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Personality and socio-institutional predictors of self-employment intentions among people with disabilities: An empirical investigation

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PERSONALITY AND SOCIO-INSTITUTIONAL PREDICTORS OF SELF-EMPLOYMENT
INTENTIONS AMONG PEOPLE WITH DISABILITIES: AN EMPIRICAL INVESTIGATION

A Dissertation

by

YULEINYS A. CASTILLO

Submitted to the Graduate School of the
University of Texas-Pan American
In partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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PERSONALITY AND SOCIO-INSTITUTIONAL PREDICTORS OF SELF-EMPLOYMENT
INTENTIONS AMONG PEOPLE WITH DISABILITIES: AN EMPIRICAL INVESTIGATION

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August 2014

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ABSTRACT

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As a minority group, people with disabilities (PWD) face many challenges when making a career choice and establishing vocational goals. Self-employment or entrepreneurship represents a viable, prevalent vocational option for people with disabilities (PWD). Owning a business, which offers flexibility, independence, earnings, and satisfaction, is a common vocational practice among PWD. This dissertation investigates the dynamic factors that influence entrepreneurial business formation among minority groups. Specifically, it evaluates the effect of personal, socio-cultural, and institutional factors on the entrepreneurial intentions of PWD.

After controlling for age, minority status, educational level, type of disability and gender, the results highlight significant empirical support for the personal factors of proactive personality and entrepreneurial self-efficacy, the social factors of perceived social status and the presence of a role model, and the institutional variables of perceived resource support and perceived institutional support as predictors of the level of entrepreneurial intentions among PWD. These findings contribute to the understanding of the process of career choice and value of self-employment as a vocational option for PWD as well as to the research on minority entrepreneurship by detecting important personal, socio-cultural, and institutional predictors of entrepreneurial intentions.

Rehabilitation professionals can increase their knowledge of the intricate career development process for PWD while identifying ways to improve services available for clients interested in self-employment. Understanding the factors impacting self-employment among PWD also helps to identify useful support systems, establish effective networks, and recognize potential policy and changes. In the entrepreneurial process for PWD, social and institutional support can greatly facilitate business creation by providing information, skills and support.

DEDICATION

The unconditional support and love of my family undoubtedly facilitated my career as a professional student. Thank you for your motivation, inspiration, and patience to help me accomplish this degree. Especialmente, a los 90 años de vida de la viejita, María Felicia Silva (Licha), quien me ha querido desde siempre. ¡Es pa' usted Licha!

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Sere eternamente agradecida a mi familia y a mis seres queridos, por todas las risas, motivaciones e incluso recordatorios de cumplir este ultimo eslabón en mi educación. My enormous agradecimiento to my parents for teaching me how to appreciate life and to my hermano for showing me resiliency and respect. ¡Gracias totales! Los adoro. Thanks RM for “listening” to ALL my endless loqueras and for giving me C as a companion. Finally, I would like to thank everyone who continuously contribute to my happiness & to my eternal friend for always being there!

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CHAPTER I

INTRODUCTION

“Life is all about balance. Since I have only one leg, I understand that well.”
(Sandy Fussell, *Shaolin Tiger*).

One of the tools that facilitates achieving this balance is work. Work plays an integral role for a person to feel as a productive member of society while helping develop a sense of self-worth (Fesko, 1995). Feeling independent and self-reliant provides personal satisfaction, especially when an individual enjoys his or her career choice. For people with disabilities (PWD) in the United States, employment represents an opportunity to enhance independence and self-determination as well as to find a personal balance (Gates-Robinson & Rubin, 2008). Thus, work is an important part of an individual’s personal satisfaction, participation in society, and financial freedom.

The Rehabilitation Act of 1973 and the American with Disabilities Act of 1990 are examples of the different federal initiatives to help PWD with social integration and employment (Sales, 2008). Despite a number of federal initiatives and programs, significant enhancements in employment opportunities for individuals with disabilities are limited with an overall small workforce representation. The rate of employment among PWD have remained stagnant. The employment rates of PWD has remained relatively constant with a slight decline in the last years due to the recession (Kessler Foundation, 2014). It is estimated that about 78% of PWD are part of the labor force; however, an estimated 22 percent of working age PWD was employed in 2012

compared to the employment-to-population ratio of people without disability of about 65 percent (U.S. Census Bureau, American Community Survey, 2012). Moreover, research has established that the employment of working age PWD declined, with a 22 percent rate dropped among men with disabilities, during the 1990s (Stapleton, Burkhauser & Houtenville, 2004). In the 2000s, the employment rate remained unchanged. Similarly, employment and income disparities are found between individuals with disabilities and individuals without disabilities across the United States. In 2012, the U.S. Bureau of Labor Statistics reported that the median earnings for PWD were a bit over \$10,000 less than for able-bodied individuals. Thus, improving the employment outcomes of PWD is still essential in the American society.

In employment, personal and contextual characteristics are a crucial component of any career choice among PWD. The experience of a disability results not only from the condition itself, but also from personal, developmental, and environmental factors (Falvo, 2013). Among PWD, unemployment and underemployment issues combined with the ability to earn a salary and to have access to health benefits represent top concerns (Nary, White, Budde & Yen Vo, 2004), particularly, considering that the unemployment rate of PWD is twice of those without disabilities. According to the U.S. Department of Labor, in January 2014, PWD have an unemployment rate of 13.3% compare to 6.8% for nondisabled Americans. Limited implementations of initiatives to increase employment, societal prejudice and discrimination, and lack of support for feasible integrated jobs in community business are some of the reasons for the high unemployment rate of PWD (Arnold & Ipsen, 2005; Rizzo, 2002). Different external and internal factors play a role in the career journey of PWD as they intend to decide on a potential job to become self-sufficient and independent. Because of the unemployment rates and specific

factors pertaining to opportunities for PWD, understanding career-related issues becomes a necessity.

A viable career option to improve the employment outcomes of PWD is self-employment or entrepreneurship. In the last few years, self-employment has remained a constant vocational opportunity for PWD in the United States. Based on the Current Population Survey from the U.S. Bureau of Labor Statistics, a prevalent occupational trend among PWD has been self-employment (See Figure 1 below). PWD are almost twice as likely as those without disabilities to own their own business. Furthermore, the rate of business ownership among people without disabilities (PWOD) has slightly decreased since 2009. As self-employment prevails among PWD, identifying factors that support this career choice seems beneficial for professionals and consumers.



Figure 1: Self-employed Workers with and without Disabilities in the US

Entrepreneurship or self-employment is an employment strategy that can lead to economic self-sufficiency for PWD. Self-employment provides PWD an opportunity to develop and manage businesses in which they can be the employer or boss, rather than merely being an employee. Moreover, it provides opportunities for growth and improvement for PWD seeking a rewarding employment option. Oftentimes, PWD are eligible and receive supplemental supports (technical and financial) which can serve as a safety net that may decrease the risk involved with pursuing self-employment opportunities. Ignoring or minimizing self-employment as a career choice deprives many PWD of the opportunity to lead productive lives while increasing autonomy and self-determination.

The continuous growth of small businesses in the recent years represents a feasible opportunity to increase employment prospects and socioeconomic outcomes among PWD. In the last few decades, new small business formations have increased in capitalistic economies as a catalyst to potential employment opportunities and wealth creation (Yusof, Sandhu, & Jain, 2008). The Small Business Administration (SBA) reports that small businesses have increased about 49% since 1982 accounting for about 54% of sales in the United States and about 27.1 million businesses employed almost 110 million people with an increase of 45.6% or about 5.8 million of minority-owned businesses between 2002 and 2007. Additionally, small businesses employ more than 50 percent of the private workforce, generate more than half of the nation's gross domestic product, and are the principal source of new jobs in the U.S. economy (Baron, 2000). According to the U.S. Department of Labor (2012), individuals with disabilities are nearly twice as likely to be self-employed as the general population. Because of this vocational trend, it is imperative to understand personal and external factors impacting career choice among PWD, specifically for clients interested in owning their own business.

Statement of the Problem

In the past three decades, some notable employment advances have occurred for individuals with disabilities partially due to a number of laws, regulations and federal initiatives to reduce employment barriers and disincentives (Sowers, McLean, & Owens, 2002). However, the workforce representation and employment options for PWD are still minimal. Identifying and understanding the personal and environmental factors that affect the career development process of PWD can reduce their negative effects on career choices and employment opportunities (Yanchak, Lease & Strauser, 2004). There is a need to explore among PWD different vocational options to become an active member of society and achieve financial independence. A viable career choice for PWD, which can help reduce unemployment rate and increase independence, is self-employment or entrepreneurship.

Legislation and laws, which protect the employment right of PWD and promote self-employment, have become an intervention supported by vocational rehabilitation counselors to promote independence and self-reliance among clients. For instance, the Title IV of the Workforce Investment Act contains the 1998 Amendments to the Rehabilitation Act of 1973, which recognizes self-employment as an appropriate, viable employment outcome with the role of vocational rehabilitation agencies as a supportive entity (Arnold & Ipsen, 2005). Additionally, federally funded research and demonstration projects, practitioner programs, and legislative changes are some of the several institutional factors that have helped self-employment become an acceptable vocational goal among vocational counselors (Arnold & Seekins, 2002).

Despite the governmental efforts to improve the employment of PWD and recognize self-employment as a potential vocational goal, there is still a need to increase social participation and understand career related issues. PWD experience a more complex career development

process than people without disabilities and their disability may partially affect career indecision and vocational identity (Enright, 1996). Some factors have been previously identified as playing a role in employment outcomes. Many interrelated factors including education and training opportunities, family support, individual abilities and limitations, and supports and barriers in the workplace play a part when considering career choices (Lindstrom, Benz, & Doren, 2004). Additionally, cognitive limitations, limited vocational information, and perceived social barriers represent some of the difficulties involved in making decisions related to career choices (Smart, 2008). Specifically for self-employment, the lack of access to adequate capital (DeKlerk, 2008), negative attitudes among professionals (Boylan & Buchardt, 2003), and business creation training for rehabilitation counselors (Colling & Arnold, 2007) are some of the barriers for clients considering this vocational option.

Even though self-employment has gained popularity among PWD, there is limited number of empirical studies exploring the personal, socio-cultural, and institutional factors affecting the entrepreneurial intentions of PWD. A total of 12 empirical research studies were found offering tentative conclusions and requiring further research. Individual characteristics include demographics traits and personal attributes while financial resources and services available represent the level of supports (Yamamoto & Alverson, 2013).

There is limited understanding and formal research, if any, about the factors that affect PWD's intentions of becoming entrepreneurs and their entrepreneurial attitudes and behaviors. PWD are ascribed as being deviant and inferior, similar to other groups based on different attributes such as age, racial/ethnic group, religion, sexual orientation and gender (Smart, 2008). By experiencing similar experiences to other underprivileged groups, PWD are considered another minority group in the United States. A significant number of scholarly studies, focusing

on determinants of entrepreneurial intention and nascent behavior among disadvantaged minority populations, have been conducted in the last few decades. Scholars have focused, among others, on the impact of personality (Shaver & Scott, 1991), education (Franke & Luthje, 2004; Jo & Lee, 1996; Kuehn, 2008), gender differences (Boden & Nucci, 2000; Marlow & Patton, 2005), family and personal entrepreneurial experience (Krueger, 1993; Shapero & Sokol, 1982) and family background of individual (Carr & Sequeira, 2007) on entrepreneurial behavior of minority groups. In addition, studies have widely used accepted theoretical models to understand entrepreneurial behaviors among individuals such as the Theory of Planned Behavior (Ajzen, 1991) and the Theory of Entrepreneurial Event (Shapero & Sokol, 1982). These different studies have found similar traits among different groups of individuals with entrepreneurial characteristics. However, empirical studies that considered factors predicting entrepreneurship as a career choice among PWD remains an understudied area.

In order to improve the quality of vocational services and employment of PWD, examining specific variables that affect career choice is imperative. Particularly, exploring the individual, socio-cultural, and institutional factors that predict entrepreneurial intentions can help in successful venture creation among PWD. A descriptive quantitative study will be conducted to determine the effects of internal and external factors on business venture start-up. By understanding the influence of personal, social and institutional factors on career decisions among PWD, services and vocational opportunities can be improved to meet their individual and vocational needs.

Purpose of the Dissertation

The purpose of this descriptive quantitative dissertation was to investigate the relationship of relevant factors that might influence entrepreneurial career intentions among

PWD. This dissertation contributed to an increased knowledge of individuals' differences in entrepreneurial activity. Identifying the impact of individual, socio-cultural and institutional characteristics - including proactive personality, entrepreneurial self-efficacy, fear of failure, optimism, perceived social status, presence of role models, perceived resource support and perceived institutional support- on entrepreneurial career intentions among PWD aimed to fill a research gap in rehabilitation counseling whereas contributing to the entrepreneurship research. Understanding entrepreneurial intentions among people with disability could help vocational rehabilitation counselors addressing self-employment as a potential employment outcome for clients.

Research Questions

This dissertation examined the influence of individual, socio-cultural, and institutional factors on the level of entrepreneurial intentions among PWD. This dissertation used a sequential model by using three reduced models and one full model. Specifically, this dissertation addressed the following five questions:

1. What are the relationships among factors relevant to entrepreneurial intentions of people with disabilities (PWD) including proactive personality, fear of failure, optimism, entrepreneurial self-efficacy, perceived social status, role models, perceived resources support and perceived institutional support?
2. Do certain personal characteristics such as proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?

3. Do certain social characteristics such as perceived social status, and role models predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?
4. Do certain institutional characteristics such as perceived resources support and perceived institutional support predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?
5. Do personal, social and institutional characteristics predict the level of entrepreneurial intentions among people with disabilities (PWD) (Full Model)?

Expected Contributions of the Dissertation

This dissertation was an investigation of the relationships among internal and external characteristics relevant to the entrepreneurial career intentions of entrepreneurs with a disability. To ensure the success of rehabilitation participants, vocational rehabilitation professionals must be skilled in such areas as supporting consumer choice, identifying natural supports and funding resources. Understanding the integration of personal, socio-cultural, and institutional factors with the level of entrepreneurial intentions among PWD are critical to address unique self-employment needs of this population.

Regarding to the potential scholarly contribution of this dissertation, it is expected to expand the literature of the field in several ways. Results from this dissertation contributed to the knowledge about PWD in the entrepreneurship and vocational rehabilitation literatures. In the entrepreneurship literature, this dissertation expected to specifically contribute to the minority entrepreneurship area. Even though entrepreneurship research is extensive, relatively little scholarly attention has focused on PWD as a minority group. This dissertation intended to contribute by considering a different disadvantaged minority group and how different factors

play a role in their business startup intentions. Individual, socio-cultural, and institutional characteristics were considered to extend the existing entrepreneurship literature and the understanding of various factors that influence minority entrepreneurial behavior and venture formation. By evaluating the relationship of role models, perceived social status, perceived resource support, and perceived institutional support, it is intended to increase the comprehension of the predictive ability of these social and institutional factors among PWD.

In addition to the entrepreneurship literature, this dissertation contributed also to an area of research within the domain of rehabilitation counseling: employment opportunities, self-employment, and career choices. Regarding employment opportunities, this dissertation evaluated the impact of internal and external factors that impact vocational goals among PWD. Predominantly, this quantitative study expanded the understudied area of self-employment in the rehabilitation field by providing a comprehension of aspects and issues pertaining to this career choice. Additionally, this dissertation anticipated to increase the knowledge of the influence of psychological and social factors on the career behavior among PWD. By exploring individual and contextual factors relevant to employment, the understanding of the career development process of PWD can be improved.

This dissertation also provides practical contributions for a diverse group of professionals and recipients of services in the rehabilitation field. Self-employment has gained acceptance as a viable employment option for people with disabilities in the vocational rehabilitation system (Weiss, 2002). Therefore, understanding the entrepreneurial intentions among clients can help to provide effective vocational services to those individuals interested in owning a small business that foster independence and increase autonomy. Rehabilitative services professionals can benefit from these findings by understanding factors that may impact potential career choices

among clients and by evaluating factors relevant to self-employment. Vocational rehabilitation clients, who may be interested in becoming entrepreneurs, can become aware of factors that may predict and increase their likelihood to succeed in venture creation. In education, this dissertation delivers valuable insights on the entrepreneurial career intentions to educators, who may teach it to future human services professionals. Moreover, students, who are interested in entrepreneurship and/or working with people with disabilities, can gain valuable knowledge in this area as well as in career choices.

Definition of Key Concepts

The following definitions are provided to ensure uniformity and comprehensions of these terms throughout this dissertation.

Disability

According to the World Health Organization, a disability is a broad term covering “impairments, activity limitations, and participation restrictions” (2011, pp.7). Moreover, it reflects the negative aspects of the interactions between features of a person’s body and personal and environmental features of the society in which he or she lives.

People with disability

According to the amendment to the Section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102), an individual with a disability has “(A) a physical or mental impairment that substantially limits one or more major life activities of such individual; (B) a record of such an impairment; or(C) being regarded as having such an impairment”

Entrepreneurship

Entrepreneurship represents an important vocational option. Entrepreneurship or self-employment is a dynamic process of vision, change and creation that requires dedication and energy for the creation of new ideas that requires the willingness to take risk, to identify needed resources, to build a solid business and to recognize opportunity ignored by others (Ronstadt, 1984; Shane, 2003). Self-employment requires personal risk, control of the investment and means of production as well as distribution and income of a business operation lead to return of a profit (Rizzo, 2002). The term self-employment and entrepreneurship will be used interchangeably throughout this dissertation.

Entrepreneurial intentions

Entrepreneurial intention is defined as a “cognitive representation of the actions to be implemented by individuals to either establish new independent ventures or to create new value within existing companies” (Bird, 1988, p.445). Another definition for entrepreneurial intentions refer to intentions of setting up one’s own business to become self-employed and take risk in creating a new enterprise rather than an interest or attitude (Van Gelderen et al., 2008).

Entrepreneurial self-efficacy

Entrepreneurial self-efficacy refers to the intensity of a person’s belief that one can successfully perform the various roles and tasks of entrepreneurship (Boyd & Vozikis 1994). “It consists of five factors: marketing, innovation, management, risk-taking, and financial control” (Chen, Greene, & Crick, 1998, p.295). Entrepreneurial self-efficacy affects entrepreneurial career choice and development (Boyd & Vozikis, 1994).

Organization of the Dissertation

In this dissertation, external and internal factors and their effects on entrepreneurial intentions among PWD were examined. This dissertation is divided into five chapters. Chapter 1 presents an introduction of the study, statement of the problem, purpose of the dissertation, research questions, expected contributions of the study, and definition of key concepts. Chapter 2 contains a review of literature and research pertaining to entrepreneurship, career choices, and vocational rehabilitation. This review of the literature will also include findings pertinent to entrepreneurial intentions, minority entrepreneurship, and employment among PWD. The relevant theory of planned behavior and established hypotheses are discussed in Chapter 3. The methodology and procedures used to gather data and analysis for the study, are presented in Chapter 4. In this chapter, a description of the research design, pilot study, participants, instrumentation and its reliability and validity, procedures, and proposed data analyses are covered. Finally, Chapter 5 offers a detailed illustration of relevant factors to career choice and entrepreneurial intentions among PWD.

CHAPTER II

LITERATURE REVIEW

The purpose of this dissertation was to empirically examine personal, social, and institutional predictors of entrepreneurial intentions among people with disabilities (PWD). In this chapter, literature related to this dissertation was examined to understand the variables that impact the intention to start a new venture. Specifically, discussion in this chapter includes an overview of entrepreneurship including the stages of the entrepreneurial life cycle and minority entrepreneurship. Further, studies related to entrepreneurial intentions were analyzed, particularly those concerning the different factors influencing intentions to start a new business venture. Moreover, the employment of PWD and their career choices were also considered. Principally, the benefits, barriers and reasons relevant to self-employment as a vocational option for PWD were also explored along with legislations pertaining to self-employment.

Overview of the Entrepreneurial Process

Entrepreneurship or self-employment is an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods and services into a market (Venkataraman, 1997; Shane & Venkataraman, 2000). It has been defined as starting one's own business, to specific behaviors including a work attitude that emphasizes self-reliance, initiative, innovativeness, and risk-taking (Bruyat & Julien, 2001). Entrepreneurship or self-employment is a dynamic process of vision, change, and creation that demands dedication and energy for the development of new ideas. It requires the willingness to take risks, to identify needed resources,

to envision a solid business and to recognize opportunities ignored by others (Ronstadt, 1984; Kuratko, 2009). In early research, great efforts were made to justify entrepreneurship as a standalone field and develop the definition of this concept. Entrepreneurship or self-employment represents a key vocational option that highlights individual work preferences with an emphasis in self-reliance and self-determination increasingly favoring self-direction and autonomy (Gibb, 2002).

In any entrepreneurial venture creation the process can be characterized as the recognition of opportunity by the entrepreneur (Ronstadt, 1984). Opportunity recognition represents a possibility for the formation of a new enterprise, or significant improvement of an existing enterprise. An entrepreneur is an individual who generates revenue through the identification of market opportunities, analysis of market forces and applies a willingness to take a commercial risk (Ronstadt, 1984). The activities of entrepreneurs intend to identify opportunities and start new companies to develop those new or existing ideas (Shane & Venkataraman, 2000).

Several cognitive and social psychological characteristics have been found to play a role in entrepreneurs' success in business creation. Some of the characteristics and competencies that individuals have to perform typical entrepreneurial tasks include: independence (Hisrich, 1990), risk-taking propensity (Tang, Tang & Lohrke, 2008), self-efficacy, market orientation (Markman & Baron, 2003), creativity and innovation (Drucker, 1985). For instance, entrepreneurs were significantly more likely to express overconfidence in their own judgments and to perceive greater potential for gain in highly uncertain situations than others did (Busenitz & Barney, 1997; Palich & Bagby, 1995). Entrepreneurs also possess specific entrepreneurial competencies

that include knowledge, skills, and abilities that help to maximize opportunities and establish successful ventures (Baron & Markman, 2003).

Entrepreneurship represents an alternative source for job creation, opportunity creation, and market renovation. In the capitalistic business world, many large, established firms have had difficulties to create a net increase in employment since the 1970's (Davidsson, 1995). Limited employment opportunities led to high level of unemployment and/or to a significant role of small and new firms to create new jobs (Davidsson, Lindmark & Olofsson, 1995). Self-employment or entrepreneurship represents an alternative source for job creation, opportunity creation, and market renovation. Thus, entrepreneurial activity translates to a way to revitalize the economy and to cope with unemployment problems (Yusof, Sandhu, & Jain, 2008). Entrepreneurship brings independence to the person while contributing to the economic structure of the nation. Moreover, entrepreneurship represents a tool for technological advances, product creation and market innovation (Mueller & Thomas, 2000). Capitalistic economies encourage new small business formation to stimulate economic growth and profit creation.

Stages of the Entrepreneurial Life Process

The path of development for business creation referred to as the entrepreneurship life cycle or venture creation cycle (Reynolds & White, 1997). The entrepreneurial life cycle repeats itself in businesses of all sizes, from small start-ups to global corporate entrepreneurship activities. During the entrepreneurship life cycle, the generation of profit is important for the sustainability of the new business venture. The beginning of the entrepreneurship life cycle starts with an opportunity identification, followed by an organizing stage marked by resource acquisition, and the last stage characterized by stability and growth after the venture launch (See Table 1).

Opportunity Identification Stage

Entrepreneurship involves the connection of entrepreneurial opportunities and enterprising individuals (Shane, 2003). The first stage in the entrepreneurial life process is opportunity identification. In this stage, the entrepreneur discovers products or services that can be exploited (Casson, 1982). An individual can create or discover a potential lucrative opportunity that can become reality (Short, Ketchen, Shook & Ireland, 2010). The recognition of a prospect idea in response to a need of new goods, services, or raw materials occurs in this stage (Shane & Venkataraman, 2000). Opportunities are fundamental for any enterprising and some people are more successful at detecting them than others (Short et al., 2010). Individuals generate business ideas by interpreting and creating a recombination of resources that allows pursuit of that opportunity (Shane, 2012).

The entrepreneurial life cycle starts with an entrepreneur who identifies an opportunity before creating an enterprise to obtain the required resources to finally establish and sustain a launched venture (Aldrich & Martinez, 2001). During the opportunity identification stage, entrepreneurs identify and select right opportunities for new ventures. Entrepreneurs use their networks to find information about diverse topics, obtain feedback on their core business idea, locate funding, and evaluate opportunities (Elfring & Hulsink, 2003). Cognitive and other psychological processes lead to individual differences that enterprising individuals use in the entrepreneurial process (Baron, 2000; Krueger, 1993; Shane, 2000). Previous research investigated cognitive procedures and reasons for individuals engage in discovering and exploiting different entrepreneurial opportunities (Baron, 1998; Gaglio, 2004). For instance, entrepreneurial alertness (Buzenitz, 1996), social network context (Hills, Lumpkin, & Singh, 1997), regulatory focus and self-efficacy (Tumasjan & Braun, 2012), and prior knowledge and

experience (Shane, 1999) have been considered as factors involved in opportunity recognition. The entrepreneur recognizes and identifies market opportunities that can become a business venture.

Identifying an entrepreneurial opportunity represents a potential vocational goal for an individual with a disability. People with disabilities may consider developing an idea for many reasons including utilizing support available, engaging in risk taking which involves chance and timing as well as an understanding of personal abilities and needs (Palmer, Schriener, Getch, & Main, 2000). The financial benefits of self-employment to support self and dependents combined with the dignity and decision making ability associated with some financial independence motivates PWD to consider this vocational prospect (McNaughton, Symons, Light, & Parsons, 2006). Moreover, psychological and personal benefits such as a sense of control, improved self-worth, self-reliance, fulfillment of expectations, work autonomy and satisfaction, and self-advocacy exemplify reasons for self-employment (Hagner & Davies, 2002; McNaughton et.al, 2006). An entrepreneur with a disability can identify the existence of opportunities or situations to recombine resources to generate profit and provide an income.

Nascent (Organizing) Stage

The second stage of the entrepreneurial life process is the nascent (organizing) stage. In this stage, the entrepreneur evaluates, organizes, and executes enterprising ideas turning them into action. The entrepreneur formulates a plan involving activities to identify means to recombine resources to exploit a discovered opportunity (Shane, 2003). This is an important stage in the entrepreneurial life cycle because specific steps are taken to conceptualize an idea to begin a business venture. Some of these steps include trainings, building social networks, business plan development, financial resource acquisition, counseling, obtaining license and

permits. In addition, in this stage the social and economic environments are evaluated to determine the presence of a welcoming setting for the development of the enterprising idea.

In the entrepreneurial process, the entrepreneur creates new ways of organizing an opportunity by recombining resources that may result in a profit or a loss (Shane, 2003). Organizing involves establishing structures and routines that support activities that recombine resources based on the entrepreneur's vision (Aldrich, 1979). In this stage, entrepreneurs locate and organize all the resources needed for a start-up using their networks (Elfring & Hulsink, 2003). Resources can be organized to create different opportunities from a tangible asset as a new firm formation (Katz & Gartner, 1988) to intangible form as knowledge or market mechanisms (Shane, 2003). Thus, the entrepreneur identifies approaches and methods to obtain resources needed for an entrepreneurial opportunity.

Minority entrepreneurs face different challenges that impact the organizing stage of the of the venture creation process. Low educational levels, struggles obtaining financial sources and discrimination represent problems for business formation among minorities (Zhou, 2004). For instance, the focus on the disability and its limitation rather than on the person and his or her abilities creates a misconception of biological inferiority of PWD which increases the experience discrimination (Smart, 2013). Access to capital and financial opportunities from conventional sources, such as commercial banks, is a significant self-employment challenge almost as difficult for women, ethnic-minority groups and PWD (Palmer, et al., 2000). These types of barriers complicate recombination of resources and creation of structure for the organizing of an enterprising opportunity.

Stability Stage

The final stage of the entrepreneurial life cycle is the stage of stability and growth. At this point, the entrepreneur has successfully recombined resources to launch a sustainable enterprise. The performances of established business in this stage tend to be measure in terms of growth, efficiency, and profit generation (Murphy, Trailer & Hill, 1996). The entrepreneur seeks to generate profits and sustain stability by restricting access to the opportunity or reducing potential competitors (Shane, 2003). The individual characteristics of entrepreneurs and personal goals seem to be important for the enterprise growth and stability (Davidsson, 1991). Moreover, the entrepreneurs' motivation for business growth can positively impact the performance and outcomes of the firm (Delmar & Wiklund, 2008).

In this stage, the entrepreneur focuses on long term stability and growth for the enterprise. Firms aim to obtain superior financial performance by securing access to resources to achieve a position of competitive advantage and sustainability (Barney, 1991). In addition, firms grow in different patterns related to firm age and size (Delmar, Davidsson & Gartner, 2003). For a new firm to survive, entrepreneurs strive to gain legitimacy. New firms are more likely to fail because they are lacking stable customer ties, internal resources and capabilities, experiences, and an effective provision of goods and services (Baum 1996; Stinchcombe, 1965). Strong and weak ties may help a new firm to gain legitimacy, particularly by establishing weak ties with different stakeholders and being sensitive to societal and institutional concerns (Elfring & Hulsink, 2003). As a firm move from emergence to early growth, new acquisition challenges arise in an uncertain environment (Hite & Hesterly, 2001). Resource availability, access and uncertainty can become problematic for entrepreneurs as they strive to gain legitimacy.

Minority firms identify a potential idea and develop a business opportunity but may experience difficulties reaching the stability stage. In this stage, different barriers represent a risk for minority firms which impact their stability and growth increasing the number of failed ventures. Minority business owners tend to be less successful on average than the majority owners with lower sales, and fewer employees. There are different factors impeding their stability such as the lack of financial resources that hinders business operations and expansion planning in the business stage for minority entrepreneurs (Robles & Cordero-Guzman, 2007). In order to obtain sustainability and competitive advantage, minority entrepreneurs need to use different skills and competencies to survive in the business world. For instance, Asian American entrepreneurs have been found to have great success in business ownership in part due to higher levels of education (Bates, 1994). Thus, minority entrepreneurs may struggle to reach stability but developing managerial and technical competences increase their likelihood of success.

Table 1. Stages of the Entrepreneurial Life Process

Stages	Objective	PWD	Studies
Opportunity Identification	To recognize and identify products or services that can become an opportunity.	Support available, risk taking, flexibility, psychological benefits & financial independence are some factors that lead to opportunity identification.	Hagner & Davies, 2002; McNaughton et.al, 2006; Palmer et al., 2000
Nascent (Organizing)	To evaluate, organize, and execute enterprising ideas into action.	Access to capital, low educational levels, and discrimination complicate recombination of resources and creation new ventures.	Palmer et al., 2000; Zhou, 2004
Stability	To obtain growth, efficiency, and profit generation.	Stability & success may be difficult for minority entrepreneurs. Support & assistance can improve survival rate for business.	Bates, 1994; Boylan & Buchardt, 2003;Robles & Cordero-Guzman, 2007.

Overview of Minority Entrepreneurship

As the entrepreneurship field of research gains legitimacy, interdisciplinary studies have strived to support the theoretical foundations of the discipline. There have been studies implemented to examine the characteristics of entrepreneurs, impact of political changes, the business decision-making process, and resources availability for entrepreneurs (Shane, 2003). During this quest to understand the entrepreneurship process, different areas of research have emerged including social entrepreneurship (Mair & Marti, 2006); corporate entrepreneurship (Wolcott & Lippitz, 2007); and minority entrepreneurship (Chaganti & Greene, 2002).

Minority entrepreneurship has become an area of great interest in exploring venture creation decisions and behaviors among diverse groups. Even though a vast research on entrepreneurship exists, relatively little scholarly attention has been devoted to minority entrepreneurs (Chang, Kellermanns, & Chrisman, 2007). Minority entrepreneurship research aims to explain reasons for less success of minority entrepreneurs when compare to mainstream counterparts. Challenges and experiences through the stages of venture creation should be considered when researching entrepreneurial behaviors among minority entrepreneurs as they cannot be examined as a homogenous group. Particularly, to understand minority entrepreneurial behaviors and factors that contribute to minority entrepreneurs having lower rates of success, lower profits and higher closure than white owned firms (U.S. Small Business Administration).

Previous studies have explored characteristics that are valuable for a minority entrepreneur. For instance, achievement, opportunity, independence, career security, power, status, and job satisfaction are some of the key characteristics of successful minority entrepreneurs (Hisrich & Brush, 1986). Moreover, a successful entrepreneur must be aggressive, competitive, goal-oriented, opportunistic, intuitive, and a calculated risk-taker (Clayton, 1992).

Owning a business is a complicated and multi-faceted process requiring a number of distinct and complex skills, including: accounting and financial skills, management and communication skills, technical skills related to the specific job, and general problem-solving repertoires (Roodt, 2005). In addition, minority business owners tend to have similar organizational values of collectivism, duty, rationality, novelty, materialism, and power when compared to non-minority counterparts (Enz, Dollinger & Daily, 1990).

For minorities, in response to social barriers in traditional employment, entrepreneurial activities provide an alternative path for upward mobility and economic development (Liu, 2012). Women and minorities face organizational challenges in traditional workplace that create frustration and dissatisfaction with corporate life and their opportunities for promotions (Heilman & Chen, 2003). The lack of mentors, negative stereotypes and overgeneralizations, inadequate jobs and lifestyles are some of the issues faced by women and minorities, in organizations, that may force them to self-employment. Consequently, self-employment generates an opportunity for underprivileged minority groups to attain self-sufficiency, strive for financial independence, and to nurture their creativity.

Relevant Minority Entrepreneurial Factors

Education has been found, in the entrepreneurship literature, to be a key determinant of business ownership. Minority groups, including those with disabilities, tend to have less access to schooling impacting their abilities to pursue resources, opportunities, success (Smart, 2013). The level of education is one of the most common reasons for minority entrepreneurship failure. Previous studies have found that positive business outcomes are associated with higher levels of education (Bates, 1997). Among minority entrepreneurs, low educational level has been attributed to low levels of success in business startup (Fairlie & Robb, 2008). Moreover, another

study found that a strong educational attainment can help to improve the success rates in minority entrepreneurship (Singh & Crump, 2008). Education can help entrepreneurs in their management practices and in selling products and services. Minority entrepreneurs who have higher level of education tend to generate higher profits and to effectively use financial and human capital (Bates, 1994).

The literature on minority business ownership provides indication that access to financial capital limit opportunities for minorities to start businesses. Having financial support facilitates the creation of social and economic opportunities for venture creation (Young, 2007). However, previous research has found that capital resources are difficult to obtain for minority entrepreneurs. Research finds significant differences in access to and amount of start-up and operating financial capital between minority and majority business owners (Blanchard, Zhao, & Yinger, 2008; Coleman, 2004). Discrimination resulting in an inability to obtain financial capital has led to a low success among minority ventures (Koellinger & Minniti, 2006). Because of a difficulty to determine entrepreneurial ability, lenders provide less favorable credit terms to minorities creating labor market discrimination (Coate & Tennyson, 1992). The stigmatization among staff of financial institutions, who do not believe in profit acquisition power and repayment capacity of people with disabilities, decreases sustainability and access to funding for the target group (De Klerk, 2008). Discrimination occurs not only in loan lending but also in the local markets (Silverman, 2000) in which individuals purchase goods and services, affecting profit generation and business survival.

The presence of social networks among minority business owners has helped in the creation of new business ventures. Though interactions in these networks, people gain access to information about entrepreneurial opportunities, including potential business locations,

prospective markets, and sources of capital (Shane, 2003). Previous research indicates that the size and composition of social networks is associated with self-employment (Allen, 2000). Minority entrepreneurs tend use only contacts available through the immediate vicinity (Rhodes & Butler, 2004) limiting the creation of potential ties. Interestingly, successful minority business owners are integrated into their communities increasing support systems that are available. Accordingly, minority entrepreneurs have active roles in their communities as employers, role models and trainers of prospective entrepreneurs (Portes & Zhou, 1996; Zhou, 2004). Another important social ties for entrepreneurs are family members. In the case of the minority entrepreneur, social networks are rarely outside family and close friends (Rhodes & Butler, 2005). However, limited access to other business and social networks can decrease successful business creation among minority groups. Thus, these social networks provide technical assistance, information, and even employment among minorities.

Information asymmetry also impacts the discovery of entrepreneurial opportunities (Shane, 2003). Successful entrepreneurs obtain knowledge from various sources such as training, personal experience and formal or informal education (Aldrich and Martinez, 2001) and have direct or indirect ties to sources of information (Shane, 2003). Social capital, which involves relations with colleagues, acquaintances or contacts, provides opportunities to access financial and human resources (Wu, Wang, Tseng, & Wu, 2009). The minority entrepreneur may be limited in opportunities to expand formal or informal ties which results in limited access to resources in general (Rhodes & Butler, 2005). Limited access to social, business or family networks reduces the creation of successful businesses among minority groups. Furthermore, having access to incomplete and inadequate information (West & Wilson, 1995) combined with the uncertainty of where to obtain information may impact minority new venture creation (Lin,

Cook, & Burt, 2001). The minority entrepreneur may have limit access to social capital and may receive erroneous information that may inhibit entrepreneurial intentions.

Disability: Minority Status

As the disability right movement emerged during the 1970, PWD realized the similar experiences and situations experienced by themselves and those from other minority groups (Smart, 2012). Minority groups belong to underserved groups who share a visible trait or characteristic than differentiates them for other groups, have limited access to resources and opportunities, and experience a pattern of disadvantage or inequality as compared to the majority group (Wagley & Harris, 1958). PWD are ascribed as being deviant and inferior, similar to other groups based on different attributes such as age, racial/ethnic group, religion, sexual orientation and gender (Smart, 2012). Thus, the inequality of opportunities and deficiency of resources result in negative societal attitudes, limited opportunities and unfavorable employment rates and outcomes.

From the minority model perspective, along with race, gender, class, and ethnicity, disability is a determining factor in defining minority status (Olkin, 1999). Minority status refers to distribution of resources and power rather than simple numbers. Rehabilitation research focused on the minority model evaluates the extent and degree of social disadvantages caused by environmental and attitudinal barriers (Rubin & Roessler, 2008). PWD share a common experience tainted with prejudice, discrimination and stigma resulting from how they are perceived and treated by the dominant culture (Smart, 2012). Individuals, who are not part of the mainstream population, are traditionally considered inferior, have few positive role models, and experience discrimination at different societal levels. Societal discriminatory barriers impact efforts to obtain educational and business-related experiences as well as limit access to financial

capital and product markets leads to heightened failure rates among minority-owned businesses (Bates, Jackson, & Johnson, 2007).

Historical Overview of Vocational Rehabilitation Legislation

Self-employment and entrepreneurial factors are important; however, for PWD vocational rehabilitation legislation also has had an effect on their success or failure in the business world. There are several federal laws, policies, and programs that have been established to enhance the employment opportunities for PWD. Work, a valuable societal right in capitalistic and democratic Western societies, which has been supported by government intervention. These societies recognize a need for an active role; in addressing the considerable disadvantage that PWD encounter in obtaining work (Barnow, 2008; Rubin & Roessler, 2008). These disadvantages have been ameliorated by the provision of vocational rehabilitation services. Over the past few decades, the federal government, in collaboration with state and local governments, has invested extensive amount of financial resources in vocational rehabilitation services and programs. Vocational rehabilitation services have a crucial function to assist individual with disabilities to obtain competitive employment opportunities in the community (Ford & Swett, 1999). Ultimately, these legislations and programs strive to improve the quality of life these individuals by providing equal services and protecting human rights.

Since the beginning of the 20th century legislation has been passed to improve the employment opportunities and lives of PWD. Some of the legislations promoting the employment of PWD are listed below in Table 2. The Smith-Hughes National Vocational Education Act of 1917 established federal assistance grants for states on a matching basis for vocational education programs to train a workforce for the rising industrial economy which was overtaking the United States agricultural economy (Rubin & Roessler, 2008). This legislation

helped to formalize the structure of vocational education and promote the practical and moral value of work. In 1918, the Soldiers' Rehabilitation Act, which is considered foundation of the field of rehabilitation, required the development of vocational rehabilitation programs for WWI returning veterans with disabilities (Sales, 2008). Subsequently, the success of the Soldier's Rehabilitation Act laid the ground work for the Smith-Fess Act of 1920, also known as the Civilian Vocational Rehabilitation Act, which authorized the first federal spending for civilian rehabilitation in vocational guidance, training, occupational adjustment, and placement services for individuals with physical disabilities (Rubin & Roessler, 2008).

Later on, to improve the financial situation of the US, the Social Security Act of 1935 established the Civilian Vocational Rehabilitation Act as a permanent program and expanded financial support for it (U.S. National Archives & Records Administration). Likewise, to counter the effects of the Great Depression, this legislation was passed to establish unemployment compensation, public assistance and welfare services. Furthermore, the Randolph-Shepard Act of 1936 was established to provide for individuals with blindness to operate and establish vendors in federal establishments. The subsequent amendments of this in 1954 and 1974 helped to assist blind individuals in the operation of vending facilities, including cafeterias, snack bars, and automatic vending machines, that are on federal property (Pierce, 1993). Moreover, the Wagner-O'Day Act of 1938 mandated that the federal government purchase products from individuals who are blind (Sales, 2008). These two acts helped to diminish misperceptions about the abilities of individuals with blindness by providing them an opportunity to demonstrate their abilities and increasing the awareness about their employability.

Another important piece of legislation furthering the advancement of PWD was the Barden-LaFollete Act of 1943 or Vocational Rehabilitation Act which expanded eligibility for

vocational rehabilitation programs to include individuals with mental illness and intellectual disabilities as well as provide physical restoration services. After 1954, significant changes occurred for over the next ten years in vocational rehabilitation services. The Vocational Rehabilitation Act Amendments of 1954 (Hill-Burton Act) increased funding for rehabilitation services, research and demonstration grants, professional preparation grants, and rehabilitation facility development (Jenkins, Patterson & Mora Szymanski, 1998). This legislation provided a foundation for college training for rehabilitation professionals.

The 1960's was a decade of sweeping changes in the US. The social activism of minorities and women, during the middle and late 1960s, provided a model for the emerging disability consumer movement to demand rights and to influence government legislation (Rubin & Roessler, 2008). After PWD demonstrated for guarantees of civil rights and an accessible environment, The Rehabilitation Act of 1973 was passed. This act strived to end discrimination on the basis of disability in hiring by the federal government and defined successful employment outcomes as competitive employment in an integrated setting. The act required priority services to people with severe disabilities, addressed accessibility concerns (Section 502), provided for affirmative action in employment (Section 503) and made accommodations and provisions for PWD by federally funded program (Section 504). In addition, the Rehabilitation Act Amendments of 1978 added Independent Living while the 1986 amendments introduced supported employment (Sales, 2008). This history of legislation helped to improve the employment opportunities but future laws would help to increase societal participation for PWD.

After a decade of uncertainty and philosophy of limited involvement of the federal government in meeting the needs of disadvantage groups, new disability-related legislation was passed. The Americans with Disabilities Act (ADA) 1990 was a very significant piece of civil

rights legislation that prohibits discrimination against PWD in many aspects of society. The ADA is organized into five sections or Titles. The most outstanding prohibits discrimination in employment practices (Title I) not only in the federal government, to which the 1973 Rehabilitation Act was limited, but also in the public sector at large. The other titles cover public establishment discrimination (Title III), require equal access to services and benefits of public entities (Title II), call for accessible communication (Title IV), and address miscellaneous concerns (Title V) (Jenkins, Patterson & Mora Szymanski, 1998; Sales, 2008). Additionally, the Workforce Investment Act and Rehabilitation Act Amendments of 1998 combined rehabilitation legislation with other federally supported job training programs to provide one-stop delivery services for individuals needing help in securing employment and to facilitate the sharing of employment resources (Sales, 2008).

Table 2: Overview of Federal Legislation Promoting PWD employment

Legislation	Mandate
Soldiers Rehabilitation Act of 1918	Vocational assistance for veterans with disabilities in WWI
Smith-Fess Act of 1920	Vocational rehabilitation (VR) services to civilians with disabilities
Vocational Rehabilitation Act Amendments of 1943	Expanded VR services to individuals with mental illness and cognitive disabilities
Vocational Rehabilitation Act Amendments of 1954	Established preparation for rehabilitation professionals and funded the establishment of community rehabilitation programs.
Rehabilitation Act of 1973	Protected the employment rights of PWD in the Federal Government, prioritized serving persons with severe disabilities first, and encouraged client involvement.
Amendments to the Rehabilitation Act of 1986	Implemented Independent Living Programs
Amendments to the Rehabilitation Act 1986	Supported employment for persons with severe disabilities
Americans with Disabilities Act of 1990	Protected the rights of PWD to mandate inclusion in all aspects of life
Workforce Investment Act of 1998	Creation of one stops services to meet needs of clients and employers
Reauthorization of the Rehabilitation Act of 1998	Allowed self-employment as a potential employment outcome

Employment Patterns and Career Choices among PWD in the U.S.

The employment outcomes and financial stability among PWD has not significantly improved, even with the aforementioned public policy and legislation mandates, in the last few decades. The American Community Survey (ACS) 2012, an annual survey conducted by the United States Census Bureau, estimated that 12% of the American population has a disability. The ACS analysis also reported that the estimated employment rate for working age people without disabilities is about 70% while for those with a disability the employment rate is about 33%. Moreover, it is estimated that the annual median earnings of PWDs is less than \$10,000 compared to adults without disabilities. Consequently, a longitudinal study over the last two decades, sponsored by the U.S. Department of Education, found small differences in employment status, job duration, type of job, weekly work hours and wages among PWD (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). These figures show that PWD still experience discrepancy in employment and income earnings due to disabilities in the American society.

The prominence value of work influences society's perception of individual contribution and participation in society. Labor and productivity function as measures of social worth in the American society where individuals, who do not work, are perceived as having less social value and as a burden (Gates-Robinson & Rubin, 2008). Employment helps individuals to become self-sufficient and contributes to self-esteem and personal satisfaction (Szymanski, Enright, Hershenson, & Ettinger, 2003). Moreover, employment helps individuals to reach financial independence and self-reliance. Finding and keeping a job is an important vocational goal but obtaining competitive employment that offers benefits, promotion opportunities and a decent pay is even more beneficial for PWD. Work has been found to be important to PWD because it

provides access to affordable health care insurance, a different focus from the medical condition, and an opportunity to contribute to society (McReynolds, 2001). For PWD, the culture of an organization and positive relationships with supervisors and coworkers are also imperative when understanding the meaning of work (Kirsh, 2000). Having a job helps a person with a disability to not only become an active participant in the economy but also to improve his/her self-worth and to adjust to his/her disability.

An individual's reaction to or adjustment to a disability is a personal challenge that is open to influences from external and internal factors. The psychological adaptation to chronic illness and/or disability implicates a slowly progressive process of assimilation of changes experienced in one's physical body, self-concept, and interaction with the environment (Livneh & Antonak, 2005). Different emotions and reactions along with environmental factors impact the adjustment process to disability. Even though each individual has a very personal experience in the adjustment journey to their disability, there are some reactions that may be similar among people. In the initial and early reaction, the individual experiences feelings of shock, anxiety and disbelief. Moreover, the person may try to find a solution to the crisis. The intermediate reactions in the adjustment process include depression, internalized anger and hostility. The person may retreat and cling to their premorbid identity and functions focusing on the past and ignoring the existing opportunities of the present and future (Smart, 2008). Ideally, the person with a disability may move to later reactions of acceptance, reintegration and even transcendence. The person may recognize the disability from a different perspective and develops unrecognized emotional and physical abilities that help for personal growth. Few people reach the transcendence reaction; the individual embraces the experience evaluating the disability, which

has a positive valence, as an opportunity for psychological and spiritual development (Vash & Crewe, 2004).

People with disabilities, including those with severe conditions, encounter attitudinal and environmental barriers to employment. The negative attitudes and lack of understanding of disabilities among employers hinder the employability of PWD (Smart, 2008). In spite of the passage of disability civil rights legislation and public policy to reduce employment barriers, PWD still face challenges to obtain gainful employment. Undeniably, the independent living movement has helped improve the quality of life of PWD but employment issues and access to resources are still extant concerns (Nary et al., 2004). Since the passage of the American with Disabilities Act (ADA); however, the employment rate for PWD has remained practically stagnant (Burkhauser & Stapleton, 2004). In fact, achieving an integrated employment opportunity has declined in the past decade. The attitudes of employers, collective values, conflicting policies, over-reliance on social systems and limited incentives for agencies are some of the factors associated with this employment decline (Callahan, Griffin & Hammis, 2011).

Career Choices among PWD in the U.S.

A crucial part of career development is selecting an occupation or career (Lindstrom, 2008). Career choice is an important decision that may derive satisfaction and fulfillment in the life of an individual. Considering different issues involved in choosing a career, identifying and selecting a potential choice is a complicated task. In particular, for PWD who typically experience a more complex career development process and are more prone to vocational identity and career-decision making problems than those without a disability (Enright, 1996; Ochs & Roessler, 2001). In addition, PWD sometimes struggle in understanding their vocational needs and making employment decisions. Accordingly, a variety of individual and

environmental factors influence the career development process for people with disabilities (Nary et al., 2004).

When choosing a career, individual factors play an important role in choosing a career for PWD. Even though the disability can complicate career choice, the abilities, gender, ethnicity, and age of an individual are also influential factors (Sayce, 2011). For instance, having early learning deficits can progressively increase limiting the range of available career choices later in life (Arbona, 2000). Considering gender, women with disabilities may have limited options based on gender role and disability stereotypes (Lindstrom, 2008). The career development of PWD can be impacted by the lack of work experience, negative previous employment environment, and limited knowledge and skills (Smart, 2008). Moreover, women with disabilities more likely work in the service sector in occupations such as food preparation, personal care, and medical assistant than in professional careers as teacher, lawyer and counselor (O'day & Foley, 2008). PWD with a minority background enjoy less employment participation than those with a Caucasian ethnicity (Loprest & Maag, 2001). Age has also been found to be significantly related to vocational identity and career aspiration for individuals with cognitive impairments and those with physical disabilities (Yanchak, Lease & Strauser, 2005). Vocational identity helps individual in career decision making and one's ability to make a career choice.

An individual's experience and adjustment to any medical condition or chronic disease can impact potential career choices as well. The degree to which a health condition affects and individual's ability and willingness to work depends on a variety of factors including the type of work, the physical environment, work requirements, and accommodations (Falvo, 2013). Thus, the medical condition interacts with the work demands, environment and expectations. Furthermore, functional capacities as well as the perception and reaction of each person to a

functional loss vary substantially due to the type of disability and personal adjustment (Smart, 2008). Social attitudes and specific stigma, related to the person's type of disability, create obstacles in education and career choice (Enright, Conyers, & Szymanski, 1996). Consequently, the type of disability can lead to differences in career choices and decisions among PWD. For instance, individual with cognitive impairments and those with physical disabilities reported significant differences in making career related decision (Yanchak, Lease & Strauser, 2005). In adulthood, disability status was found to have a significant relationship with career aspiration and choice (Rojewski, Lee, Gregg & Gemici, 2012).

Contextual constructs, related to the environment in which individuals live, can also influence the career choice of PWD. Some of these factors include socioeconomic status, opportunity structure, relevant legislation, opportunity structure, family, socialization patterns, and (Szymanski & Hershenson, 1998). In a previous study among students with disabilities, a higher socioeconomic status was associated with a positive change in career aspirations and career choice (Rojewski et al., 2012). In employment options, different legislations and programs have strived to offer equal work opportunities, fair job practice, accessible environments, and customized career alternative to make employment a real possibility for PWD (Callahan, Griffin, & Hammis, 2011). There are some obstacles to overcome for PWD; however, when choosing a viable occupation. PWD may have inaccurate or no information about services available, preservation of services, and support system for vocational options (Stevens & Ibanez, 2007). In addition, a group of individuals with visual impairments identified employer's attitudes, transportation limitations, and poor coordination of services as barriers to employment (Crudden, Sansing, & Butler, 2005). Thus, different factors impact a person's career choices especially when societal values and attitudes shape social perceptions of disabilities

Different sociocultural aspects, individual characteristics and disability related factors affect the formation of damaging attitudes (Smart, 2008). Independence, physical beauty, self-sufficiency and productivity, which are some of the values that the great majority of the U.S public embrace, shape attitudes and negatively influence attitudes and behaviors towards PWD (Gatens-Robinson & Rubin, 2008). Prejudice and discrimination towards disability have a negative effect on community participation, and employment plus personal and professional relationships (Smart, 2008). For instance, a survey of a group of individuals with visual impairments identified that negative attitudes of employers and the general public as a major barrier for employment (Crudden et al., 2005). Diverse legislations, public policy and programs have made advances to remove some environmental barriers for different disabilities but individual attitudes remain one of the biggest challenges for remunerative employment (Smart, 2008).

A distinct alternative to traditional employment of working for others is self-employment. This career option attracts PWD for a variety of personal reasons and environmental circumstances. The creation of a new firm requires knowledge, training and experience, funding and social relationships (Aldrich & Martinez, 2001). Considering the needed parts of venture creation, PWD use this career as a way to become independent and self-determined. Owning a business allows for PWD to control their employment outcomes, establish work parameters, and become their own bosses (Feldman & Bolino, 2000). Likewise, this occupation offers freedom and flexibility to fit job requirements around the individual's personal schedule, symptom cycles, or functional abilities (Callahan, Shumpert & Mast, 2002; Doyel, 2000). Self-employment can accommodate communication, transportation or accessibility issues for PWD as well (Clark & Kays, 1999). Frustration and lack of traditional employment opportunities (Boylan & Buchardt,

2003) and discrimination in jobs or in job search practices (Blank, Sandler, Schmeling & Scharz, 2000) also motivate PWD to become self-employed (Boylan & Buchardt, 2003).

Previous studies have examined external and internal factors that affect the career choices of PWD. These studies have found that the career choices of PWD are impacted by a variety of causes. In table 3 below, some of the studies found specific issues that shape the vocational options of PWD. For instance, stigma, the specific medical condition, support available, and personal characteristics are some of the issues that impact the career development and vocational choices of PWD. Thus, environmental and individual factors can modify the vocational intention of those with disabilities.

Table 3: Factors affecting career choices & career decision among PWD

Author/Year	Variables	Clients	Key Findings
Crudden, Sansing, & Butler (2005)	Negative attitudes of employers & of persons with visual impairments, inadequate transportation, the lack of access to print & administrative issues.	Focus groups of 18 individuals with visual impairment & 25 rehabilitation providers.	The negative attitude of employers and general public, transportation limitations, and poor coordination of services are barriers to employment.
Enright (1996)	Disability status, career beliefs & career indecision.	119 College students both with and without disabilities	Disability related characteristics influence career choice & vocational identity. Commitment anxiety, decision-making confusion, and age were significantly related to vocational identity.
Loprest & Maag (2001)	Job search, workplace accommodations.	Dataset - Working age adults with disabilities	Difficulties in job search, lack of appropriate jobs, information available & transportation problem were cited as barriers for employment for PWD.
O'Day &Foley (2008)	Demographic factors & employment outcomes	Data from American Community Survey about men & women with disabilities.	Women and men with disabilities face many similar employment issues but women have a lower employment rate, tend to work part time & earn less than men with disabilities.
Ochs &Roessler (2001)	Career decision self-efficacy & career decision making outcome expectations, career exploratory plans or intentions	176 Students in special education & general education	Career decision self-efficacy and career outcome expectations were key predictors of career exploratory intentions in both groups

Table 3: Factors affecting career choices & career decision among PWD Continued

Author/Year	Variables	Clients	Key Findings
Rojewski, Lee, Gregg & Gemici (2012)	Career choice/ aspirations, academic achievement, socioeconomic status & disability status.	Dataset - Students with disabilities	Career aspirations tend to increase during high school but decreased after school completion. Higher socioeconomic status was associated with a positive change in career aspirations and career choice. In adulthood, disability status was significant factor associated career aspiration
Yanchak, Lease & Strauser (2005)	Career thoughts, vocational identity & type of disability (moderator).	90 Individuals with cognitive impairment and individuals with physical disabilities	Individuals with cognitive impairments have more dysfunctional career thoughts than individuals with physical impairments leading to greater difficulty in decision making.

Entrepreneurs with Disabilities

Self-employment can be a sustainable option for improving socioeconomic and employment outcomes of individuals with disabilities. Interestingly, self-employment rates are higher for entrepreneurs with disabilities than those without disability. According to the American Community Survey, the general labor force aged 16 and over engaged in self-employment is estimated about 9.5% while for those with disabilities is about 12%. In the vocational rehabilitation system, self-employment has been gaining philosophical acceptance as a feasible employment option for people with disabilities (Doyel, 2002). The shift in the American economy from an industrial to an information, technology, and services based one with the philosophy of consumer empowerment and support of self-determination in employment may have contributed to the rate increase (Palmer et al., 2000; Rizzo, 2002; Walls, Dowler, Cordingly, Orslene, & Greer, 2001). In addition, federally funded research and demonstration projects, legislative changes and services programs across the nation have also positively influenced attitudes towards self-employment in vocational rehabilitation agencies (Arnold & Ipsen, 2005).

The lack of employment opportunities and stable employment combined with societal negative attitudes still represent personal and societal challenges for PWD (Table 4). Many individuals choose self-employment or entrepreneurship as a feasible employment option to remove social barriers and improve their social participation. A total of 12 empirical research studies in the United States were found offering tentative conclusions and requiring further research about self-employment among PWD (Yamamoto, Unruh & Bullis, 2012).. In a synthesis of the empirical-research studies on self-employment in the United States, self-employment, which is considered in financial and non-financial terms, is influenced by

individual characteristics, levels of supports, and accountability systems. Individual characteristics, include demographics traits and personal attributes, while financial resources and services available represent the level of supports for PWD (Yamamoto & Alverson, 2013). The broad contextual factors, including laws, regulations, and economic conditions, are the accountability systems and supports relevant to self-employment for PWD.

In the entrepreneurial process, a nascent entrepreneur is a crucial active participant to have a successful business start-up. A nascent entrepreneur is a person who initiates serious entrepreneurial activities to establish a viable business start-up (Reynolds, 1994). As established entrepreneurs are individuals who recognize and exploit new business opportunities by founding new ventures (Shane & Venkataraman, 2000). Unless an entrepreneur recognizes the opportunities available in the environment, they will go unnoticed and unused (Venkataraman, 1997). The entrepreneurship process begins with the entrepreneur's intentions and continues with the different activities and decisions needed for a venture creation (Aldrich & Martinez, 2001). To be successful in owning one's own business, people with disabilities need to possess a specific work attitude emphasizes self-reliance, initiative, innovativeness, and risk-taking (Bruyat & Julien, 2001).

To have a successful new venture, three elements are required: human capital, financial capital, and social capital (Aldrich & Martinez, 2001). Human capital relates to a person's education, knowledge and experience which influence his or her behavior (Coleman, 1988). It also includes personality, appearance, reputation and credentials. Knowledge, which is specific and difficult to imitate, is a key component of human capital and creates competitive advantage (Barney, 1991). Prior research shows that human capital influences various entrepreneurial outcomes (Davidsson & Honig, 2003). Financial capital is the funds needed to obtain inputs

necessary for the production of goods or services and to sustain the enterprise in time of hardship (Aldrich & Martinez, 2001). The lack of financial capital in the launch of a business may hinder the start-up process and even have long-term consequences for performance (Verheul & Thurik, 2001). Social capital refers to the existing and potential resources that an individual can access through relationships (Coleman, 1988) allowing individuals to obtain inaccessible resources such as clients, capital, and other businesses (Aldrich & Martinez, 2001). Many studies have examined the importance of social capital in entrepreneurial activities (Davidson, 2006) including social norms, networks, and social ties (Burt, 1992; Davidson & Honig, 2003).

Overview of Self-Employment Legislation

To reach a vocational goal, people with disabilities can use alternative routes for competitive employment. Work has personal, emotional, financial and social benefits for an individual. The person strengthens self-worth and feels independent while being a participating member of society (Gates-Robinson & Rubin, 2008). Supporting these societal values, legislation has contributed to expand and increase competitive employment opportunities in integrated settings for PWD. Depending on the person's disability, abilities and experiences, the person can aim for traditional employment, supported employment, and self-employment. Hence, self-employment can be a sustainable employment approach to improve the quality of life of PWD.

The Rehabilitation Act of 1973 is an important piece of legislation that addresses the employment needs of people with disabilities. This act authorizes funding for state rehabilitation services to support a successful employment outcome. A successful employment outcome is defined as full-time or part-time competitive employment, or supported employment in an integrated labor market, or innovative options such as self-employment, telecommuting or

business ownership (Rehabilitation Act of 1973, as amended 29 U.S.C. § 791). Technical assistance, consultation services to conduct market analyses, business plan development, and provision of resources through the workforce investment system are vocational services available to eligible individuals, who are pursuing self-employment, established under the Section 103(a) (13) of this act. These amendments are part of an important piece of self-employment legislation, the 1998 Reauthorization of the Rehabilitation Act. This act had a great influence on vocational rehabilitation agencies because it recognized self-employment as a legitimate employment outcome (Arnold & Ipsen, 2005). By emphasizing consumer choice in the rehabilitation process, this act empowers clients to voice their desire for pursuing self-employment as a vocational option. Moreover, the act identifies a proactive role for Vocational Rehabilitation agencies in supporting PWD interested in self-employment.

Based on financial constraints and individual policies on self-employment, each agency has distinctive procedures. Vocational rehabilitation agencies have become more open to self-employment outcomes since the mid-1990s. Agencies views and governmental policies have positively influenced rehabilitation counselors' attitudes towards self-employment (Ravesloot & Seekins, 1996). The federal government, as supported by some legislation, acknowledges the benefits of small business ownerships for the national economy and individuals as well as a potential employment opportunity for PWD. A content review of self-employment policies and procedures has identified a positive climate within VR (Arnold & Ipsen, 2005). The majority of states have a written policy with more positive statements toward self-employment. In addition, self-employment policies have been developed with the intent to provide counselors with guidelines for initiation and completion for business plans using external expert assistance (Arnold & Ipsen, 2005). Policies provide guidance for initiation and continuation. However, this

study also showed that some states lacked self-employment training and education. To ensure successful business ventures, VR agencies need to have self-employment policies and procedures that provide a framework that include self-employment trainings for VR counselors (Arnold & Seekins, 2002). Having self-employment policy, procedures and training support VR agencies to provide effective services for clients who wish to pursue this vocational goal.

Reasons for Self-Employment

Previous studies have evaluated the diverse individual, societal, and economic reasons for PWD to become entrepreneurs. The disability and its limitations on functional abilities not only represent a reason for entrepreneurship but it influences the type of business and business related decisions (Adam, White & Lacaille, 2007). For instance, young adults with acquired disabilities evaluated their limitations and entrepreneurship compatibility their personal lives, needs and interest (Palmer et al., 2000). To cope with an illness or disability, self-employment offers greater flexibility and non- traditional working hours and reduces issues of accessible accommodations, transportation and communications (Clark & Kays, 1995). Considering age and disability, older PWD may choose for this vocational option to transition from the labor market to retirement or labor inactivity (Paga-Rodriguez, 2013). Moreover, PWD strive to enhance their self-fulfillment and self-esteem while earning a living and contributing to support their families (De Klerk, 2008). By owning a business, PWD can also challenge the stereotypical notions of dependency and impoverishment (Hagner & Davies, 2002). For PWD, having the opportunity of choosing is another reason to own a business. In a qualitative study, participants continuously repeated that self-employment was an excellent option because it was their choice, it was what they wanted to do (Callahan et al., 2002). Having an opportunity to become their own boss, attain financial independence, enjoy creative freedom and fully use their

ability and skills are additional reasons for PWD to opt for this vocational option (Sullivan & Cooper, 1998). In addition, they value the opportunity for community involvement and appropriate workplace accommodations as well as the perceived status and income potential of entrepreneurship.

In response to negative social stigma and discrimination experience in seeking and maintaining employment, PWD perceive self-employment as alternative option (Blanck, Sandler, Schmeling, & Schartz, 2000). Finding a job in the regular job market is a difficult task thus becoming self-employed becomes a potential venue to be independent and earn a living (Burkhater & Curtis, 1989; Boylan & Buchardt, 2003). Similarly, the lack of employment opportunities (Hagner & Davies, 2002), or unsatisfactory previous employment experience working for others (McNaughton et al., 2006) may motivate PWD to establish their own businesses. In addition, most traditional jobs and support systems are still unprepared to address the issues often present for a person with severe disabilities (Uditsky, Sannuto & Waters, 1996) thus self-employment becomes a practicable alternative. Because of their understanding of employment barriers and social stigma, entrepreneurs with disabilities become advocates who serve as models for others and raise awareness about the competencies of PWD (Blanck et al., 2000). Having support and training combined with the presence of business owners available also motivated PWD to select self-employment as a vocational choice (Palmer et al., 2000).

Benefits of Self-Employment for PWD

Individuals with disabilities can experience a variety of benefits from self-employment. Autonomy and independence are benefits from owning a particular business that may not unavailable features in traditional employment (Burkhater & Curtis, 1989; Feldman & Bolino, 2000; Shoemaker & Zack, 2002). Self-reliance, autonomy, work satisfaction, control and self-

worth are some of the psychological benefits derived from self-employment for PWD (Hagner & Davies, 2002; McNaughton et al., 2006). Entrepreneurs with disabilities identified empowerment as the ultimate positive outcome of owning a business (Van Niekerk, Lorenzo & Mdlokolo, 2006). Furthermore, the involvement in the entrepreneurial process, including decision making and business planning, combined with the consideration of individual's skills and interests create a sense of control for the individual (Griffin & Hammis, 2002). The flexibility value, derived from entrepreneurship, helps to consider individual's schedules, symptom cycles, and functional abilities (Boylan & Buchardt, 2003; Feldman & Bolino, 2000; Griffin & Hammis, 2002; Walls et al., 2001). For example, the effects of many medical conditions related to disabilities, from multiple sclerosis to mental health disorders, vary in frequency and intensity making difficult to adhere to a fixed work schedule (Falvo, 2011).

By establishing a new business venture, entrepreneurs with disabilities can generate employment opportunities while meeting personal and financial needs. Self-employment helps individual to become financially independent while strengthening societal economic development, creating job opportunities and increasing innovation (Basu & Virick, 2008). Self-employment provides financial stability and independence to support self and others (McNaughton, et al., 2006). In addition, this employment option can help PWD overcome issues with accessibility, communication and transportation that arise in traditional jobs (Seekins & Arnold, 1999). Another important benefit of self-employment is that it may reduce transportation needs and provide a disability-friendly work environment based on functional limitations (Walls et al., 2001) because those self-employed may have the flexibility to establish their own location of employment and work environment. Entrepreneurship allows individuals to retain their well-developed support networks rather than relocate to a different region to obtain a different job

(Kassel & Gibbs, 1997). Lastly, the societal discrimination and negative attitudes towards PWD in their quest to obtain and retain employment (Smart, 2008) may convert self-employment into a less problematic option. Self-employment represents an opportunity to meet personal expectations by contributing to society and demonstrating competency of individuals helping to reduce prejudice towards PWD (McNaughton et al., 2006).

Barriers to Self-Employment for PWD

Even though self-employment may look like a feasible option, there are considerable challenges. The lack of access to supports and resources available can hinder the venture creation process for PWD. Thus, accessibility issues is a noteworthy problem in agencies providing self-employment assistance (Boylan & Buchardt, 2003). Entering buildings for training or information offered in inaccessible formats, such as training materials not available in braille or printed material are available in only one font size, are examples of accessibility concerns. Another significant barrier for this employment option is access to adequate financial capital from bank institutions, a similar challenge for other minority individuals. In order to access business start-up funds, many state require clients to match funds with personal capital (Keeton, Killeen & Shaheen, 2010). Obtaining necessary capital for venture creation from financing institutions, such as commercial banks, represents a difficult task for PWD as it has historically been for ethnic-minority groups and women (Callahan et al., 2002; De Klerk, 2008; Heath & Reed, 2013; Palmer et al., 2000).

A multinational study found by De Klerk in 2008 found that entrepreneurs with disabilities might experience self-exclusion and exclusion by others. Hence, individuals might avoid getting any type of financial assistance for new business enterprising because they are afraid of indebtedness due to failure, refusal of credit approval or excessive interest rates.

Moreover, credit officers might assess PWD as high-risk clients who might require more of their time with future follow-up and assistance. Subsequently, PWD rely on close ties, including individual and family sources, and alternative funding sources such as small business organizations and vocational rehabilitation and disability agencies to obtain financial capital (Hagner & Davies, 2002; Palmer et al., 2000). Business ownership and capital can also negatively lead to a perceived or actual reduction of government assistance benefits such as SSI, SSDI, food stamps and health insurance (Callahan et al., 2002).

Another barrier for self-employment is societal negative attitudes and prejudice towards people with disability. A counselor's attitudes towards self-employment can significantly influenced a case closure using this employment option (Ravesloot & Seekins, 1996). Hence, professionals' attitudes and stigma jeopardize business venture activities among PWD. Stigmatization of PWD and societal prejudice create negative public attitudes and low expectations that represent a huge hurdle to overcome for entrepreneurs with disabilities (Smart, 2012). The low expectations of professionals along with a perception of lacking a meaningful participation in society represent a barrier to employment outcomes (McNaughton et al., 2006). Because of negative attitude among business advisers, entrepreneurs with disabilities can lose their intention of owning a business (Boylan & Buchardt, 2003). These negative attitudes include a lack of trust in their abilities to run a business and doubts about possessing appropriate coping skills for work option. Nevertheless, negative attitudes and stigma associated with disabilities can be changed with education, positive interaction and fruitful experiences (Smart, 2008). After having a positive experience with a self-employed with a disability, rehabilitation counselors' attitudes tend to be more positive towards this employment option (Arnold & Seekins, 1996). In addition, the office environment and the attitudes of colleagues and peers towards self-

employment can predict a VR counselor's view of self-employment (Ravesloot & Seekins, 1996). Therefore, negative attitudes and prejudice in society represent a barrier for self-employment that can be removed with proper education and training.

Agencies' atmosphere and professionals' attitudes towards self-employment are additional concerns involving self-employment. The complexity of the benefit system, combined with difficulties in obtaining funding, and creating a business plan with limited support negatively impact business formation among PWD (Boylan & Buchardt, 2003). Vocational Rehabilitation programs may lack a comprehensive and effective program to support individuals interested in entrepreneurship (Kendall, Buys, Charker & MacMillan, 2006; Walls et al., 2001). The creation and implementation of policies can assist agencies to facilitate the opening of successful new business enterprises. Interestingly, each agency has unique policy and procedures based on state financial constraints and philosophy on self-employment (Arnold & Ipsen, 2005). Agencies' policy and current legislation combined with training create positive attitudes towards self-employment among counselors (Arnold & Seekins, 2002). Especially when the lack of knowledge and training to support new business creation among rehabilitation counselor can impede self-employment (Colling & Arnold, 2007).

Understanding procedures and steps to open a business can be an overwhelming task for clients and counselors. In the past, counselors mainly developed and wrote business plan alone but currently the counselor facilitates the process with the help of external business developers (Arnold & Ipsen, 2005). In Small Business Development Centers, individuals with experience serving PWD or agencies that offered more accessible programs were more likely to work with state Vocational Rehabilitation (VR) agencies, and offer more resources for PWD (Ipsen, Arnold & Colling, 2003). Thus, an agency's program and previous experience with disabilities

influences the self-employment services available for PWD. Similarly, participation in assistance programs seems to positively influence a successful business launch among PWD (Heath, Ward & Reed, 2013). The contribution between vocational rehabilitation agencies, training facilities, and community development centers represent valuable institutional support that improve small business practices among PWD.

Table 4: Overview of Self-Employment among PWD

Author/Year	Study Approach (Some Variables)	Sample	Identified Issues
Adam, White & Lacaille (2007)	Qualitative study – disability, team participation.	247 patients with arthritis	Understanding the medical condition impact on self-employment (SE). Advice for business success, the importance of formal and informal support, self-care, close contact with medical team and business planning.
Arnold & Ipsen (2005)	Non-experimental & review of self-employment policies of agencies	55 state vocational rehabilitation agencies	Agencies have more positive policies & have developed programs and published manuals specifically for counselors.
Arnold & Seekins (1995)	Document analysis & survey	50 state vocational rehabilitation agencies & 95 vocational rehabilitation counselors.	Self-employment represents a positive vocational rehabilitation employment option in rural areas.
Arnold & Seekins (1996)	Analyses of SE policies.	45 Vocational Rehabilitation departments	Counselors developed a positive attitude toward when a client has a positive outcome in SE.
Arnold & Seekins (1997)	Survey	352 vocational rehabilitation counselors	Rural counselors expressed more dissatisfaction with transportation options available to clients & greater satisfaction with networking opportunities available than urban ones.
Arnold & Seekins (1998)	Survey	352 vocational rehabilitation counselors	Counselors identified some of strengthens and limitation of self-employment in rural areas. Lack of public transportation a critical problem in rural areas and job coaches and on the job training are beneficial.

Table 4: Overview of Self-Employment among PWD Continued

Author/Year	Study Approach (Some Variables)	Sample	Identified Issues
Arnold & Seekins (2002)	Recommended SE process for Vocational Rehabilitation agencies.	Conceptual framework	A detailed process to facilitate entrepreneurial practices among clients.
Blanck, Sandler, Schmeling, & Schartz, (2000)	Open-ended questions.	509 entrepreneurs with disabilities	Characteristics, challenges & motivations of entrepreneurs with disabilities
Boylan & Buchardt (2003)	Quantitative analysis of datasets, in-depth interviews.	12 established entrepreneurs with disabilities & 12 staff members	The complexity of the benefit system, difficulties in obtaining funding, and creating a business plan combined with negative attitudes & lack of accessible information represent barriers for SE.
Callahan, Shumpert & Mast (2002)	Interviews with participants.	29 participants in Choice demonstration projects.	SE & participant choice are interrelated. PWD with choices & access to control of public resources tend to choose SE
Colling & Arnold, (2007)	Qualitative analysis bases on focus group interviews.	3 focus groups including vocational rehabilitation counselors and administrators, business development professionals & 2 entrepreneurs with disabilities.	Collaboration with a business consultant is an important component of business development; however, quite often is forgotten when assisting PWD. VR agencies need to utilize the services of community business development.

Table 4: Overview of Self-Employment among PWD Continued

Author/Year	Study Approach (Some Variables)	Sample	Identified Issues
De Klerk (2008)	Literature review, worldwide survey. Funding for PWD.	107 organizations. 58 for PWD & 50 microfinance providers.	PWD do not have access to microfinance programs due to stigma & self-exclusion.
Doyel (2002)	Risk	None	Understanding & assessing risk in SE for PWD. Positive methods for vocational counselors discussed. Workplace accommodations can help increase the effectiveness of the entire business.
Galle & Lacho (2009)	Model for SE training	Conceptual/framework	Provide resources, consulting services, training, assistance with business plan & follow up services are needed for a policy model.
Hagner & Davies (2002)	Qualitative approach. In-depth individual interviews & observations	8 business owners with cognitive disabilities, mobility impairments & secondary psychiatric disability.	SE offers numerous & varied forms of social contact & participation while providing a sense of control. However, the level of support needed blurs the line of authority over the business between client & support staff. Different support needs required different type of resources.
Heath & Reed (2013)	Program evaluation	38 entrepreneurs with disabilities	The industry-driven service model demonstrated a cost- effective method for delivering training, providing needed supports, and connecting low-income entrepreneurs with disabilities to each other and resources.

Table 4: Overview of Self-Employment among PWD Continued

Author/Year	Study Approach (Some Variables)	Sample	Identified Issues
Heath, Ward & Reed (2013)	Discovery program evaluation. Business launch & use of Discovery.	71 entrepreneurs with disabilities	The use of Discovery is associated with successful business launch.
Ipsen, Arnold & Colling (2003)	Exploratory survey	337 directors of Small Business Development Centers	Experience and more accessible program accommodations reported higher rate of PWD as consumers. Accommodations, improved internal capacity, and maintain records of services provided to PWC can enhance services.
Kendall, Buys, Charker & MacMillan (2006)	Attitudes toward self-employment, assessment of client skills & external resources	140 rehabilitation providers in Australia	Australian rehabilitation counselors expressed a positive attitude towards SE & believed clients should have a choice. There is a lack of organizational support for SE.
McNaughton, Symons, Light & Parsons (2006).	Focus group	7 men with cerebral palsy	SE provided financial benefits, meaningful work activities, and an opportunity to meet personal expectations for societal participation. Negative societal attitudes & limited educational background viewed as major barriers. Personal characteristics were evaluated as important.
Pagan-Rodriguez (2013)	Transition to and from self-employment. Dataset (Survey of Health, Ageing, and Retirement in Europe – SHARE)	5847 individuals, 50 years or older from 11 European countries.	Older PWD, aged 50 years or over, who are self-employed are less likely to remain in the same labor status three years later, especially women. Transitions from self-employment to labor inactivity were higher for PWD in Europe.

Table 4: Overview of Self-Employment among PWD Continued

Author/Year	Study Approach (Some Variables)	Sample	Identified Issues
Palmer, Schriener, Getch, & Main (2000)	Qualitative research design	4 entrepreneurs with physical disabilities.	Value of time and opportunity when choosing SE as a vocational option. Challenges & sources of financial capital. Value of support available to start a business for PWD.
Rizzo (2002)	Supported Self-employment	People with severe disabilities (None)	A business model that combines social & business supports to open the options of SE for this group.
Van Niekerk, Lorenzo & Mdlololo (2006)			Lack of capacity & financial capital combined with complexity of establishing working relationships were barriers for SE while building group identity & developing capacity were strategies for success.
Walls, Dowler, Cordingly, Orslene & Greer (2001)	Microenterprise, definition of success & concerns.	408 callers concerning self-employment (Job Accommodation Network)	Microenterprise as a viable vocational goal. Using support systems to establish a business. Success includes not only financial gain but increased self-efficacy, participation in meaningful work or control over workload and accommodations.
Yamamoto & Alverson (2013)	Predictors of SE. Gender, ethnicity, cost of VR services, education & public supports.	RSA 911 dataset	A VR client is more likely to attain a traditional job than to become self-employed. Different factors predicted SE closure, including disability status. Among the significant predictors, ethnicity had the largest effect, followed by education attainment and gender.
Yamamoto, Unruh & Bullis (2012)	Literature review	12 U.S. empirical-research studies	Financial and non-financial factors defined successful self-employment. Three factors were found vital: individual characteristics, level of supports, and accountability systems.

Entrepreneurial Intentions

The intentions and motivations for creating a new enterprise vary from individual to individual. Entrepreneurial activity can be predicted more accurately by studying intention rather than situational factors (Krueger, Reilly, & Carsrud, 2000). In the entrepreneurial research, the intentions to engage in entrepreneurial behavior are known as entrepreneurial intentions.

Entrepreneurial intention is defined as a “cognitive representation of the actions to be implemented by individuals to either establish new independent ventures or to create new value within existing companies” (Bird, 1988, p.445). Individual entrepreneurial intent has proven to be an important and continuing construct in entrepreneurship theory and research (Carr & Sequeira, 2007). The theory of planned behavior asserts that intention is an accurate predictor of planned behavior, especially in cases where the behavior is difficult to observe, rare, or involves unpredictable time lags as in entrepreneurship (Krueger et al., 2000).

Entrepreneurial intentions are considered the first step in new business formation (Lee & Wong, 2004). Individuals do not start a business as a reflex instead intention and planning are part of the venture formation process (Krueger et al., 2000). Several conceptual models of entrepreneurial intentions have been developed striving to improve the understanding of factors that shape individuals’ intentions of starting a business (Davidsson, 1995; Shapero & Sokol, 1982). Entrepreneurial intentions-based models tend to explain entrepreneurship usually as a planned process. Krueger et al. (2000) used the theory of planned behavior as a theoretical framework to examine entrepreneurial intentions and found a positive effect of personal attitude and perceived behavioral control on intentions related to venture formation. Empirical studies generally support the relationship postulated by the theory of planned behavior between entrepreneurial intention and attitudes, subjective norms, and perceived behavioral control

(Douglas & Shepherd, 2000; Kreuger et al 2000). A previous studies found that psychological characteristics influence entrepreneurial intentions (Zhao, Seibert, & Hills , 2005) as well as that individual domains and contextual variables as the two dimensions responsible for the formation of entrepreneurial intentions (Bird, 1988).

Antecedents of Entrepreneurial Intentions

The decision to become an entrepreneur is a complex process that requires intricate mental processes (Shaver & Scott, 1991). Entrepreneurship research provides a variety of factors that impact the formation of entrepreneurial intentions. Intentions are categorized into individuals and contextual domains (Bird, 1988). The individual variables include psychological characteristics, prior knowledge, social networks, and prior knowledge while contextual component comprises environmental support, and institutional factors. Different psychological models have been implemented to analyze the venture creation decision among entrepreneurs (Baum, Frese & Baron, 2007). Moreover, some authors have argued that social values and beliefs regarding entrepreneurship affect individuals' entrepreneurial motivation (Davidsson & Honig, 2003; Liñán & Santos, 2007).

Although age is often not regarded a significant factor of business formation, previous studies have found its relevancy to individual's attitudes. Since age brings the positive effects of experience and the negative effects of uncertainty and opportunity cost, age has a curvilinear relationship with the likelihood of opportunity exploitation (Shane, 2003). Boyd (1990) showed that age had a curvilinear relationship with entrepreneurial intentions by first rising and then falling with age. Another study also established that intentions increases with age as people approach 40 then remaining constant after that (Bates, 1995). Likewise, adults between 25 and 44 years were identified as the most active in their entrepreneurial activities in Western countries

(Reynolds et al., 2002). Age tends to increase the likelihood of business formation but as people get older their intentions decline with their willingness to bear uncertainty (Shane, 2003).

Previous research has also found an interaction between the two factors of gender and entrepreneurial intention influencing the rate and pattern of entrepreneurship. Adult men are twice more likely than women to engage in the process of business startup in the United States (Reynolds et al., 2002). Similarly, another study established that male students tend to have higher entrepreneurial intentions than female (Crant, 1996). Moreover, women continue to report lower entrepreneurial intentions showing gender differences in entrepreneurial activity (Zhao et al., 2005). Nevertheless, other studies failed to find a significant effect of gender on entrepreneurship (Block & Sandner, 2009) whereas the direct gender effect of men's enterprising ventures may be due to female under representation among entrepreneurs (Davidsson, 1995). In a study comparing Norwegian and Indonesian students, Kristiansen and Indarti (2004) found no statistically impact on entrepreneurial intention associated with gender.

Empirical research indicates significant differences in business ownership intention rates among different ethnic groups in the United States (Fairlie, 2004). Using the theory of planned behavior as a theoretical framework, Basu and Virick (2008) found no differences in subjective norms and perceived behavioral control among students from different ethnicities but Caucasians expressed the uppermost level of positive attitudes to entrepreneurship whereas Hispanics had the least favorable attitude. An empirical study also found that reported ethnic identity plays an important factor in the level of entrepreneurial desires, with minority girls reporting higher levels of interest in starting a business than Caucasian girls (Wilson, Marlino & Kickul, 2004). Moreover, Hispanic and African Americans were more motivated by social concerns than their Caucasian counterparts.

Personality traits and characteristics have also been found to be significant among nascent entrepreneurs. Major personality variables studied include the Big Five personality variables (Zhao & Seibert, 2006) and the proactive personality (Crant, 1996) which have been found to be positive predictors of entrepreneurial intentions. Similarly, entrepreneurial self-efficacy (ESE) (Chen, Greene & Crick, 1998), locus of control, motivation (Crane & Crane, 2007), among other factors have been associated with entrepreneurial intentions. ESE refers to the strength of an individual's belief that he or she is capable of successfully performing the roles and tasks of an entrepreneur (Boyd & Vozikis 1994). A previous study found that students, who intention (Kristiansen & Indarti, 2004). Moreover, a previous study reported that motivators for business start-up may differ among gender as females were more motivated by an opportunity to work with others, establish good relationships and earn respect than males, especially among Hispanic participants (Wilson et al., 2004). Regarding economic options and employment status, a study found that a man has higher probability to open a business than being unemployed or in paid employment (Bergmann & Sternberg, 2007). Furthermore, previous research established that as a solution to unemployment men incline to make a decision to start their own business more frequently than women (Giacomin, Guyot, Janssen & Lohest, 2007).

Different factors social constraints have been identified as predictors for the minority entrepreneurship behavior and rates. An empirical study that analyzed minority business ownership found that the increment of self-employment rate among African American men could be as result of a growing educational level among this group (Fairlie, 2004). However, the gap in self-employment rates between Hispanics and Whites widened as there is no improvement in the educational attainment of Hispanic men. Similarly, educational level and entrepreneurial education has been found to have a relationship with entrepreneurial intentions. Accordingly, an

extensive literature review suggested that different attributes, including educational level, experience, and attitude towards risk-taking, along with credit lines affect women entrepreneurial activity (Ekpe, Mat & Razak, 2010). Entrepreneurship education represents a venue to increase the levels of self-efficacy fueling the interest of starting a business among women entrepreneurs (Wilson, Kickul, & Marlino, 2007). Interestingly, one study found that the entrepreneurial intentions of more proactive women decreased when exposed to masculine stereotypes about entrepreneurs (Gutpa & Bhawe, 2007) demonstrating that external social factors can also impact an individual's entrepreneurial intentions.

Alongside social factors affecting business startup, research has examined different institutional factors that predict entrepreneurial intentions (Bowen & De Clerq, 2008; Vaillant & Lafuente, 2007). Entrepreneurship research has evaluated the role of government in the entrepreneurial process (Minnitti, 2008) and finances in the growth and establishment of new businesses (Cumming, 2007). Institutional barriers are a potential explanation for the differences in business start-up intentions between blacks and whites nascent entrepreneurs as blacks face increased barriers to financing and customer services (Kollinger & Minniti, 2006). For instance, the lack of access to financial capital combined with a projected deficiency in human capital by financial institutions force nascent ethnic entrepreneurs into markets with small potential for profitable outcomes and low required educational qualifications barriers of entry (Ram, Theodorakopoulos, & Jones, 2008). Likewise, African Americans and Hispanics entrepreneurs experience substantial discrimination in loan approval based on lenders' stereotypes of minorities' abilities to succeed with their enterprising venture (Blanchard et al., 2008). Difficulty obtaining loans and financing creates an institutional barrier difficult to overcome for minority entrepreneurs (Koellinger & Minniti, 2006).

Table 5: Overview of Major Studies on the Antecedents of Entrepreneurial Intentions

Author/Year	Independent/dependent Variables	Sample	Key findings
Basu & Virick (2008)	Role models, previous experience, education & ethnicity/Entrepreneurial intentions (EI) & entrepreneurial self-efficacy(ESE)	Students	Education have a positive effect on EI. Prior exposure affects ESE. Hispanic have the least favorable attitude toward entrepreneurship.
Chen, Liao, Redd & Wu (2013)	Optimism, Moderating: education, experience, motivation/new venture performance	Entrepreneurs	Entrepreneur’s level of optimism has, on average, a positive relationship with the performance of their new ventures. Entrepreneurial level of education and entrepreneurial motivation moderate this relationship.
Crant (1996)	Proactive personality, gender, education, family experience/Entrepreneurial intentions	Students (undergraduate & MBA)	Students who reported higher entrepreneurial intentions tended to be male rather than female, MBA students rather than undergraduates, and had at least one parent who owned a business. Proactive personality was positively associated with entrepreneurial intentions.
Ekore & Okekeocha (2012)	Fear of failure, pre-entrepreneurial intention, attitude and capacity/ Fear of entrepreneurship	Graduate students	Individuals with high core-self-evaluation reported less fear of entrepreneurship. High levels of pre-entrepreneurial factors, including intention, attitude and capacity, lead to less fear.
Ellen (2010)	Entrepreneurship education & experience, proactive personality, entrepreneurial self-efficacy/ Entrepreneurial intentions(EI)	Students (Finland)	Entrepreneurship education & experience, proactive personality and entrepreneurial self-efficacy positively predicted entrepreneurial intentions. ESE is a strong predictor of EI because it mediates the effect of other variables.

Table 5: Overview of Major Studies on the Antecedents of Entrepreneurial Intentions Continued

Author/Year	Independent/dependent Variables	Sample	Key findings
Fini, Grimaldi, Marzocchi & Sobrero (2009)	Psychological characteristics, individual skills & environmental influences/Entrepreneurial intentions (EI)	Entrepreneurs (new technology based firms)	Attitudes directly predict EI, while psychological characteristics, individual skills and environmental influence have only an indirect impact. The environmental support does not predict EI.
Hmieleski & Baron (2009)	Optimism/Entrepreneurial Intentions (EI) – Moderators: Entrepreneurial experience & Environmental dynamism	Management team leaders of new ventures	Entrepreneurs’ optimism and the performance of a new venture have a negative relationship. Pas experience and industry dynamism moderated these relationship supporting the negative relationship between entrepreneurs’ optimism and venture performance.
Kristiansen & Indarti, (2004)	Age, gender, educational background, self-efficacy, access to capital & information/ entrepreneurial intentions.	Students	Age, gender & educational background have no statistically impact on EI while Self-efficacy & readiness positively affect it.
Sequeira, Mueller & McGee (2007)	Social network & self-efficacy/entrepreneurial intentions.	Adults	A personal network of supportive strong ties coupled with high entrepreneurial self-efficacy increases the likelihood of entrepreneurial intentions and nascent behavior.
Vaillant & LaFuente (2007)	Social stigma to entrepreneurial failure & role models/entrepreneurial activity	Adults	Roles models positively influenced entrepreneurial activity in rural areas.

Table 5: Overview of Major Studies on the Antecedents of Entrepreneurial Intentions Continued

Author/Year	Independent/dependent Variables	Sample	Key findings
Wilson, Kickul & Marlino (2007)	Gender/ entrepreneurial self-efficacy & entrepreneurial intentions	Teenagers & MBA students.	Women have lower self-efficacy than men regardless of educational level.
Wilson, Marlino & Kirkul (2004)	Gender, reported ethnicity, motivations, perceived leadership skills/ entrepreneurial interests	High school students	Hispanics & African Americans were more motivated by social concerns than Caucasian ones. Girls are less likely than boys to be interested in starting an own business.
Zhao, Seibert & Hills , (2005)	Perceived learning from entrepreneurship courses, entrepreneurial experience, risk propensity /entrepreneurial intentions Mediator: Self-efficacy	Master students of business administration	The effects of all variables were mediated by fully entrepreneurial self-efficacy.

Summary

Despite different legislations and government programs, the employment of PWD has remained stagnant in the last few decades. A variety of personal, social, and institutional factors affect the career choices among PWD. As a result of personal interests and environmental constraints, PWD may choose self-employment as a vocational choice. Individuals' entrepreneurial intentions are a cognitive representation of the actions to be implemented in business venture formation. Thus, individuals plan and make relevant decisions before owning a small business. A variety of factors influence entrepreneurial intentions in two main categories: the individual and the contextual domains (Bird, 1988). Specific individual traits and environmental factors predict the intentions of owning a business among individuals. Table 5 above presents an overview of relevant findings about entrepreneurial intentions.

For PWD, individual characteristics, available support and accessible factors have been identified as relevant factors in the entrepreneurial process. In this dissertation, the first category, which includes demographics, personal traits, and psychological characteristics, will be considered. The contextual domains will be evaluated by perceived social status, role models, perceived resources support, and perceived institutional support. These different domains represent potential antecedents for entrepreneurial intentions among PWD. This dissertation sought to contribute by addressing the gap in knowledge about entrepreneurial intentions among PWD by empirically testing a model that drew on the theory of planned behavior to examine the antecedents of entrepreneurial intentions. In the next chapter, the theory of planned behavior (Ajzen, 1991) which explains that attitudes and contextual variables affect intentions will be explained as well as the hypotheses.

CHAPTER III

THEORY AND HYPOTHESES DEVELOPMENT

In order to examine the relationship between personal, social, and institutional predictors of entrepreneurial intentions among people with disability (PWD) different factors were considered. Even though self-employment is a popular option among PWD, there is a need to empirically explore personal traits and environmental context that influence PWD business ventures. Examining how several factors were related to entrepreneurial intentions of PWD provided a clearer understanding of business formation and employment decisions among this group. In this chapter, the theoretical framework and hypotheses established to explore the entrepreneurial intentions of PWD are presented and discussed.

Theory of Planned Behavior

Specific characteristic of the entrepreneur are important for the success of the business. Forming an intention to undertake an entrepreneurial adventure is usually the first step in the process of discovering, creating, and exploiting opportunities for venture creation (Gartner, Shaver, Gatewood, & Katz, 1994). The entrepreneurial event theory (Shapiro & Sokol, 1982) and the Theory of Planned Behavior (TPB) (Ajzen, 1991) are widely accepted theoretical models in the entrepreneurship literature to analyze new business formation. To understand entrepreneurial intentions, TPB is probably the most theoretical approach used in research. TPB is an extension of the Theory of Reasoned Action (Ajzen & Fishbein, 1980) adding a measure of

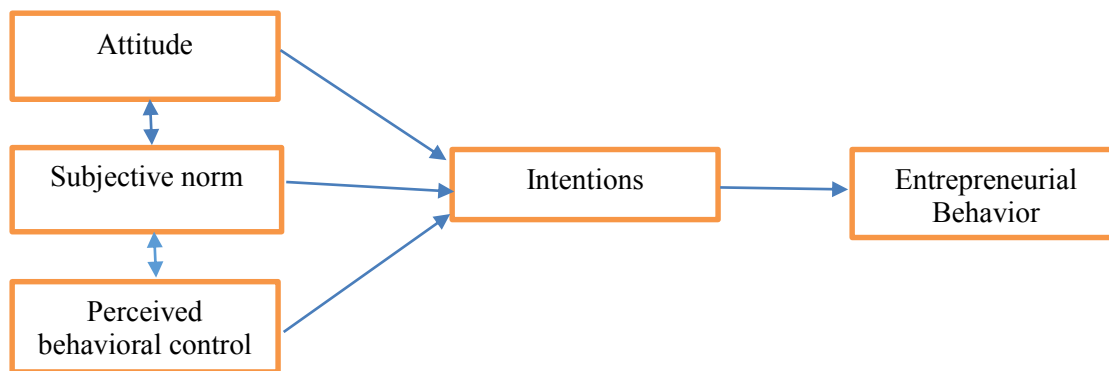
perceived behavioral control. TPB explains that conscious decisions precede considered actions to act in a specific way (Ajzen, 1991).

TPB has been used to examine the relationship between attitudes and behavior not only in entrepreneurship but other fields. TPB provides a social cognition model that has been applied to understand different behaviors and intentions (Duncan, Forbes-McKay, Henderson, 2012). The model has considerable empirical support related to different behaviors. Using TPB as a theoretical model in different fields has provided an insight into reasons behind drinking during pregnancy (Duncan et al., 2012), motivation for physical activity among teenagers (Moreno-Murcia, Cervello Gimeno, Hernandez, Belando Pedreno & Rodriguez Marin, 2013), intentions of managers of small and medium-sized companies to protect the environment (Sanchez-Medina, Romero-Quintero & Sosa-Cabrera, 2014) and surgery decision among women with early breast cancer. In addition, a meta-analysis of studies applying TPB to a wide range of behaviors explained 39% of the variance in intention and 27% of the variance in behavior (Armitage & Conner, 2001). In another meta-analysis focused on health behaviors also reported that TPB accounted for the variance of 41% of intentions and 34 % of future behavior (Godin & Kok, 1996). TPB has been used to provide an understanding of intentions in different behaviors and fields including entrepreneurship.

A key component of the theory of planned behavior (TPB) is an individual's intention to perform certain behavior. These intentions are assumed to demonstrate the motivations and how much effort a person wants to utilize behind a behavior (Ajzen, 1991). A person's desire to perform a specific task impacts behaviors and decisions. As illustrated in Figure 2 below, TPB explains the relationship between intentions and subsequent action through three antecedents: attitudes, perceived behavioral control (PBC), and subjective norms (Ajzen, 1988, 1991).

Attitudes refers to the degree of a favorable appraisal of a specific behavior and combine cognitive and affective elements experienced by the individual while subjective norm refers to the perceived social pressure to perform the behavior. Lastly, the third antecedent of intention is the degree of perceived behavioral control that reflects the individuals' perception about his/her own capacity to perform the specific behavior based on past experience as well as anticipated impediments and obstacles (Ajzen, 1991). Ajzen (1991) theorized that intentions were the result of attitudes formulated through life experiences, personal characteristics and perceptions drawn from these preceding experiences (Ajzen & Driver, 1992). An individual's decision to open a business may have been influenced by previous familial or personal experiences as well as exposure to business creation information.

Figure 2. Theory of Planned Behavior Applied to Entrepreneurial Behavior



According to the TPB, feasible affective and evaluate behavioral beliefs that link the behavior to various outcomes shape attitudes (Linan & Chen, 2009). From this approach, intentions are a robust predictor of planned behavior, such as starting a new business (Ajzen, 1991; Krueger, 1993). The TPB asserts that intention is an accurate predictor of planned

behavior, especially in cases where the behavior is difficult to observe, rare, or involves unpredictable time lags as in entrepreneurship (Krueger et al., 2000). In entrepreneurship research, TPB implies that the entrepreneurial intentions depend on an individual's attitudes towards entrepreneurship, the impact of subjective norms included beliefs to perform the behavior, and the perceived ability to engage in specific behaviors for venture creation (Basu & Birick, 2008). Even some previous research has even suggested that intentions are the best predictors of behaviors (Ajzen, 1991; Krueger, 1993). Meta-analyses show that intentions are strong predictors of actual behavior in different settings (Sutton, 1998). A meta-analytic test showed that the TPB determinants influence entrepreneurial intentions which suggests that an individual's desire are transformed into intentions (Schlaegel & Koenig, 2013). Subsequent testing of the TPB model has supported its validity by demonstrating the ability of intentions to predict behavior (Ajzen, 1991; Schifter & Ajzen, 1985). An individual with a favorable attitude and positive subjective norm combine with a perceived behavioral control tends to show a higher intention to perform a behavior. (Ajzen, 1988; 1991).

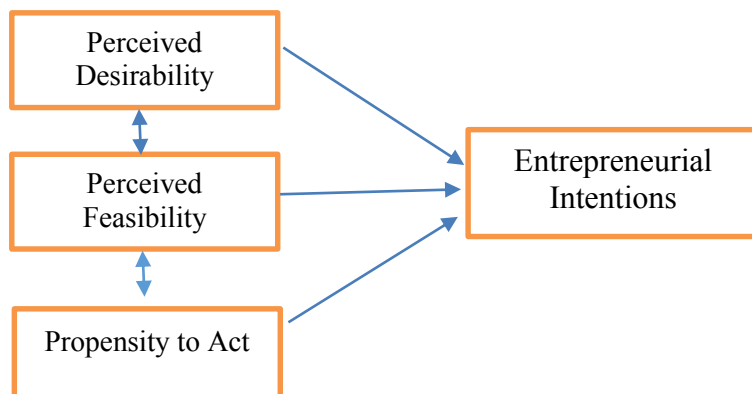
Theory of Entrepreneurial Event

In the entrepreneurship literature, the entrepreneurial event theory (Shapero & Sokol, 1982) is a widely accepted theoretical model to understand new business formation. This theory implies that individuals continue on a given path shaped by external factors such as family, job, and social status. Shapero and Sokol (1982) explained that inertia guides human action and a displacing event pushes or pull an individual to change course in his/her path. This displacement event can lead to a decision to make a significant change in life such as starting a new business. Sense of boredom, work transfers and loss of a job are types of displacement events (Summers,

2000). According to Shapero and Sokol (1982), an alteration in an individual's routine may result in an entrepreneurial decision.

The Theory of Entrepreneurial Event explains that three distinct elements influence an individual's decision. These factors includes the desirability of a specific behavior, the propensity to act on intentions and the perceived feasibility of this behavior (Shapero & Sokol, 1982). Propensity to act refers to the psychological traits that make people attempt to become an entrepreneur upon a trigger event (Summers, 2000). Perceived desirability is the “degree one finds the prospects of starting a business to be attractive” while perceived feasibility is “the degree to which one believes that he or she is personally capable of starting a business” (Krueger, 1993, p. 8). Perceptions of desirability and feasibility result from cultural and social environments and help to make decisions about actions. Figure 3 presents the different elements in the model as it applies to intentions. Similarly, individuals should believe that starting a new venture is possible combined with a precipitating event are required for venture creation (Krueger, 1993). Individuals make a decision to create a new venture before they take the necessary steps to establish a firm; thus, this theory aims to explain factors that may affect a person's entrepreneurial intentions.

Figure 3: Model of the Entrepreneurial Event Theory



Using the Entrepreneurial Event Model, intentions are regarded as a predictor of entrepreneurial behaviors to create a new venture. Based on prior exposure to entrepreneurial activities, attitudes are linked to perceived feasibility and desirability (Shapero & Sokol, 1982). Krueger (1993) found that perceived feasibility and desirability were antecedents of entrepreneurial intentions having a positive association with prior exposure to entrepreneurship. Shapero and Sokol explained that a variety of social factors influence a person's experiences related to entrepreneurship ranging from cultural attitudes to social influences (1982). Previous studies have examined the impact of family business experiences (Wang, Lu & Millington, 2012), financial status (Hsu, Roberts & Eesley, 2007), and role models (Krueger, 1993) on entrepreneurial intentions. Children with entrepreneur parents are more likely to start their new business (Wang et al., 2012) and those with richer parents may receive financial support influencing their entrepreneurial intentions (Hsu et al., 2012). Thus, these social and cultural factors impact the entrepreneurial intention through the perceived desirability and feasibility.

Entrepreneurial Intentions

The intentions and motivations for creating a new enterprise vary from individual to individual. Entrepreneurial activity can be predicted more accurately by studying intention rather than situational factors (Krueger et al., 2000). In the entrepreneurial research, the intentions to engage in entrepreneurial behavior are known as entrepreneurial intentions. Entrepreneurial intention is defined as a "cognitive representation of the actions to be implemented by individuals to either establish new independent ventures or to create new value within existing companies" (Bird, 1988, p.445). Thus, entrepreneurial intentions represents the intention of an individual to start a new business (Krueger, 2009). Individual entrepreneurial intent has proven to be an important and continuing construct in entrepreneurship theory and research (Carr &

Sequeira, 2007). Moreover, entrepreneurial intentions have been found to be the best predictor of a person becoming an entrepreneur (Krueger et al., 2000).

Entrepreneurial intentions are considered the first step in new business formation (Lee & Wong, 2004). Individuals do not start a business as a reflex instead intention and planning are part of the venture formation process (Krueger et al., 2000). Several conceptual models of entrepreneurial intentions have been developed striving to improve the understanding of factors that shape individuals' intentions of starting a business (Davidsson, 1995; Shapero & Sokol, 1982). Entrepreneurial intentions-based models tend to explain entrepreneurship usually as a planned process. Krueger et al. (2000) used the theory of planned behavior as a theoretical framework to examine entrepreneurial intentions and found a positive effect of personal attitude and perceived behavioral control on intentions related to venture formation. Empirical studies generally support the relationship postulated by the theory of planned behavior between entrepreneurial intention and attitudes, subjective norms, and perceived behavioral control (Douglas & Shepherd 2002; Kreuger et al 2000). A previous studies found that psychological characteristics influence entrepreneurial intentions (Zhao, Seibert, & Hills, 2005) as well as that individual domains and contextual variables as the two dimensions responsible for the formation of entrepreneurial intentions (Bird, 1988). A variety of factors have been studied as antecedents of entrepreneurial intentions among individuals including personal, social and institutional factors. In the following section, these three different types of antecedents will be discussed. Some of these factors are considered in this section as antecedents of entrepreneurial intention based on extensive literature.

Individual Antecedents of Entrepreneurial Intentions

TPB explains that intentions precede human behavior because many behaviors are planned (Fishbein & Ajzen, 1980). Several studies have shown that demographic characteristics such as age, ethnicity, gender as well as individual background including education and previous experience, have an impact on entrepreneurial intentions. Since age brings the positive effects of experience and the negative effects of uncertainty and opportunity cost, age has a curvilinear relationship with entrepreneurial behavior (Boyd, 1990; Shane, 2003). In the entrepreneurial literature, gender differences in venture creation has been well documented (De Bruin, Brush & Welter, 2006) showing that men are almost twice more likely than women to become entrepreneurs. Considering ethnic groups, for instance, Hispanics/Latinos have expressed the least favorable attitude toward entrepreneurship among minority entrepreneurs (Basu & Virick, 2008; Fairlie, 2004). When forming entrepreneurial intentions, work experience play a vital role by affecting individual's perceived self-efficacy in starting a business (Wang et al., 2012). Specifically, perceived learning from formal education in entrepreneurship and experience as an entrepreneur positively predict the entrepreneurial intentions of an individual (Ellen, 2010).

Similarly, some psychological and behavioral characteristics (Shane, 2003) as well as cognition attributes (Allison, Chell & Hayes, 2000) make some individuals prone to become an entrepreneur. Risk taking propensity (Luthje & Franke, 2003; Zhao et al., 2005), self-efficacy (Wilson et al., 2008), personality type (Zhao, Seibert & Lumpkin, 2010), innovativeness and independence (Ang & Hong, 2000) are some of the psychological traits discussed in the entrepreneurship literature. Previous research has established a relationship of individual psychosocial and cognitive characteristics on entrepreneurial intentions. For instance, entrepreneurial self-efficacy has been found to have a positive relationship with entrepreneurial

career intentions for both genders among minority groups (Wilson et al., 2008) and to be a mediator effect between antecedents and business formation intentions (Zhao et al., 2005). Similarly, in a multinational comparative study about individuals' entrepreneurial cognitive mechanism, participants with high scores in cognitive scripts have higher levels of entrepreneurial intention (Sanchez, 2012).

Social Antecedents of Entrepreneurial Intentions

Some authors have argued that socio-cultural values and beliefs, regarding entrepreneurship, affect individuals' entrepreneurial motivation (Begley & Tan, 2001; Davidsson & Honig, 2003; Liñán & Santos, 2007). In particular, authors have extensively examined the influence of social networks (Elfring & Hulsink, 2003; Menzies, 2003), social capital (Liao & Welsch, 2005), social cognition (Shepherd & Krueger, 20002) and socio-cultural values (Begley & Tan, 2001). For entrepreneurs, relationships of individuals, communities and network offer an asset for enterprising intentions because social networks allow access to valuable resources such as ideas, finance and technology (Chung, 2006). Thus, having a supportive social networks strongly impact the motivation for self-employment (Wang, Prieto & Hinrichs, 2010). Role models and family background along with a supportive network seem to affect the entrepreneurial behavior of individuals. Because entrepreneur parents may establish a positive role model, individuals with family business background have a higher probability to become entrepreneurs among Chinese (Wang et al., 2012).

For an entrepreneur, perceived social norms and societal values, relevant to entrepreneurship, may be important for their influence on self-employment perceptions. Davidsson (1995) found no predicting power for social status of entrepreneurship in Sweden while Begley and Tan (2001) explained that social status predicted entrepreneurial intention in

East Asian countries. The role of socially constructed gender stereotypes in entrepreneurship also influence men and women's entrepreneurial intentions (Gutpa, Turban, Wasti & Sikdar, 2009). Similarly, cultural views of entrepreneurial activity affect venture creation as those cultures that value and reinforce business start-up may facilitate risk-taking and innovation (Hayton, Geroge & Zahra, 2002).

Institutional Antecedents of Entrepreneurial Intentions

Besides individual and social factors affecting business startup, research has examined different institutional factors that predict entrepreneurial intentions (Baumol, 2008; Vaillant & Lafuente, 2007). Institutions help to create limits for organizations and individuals while facilitating opportunities for enterprising action (Dunning & Lundan, 2008). Entrepreneurship research has evaluated the role of government in the entrepreneurial process (Minnitti, 2008) and finances in the growth and establishment of new businesses (Cumming, 2007). In entrepreneurship literature, a nation's institutional environment has been found to influence entrepreneurial activities and the extent to which entrepreneurs engage in high-growth activities (Bowen & De Clerq, 2008). Specifically, financial resources and entrepreneurial education may stimulate entrepreneurs to take specific steps to open up a business.

In regard to financial options, the lack of access to capital and credit opportunities represent barriers to business innovation and success for minority entrepreneurs (Koellinger & Minniti, 2006). Thus, personal savings, family ties, and community network become potential sources of credit for business start-up. Institutional barriers may explain the differences in business start-up intentions between minority and whites nascent entrepreneurs as minorities face increased barriers to financing and customer services (Kollinger & Minniti, 2006). Moreover, an understanding of a community is crucial for adapting entrepreneurship support, framework and

services that promote business startup (Vaillant & LaFuente, 2007). An institutional framework can support entrepreneurial activity in an area by providing support and services for entrepreneurs.

Integrated Model of Entrepreneurial Intentions among PWD

TPB was used as a theoretical model to empirically examine the antecedents of entrepreneurial intentions among PWD. The succeeding Figure 4 represents the conceptual model of the proposed antecedents of entrepreneurial intentions among PWD. The dependent variable is entrepreneurial intentions (EI) while the independent variables are grouped into three categories: personal, social, and institutional factors. The personal factors will be proactive personality, entrepreneurial self-efficacy (ESE), fear of failure, and optimism. Social factors include perceived social status and role models whereas perceived resource support and perceived institutional support are under institutional factors.

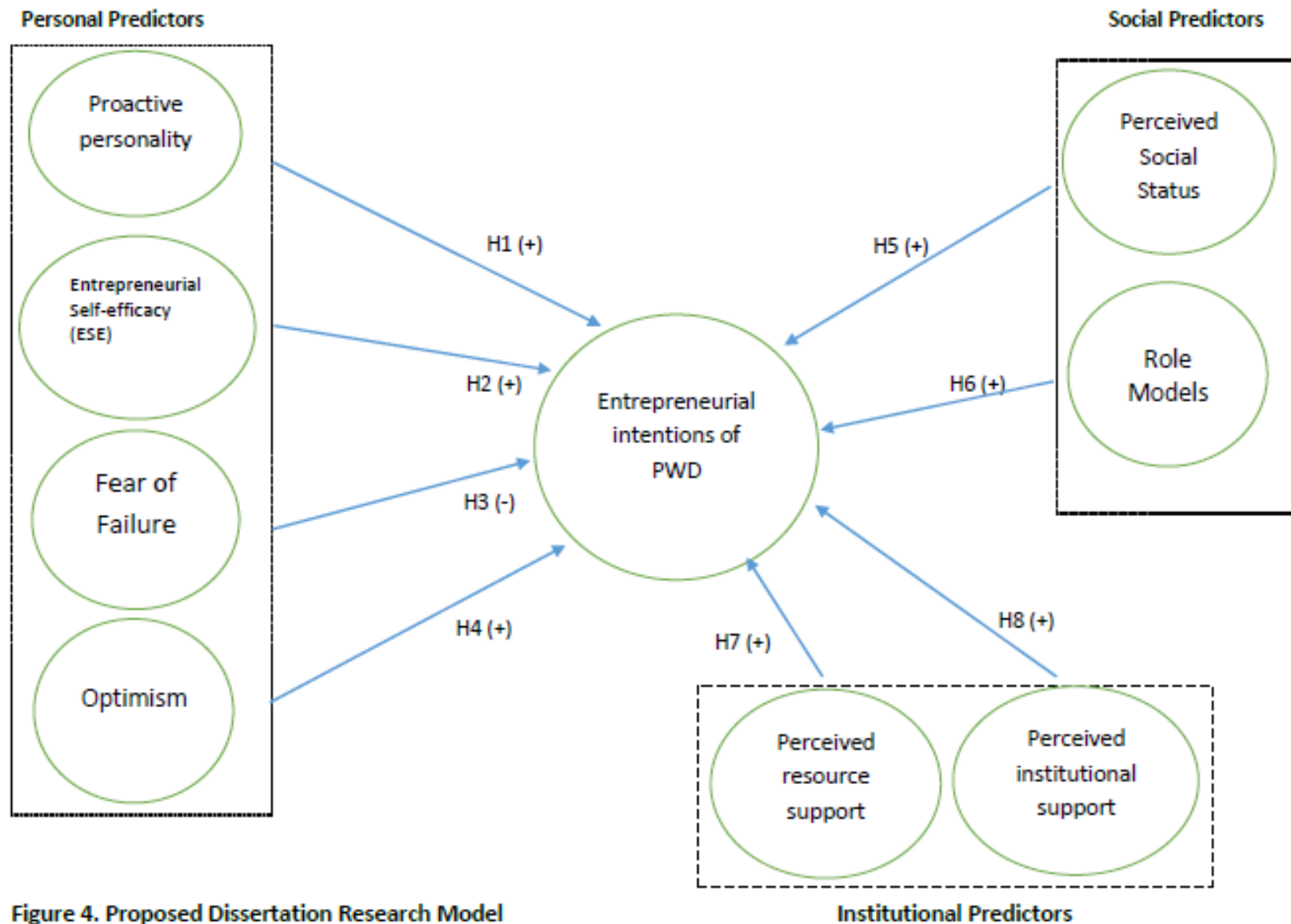


Figure 4. Proposed Dissertation Research Model

To understand the relationships of relevant factors to entrepreneurial intentions this dissertation has five research questions:

1. What are the relationships among factors relevant to entrepreneurial intentions of people with disabilities (PWD) including proactive personality, fear of failure, optimism, entrepreneurial self-efficacy, perceived social status, role models, perceived resources support and perceived institutional support?
2. Do certain personal characteristics such as proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?
3. Do certain social characteristics such as perceived social status, and role models predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?
4. Do certain institutional characteristics such as perceived resources support and perceived institutional support predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?
5. Do personal, social and institutional characteristics predict the level of entrepreneurial intentions among people with disabilities (PWD) (Full Model)?

Entrepreneurship research provides a variety of factors that impact the formation of entrepreneurial intentions. In the past few decades, scholars have focused on different issues related to entrepreneurial intention and nascent behavior. In entrepreneurship, creations of new ventures are outcomes of entrepreneurial intentions (Bird, 1988). The intention to perform a behavior can be affected by internal or external factors (Lee & Wong, 2004). In research, the individual characteristics include psychological characteristics, prior knowledge, social

networks, and prior knowledge while contextual component comprises environmental support, and institutional factors. Considering personal, social and institutional predictors of entrepreneurial intentions, the hypotheses for this dissertation will be discussed in the following section.

Proactive Personality and Entrepreneurial Intentions

Different personality traits seem to have an impact on entrepreneurial intentions. Gartner (1990) identified that one of his eight categories related to entrepreneurship focused on the entrepreneur as an individual with usually unique personality characteristics and abilities. According to Bateman and Crant (1993), proactive personality is defined as “one who is relatively unconstrained by situational forces and who effects environmental change” (p. 105). In addition, they discussed the proactive component of organizational behavior measure as a personal disposition toward proactive behavior and identify differences among people in their actions to influence their environments. Consequently, individuals with proactive personalities identify opportunities and act on them as well as they show initiative, take action, and show persistence until creating meaningful change. Conversely, people who lack a proactive personality fail to identify potential opportunities for change (Bateman & Crant, 1993).

In previous empirical studies, proactive personality was positively associated with entrepreneurial intentions (Crant, 1996; Ellen, 2010; Gutpa & Bhawe, 2007; Prieto, 2011). For instance, small company presidents who started their own business were found to have higher level of proactive personality than presidents who purchased or inherited their business (Becherer & Maurer, 1999). Furthermore, a proactive president creates an organization that scans for opportunities and uses an aggressive approach in the market. In addition, individuals with proactive personality have stronger entrepreneurial leadership that may contribute to the success

of the organization (Prieto, 2010). With the argument that personality plays an important role in decisions, it seems probable that PWD with proactive personality are more likely to open up their own businesses.

Hypothesis 1: Among people with disabilities (PWD), proactive personality is positively related the level of entrepreneurial intentions.

Entrepreneurial self-efficacy (ESE) and Entrepreneurial Intentions

Self-efficacy, derived from Bandura's social learning theory (1977), describes a person's beliefs in his or her ability to perform a specific task. Bandura explained that the level of motivation, affective status and behaviors are influenced by an individual's own beliefs. An extension of the self-efficacy concept is entrepreneurial self-efficacy (ESE) defined as an "individual's belief that he or she is capable of successfully performing roles and tasks of an entrepreneur" (Boyd & Vozikis, 1994; Chen et al., 1998 p. 301). Individuals with high ESE tend to believe in their ability to achieve goals, perceive low probability of failure and focus on opportunities rather than risks. Therefore, the role of ESE is a usually a key antecedent in an intentional career choice of starting a business (Chen et al., 1998).

A robust body of research in the field of entrepreneurship has explicitly investigated the relationship between entrepreneurial self-efficacy and entrepreneurial career preferences. In a meta-analysis research, self-efficacy consistently and positively relates to work performance across a variety of contexts (Stajkovic & Luthans, 1998). In the field of entrepreneurship research, those with high entrepreneurial self-efficacy are more likely to believe they have an actionable idea (Markman, Balkin & Baron, 2002; Wilson, et al., 2004). For instance, For instance, an empirical previous research found that entrepreneurial self-efficacy had a stronger effect on entrepreneurial career interest for teenage girls than for boys and female participants were found to have lower level of self-efficacy than male ones (Wilson et al., 2007).

Similarly, a previous cross-national study, comparing males and females from Indonesia and Norway, found that male students' self-efficacy had significant higher level than females and was positively related with strong entrepreneurial intention in both countries (Kristiansen & Indarti, 2004). These findings are consistent with previous research on adults that indicates that women are more likely than men to limit their ultimate career choices because of their lack of confidence in their abilities (Bandura, 1992).

Self-efficacy has also shown to have a strong predictive ability when incorporated into proposed models of entrepreneurial career intentions (Chen et al., 1998; Shapero & Sokol, 1982). A different meta-analysis of previous studies found that self-efficacy was strongly correlated to intentions and behaviors since individuals who feel confident about their abilities to enact a specific act tend to form intentions (Armitage & Conner, 2001). In an attempt to develop an ESE measure, five identified factors, which include searching, planning, marshaling, implementing and attitude, had a positive relationship between with business formation (McGee, Peterson, Mueller & Sequeira, 2009). In addition, ESE has been found to mediate the influence of entrepreneurial education, experience, and risk propensity on entrepreneurial intentions (Zhao, et al., 2005). Thus, individuals with a strong belief that they can be successful entrepreneurs have intentions and choose to start a business (Ellen, 2010). Moreover, individuals with high self-efficacy are more likely to engage in entrepreneurial behavior such as writing a business plan or finding capital for investment (Sequeira, Mueller & McGee, 2007). Based on empirical evidence, it is estimated that entrepreneurial self-efficacy seems to play an important role among the entrepreneurial career intention of PWD.

Hypothesis 2: Among people with disabilities (PWD), entrepreneurial self-efficacy is positively related to the level of entrepreneurial intentions.

Fear of Failure and Entrepreneurial Intentions

Psychological factors can also inhibit or even prevent entrepreneurial activity as a viable career opportunity. In an unpredictable environment with rapid changes, the role of affect in entrepreneurship decisions is undeniable (Baron, 2008). Affect, which combines feelings and emotions, strongly affects how information is stored in memory, processed and retrieved for use (Isen, 2002). Emotions shape evaluations of a specific event or activity since they influence how individuals process information (Beal, Weiss, Barros, & Macdermid, 2005; Foo, Uy & Baron, 2009). Thus, feelings shape thought while thoughts can shape feelings (Isen & Baron 1991).

Different events can create fear of failure which evokes images and feelings that can be frightening (DWS, 1975). Shame, disgrace, and guilt are some of the feelings associated with failure. Hence, fear of failure reflects an apprehension that based on internalized goals, the individual will be unable to perform as well as he or she desires (Beery, 1975). Moreover, it results from the fact that striving does not always leads to success and that failing negatively affects self-esteem and other's perception of the individual (Birney, Burdick & Teevan, 1969). Thus, fear of failure makes a person feel discouraged and afraid before even making an attempt because he or she will not succeed (Omololu, 1990; as cited in Ekore & Okekeocha, 2012).

The fear of failure is an affect that can have an aversion effect on the entrepreneurial intentions of an individual (Crane & Crane, 2007). Foo et al. (2009) reported that individuals experiencing fear, a negative emotion, perceive high outcome uncertainty and limited personal control over the outcome. Moreover, fear of failure is often view as a cultural component that impacts new firm formation (Bosma, Jones, Autio & Levie, 2007) and decisions to whether exploit a business opportunity (Welp et al., 2012). Landier demonstrated that the stigma associated with failure impacts the decision to become an entrepreneur, the termination of an

entrepreneurial idea, and the type of and entrepreneur would start (2006). Moreover, when failure is highly stigmatized, entrepreneurs are more likely to engage in projects with low chances of failing.

Ekore and Okekeocha (2012) also evaluated the impact of entrepreneurial factors on the fear of entrepreneurship. Core self-evaluation represented the fundamental evaluation that individuals make about their own competence, worthiness and capabilities (Judge, Locke & Durham, 1997). In this study, individuals rating themselves as having high competence, worthiness, and capability would be more likely to venture into entrepreneurship, would not be afraid of taking risks, and would remain satisfied despite of its complexities. Those who rate themselves highly are more likely to deal with adversity and persevere in resolving their business issues to overcome different fears related to entrepreneurship, including the fear of failure. On the other hand, in a different study that focused on rural areas in Spain, the fear of entrepreneurial failure had no influence upon entrepreneurial activity as compared to other parts of the country (Vaillant & LaFuente, 2007). These findings contradict preceding results thus requiring additional research about fear of failure. Even though previous studies have found contradicting findings, it is proposed that fear of failure negatively affects the entrepreneurial intention level among PWD.

Hypothesis 3: Among people with disabilities (PWD), fear of failure is negatively related to the level of entrepreneurial intentions.

Optimism and Entrepreneurial Intentions

When evaluating how the characteristics, motives, and actions of individuals impact entrepreneurial intention, another factor to consider is optimism. In the entrepreneurial cognition research, heuristics refer to “simplifying and time-saving strategies that individuals use to make decisions” (Ucbasaran, Westhead, Wright & Flores, 2010, p. 542). Optimism is a generalized

positive expectancy that everything will have positive results (Scheier & Carver, 1985). On the other hand, a pessimistic individual expects the worst and that nothing will turn out well.

Optimism also focuses on outcome expectancies influencing behavior towards a specific goal despite obstacles to attaining these goals (Scheier & Carver, 1992; Snyder et al., 1991).

Dispositional optimism, described as a personality trait, is the expectation that in the future positive things will be plentiful while negative ones will be rare (Scheier & Carver, 1992).

A review of the entrepreneurship literature reported that dispositional optimism, a trait of entrepreneurs, is correlated to entrepreneurial success (Crane & Crane, 2007). Entrepreneurs are goal oriented individuals who continue working on their goals despite barriers and setbacks.

After making a decision to become business owners, entrepreneurs have an extraordinary degree of optimism predicting their success better than other similar businesses (Cooper, Dunkelberg & Woo, 1988). Moreover, optimistic entrepreneurs may work hard to increase their prospects for success and find ways to overcome many obstacles in business start-up (de Meza & Southey, 1996). Optimism has also been found to generate strong focus and enhanced creativity representing beneficial outcomes for entrepreneurs (Baron & Tang, 2011). In an emerging economy, optimism was found to positively influence new business performance (Chen, Liao, Redd & Wu, 2013). Additionally, entrepreneurs with lower level of education displayed a strong positive relationship between their optimism and the performance of their new enterprise.

Even though some studies report that optimism increases entrepreneurial activity, some studies have established that it can partially influence venture failure. Positive affect increase vulnerability to various cognitive errors that can conceivably be damaging to entrepreneurs and their business activities (Baron, 2004). An example of these cognitive errors is the optimistic bias which is an overestimated anticipation that everything will have positive outcomes (Shepperd,

Ouellette, & Fernandez, 1996). For instance, a previous study found that entrepreneurs' optimism and the performance of their new enterprises have a negative relationship (Hmieleski & Baron, 2009). In this study, the enterprise's performance initially rose as the entrepreneurs' optimism increased but after a certain point any increments would lead to a decline in performance. Moreover, the relationship between optimism and firm performance was moderated by past entrepreneurial experience and industry dynamism. Highly optimistic individuals often hold unrealistic expectations, have overconfidence, and ignore negative information affecting their decision making and their venture's performance (Geers & Lassiter, 2002). Many nascent entrepreneurs are optimistic, with improbable expectations and overestimation of success, which can partially explain high failure rates, reliance on bank credit, business decisions, and credit restrictions (de Meza & Southey, 1996). Even though optimist may lead to venture failure due to unrealistic expectations, it is estimated that optimistic PWD are prone to create a new venture.

Hypothesis 4: Among people with disabilities (PWD), optimism is positively related to the level of entrepreneurial intentions.

Perceived Social Status and Entrepreneurial Intentions

Another factor that influences a person's intention to exploit an entrepreneurial opportunity is perceived social status. Perceived social status refers to an individual's interpretation of how others perceive where they rank in the social community ranking (Shane, 2003). Thus, the value of a career preference in a society can often influence an individuals' decision to pursue it (Mueller & Thomas, 2001). Career choices and individual professional success have a perceived value that varies in different societies that may influence a person's decision to be in a specific industry.

Empirical evidence from previous studies showed that entrepreneurial activity, in some countries, is strongly related to specific social values and perceptions related to owning a business (Begley & Tan, 2001). In a socio-cultural context, career options are valued based on values and attitudes towards a specific profession which in turn may influence an individual's decision to pursue it. For instance, an empirical study among Mexican Americans in the United States reported that perceived social status has a strong positive association with entrepreneurial intentions (Abebe, 2012). Begley and Tan (2001) reported that in Indonesia social status predicted significantly entrepreneurship interest; however, Malach-Pines, Levy, Utasi and Hill (2005) found that the impact of the perceived social status on entrepreneurs' intentions vary among different social groups. Moreover, in a study regarding entrepreneurship in Latin America, Guzman-Alfonso and Guzman-Cuevas (2012) also found that attitudes, perceived social value and self-efficacy influenced entrepreneurial intentions. In contrast to previous studies; conversely, a significant negative relationship between perception of social value and entrepreneurial intention was established where individuals emphasize less others' opinions about the possibility of venture creation. With estimation that the perceived social status associated with entrepreneurship influences intentions, it is estimated that the entrepreneurial intention of PWD increases based on the perception of this career choice as feasible and respectable.

Hypothesis 5: Among people with disabilities (PWD), perceived social status is positively related to the level of entrepreneurial intentions.

Presence of Role Models and Entrepreneurial Intentions

The presence of a role model also influences the entrepreneurial activity of an individual. In entrepreneurship, an individual's intentions can be understood from a social learning perspective (Krueger, 1993). From the social learning perspective, observational learning helps

to learn a behavior in the environment (Bandura, 1977). Moreover, learning involves a cognitive process where the individual acquires knowledge by observing a behavior and its consequences in a social context. The individuals that are observed are called models. From observations of role models, individuals can learn behavior and create interpretations. In entrepreneurship research, the presence of a role model increases the probability of being involved in entrepreneurial activities (Vaillant & Lafuente, 2007).

Empirical evidence has shown that a role model and his or her business ownership experience influence an individual's readiness and preparedness in establishing a firm (Krueger et al., 2000; Douglas & Shepherd, 2002, Van Auken, Fry & Stephens, 2006). Recognizing the experience of the role model as positive had a significant impact of the perceived desirability of launching a firm (Krueger, 1993; Basu & Virick, 2008). For instance, Davidson (1995) found that individuals with a role model were more likely to run their own business than those without one. Another study also found that the presence of a role model combined with the role model's perceived performance positively influenced entrepreneurial career intentions (Scherer, Adams, Carley, & Wiebe, 1989).

Role models, which help to develop and discover entrepreneurial opportunities, have a positive influence in the entrepreneurial activity (Fornahl, 2003). Previous exposure to family business provides an opportunity for role model and experience with entrepreneurship. An individual who had positive experiences and views of his/her family business expressed an affirmative attitude towards opening a business (Drennan, Kennedy & Renfrow, 2005). Thus, individuals with exposure to the experience of starting a business have a more favorable attitude and feel more confident to start a business (Basu & Virick, 2008). Observing and identifying the positive aspects of a role model lifestyle and career had a positive influence on career

entrepreneurial intentions of individuals (Van Auken, Fry & Stephens, 2006). Consequently, the presence of role models and the perception of the merits of an entrepreneurial career have a positive effect on entrepreneurial attitudes among PWD.

Hypothesis 6: Among people with disabilities (PWD), role models are positively related to the level of entrepreneurial intentions.

Perceived Resource Support and Entrepreneurial Intentions

Financial resources available and personal relationships are part of the environmental context that foster entrepreneurial intention. Perceived resource support can be divided into perceived social and financial support. According to Sequeira, Mueller & McGee (2007), emotional and psychological supports as well as financial support represent valuable resources for individuals in the venture creation process. Previous research has explored the value of social capital including social networks (Linan & Santos, 2007) and financial capital (Davidsson & Honig, 2006) in entrepreneurial intentions.

Social networks are not only important for opportunity recognition (Davidsson & Honig, 2003) but also in the resource acquisition process as individuals gain access to sources of capital (Shane, 2003). Thus, social relationships are important for nascent entrepreneurs to identify potential business opportunity and financing ideas. However, other factors may constitute substantial contributions to the difficulties accessing financial capital. For instance, sexual stereotyping and discrimination affects female entrepreneurs' relationships with bank staff which leads to the collateral required for external financing being beyond the scope of women's personal assets and credit history (Hirsch & Brush, 1984). Thus, the interpretation of financial support available influences the level of entrepreneurial intentions among PWD.

Financial institutions represent a vital institutional support for individuals considering a new business. In general, individuals starting a new business are vulnerable to financial

constraints needing external financing support (Beck, Demirguc-Kunt, & Maksimovic, 2005; Davidsson & Honig, 2006; Lerner, 1999). Prior research indicates that entrepreneurs often first obtain financial resources from family and friends, but soon require additional resources to finance the growth of their business (Gaston, 1989; Gompers, 1999). In the minority entrepreneurship literature, the lack of financial capital has been identified as a primary obstacle for starting a new enterprise and long term success (Kollinger & Minniti, 2006). Perceive resource support involves the emotional and psychological support from social networks combined with the financing aspects involved in business creation. These two components of perceive resource support can influence the entrepreneurial intention of PWD.

Hypothesis 7: Among people with disabilities (PWD), perceived resource support is positively related to the level of entrepreneurial intentions.

Perceived Institutional Support and Entrepreneurial Intentions

Since nascent entrepreneurs find and utilize opportunities in the environment to establish new potential ventures, another factor that may impact entrepreneurial intentions is institutional factors (Thornton, 1999). Creating a new enterprise and becoming an entrepreneur may be influenced by environmental factors that determine the levels of entrepreneurial activity in a specific context (Baumol, 1990). Thus, institutional factors may play an important role in the entrepreneurial activity in a community.

In the entrepreneurship literature, previous research has considered a number of institutional factors that predict entrepreneurial behavior (Baumol, 1990; Bowen & De Clercq, 2008). The role of the state or government also influences the allocation of entrepreneurial activity (Whitley, 1999). For instance, governmental funding structures, tax policies, and other support systems intent to facilitate entrepreneurship and improve market status (Lerner, 1999). Moreover, entrepreneurial support services help potential entrepreneurs to transform an initial

idea into a feasible business opportunity (Foo, Wong, & Ong, 2005). Oppositely, Fini, Grimaldi, Marzocchi and Sobrero (2009) in an empirical study established that environmental support from government and universities failed to predict entrepreneurial intention. Thus, external support may become relevant into a later stage of entrepreneurship as individual implements concrete entrepreneurial actions for a successful venture. PWD receiving vocational services explained that poor coordination of services (Crudden, Sansing, & Butler, 2005) and challenges obtaining necessary capital for venture creation from financing institutions represent barriers for self-employment (Callahan et al., 2002; De Klerk, 2008; Heath & Reed, 2013; Palmer et al., 2000). Thus, it is necessary to explore the argument that institutional factors impact entrepreneurial intentions among PWD.

Hypothesis 8: Among people with disabilities (PWD), perceived institutional support is positively related the level of entrepreneurial intentions.

Summary

Using TPB as a social cognition model, the nascent entrepreneurship behavior of individuals can be better understood. A variety of personal and environmental factors influence the entrepreneurial intentions and behaviors of individuals. The purpose of this quantitative study was to investigate different variables that may influence entrepreneurial intentions among people with disabilities and potentially identify those variables that differ significantly between the disability categories. The proposed theoretical model and hypotheses intended to examine the venture creation among PWD and how vocational services can be improved based on the findings (Table 6). The previous two chapters presented the significance of the study to entrepreneurship and vocational rehabilitation services as well as a review of relevant literature. In the following chapter, information about the research design of this exploratory study,

including selection of participants, instrumentation, variables, procedures, and data analysis procedures will be presented.

Table 6. Summary of Proposed Hypotheses

Hypothesis	Proposed Relationship	Supported/Not Supported
H1	Among people with disabilities (PWD), proactive personality is positively related the level of entrepreneurial intentions.	Supported
H2	Among people with disabilities (PWD), entrepreneurial self-efficacy is positively related to the level of entrepreneurial intentions.	Supported
H3	Among people with disabilities (PWD), fear of failure is negatively related to the level of entrepreneurial intentions.	Not Supported
H4	Among people with disabilities (PWD), optimism is positively related to the level of entrepreneurial intentions.	Not Supported
H5	Among people with disabilities (PWD), perceived social status is positively related to the level of entrepreneurial intentions.	Supported
H6	Among people with disabilities (PWD), role models are positively related to the level of entrepreneurial intentions	Supported
H7	Among people with disabilities (PWD), perceived resource support is positively related to the level of entrepreneurial intentions.	Supported
H8	Among people with disabilities (PWD), perceived institutional support is positively related the level of entrepreneurial intentions.	Supported

CHAPTER IV

METHODOLOGY

This chapter is organized with information about the research design of this dissertation, including selection of participants, instrumentation, variables, and data analysis procedures. Because there is a paucity of research on entrepreneurial intentions among people with disabilities, personality, social and institutional determinants of entrepreneurial intentions were empirically investigated. The purpose of this quantitative study was to investigate different variables that might influence entrepreneurial behavior of people with disabilities and potentially identified those variables that might increase their desire of venture creation. The previous three chapters presented the significance of the study to entrepreneurship and vocational rehabilitation services as well as a review of relevant literature.

Research Design

This dissertation attempted to understand the antecedents that may impact the entrepreneurial intentions of people with disability (PWD). The theory of planned behavior served as a theoretical framework to explain entrepreneurial intentions while personal factors, socio-cultural factors, and institutional factors were also incorporated into the research model. This dissertation was designed to empirically examine the relationship between the level of entrepreneurial intentions of PWD and the explanatory variables concerning individual factors, socio-cultural factors, and institutional factors. This dissertation explored the following research questions:

1. What are the relationships among factors relevant to entrepreneurial intentions of people with disabilities (PWD) including proactive personality, fear of failure, optimism, entrepreneurial self-efficacy, perceived social status, role models, perceived resources support and perceived institutional support?

2. Do certain personal characteristics such as proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?

3. Do certain social characteristics such as perceived social status, and role models predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?

4. Do certain institutional characteristics such as perceived resources support and perceived institutional support predict the level of entrepreneurial intentions among people with disabilities (PWD) (Reduced Model)?

5. Do personal, social and institutional characteristics predict the level of entrepreneurial intentions among people with disabilities (PWD) (Full Model)?

Sample and Data Sources

Overview of Target sample

The unit of analysis in this dissertation was individuals, who self-identified as having a disability. These individuals were members of different types of organizations and/or clients in employment agencies. This dissertation used a non-random sampling approach to identify clients of vocational services and members of organizations for PWD. A convenience sampling has a relative low cost and requires less time to collect data than probability sampling techniques

(Singleton & Strait, 2010). However, bias in selection of participants and the lack of sampling error become concerns when using nonprobability sampling.

A referral sampling was be used to contact potential participants and collect data. Referral sampling is useful to reach target populations that belong to small subgroups of the larger population (Sudman & Kalton, 1986; Singleton & Straits, 2010). Since individuals with disabilities represent a subgroup of individuals' recipients of services, with disabilities, using referral sampling facilitate contacting potential participants who were receiving employment services. After contacting an agency or/and organization, they were asked to share the online link with other potential participants with disabilities. The sample came from PWD who were currently receiving employment assistance in different type of employment agencies or belong to an organization related to disabilities.

Power Analysis for Sample Size

The estimated sample size for this dissertation was be based on Cohen and Cohen (1983) calculations of power in multiple regressions. Power represents the probability of obtaining a statistical significant R-square for a specified sample size. According to Tabachnick and Fidell (2007) in studies using regression analysis, the sample should be equal to or greater than 104 plus the number of predictor variables to achieve a medium effect size with an alpha level of .05 and a beta value equal to or greater than .20. Using a desired statistical power level of .80 and calculated the minimum R-square for a specified sample size with an alpha of .05, requires a sample of minimum 83 participants. With a sample size of 83, at a significant level of .05, an anticipated effect size of .20 and above helps to increase the likelihood of obtaining a significant relationship between the dependent variable and the independent variables. A similar calculation was used to calculate power for the final analyses.

Data Collection Approach

Employment agencies that assist PWD with their vocational goals were contacted to help to distribute the online survey. In addition, professional and local organizations, for entrepreneurs with disabilities, were also approached to ask for assistance to share this dissertation. A representative for these agencies and organizations was asked to send an email to members or clients in their email mailing list. Agencies and organizations in different states were contacted to encourage their involvement in data collection. However, it is unknown how many agencies/organizations actually sent the online survey to potential participants because they did not provide access to their mailing list. This email message encouraged member's participations and a brief explanation about the purpose of this dissertation with a link to the survey. If the members were interested in participating in this dissertation, they could click on the link and complete the survey.

Data Collection Procedures

The research questions in this dissertation would be answered by a survey research design focus on entrepreneurs with disabilities. This survey research design examined a variety of factors that influence the level of entrepreneurial intentions among people with disabilities. The data in this dissertation was quantitative and obtained from self-reported questionnaires online. Data collected from the questionnaires included participants' demographics, and items that measured variables comprising proactive personality, fear of failure, optimism, perceived social status, entrepreneurial self-efficacy, role models, perceived resources support and perceived institutional support. An online version survey was used for data collection in a survey tool online program called Qualtrics. This online survey was shared with agencies and organizations which provide services and support to PWD.

In order to prevent inaccuracy of data, the responses collected were clean and reviewed for error checking. A wild-code checking approach was used because it can help to determine whether there are any out of range items in a specified set of legitimate codes (Sonquist & Dunkelberg, 1977 as in Singleton & Straits, 2010). The minimum and maximum values for each variable were revised at different points during the analysis. For instance, variables with a 7-point Likert Scale, in this dissertation model, had values only between 1 and 7. Likewise, the dataset was looked over for any missing data. After revision of the data, it was determined that only a few cases of missing values were present during the analysis. Since the cases of missing data seemed random, a pairwise exclusion was selected during analysis. The option to exclude cases on a pairwise meant that a case's data was dismissed only for analyses with missing data. Then, the data was coded and entered in a computer using a computer software, IBM SPSS.

Pilot Study

In the first portion of data collection process, a pilot study was conducted among students with disabilities at the University of Texas-Pan American (UTPA). The pilot study represents a preliminary study to identify potential changes to improve the study design prior to carry out a nationwide survey (Singleton & Straits, 2010). Students with disabilities were invited to participate in the pilot study by contacting students in the Rehabilitation program. In total 31 of the 65 invitations were answered resulting in a 47.7 percent response rate. The email was sent to those students who showed interest to participate in the pilot study. A total of 31 students volunteered to participate in the pilot study and received an email containing a link to the online survey. In addition, some students completed the online survey in a personal laptops to provide immediate feedback about the instruments.

The first page of the online survey used for the pilot study informed participants of the nature and purpose of the study. It also assured respondents that their participation was voluntary, and confidential for they could stop it at any time and none of their personal information was required to participate. This page also contained contact information for the principal investigator, supervisory contact, and UTPA's Institutional Review Board (IRB). To participate in the pilot study, students had to confirm their voluntary participation, be 18 years of age or older and have a disability (any type of disability)

The pilot study allowed to evaluate the length of time it takes to complete it and to detect any potential accommodations needed to complete the questionnaires. In addition, respondents provided key comments to improve the flow of the survey as well to fix any issues on any survey item. For instance, there was a Likert-type question with numerous answers that only allowed participants to select one answer. Modifications were made based on feedback using context-related information that could help in the understanding of entrepreneurial intentions among PWD. Moreover, the pilot study could be used to determine the correct sample size and effect size for the main study.

Data Collection Results

After consenting to participate in the online survey, respondents were presented with questions related to the research model variables and demographic information. The online survey (Appendix A) contained all the measurement instruments for the dependent and independent variables. To measure these variables, Likert-type scales were implemented based on previously adapted measurement tools. In addition, some dichotomous questions and categorical items were used to collect demographic data. All this information was kept confidential and anonymous.

After the obtained data was clean and organized, a factor analysis was conducted to evaluate the measurement instruments. The scale testing was performed using the statistical software package of IBM SPSS. For a pilot study, a Cronbach's alpha greater than or equal to 0.70 is considered acceptable (Nunnally & Bernstein, 1994). In this analysis, almost all the instrument had a Cronbach's Alpha higher than .70. Only perceived resource support (for financial aspects) had a low one; however, it was decided to keep it for the final study. The decision was made due to some issues with wording and reverse coding. Table 7 summarizes the results obtained for each variable.

After making modifications based on feedback from respondents and completing a reliability analysis, the pilot study showed that the measurement instrument were usable and reliable for the dissertation research model. Even though the pilot study had a great response rate, its results should be accepted with caution due to its small sample size. By completing this pilot study, the main study was better prepared and offered a more user friendly online tool for respondents with disabilities.

Table 7: Cronbach's Alpha for Variables Examined in the Pilot Study

Variable	Items	Cronbach's Alpha
Proactive Personality	10 items	.966
Optimism	6 items	.824
Fear of Failure	5 items	.858
Perceived Social Status	4 items	.920
Perceived Resource Support	3 items	.339
Perceived Institutional Support	5 items	.933
Entrepreneurial Intentions	4 items	.939

Measures or Variable Operationalization

In this dissertation, different variables were used to explore the entrepreneurial venture creation among PWD. The dependent variable was the level of entrepreneurial intention among PWD. While the independent variables were divided into three categories: personal, socio-cultural and institutional. These variables were measured with a variety of instruments (Table 8). A copy of the questionnaire is included in Appendix A. The personal factors included proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism while socio-cultural factors were perceived social status, and the presence of role models. Lastly, perceived resource support and perceived institutional support were part of the institutional factors group.

The outcome variable of entrepreneurial intentions was measured with a Likert-scale measure. The control variables included five demographics (e.i. age, disability, educational level, gender, and ethnicity). The questionnaire items related to proactive personality, entrepreneurial self-efficacy, fear of failure, optimism, perceived social status, role models, perceived resource support and perceived institutional were used to collect data. The study was a non-experimental descriptive, quantitative multiple regression study conducted through utilizing a modified version of the Entrepreneurial Intention measurement used by Chen, Green, & Crick (1998), The Proactive Personality scale (Bateman & Crant, 1993), the Entrepreneurial Self-Efficacy Measurement (McGee et al., 2009), the Performance Failure Appraisal Inventory (Short-Form) (Conroy, Willow & Metzler, 2002), the Revised Life Orientation Test (Scheier, Carver & Bridges, 1994), and additional demographic questions were developed to measure different criterion and predictor variables. Using multiple regression method to examine three reduced model and one full model, this dissertation explored the significant explanatory variables to influence the level of entrepreneurial intentions among PWD.

Dependent Variable

The dependent variable of this dissertation is entrepreneurial career intention. Entrepreneurial intentions refer to intentions of setting up one's own business to become self-employed and take risk in creating a new enterprise rather than an interest or attitude (Van Gelderen et al., 2008). A modified version of the entrepreneurial intention scale based on Chen et al., (1998) will be used to measure this variable. The Cronbach's alpha for the scale is 0.92 This scale has four items that ask the respondents how interested they were in setting up an own business, if they had considered setting up their own business, how likely that they were to going to set up their own business in the near future and how interested they were in setting up and building a high-growth business. Participants will rate their responses using a seven-point Likert-type scale from 1= strongly disagree to 7= strongly agree.

Independent Variables

The independent variables are in three categories: personal, socio-cultural and institutional. The personal factors include proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism while socio-cultural factors are perceived social status, and role models. Lastly, perceived resource support and perceived institutional support are part of the institutional factors.

Proactive Personality. According to Bateman and Cant (1993), proactive personality is defined as one who is relatively unrestricted by situational forces and tends to generate environmental change. The shortened version of the Proactive Personality scale by Bateman and Crant's (1993), a 10-item measure, will be used to measure personality traits among participants. Responses are indicated on a seven-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"), with such items as "I excel at identifying opportunities" and "No matter what

the odds, if I believe in something I will make it happen." Bateman and Crant (1993) reported the reliability of the scale was supported via factor analysis across three different samples (ranging from 0.87 to 0.89). The 10-item shortened version of this scale has a reliability coefficient of 0.85 (Seibert, Kraimer & Crant, 2001). An average of all 10 items will be calculated for this variable.

Entrepreneurial Self-Efficacy. Entrepreneurial self-efficacy (ESE) defined as a person's belief that she or he can successfully perform the various roles and tasks needed for venture creation (Chen, Greene & Crick, 1998). The Entrepreneurial Self-Efficacy Measurement (McGee et al., 2009) will be used for its measurement. An average of all items identified for each construct in this scale will be calculated. The five constructs in this scale are: searching, planning, marshaling, implement-people, and implementing-financial. All the five factors of this scale had values for Cronbach alphas above .80 showing a decent reliability for each construct. This 19-item scale includes statement such as: "Estimate the amount of start-up/working capital necessary to start my business", "Deal effectively with day-to-day problems and crises" and "Design a product or service that will satisfy customer needs and wants". Respondents will use a seven-point Likert scale to indicate their degree of confidence in performing each of the roles/tasks ranging from no confidence to very confident.

Fear of Failure. Fear of failure reflects an apprehension that based on internalized goals, the individual will be unable to perform as well as he or she desires (Beery, 1975). The Performance Failure Appraisal Inventory (Short-Form) (Conroy et al., 2002), a 5-item instrument will measure the fear of failure among participants. This survey has statement such as "When I am failing, I am afraid that I might not have enough talent" and "When I am failing, important others are disappointed". Participants were asked to think of how often they believed each

statement was true in their significant in their important decisions. Respondents use a response rate with a scale that includes “Do not believe at all”, “Believe 50% of the time” and “Believe 100% of the time”. The five-short form has demonstrated cross-validity, convergent and discriminate validity (Conroy et al, 2002) as well as structural validity over time in groups of children, youth, and emerging adults (Conroy & Coatsworth, 2004; Conroy, Metzler, & Hofer, 2003). The coefficient alpha for this scale was .72 with a mean value of 0.00 (SD=0.84) (Conroy et al., 2002).

Optimism. Optimism is a generalized positive expectancy that everything will have positive results (Scheier & Carver, 1985). A modified version of The Revised Life Orientation Test (LOT-R) (Scheier et al., 1994), a 10-item survey, will be used to measure optimism among participants. “In uncertain times, I usually expect the best”, and “I rarely count on good things happening to me” are examples of some of the statement in this survey. Participants were asked to answer the questions about themselves by indicating the extent of agreement using a seven point Likert scale. The revised scale and the original Life Orientation scale have a correlation of .95 (Scheier et al., 1994). The LOT-R is a reliable and valid instrument of optimism to measure positive outcome expectancies (Lai, Cheung, Lee & Yu, 1998). This scale also produced a Cronbach’s coefficient alpha of .80 in a previous study focused on entrepreneurial intentions among top management leaders (Hmieleski & Baron, 2009). An average of all 10 items will be calculated for this scale.

Perceived Social Status. Social status refers to an individual’s interpretation of how others perceive that they rank in the social community ranking (Shane, 2003). The perceived social status variable will be measured with statements that will evaluate their consideration of others’ opinions. Respondents will use a 7 point Likert scale to express their agreement with

statements like: “My family and friends will think highly of me if I become an entrepreneur” and “The community I live in values being an entrepreneur highly”. This measure had an overall Cronbach’s Alpha of 0.782. in a previous study (Abebe, 2012). An average of all 3 items will be calculated for this scale.

Role Models. In the entrepreneurial process, the presence of a positive example is significant when an entrepreneur considers creating a new venture (Shapero & Sokol 1982). Previous studies have shown that role models positively influence the entrepreneurial intentions and new venture formation process (Van Auken, Fry & Stephens, 2006). The presence of a role model will be measure with a dichotomous response to “Do you know a close friend or family member who has created a new business over the past two years?”. Respondents will also rate the extent to which they believe this role model is a good example to follow with their entrepreneurial plans using a seven-point scale. A reliability score will be calculated for this dichotomous scale after collecting data.

Perceived Resource Support. According to Sequeira, Mueller & McGee (2007), emotional and psychological support combined with resource support provide perceived social support. To measure the emotional and psychological component, a seven-point Likert scale will be used to indicate the extent to which participant believes loved ones feel about their entrepreneurial plans and to what extent would they provide useful information and/or skills. Parents, spouse, siblings, children, other relatives and close friends are considered loved ones for this measure. For the resource support, respondents will be asked to indicate the extent to which they agree with statements like “It will be difficult to get a business loan from banks if I decide to start my own business” and “Banks are not likely to help me get a business loan if I decide to

start my own business “. A scale with similar items had an overall Cronbach’s Alpha of 0.847(Abebe, 2012). An average of all 3 items will be calculated for this scale.

Perceived Institutional Support. Creating a new enterprise and becoming an entrepreneur may be influenced by environmental factors that determine the levels of entrepreneurial activity in a specific context (Baumol, 1990). In this dissertation, the perception of institutional support among participants will be measured with five items using a seven-point Likert Scales. Some of the statements include “Human services personnel are supportive of my self-employment goals” and “I have been offered assistance by human services personnel in the development of my plans to open my business”. However, the items to measure this variable may change after completing the pilot study. A reliability coefficient for this measure will be calculated after obtaining data.

Control Variables

In the analysis, five control variables will be included based on previous research: age, disability, gender, reported ethnicity, and educational level. In previous studies, age has been found to have a curvilinear relationship with the likelihood of opportunity exploitation (Shane, 2003) where entrepreneurial intentions increase in young adulthood years and then falling with age (Boyd, 1990). Similarly, previous research has shown that having a disability may influence an individual’s vocational choices (Smart, 2008). Because of its flexibility, reduced accessibility issues, and possible accommodations, PWD has been found to choose self-employment over traditional employment (Clark & Kays, 1995; Palmer et al, 2000; Pagan-Rodriguez, 2013). Participants will choose their disability in one or more of the following categories: chronic medical conditions, physical disorders, substance abuse, cognitive disorders, mental health and sensory disorders.

In addition, previous research has found mixed results about an interaction between gender and entrepreneurial intention influencing the rate and pattern of entrepreneurship (Block & Sandner, 2009; Crant, 1996; Zhao et al, 2005). Adult men have been found to be twice more likely than women to engage in the process of business startup in the United States (Reynolds et al., 2002) while other studies found no significant effect of gender on entrepreneurship (Block & Sandner, 2009; Kristiansen & Indarti, 2004). Respondents will answer a dichotomous choice for the two genders. Lastly, empirical research has indicated significant differences in business ownership intention rates among different ethnic groups in the United States (Fairlie, 2004; Wilson et al., 2004). Participants will report their group of identification among ethnic groups.

Empirical evidence has shown that work experience, income level, and employment status also influence entrepreneurial intentions (Carr & Sequeira, 2007; Wang et al, 2012). For instance, work experience play a significant role in the formation of entrepreneurial intentions among Chinese and American individuals (Wang et al., 2012). Participants will identify their employment status and if employed, they will provide the length of time in their current job. Likewise, the financial status of the family have been found to influence an individual's decision to start a new business (Hsu et al., 2007

Table 8: Constructs and Measurement items for Dissertation Variables

Construct	Items	Factor 1	Factor 2	Factor 3	Cronbach's alpha
Entrepreneurial Intentions	E1	.967			.974
	E2	.970			
	E3	.957			
	E4	.963			
Proactive Personality	PP1	.812			.956
	PP2	.847			
	PP3	.824			
	PP4	.860			
	PP5	.880			
	PP6	.823			
	PP7	.867			
	PP8	.874			
	PP9	.855			
	PP10	.813			
Entrepreneurial Self-efficacy	ESE 1	.833			.976
	ESE 2	.842			
	ESE 3	.846			
	ESE 4	.736			
	ESE 5	.581			
	ESE 6	.573			
	ESE 7	.743			
	ESE 8	.785			
	ESE 9	.748			
	ESE 10	.656			
	ESE 11		.805		
	ESE 12		.820		
	ESE 13		.806		
	ESE 14		.730		
	ESE 15		.681		
	ESE 16		.740		
	ESE 17			.869	
	ESE 18			.896	
	ESE 19			.884	
Fear of Failure	FF 1	.911			.935
	FF 2	.886			
	FF 3	.889			
	FF 4	.865			
	FF 5	.893			

Optimism	O1		.857		.793	
	O2	.877				
	O3		.906			
	O4	.919				
	O5	.896				
	O6		.859			
Perceived Social Status	PSS1	.868			.894	
	PSS2	.831				
	PSS3	.920				
	PSS4	.875				
Perceived Resource Support (Emotional/ Moral)	PRS1	.873			.960	
	PRS2	.853				
	PRS3	.859				
	PRS4	.785				
	PRS5	.825				
	PRS6	.848				
	PRS7		.762			
	PRS8		.693			
	PRS9		.838			
	PRS10		.810			
	PRS11		.863			
	PRS12		.811			
Perceived Resource Support (Financial)	PRSF1	.935			.330	
	PRSF2					.748
	PRSF3	.929				
	PRSF4					.831
Perceived Institutional Support	PIS1	.928			.817	
	PIS2	.949				
	PIS3	.940				
	PIS4	.912				
	PIS5					.999

Analytical Approach

Based on the nature of the measurement instruments a quantitative approach was used in this dissertation. This analytical approach helped help to determine whether the relationship between the level entrepreneurial intentions and personal, socio-cultural, and institutional variables was likely to exist and the effect of each variable. The purpose of an explanatory survey study is to investigate and attempt to explain relationships between research variables (Singleton & Straits, 2010). A self-administered electronic research survey consisted of demographic questions and a series of measurement items, which use Likert-type scales, for each variable in the research model. IBM SPSS software was used to perform statistical analyses to understand and analyze the collected data. SPSS multiple regression results used T-statistics to determine whether the model was a good fit for the data using an alpha of .05.

Testing of the Research Model

Due to the exploratory nature of this dissertation, a series of multiple regression analysis were undertaken to examine the impact of individual, socio-cultural, and institutional factors on the level of entrepreneurial intentions among PWD. A multiple regression explains the relationship between multiple independent variables and one dependent variable (Singleton & Straits, 2010). Since the research model had two or more predictor variables and one dependent variable, a multiple regression analysis was implemented.

A strings of multiple regression analyses were conducted to evaluate how well the personal characteristics, social and institutional factors predicted the entrepreneurial intention levels among people with disabilities. By using a multiple regression analysis, all eight independent variables were included in the model to determine if they could predict the level of entrepreneurial intentions among participants. In order to answer the research questions of this

dissertation, the independent variables were grouped into individual, socio-cultural, and institutional sets. Due to having an exploratory model, a stepwise regression approach was used in this dissertation. The research model of this dissertation was tested with a series of three reduced models and a full model. Moreover, the analysis for each hypothesis was performed separately using multiple regression analysis to test whether an interaction effect existed between variables. The analysis was conducted using IBM SPSS Statistics to modify the scaled measurement items to factor scores that could be entered into the multiple regression analyses.

By using a stepwise multiple regression analysis, the variables, which were no significant for the model, appeared in the variables excluded from the equation table. The removed variables were not included any of the reduced model. In the three reduced models, the control variables were excluded in the good fit one. According to Cohen (1992), by evaluating R^2 , the practical significance of a model can be evaluated and considered. To determine effect size using f^2 , the following interpretations are considered: *small* = .02; *medium* = .15; and *large* = .35. Based on the prior interpretations, these values can easily be converted to R^2 : *small* = .02; *medium* = .13; and *large* = .26. Thus, if a R^2 greater than .26 is found, a larger practical significance can be obtained from the analysis.

A crucial step when using multiple regression analysis is to check for a series of assumptions. Multiple regression assumes linearity of the model, normal distribution among variables and that variance is constant across all levels of the predicted variables, or homoscedasticity, to avoid Type I and II errors (Osborne & Waters, 2002). The normality assumption explains that the differences between the research model and the observed data are frequently zero or very close zero, and that greater differences occur only sporadically (Field, 2013). The linearity assumption implies that there is a straight relationship between the IVs and

the DV (Singleton & Straits, 2010). Because regression analysis only test for linear relationships, checking the data for this assumption is critical to proceed with the analysis. In addition, multiple regression requires that there is no a strong correlation between two or more predictors (Field, 2013). A visual inspection of data plots, scatterplots of residuals and statistical tests was used to inspect for linearity, normality and homoscedasticity.

Multicollinearity, which occurs when two or more independent variables are highly correlated with each other, may complicate the ability to identify if variables are statistically significant (Singleton & Straits, 2010). When multicollinearity occurs two or more predictors in the model are correlated and provide redundant information about the outcomes. A variance inflation factors (VIF) measure and tolerance level were calculated to determine multicollinearity. One of the recommendations when using regression is to have cases-to-independent variables (IVs) ratios of at least 10:1, with 20:1 being ideal (Field, 2013). This translates to at least 10 cases for every IV in the model. The lowest ratio tolerated is 5:1. In this dissertation, at least 20 cases per IV were considered to test the dissertation model. The sample size obtained for this dissertation satisfied the minimum requirements for these ratios. By obtaining a large sample size, examining bivariate correlations among variables, and adding and/or removing variables from model is intended to decrease standard errors.

In addition, this dissertation used a sequential model by using three reduced models and one full model. Each reduced model was developed to address each on the three identified factors in the proposed dissertation model including personal, socio-cultural, and institutional predictors. The first reduced model addressed the influence of personal factors on entrepreneurial intentions among PWD while the second reduced model was created for social factors and a third

one for institutional factors. Finally, a last model combined all three factors into a full model to understand their influence on entrepreneurial intentions among PWD.

Concerns of Validity

In survey research, there are a variety of validity issues relevant to the research design, data collection, and analysis. Common method variance, non-response bias, and randomization of the sample, should be considered when performing this type of research. Some of this validity issues are discussed in this section as they relate to this dissertation.

Using self-report methods can lead to a potential inflation of correlations between measures in behavioral research. In research involving self-report measures, common method variance (CMV) represents a source of concern (Spector, 2006). The CMV is “attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, MacKenzie, Lee & Podsakoff, 2003, p. 879). Due to the same respondent answering a single questionnaire at one point in time, the data is more susceptible to CMV (Singleton & Strait, 2010). Moreover, CMV can inflate or deflate relationships between variables leading to Type I and Type II errors. Since this dissertation relied on self-reported method to collect data, steps to assess and control for CMV were implemented. Among the various available statistical methods, those that use a confirmatory factor analysis tend to be most rigorous (Podsakoff et al., 2003). The Harman’s one-factor test is one of the most widely used techniques to address CMV. With this technique, all variables in the study are loaded into an exploratory factor analysis to “determine the number of factors that are necessary to account for the variance in the variables” (Podsakoff et al., 2003, p.889). Thus, in this dissertation the Harman’s one factor test was performed to assess and control for CMV.

When collecting data through online surveys, nonresponse bias can become a major source of bias in this research approach. Nonresponse bias refers to “the bias that exists when respondents to a survey are different from those who did not respond in terms of demographic or attitudinal variables” (Sax, Gilmartin & Bryant, 2003, p.411). Thus, there is a concern that an exclusion of one or more groups of participants in the data (Singleton & Straits, 2010). There are two types of nonresponse bias: total and unit (Fraenkel & Wallen, 1993). Total nonresponse occurs when individuals do not complete the survey at all, while unit or item nonresponse happens when the survey is returned incomplete. Moreover, nonresponse bias differs from response bias as the latter refers to the bias involved in answering the items in a survey (Sax et al., 2003). To identify bias in the estimates obtained from the sample of respondents, the demographic profiles of respondents was compared to data for the intended target population (Bose, 2001), in this case PWD. In this dissertation, a group of non-respondents, who were receiving rehabilitation services or belonged to an organization, received an online invitation to participate in the study and chose not to contribute to the data collection. Another group of non-respondents were those individuals without access to the internet or computer literacy as well as those individuals with limitations that prohibit using a computer.

Since a convenience sampling approach was used for data collection in this dissertation, the lack of sample randomization signified a bias concern. Ideally, it is recommended for most study designs to use a random sample to avoid creating bias (Singleton & Straits, 2010). Because of lack of access to potential participants, a referral approach was used in this dissertation to obtain data. In order to increase randomization in the sample, agencies and organizations in different states across the nation were contacted. By diversifying the potential participants’ pool, it was envisioned that responses would better reflect PWD in America.

Contributions of the Dissertation

By adding to the body of knowledge, providing preliminary results for future research, and offering possible implementation for findings, this dissertation aims to have an impact on the field of rehabilitation and minority entrepreneurship. There is limited research regarding the intentions of PWD to open their own business. Additional information relevant to this vocational option can help improve services and resources available for entrepreneurs with disabilities. Expanding the research in this area can be beneficial not only for rehabilitation professionals but also for clients and society.

Regarding to the potential scholarly contribution of this dissertation, it was expected to expand the literature of the field in several ways. Results from this dissertation aimed to enhance to the knowledge about PWD in the entrepreneurship and vocational rehabilitation literatures. In the entrepreneurship literature, this dissertation targeted to specifically contribute to the minority entrepreneurship area. Even though entrepreneurship research is extensive, relatively little scholarly attention has focused on PWD as a minority group. This dissertation intended to contribute by considering a different disadvantaged minority group and how different factors play a role in their business startup intentions. Individual, socio-cultural, and institutional characteristics were considered to extend the existing entrepreneurship literature and the understanding of various factors that influence minority entrepreneurial behavior and venture formation. By evaluating the relationship of perceived social status, perceived resource support, and perceived institutional support, it was expected to increase the comprehension of the predictive ability of these social and institutional factors on the entrepreneurial behavior of PWD.

In addition to the entrepreneurship literature, the study also supplemented an area of research within the domain of rehabilitation counseling: employment opportunities and career choices. Regarding employment opportunities, this dissertation evaluated the impact of external and internal factors on vocational goals among PWD. Additionally, this dissertation aimed to expand the knowledge of the influence of psychological and social factors on the career behaviors and choices among PWD. Predominantly, this quantitative study hoped to expand the understudied area of self-employment in the rehabilitation field by providing a comprehension of factors and issues pertaining to this career choice. Because of the research gap in self-employment opportunities for PWD, this dissertation was designed to identify significant factors to ensure positive employment outcomes and to find ways that support nascent entrepreneurial behavior among clients.

This dissertation also provided practical contribution for a diverse group of professionals and recipients of services in the rehabilitation field. Self-employment has gained acceptance as a viable employment option for people with disabilities in the vocational rehabilitation system (Weiss, 2002). Therefore, understanding the entrepreneurial intentions among clients can help to provide effective vocational services to those individuals interested in owning a small business that foster independence and increase autonomy. Rehabilitative services professionals can benefit from these findings by understanding factors that may impact potential career choices among clients and by evaluating factors relevant to self-employment. Vocational rehabilitation clients, who may be interested in becoming entrepreneurs, can become aware of factors that may predict and increase their likelihood to succeed in venture creation. In education, this dissertation planned to provide valuable insights on the entrepreneurial career intentions to educators, who may teach it to future professionals. Moreover, students, who are interested in entrepreneurship

and/or working with people with disabilities, can gain valuable knowledge in this research area. Furthermore, these findings may be considered for policy and services changes to improve the self-employment resources available for PWD.

CHAPTER V

DATA ANALYSIS RESULTS

The previous three chapters presented the significance of this dissertation to the entrepreneurship and rehabilitation literatures, the potential influence on vocational rehabilitation services, the impact on policy as well as a review of relevant literature and a presentation of the proposed hypotheses. In this chapter, the analysis derived from the data collection process, which was described in the research design, are discussed. This chapter starts with an overview of the quantitative data analysis procedures of the data collected among participant with disabilities. The overview and analysis includes the statistical procedures and a description of the demographic characteristics of the sample. Descriptive statistics, including variable frequencies, are presented for the independent and dependent variables used in this dissertation research model. Next the assumptions of multiple regression are tested for violations. In the following sections, the research model and hypotheses are tested using multiple regression models. Finally, the chapter concludes with the presentation of the post hoc power analysis and a summary of the findings of this dissertation.

Because there is a paucity of research on entrepreneurial intentions among people with disabilities; personality, socio-cultural, and institutional determinants of entrepreneurial intentions were empirically examined in this dissertation. Self-employment represents a sustainable option of employment to improve the quality of life and socioeconomic outcomes for PWD (Yamamoto et al., 2012). Thus, the purpose of this quantitative study was to investigate different variables that might influence entrepreneurial intentions among PWD. This dissertation

aimed to determine the impact that these relevant variables had on entrepreneurial intentions among PWD. To understand factors affecting entrepreneurial intentions among PWD, eight predictive variables that included 1) proactive personality, 2) fear of failure, 3) optimism, 4) entrepreneurial self-efficacy, 5) perceived social status, 6) role models, 7) perceived resource support and 8) perceived institutional support. In this dissertation, entrepreneurial intentions was identified as the dependent variable.

Data Analysis Procedures

To examine the dissertation's research model, a non-experimental, cross sectional, explanatory approach was implemented. This correlational study only collected data from one point in time. In order to determine whether institutional, social, and institutional variables had a significant relationship to the level of entrepreneurial intentions among PWD, a series of multiple regressions were used for this dissertation. Scatter diagrams of residuals, partial plots, and normal probability plots of residuals were constructed to test assumptions.

Using the dissertation research model, the following questions were examined in this dissertation:

RQ1. What are the relationships among factors relevant to entrepreneurial intentions of people with disabilities (PWD) including proactive personality, fear of failure, optimism, entrepreneurial self-efficacy, perceived social status, role models, perceived resources support and perceived institutional support? Descriptive and correlation analyses were used to address this question.

RQ2. Do certain personal characteristics such as proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism predict the level of entrepreneurial intentions among people with disabilities (PWD)? A reduced model was used to answer this question.

RQ3. Do certain social characteristics such as perceived social status, and role models predict the level of entrepreneurial intentions among people with disabilities (PWD)? To analyze this question, a reduced regression model was used.

RQ4. Do certain institutional characteristics such as perceived resources support and perceived institutional support predict the level of entrepreneurial intentions among people with disabilities (PWD)? A reduced regression model was used to answer this question.

RQ5. Do personal, social and institutional characteristics predict the level of entrepreneurial intentions among people with disabilities (PWD)? Finally, a full model was utilized to address the final research question.

Factor Analysis of Instruments

After examining the reliability of the scales and performing a factor analysis, some variables were reduced. A factor analysis uses correlations among items to reduce a set of variables into clusters (Field, 2013), a technique commonly used in psychometric instrument development. Furthermore, factor analysis helps to eliminate items for improvement by identifying redundant and/or irrelevant variables.

Since some variables were measured using newly developed surveys, it was important to check for reliability and redundant items. The Perceived Resource Support and Perceived Social Status (Abebe, 2012) items, with some modifications were based on a previous study that used them for a first time. Thus, an exploratory factor analysis aimed to reduce any irrelevant items. The Perceived Institutional Support measurement was developed for this study; thus an evaluation of the scale was a necessity. The data was screen for each variable to identify scale items that were highly correlated, represented underlying factors, and contributed to the measure

of each factor. A correlational analysis was used to evaluate the relationship among all items for each variable.

The correlation of items for Perceived Resource Support (Financial) and Perceived Institutional Support were reduced after an exploratory factor analysis. Nonetheless, the Perceived Social status remain intact with a Cronbach's Alpha of .894. The Perceived Resource Support (Financial) scale had a Cronbach's Alpha of .399 when encompassing all four items; however, the Cronbach's Alpha improved to .883 by retaining only two items. These two items were: "It will be difficult to get a business loan from banks if I decided to start my own business" and "My chances of getting a business loan from banks are limited". Likewise, the Perceived Institutional Support scale was reduced after a factor analysis. With the original 5 items, its Cronbach's Alpha was .817; however, it increased to .949 after removal of the item "I have access to trainings through a human services agency on how to open a new business". After adjusting the scales, both of these items were retained because their Cronbach's Alpha for these constructs were above the recommended score of .70 (Field, 2013).

Descriptive Statistics

After data collection, a final sample size of 172 was used to test this dissertation model. The original data collected was 198 but 26 case were rejected because participants had no disabilities. In Table 9, the demographic characteristics of the sample are reported by frequency and percentage. Female and male participants were almost equally represented in this sample while about 56% reported an identification with the Hispanic/Latino ethnicity and about 38% claimed a Caucasian one. The rest of the participants reported an African American identity (6.4%), Asian American identity (2.3%), American Indian identity (1.2%), and Pacific Islander (1.2%). The level of formal education varied among participants with the majority of 38%

having earned a High School Diploma or GED, about 20% had obtained an Associate degree while 15.1% and 16.3% had obtained Bachelors and Master’s degree respectively. Only about 3% of participants received a doctoral degree and 7.6% had less than High School education. Lastly, acquired disabilities were more common than congenital ones among participants with 61% and 35% respectively.

Table 9: Frequency Distribution of Demographics

Variable	Frequency	Percent
Gender		
Female	94	54.7
Male	78	45.3
Ethnic Identity		
Caucasian	58	33.7
African American	11	6.4
Asian American	4	2.3
American Indian	2	1.2
Pacific Islander	1	0.6
Hispanic/Latino	96	55.8
Formal Education		
Less than High School	13	7.6
High School or GED	66	38.4
Associate	34	19.8
Bachelors	26	15.1
Masters	28	16.3
Doctoral	5	2.9
Type of disability		
Acquired	105	61
Congenital	60	34.9

The eight independent variables including proactive personality, fear of failure, optimism, entrepreneurial self-efficacy, perceived social status, role models, perceived resource support and perceived institutional support as well as the dependent variable of entrepreneurial intentions were included in the dissertation research model. The descriptive statistics for the independent and dependent variables are presented in Table 10. The standard deviation of the dependent variable was about 2 showing that the intentions of opening a business vary among PWD, with a mean of 4.10. Among the independent variables, Perceived Resource Support had the smallest standard deviation (1.09) while Perceived Intuitional Support had the largest one (1.53). Results also indicated that the mean for the independent variables range from 2.37 to 5.36. Specifically, these independent variable means and standard deviations were: Proactive Personality had a mean of 5.36 with a standard deviation of 1.30; Entrepreneurial Self-Efficacy was 5.14 with standard deviation of 1.45; Fear of Failure was 2.37 with a standard deviation of 1.12; Optimism was 4.80 with a standard deviation of 1.18; Perceived Social Status was 4.50 with a standard deviation of 1.50 Perceived Resource Support - including Financial and Emotional/Moral support - was 4.20 with a standard deviation of 1.01; the Presence of a Role Model was 4.82 with a standard deviation of 1.5; and Perceived Institutional Support was 3.54 with a standard deviation of 1.53.

Table 10: Descriptive Statistics for Variables

Variables	Mean	Std. Deviation
Dependent		
Entrepreneurial Intentions	4.10	1.996
Independent		
Proactive Personality	5.36	1.30
Entrepreneurial Self-Efficacy	5.14	1.45
Fear of Failure	2.37	1.12
Optimism	4.80	1.18
Perceived Social Status	4.50	1.50
Presence of Role Models	4.82	1.55
Perceived Resource Support	5.35	1.09
Perceived Institutional Support	3.54	1.53

Relationships among Variables

Since this is an exploratory dissertation, reporting the relationship among variables can help to better understand the entrepreneurial intentions among PWD. To evaluate the relationship among variables, a correlation analysis was used (RQ1). A correlation analysis intends to identify the extent of association between two variables (Field, 2013). Linearity assumption, where the relationship between two variables appears to be linear, was tested for this dataset. The eight predictive variables and the dependent variable (DV) were considered in a multiple correlation analysis. With this statistical technique, the degree of relation among two variables can be identified in a linear relationship. Specifically, the correlation of the independent variables and the level of entrepreneurial intentions among PWD was evaluated as well as the relationship among some of the predictive variables. As illustrated in table 11, some of these correlations were significant with an alpha of .01 while others at .05.

The individual variables of proactive personality ($r = .330, p = .001$), entrepreneurial self-efficacy ($r = .513, p = .001$), and optimism ($r = .245, p = .001$), had a positive significant correlation with entrepreneurial intentions among PWD. Entrepreneurial self-efficacy had a moderate degree of correlation while proactive personality and optimism showed weak degree level. The positive correlation indicates that the level of entrepreneurial intentions among PWD increase with these three individual factors. In addition, entrepreneurial self-efficacy had a positive relation with other variables: perceived social status ($r = .325$), optimism ($r = .243$), role model ($r = .211$), perceived resource support ($r = .420$), and perceived institutional support ($r = .342$). These results showed that entrepreneurial self-efficacy increases with adequate perceived support at the social and institutional levels. Fear of failure had no significant relationship, ($r = -.057, p = .001$) with the criterion variable; however, the negative relationship shows a reversed

one. When one's fear of failure increases, his or her desires to open a business decreases, and vice versa. Nevertheless, fear of failure had significant negative relationships with other variables as proactive personality ($r = -.224$), entrepreneurial self-efficacy ($r = -.165$), optimism ($r = -.295$), and perceived institutional support ($r = -.171$). These correlations showed that a person's fear of failure increases or decreases in the opposite direction of these individual and institutional factors.

Among the socio-cultural variables, the presence of a role model and perceived social status both had a positive association with the DV. The entrepreneurial intentions among PWD was significantly related to the presence of a role model ($r = .382, p = .001$) and perceived social status had a moderate one ($r = .603, p = .001$). The presence of a role model had a moderate relationship with the DV while perceived social status had a strong one. The intentions of opening a business for PWD increases when they have an entrepreneur role model. Interestingly, their intentions increase even more with the social status prescribed to being self-employed. The presence of a role model had a positive, moderate correlations with fear of failure ($r = .245$), perceived social status ($r = .408$), and perceived resource support ($r = .360$). Knowing an entrepreneur increases the positive perception of social status and support available for nascent entrepreneurs. Fear of failure also had a positive relationship with perceived social status.

By the same token, the institutional factors of perceived resource support and perceived institutional resources were positively related to the DV. Perceived resource support had a stronger association ($r = .382, p = .001$) than perceived institutional resources ($r = .219, p = .001$) with the criterion variable. Additionally, perceived resource support had a positive significant relationship with proactive personality ($r = .254$), entrepreneurial self-efficacy ($r = .420$), and optimism ($r = .169$). Moreover, perceived institutional support also had significant relationship

with three individual factors: proactive personality ($r = .216$), entrepreneurial self-efficacy ($r = .342$), and fear of failure ($r = -.171$). These individual traits increase the perception of financial and emotional support available for entrepreneurs with disabilities but fear of failure can also decrease their possibility to identify valuable resources.

Among the control variables (age, education level, gender, ethnic identification, and type of disability) none had a significant relation with the DV. Age, minority status, and type of disability had a negative association while education level and gender had a positive with the dependent variable. The level of entrepreneurial intentions among PWD decreases with age and among PWD with a minority background. Similarly, this results imply that acquired disabilities had a negative correlation with the level of entrepreneurial intentions of PWD. On the other hand, entrepreneurial intentions increase with the level of education attained among individuals as well as female with disabilities showed higher level of intentions to open a business. The entrepreneurial intentions reached a high point when an individual had a bachelor's degree but started to decrease with higher levels of education (Master's degree or Doctorate). However, these relationships were not significant with the entrepreneurial intentions of PWD.

Table 11: Correlations of Variables

	DV	IV1	IV2	IV3	IV4	IV5	IV6	8	9
Entrepreneurial Intentions (DV)									
Proactive Personality(IV1)	.330**								
Entrepreneurial Self-Efficacy(IV2)	.513**	.387**							
Fear of Failure(IV3)	-.057	-.224*	-.165*						
Optimism(IV4)	.245**	.395**	.243**	-.295**					
Perceived Social Status(IV5)	.603**	.188*	.325**	.195*	.143				
Role Model(IV6)	.382**	-.058	.211*	.245**	.042	.408**			
Perceived (IV7) Resource Support	.38**	.235**	.392**	.566**	-.098	.566**	.359**		
Perceived Institutional Support (IV8)	.219**	.216**	.342**	-.171*	.151	.080	.135	.191*	

** . Correlation is significant at the 0.01 level

* . Correlation is significant at the 0.05 level

Testing of Multiple Regression Assumptions

A crucial step in a multiple regression analysis, the assumptions were also tested. After checking for accuracy and missing data, the normality and linearity of the model were evaluated. Visual inspections of histogram, regression standardized residual plot, and scatterplot of regression deleted residual helped to determine that the residuals were normally distributed around the predicted score of the dependent variable (DV), entrepreneurial intentions. The linear relationship, between the residuals and the predicted DV, showed that the IVs and DV are linearly related as well. The correlation of the relationships between the IVs were used to test the assumption of independence. The correlations of all the IVs used in this study are presented in Table 11. The nature of the variables can lead to significant correlations between variables due to the subjects and the dissertation research questions. Even though these significant correlations can be expected, they do not infer cause and effect relationships (Field, 2013). In addition, a Durbin-Watson test result showed that the residuals are uncorrelated with a value of 1.649, a value closer to 2 which reflects no autocorrelation (Field, 2013).

The final assumption of multicollinearity was tested by using a variety of statistical checks. Two diagnostic checks for multicollinearity of the predictive variables, the tolerance levels and the Variance Inflation Factor (VIF), were calculated to test this assumption. The VIF indicates whether a predictive variable has a strong linear relationship with other predictors. The relative threshold levels that highlight trouble with the data for the tolerance levels are not below .10 and for the VIF scores are well beneath 10 (Bowerman & O'Connell, 1990). Based on these threshold, the results of these two analyses indicated that there was no need for further investigation. In addition, the correlation values in Table 11 revealed that there was no reason for concerns that the predictive variables excessively influenced each other. In the same way, a

correlation among the eight predictive variables showed that none of the correlations of the predictor variables reached the .80 threshold. A correlation of above .80 is considered to be highly correlated (Field, 2013). Thus, this correlation analysis showed that no two variables were closely related in this research model.

Multiple Regression Procedure

In order to examine the relationship between individual, socio-cultural, and institutional factors, three reduced multiple regression models and a full model were performed. The reduced models were expected to answer three research questions (RQ2, RQ3, and RQ4) whereas the full regression model answered research question # 5. Each set of independent variable were tested separately to determine the relationship among each group with the dependent variable.

Proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism were categorized as individual variables while perceived social status and role model were grouped as socio-cultural variables. Lastly, perceived resource support and perceived institutional support were the institutional ones. The results obtained from these regressions are discussed in this section.

Personal Factors – RQ2

Multiple regression analysis was conducted to examine the influence of proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism on the level of entrepreneurial intentions among PWD. The results of the multiple regression, as stated on Table 12, indicated that two predictors explained 28.4% of the variance ($R^2 = .284$, $p < .01$). Based on these R^2 values, proactive personality and entrepreneurial self-efficacy can be utilized to explain the entrepreneurial intentions of PWD. It was also found that entrepreneurial self-efficacy predicted the entrepreneurial intention level ($B = .623$), as did proactive personality ($B = .238$)

(Table 12). After the control variables were removed from the model, proactive personality and entrepreneurial intentions were found to have a significant relationships with the level of entrepreneurial intentions, indicating that individuals with higher score in these traits were expected to have higher level of entrepreneurial intentions, after controlling for other variables. For every unit increase in entrepreneurial self-efficacy and in proactive personality, a .62 unit and .24 increase in entrepreneurial intentions is predicted respectively, holding all other variables constant. This findings supported Hypothesis 1 and Hypothesis 2. However, when a multiple regression included the four variables, fear of failure and optimism had no significant relationships with the DV leading to no support to Hypothesis 3 and 4. Thus, fear of failure and optimism did not contribute to the reduced multiple regression model which included individual predictors. After running a multiple regression, the model for individual factors only included proactive personality and entrepreneurial intention. The ANOVA results also showed a significant result indicating that the model is a good fit for the data ($F = 28.35, p < .01$).

Table 12: Multiple Regression Results for Individual Factors

DV: Entrepreneurial Intentions				
Model 1				
Control Variables	B	Std. Error	B	Std. Error
Age	-.006	.010		
Disability	-.105	.312		
Educational Level	-.410	.298		
Gender	.128	.032		
Ethnicity	-.067	.317		
Independent Variables				
Proactive Personality	.185	.130	.238**	.105
Entrepreneurial Self-Efficacy	.637***	.110	.623***	.118
Fear of Failure	.140	.135		
Optimism	.189	.138		
Model Fitting				
R		.557		.533
R Square		.310		.284

Standardized regression coefficients are shown * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

Social Predictors – RQ3

Multiple regression analysis was used to test whether perceived social status and role model significantly predicted the level of entrepreneurial intentions among PWD. As displayed on Table 13, the results of the multiple regression indicated that two socio-cultural predictors explained 38.6% of the variance ($R^2 = .386$, $p < .01$) of the dependent variable. Based on these R^2 values, these two social predictors have a large practical significance to explain the entrepreneurial intentions of PWD. Specifically, perceived social status was found to predict the entrepreneurial intention level ($B = .712$), as did role model ($\beta = .211$) (Table 13). For every unit increase in perceived social status and in role model, a .712 unit and .211 increase in entrepreneurial intentions is predicted respectively, holding all other variables constant. After entering the control variables into the model, perceived social status and the presence of a role model were found to have a significant relationships with the level of entrepreneurial intentions. This results showed that individuals who perceived a social status associated to entrepreneurship as well as those individuals who have the presence of a role model in their life had stronger entrepreneurial intentions. This findings supported Hypothesis 5 and Hypothesis 6. The ANOVA also provided a significant result demonstrating that the model, which included perceived social status and role model predictors, is a good fit for the data ($F = 34.25$, $p < .01$).

Table 13: Multiple Regression Results for Socio-Cultural Factors

DV: Entrepreneurial Intentions				
Model 2				
Control Variables	B	Std. Error	B	Std. Error
Age	-.006	.010		
Disability	-.105	.312		
Educational Level	-.410	.298		
Gender	.128	.032		
Ethnicity	-.067	.317		
Independent Variables	B	Std. Error	B	Std. Error
Perceived Social Status	.709***	.114	.712***	.109
Role Model	.229**	.111	.211**	.106
Model Fitting				
R	.628	.621		
	.395	.386		
R Square		.628		.621
		.395		.386

^a Standardized regression coefficients are shown * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

Institutional Predictors – RQ4

To test whether perceived resource support and perceived institutional support predicted the level of entrepreneurial intentions among PWD, multiple regression analysis was applied to the data. The results of the multiple regression indicated that the two considered institutional predictors explained 17.2% of the variance ($R^2 = .172$, $p < .01$), as showed on Table 14. The R^2 of these two predictors variable showed a medium practical significance. In detail, perceived resource support was found to predict the entrepreneurial intention level ($B = .692$), as did perceived institutional support ($B = .202$) (Table 14). After entering the control variables into the model, perceived resource support and perceived institutional support showed significant relationships with the level of entrepreneurial intentions among PWD. For every unit increase in perceived resource support and in perceived institutional support, a .692 unit and .202 increase in entrepreneurial intentions is predicted respectively, holding all other variables constant. This positive significant relationship indicated that individuals who perceived a useful institutional support, including financial and emotional, had a higher level of entrepreneurial intentions. This findings supported Hypothesis 7 and Hypothesis 8. The ANOVA results also provided a significant result showing that the model is a good fit for the data ($F = 14.95$).

Table 14: Multiple Regression Results for Institutional Factors

DV: Entrepreneurial Intentions				
Model 3				
Control Variables	B	Std. Error	B	Std. Error
Age	-.005	.011		
Disability	-.179	.329		
Educational Level	-.076	.313		
Gender	.177	.308		
Ethnicity	-.560	.335		
Independent Variables	B	Std. Error	B	Std. Error
Perceived Resource Support	.676***	.147	.692***	.149
Perceived Institutional Support	.196*	.102	.202**	.101
Model Fitting				
R		.439		.415
R Square		.193		.172

^a Standardized regression coefficients are shown * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

Full Regression Model

In order to address the fifth research questions for this dissertation, a multiple regression analysis was conducted to examine the influence of personal, socio-cultural, and institutional factors on the level of entrepreneurial intentions among PWD. The eight predictive variables were included in this full model to identify any effect on the criterion variable while holding for the control variables (Table 15). The results of the multiple regression model indicated that for this model the five control variables explained .28% of the variance ($R^2 = .028$, $p < .01$). However, no significant relationship existed between the control variables and the criterion one.

After controlling for the control variables, the personal factors model explained 31% of the variance ($R^2 = .310$, $p < .01$). From a practical significance perspective, proactive personality, self-efficacy, fear of failure and optimism have a large effect on the criterion variable. Personal factors have an effect on the entrepreneurial intentions of PWD. After holding for the control variables, it was found that entrepreneurial self-efficacy significantly predicted the entrepreneurial intention level ($B = .334$) as well as proactive personality (.389). For every unit increase in entrepreneurial self-efficacy leads to a .334 increase in the level of entrepreneurial intentions among PWD. This result shows that these two variables still have a significant relationship with the criterion variable even when all variables are included in the model. These two personality traits seem to strongly predict entrepreneurial behavior among participants.

In addition, perceived social status and the presence of role models were significant contributors to the level of entrepreneurial intentions. These two socio-cultural variables continue to show a positive predicting power. A rise in perceived social status and the presence of a role model generates a .536 and .228 increase in the level of entrepreneurial intentions. However, perceived resource support and perceived institutional support showed no significant

relationship with the dependent variable in the full model. In this model, personality and socio-cultural factors are the only ones to be found as predictor of the entrepreneurial behavior of participants.

The independent variables explained about 45% of the variance ($R^2 = .537$, $p < .01$) in representing the overall strength of association among these variables and the level of entrepreneurial intentions among PWD. This R-squared value shows a significantly practical result to understand the impact of these personality and social variables. Specifically, it shows a relationship between proactive personality, entrepreneurial self-efficacy, perceived social status, and the presence of a role model. This last model reiterated a significant relationship with the same independent variables included in the three previous model.

Table 15: Multiple Regression Results for All Variables

DV: Entrepreneurial Intentions				
	B	Std. Error	B	Std. Error
Control Variables				
Age	.010	.011		
Disability	.043	.324		
Educational Level	.131	.295		
Gender	.276	.285		
Ethnicity	.296	.313		
Independent Variables				
Proactive Personality	.337***	.117	.389***	.110
Entrepreneurial Self-Efficacy	.297**	.136	.334***	.121
Fear of Failure	.076	.155		
Optimism	.207	.140		
Perceived Social Status	.564***	.133	.536***	.113
Role Model	.202*	.112	.228**	.108
Perceived Resource Support	-.140	.184		
Perceived Institutional Support	.104	.096		
Model Fitting				
R		.537		.493
R Square		.476		.445

Post Hoc Analysis

A post doc power analysis was carried out to analyze the statistical power of the significant and non-significant results in this dissertation. For this dissertation, required sample sizes that attain power of 0.80 at the alpha of 0.05 were expected. The observed power for each multiple regression models were calculated using the observed R², sample size and the number of predictors. For the significant effect found in testing each of the reduced models and the full model, the statistical power was over .90. The results of this post hoc analysis support the significant results obtained from the multiple regression analyses.

Summary

Personality, socio-cultural, and institutional factors affect the entrepreneurial intentions among PWD. A variety of factors influence entrepreneurial intentions in two main categories: the individual and the contextual domains (Bird, 1988). Specific individual traits and environmental factors can predict the intentions of owning a business among individuals. The three models and the full regression model results showed that some factors indeed predicted self-employment behavior among participants. Personality factors, including proactive personality and entrepreneurial self-efficacy had a significant relationship with the criterion variable. Additionally, the social factors of perceived social status and the presence of role model as well as the institutional factors of perceived resource support and institutional support also are significantly different from 0. Among the three reduce model, the second model (socio-cultural factors) had the strongest predicting power with about 39% while personality factors were second (28%) and institutional factors (17%).

Based on the information obtained from these models, entrepreneurial self-efficacy, perceived social status, perceived resource support, and were found to be the strongest predictors of the level of entrepreneurial intentions. In the full model, proactive personality, entrepreneurial self-efficacy, perceived social status and role model showed a significant association with the entrepreneurial intentions among PWD. The two institutional variables, perceived resource support and perceived institutional support, were dropped in the full model. For individuals in this dataset, individual characteristics, available support and resources have been identified as relevant factors in the entrepreneurial process.

Table 16: Summary of Hypothesis Testing

H1	<p>Proactive Personality and Entrepreneurial Intentions</p> <p>Proactive personality is positively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Supported
H2	<p>Entrepreneurial self-efficacy and Entrepreneurial Intentions</p> <p>Entrepreneurial self-efficacy is positively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Supported
H3	<p>Fear of failure and Entrepreneurial Intentions</p> <p>Fear of failure is negatively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Not Supported
H4	<p>Optimism and Entrepreneurial Intentions</p> <p>Optimism is positively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Not Supported
H5	<p>Perceived Social Status Entrepreneurial Intentions</p> <p>Perceived social status is positively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Supported
H6	<p>The Presence of Role Models and Entrepreneurial Intentions</p> <p>Role models are positively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Supported

H7	<p>Perceived Resource Support and Entrepreneurial Intentions</p> <p>Perceived resource support is positively related to the level of entrepreneurial intentions among people with disabilities (PWD).</p>	Supported
H8	<p>Perceived Institutional Support and Entrepreneurial Intentions</p> <p>Among people with disabilities (PWD), perceived institutional support is positively related the level of entrepreneurial intentions.</p>	Supported

CHAPTER VI

IMPLICATIONS AND CONCLUSIONS

The purpose of this dissertation was to empirically examine personal, socio-cultural, and institutional predictors of entrepreneurial intentions among people with disabilities (PWD). A review from previous literature supported a gap in research focusing on pertinent factors to self-employment activities and behaviors among those individuals with medical conditions and/or chronic illnesses. With this quantitative investigation, the identification of variables that would influence the level of entrepreneurial intentions among PWD were considered in the research model.

This chapter includes a discussion of the results of the aforementioned hypotheses, a detailed interpretation of the findings and revised dissertation research models. In addition, a discussion of implications for both practitioners and researchers as well as suggestions for practice, policy, and future research in this field. This chapter also includes research limitations and a conclusion for this dissertation.

Problem Overview

Due to a number of laws, regulations, and federal initiatives to reduce employment barriers and disincentives, in the past three decades, some notable employment developments have happened for PWD (Sowers, McLean, & Owens, 2002). However, the workforce representation and employment options for PWD are still minimal. A feasible career choice for PWD, which can help reduce unemployment rate and increase independence, is self-employment or entrepreneurship.

Even though self-employment has gained popularity among PWD, there is limited number of empirical studies exploring the personal, socio-cultural, and institutional factors affecting the entrepreneurial intentions of PWD. PWD are perceived as being deviant and inferior, similar to other minority groups based on different attributes such as age, racial/ethnic group, and gender (Smart, 2008). A significant number of scholarly studies, focusing on determinants of entrepreneurial intention and nascent behavior among disadvantaged minority populations, have been conducted in the last few decades. However, empirical studies relevant to factors that affect PWD's entrepreneurial intentions, attitudes and behaviors are uncommon.

In order to improve employment outcomes and the quality of life of PWD, examining specific variables that affect career choice is essential. Particularly, exploring the individual, socio-cultural, and institutional factors that predict entrepreneurial intentions for it can help in successful venture creation among PWD. Thus, an exploratory quantitative dissertation was conducted to examine the effects of internal and external factors on business venture start-up among PWD. A series of three reduced regression models were used to evaluate the three sets of independent variables interaction with the dependent variable, entrepreneurial intentions. Proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism, part of the first reduced model, denoted the personal characteristics whereas perceived social status and role model were included in the second reduced model as the socio-cultural factors. Lastly, the third reduced model was formed by the institutional factors of perceived resource support and perceived institutional support. A final full regression model was used entering all the variables, including predictive and criterion ones, in a complete representation of the research model.

Using these regression models, combined with descriptive statistics and correlation analyses, this dissertation addressed the five research questions and tested the eight proposed hypotheses.

Discussion

A full model and three reduced multiple regression models were used to examine personal, socio-cultural, and institutional predictors of the level of entrepreneurial intentions among PWD. The results from this analysis identified the most significant predictive variables and their impact on self-employment. The hypotheses proposed that personal, social, and institutional factors predicted the level of entrepreneurial intentions. A discussion of the results of testing of the hypotheses is discussed in this sections.

The results of this dissertation contain several implications by contributing to the literature concerning relevant factors to minority entrepreneurship, and entrepreneurial intentions. Other researchers have evaluated the impact of different factors on the nascent behavior of minority individuals but this dissertation focused to empirically study the significant connection of personality, socio-cultural, and institution factors with entrepreneurial intentions among PWD. Moreover, these variables showed an effect beyond several demographic variables.

Three individual factors are positively and significantly correlated with the criterion, indicating that those with a proactive personality, entrepreneurial self-efficacy and an optimistic outlook tend to have higher intentions of becoming self-employed. Even though fear of failure had no significant association with the criterion, the direction of their relationship was found negative. An individual who is afraid of failure may be hesitant to consider owning a business. Just as individual factors had a positive relationship with the criterion, social and institutional factors did too. The significantly positive association indicates that PWD, who values social status and has the presence of an entrepreneur role model, have higher levels of entrepreneurial

intentions. Social support and network ties have a significant role in the nascent behavior by providing information, setting an example, and even becoming a mentor. The institutional factors of perceived resource support and institutional support also were positively correlated with the DV, illustrating that having institutional support can lead to higher levels of entrepreneurial intentions among PWD. Thus, social and institutional support seem to play an important role in the venture creation process of those with disabilities. In this case, social capital can facilitate the creation of new enterprises by providing support, facilitating resources, setting an entrepreneurial example, and building a network. Similarly, the environment can help to foster enterprising ideas with accessible trainings, information and programs.

Personal Characteristics

The relationship between the individual and the environment can help in forming personality characteristics that influence career choices. However, individuals are also born with unique traits that become part of their personality. In previous studies, the personal traits of entrepreneurs (Littunen, 2000) along demographic patterns (Aldrich, 1989) have been found to show a relationship with entrepreneurial decisions. In this dissertation, the personality variables consisted of proactive personality, entrepreneurial self-efficacy, fear of failure, and optimism. According to the hypotheses, only fear of failure would negatively relate to the level of entrepreneurial intentions among PWD meaning that the greater the fear, the less entrepreneurial intentions. The other three variables were expected to be positively related to the criterion variable. The results of the data analyses indicated that proactive personality and entrepreneurial self-efficacy had a positive association with entrepreneurial intentions.

A proactive individual create environmental change regardless of situational factors and have the ability to identify opportunities (Crant, 1996). Based on the individual characteristics

model, proactive personality had a significant positive relation with entrepreneurial behavior among PWD. As in previous empirical studies, proactive personality was positively associated with entrepreneurial intentions (Crant, 1996; Ellen, 2010; Gutpa & Bhawe, 2007; Prieto, 2011). Specifically, this finding showed a significant relation of this personality trait with the entrepreneurial behaviors of those individuals with disabilities. Proactive individuals can visualize creative ways to create and implement a business idea. In addition, an individual with a proactive personality envisions potential for growth and have strong leadership skills (Prieto, 2010). By identifying this personality trait among their clients indicating self-employment as a career option, rehabilitation professionals can assist in increasing successful competitive employment outcomes among clients. Proactivity reflects an individual's orientation toward the environment and displays a more aggressive approach to the market (Becherer & Maurer, 1999). Rehabilitation professionals can encourage those individuals with proactivity tendencies to continue with their interest in pursuing self-employment as a vocational option. Specially, counselors can work with clients to identify opportunities in the market and utilize the environment as a tool to exploit a potential entrepreneurial idea.

A strong predictor of entrepreneurial intentions, identified in this dissertation, was entrepreneurial self-efficacy. Entrepreneurial self-efficacy refers to an individual's belief that he or she possess adequate skills and knowledge for venture creations. In the individual and full regression model, entrepreneurial self-efficacy, as in previous research, had a strong positive association with the level of entrepreneurial intentions. Self-efficacy has shown repeatedly to have a strong predictive ability when incorporated into proposed models of entrepreneurial career intentions (Chen et al., 1998; Shapero & Sokol, 1982). A robust body of research, in the field of entrepreneurship, has found a positive relationship between entrepreneurial self-efficacy

and entrepreneurial career preferences (Chen et al., 1998; Kristiansen & Indarti, 2004; Markman, Balkin & Baron, 2002; Wilson, et al., 2004; Wilson et al., 2007 among others). This dissertation results are consistent with previous studies, suggesting that entrepreneurial self-efficacy can play a role in nascent behavior among those with disabilities. Identification of qualities congruent with those items found in the self-efficacy instrument can help rehabilitation counselors in working with entrepreneurs with disabilities. Rehabilitation professionals can assist those with strong desire to become self-employed by providing services and tools that facilitate this vocational choice. Particularly when individuals with high levels of entrepreneurial self-efficacy tend to believe in their ability to achieve goals, perceive low probability of failure and focus on opportunities rather than risks (Chen et al., 1998). In addition, individuals with high levels of entrepreneurial self-efficacy may choose to become entrepreneurs (Zhao et al., 2005) shaping their vocational goals. Rehabilitation professionals can support their clients' beliefs that they have the abilities to open and run their own business by providing resources and information. Understanding the predicting power of entrepreneurial self-efficacy can help practitioners to provide adequate tools and motivation to clients who are interested in becoming self-employed.

Another predictive variable examined, as a personal factor was fear of failure. Fear of failure is an affect that can make a person feel discouraged and afraid before even making an attempt because he or she will not succeed (Omololu, 1990; as cited in Ekore & Okekeocha, 2012). While proactive personality and entrepreneurial self-efficacy seemed as predictors of entrepreneurial intention, fear of failure had no significant relationship with the criterion variable. A lack of a significant relationship supports the results of a previous study that found that fear of entrepreneurial failure had no influence upon entrepreneurial activity (Vaillant & LaFuente, 2007). In this dissertation, the third hypothesis stated that fear of failure was

negatively related to the level of entrepreneurial intentions among PWD. Even though the multiple regression analysis showed no significant relationship among variables, there was a negative correlation between fear of failure and entrepreneurial levels. This association indicates that when fear of failure increases, the intentions of an individual to open a business decreases and vice versa. Similarly to other studies, fear of failure is an affect that can have an aversion effect on the entrepreneurial intentions of an individual (Crane & Crane, 2007). Thus, there is still a need to understand the influence of fear of failure on entrepreneurial behaviors as it has been found a significant predictors in other studies. When working with PWD, it may be beneficial for rehabilitation professionals to explore fear of failure as a potential barrier to successful employment outcomes and to discuss with clients their concerns about self-employment. Clients may be concern about the uncertainty and risk taking involved in entrepreneurship (Caliendo, Fossen & Kritikos, 2009), thus limiting their employment opportunity to traditional jobs. Understanding how this negative force may inhibit entrepreneurial intentions can help practitioners to find techniques to reduce its impact on vocational goals.

The last personal predictor to be considered in this dissertation was optimism, which was expected to be positively related to the level of entrepreneurial intentions. Optimism is a generalized positive expectancy that everything will have positive results (Scheier & Carver, 1985). The multiple regression results demonstrated that optimism had no significant association with the entrepreneurial level among PWD. This is an interesting finding that suggest some similarities between proactive personality and optimism since these two personal characteristics denote an individual's emphasis on positive expectations on any outcomes. However, these two

constructs are distinct. When including optimism and the dependent variable in a single regression, a significant relationship is found among these two variables.

In a review of the entrepreneurship literature, dispositional optimism is correlated to entrepreneurial success (Crane & Crane, 2007) and has been found to be an overarching trait that many entrepreneurs possessed and helped them to become successful (Boyett & Boyett, 2001). In this dissertation, optimism was also found to have a significant positive correlation with the criterion variable. Rehabilitation professionals need to be aware that individuals high in optimism exhibit confidence in challenging situations (Hmieleski & Baron, 2009) but they may hold unrealistic expectations and mentally reconstruct experiences to avoid contradictions (Geers & Lassiter, 2002). Optimism has also been found to have a negative relationship between entrepreneurs' optimism and the performance of their venture (Hmieleski & Baron, 2009). An excessive optimistic individual may have unrealistic expectations and can become distracted from developing realistic plans. Moreover, optimism can impact a client's decision and motivation to engage in entrepreneurial behaviors. Rehabilitation professionals can assist clients to evaluate and determine their level of optimism and attainability of their vocational goals. Considering that successful entrepreneurs have been found to be moderate risk takers and optimistic yet realistic about their venture performance (Baron, 2000; Hisrich, Peters & Shepherd, 2005).

These personality traits also were found to have relationship with other variables in the model. Entrepreneurial self-efficacy had a positive relation with the socio-cultural and institutional factors suggesting that an individual who believes in his or her ability to succeed in self-employment may perceive a supporting system. Similarly, proactive personality had a positive association with two personality characteristics: entrepreneurial self-efficacy and

optimism. Another finding from this analysis was that optimism showed a significant negative relationship with fear of failure showing that these two personal traits have an opposite interaction with the level of entrepreneurial intentions. Thus, practitioners need to recognize and understand the impact of these personality traits on the vocational aspirations of clients. For instance, if an individual's fear keeps her or him from achieving a goal, a practitioner can help this client to recognize and manage their negative emotions to develop abilities and confidence to pursue this goal. For rehabilitation practitioners, understanding the influence of personality traits and heuristics on nascent behavior can become instrumental in successful employment outcomes.

Socio-cultural Components

A variety of entrepreneurship studies use the trait model and contingency thinking model to explore reasons for individuals to become entrepreneurs (Littunen, 2000). Previous empirical evidence has showed that entrepreneurial activity is strongly related to specific social values and perceptions related to owning a business (Begley & Tan, 2001). In this dissertation, perceived social status and the presence of role model were considered to examine the effect of socio-cultural factors on nascent behavior. According to the proposed hypotheses, these two factors would positively relate to entrepreneurial intentions. The results of the analyses demonstrated that these social variables indeed had a strong significant relation with the criterion variable.

In entrepreneurship, environmental factors can affect decisions to engage in venture creation and the outcomes of these activities. Perceived social status refers to an individual's interpretation of how others perceive where they rank in the social community ranking (Shane, 2003). Precisely, the value linked to a career can influence an individual's vocational choices. Based on the results of data analysis, perceived social status showed a strong effect on nascent behavior among participants. These results indicate a significant predictive power of perceived

social status, which is consistent with past studies in the literature (Abebe, 2012; Begley & Tan, 2001; Malach-Pines et al., 2005), on entrepreneurial intentions. Social capital, which include social norms and values, can influence perceived desirability and perceived feasibility which are considered two antecedents of intentions (Linan & Santos, 2007). The prestige and respect, associated with self-employment, offers an opportunity for PWD to earn their own income while actively participating in society. Clients may perceive self-employment as a tool to earn not only financial independence but respect and recognition in their community. In a society where PWD experience stigma and discrimination due to their disabilities, self-employment represents an option to change how others perceived them. Conversely, rehabilitation practitioners need to understand the impact of the value attributed to self-employment and how this may influence a client's decision to pursue this vocational option.

In the same way, the presence of a role model strongly predicted the entrepreneurial intentions of individuals. From a social learning perspective, individuals learn a behavior in their environment by observing it and interpreting its consequences in a social context (Bandura, 1977). In this dissertation, the presence of a role model was found significantly influential on entrepreneurial behaviors in both: the socio-cultural and full regression models. This findings indicated that a familiar entrepreneur helps an individual to identify a potential business opportunity and to develop an interest in self-employment. Modeling has been linked to vocational choices since individuals compare their own abilities, motives, and situation to those of the role models (Buunk, Peiro & Griffioen, 2007). The role model could represent a potential reflection of their career decisions or what they could accomplish in the future. In preceding entrepreneurship research, the presence of a role model/mentor had a positive influence and increases the probability of being involved in entrepreneurial activities and in the new business

formation process (Davidson, 1995; Vaillant & Lafuente, 2007; Van Auken et al., 200; Sequeira et al., 2007). Therefore, the exposure to role models can have a positive effect on intention and career decisions. Rehabilitation professionals can assist clients to identify and use role models to obtain treasured information and to learn about the entrepreneurial process. Social capital becomes a crucial component for choosing self-employment as a vocational goal. The significant predictive power of socio-cultural factors is congruent with a number of preceding studies (Buunk et al., 2007; Linan & Santos, 2007; Van Auken et al., 2006) suggesting that social factors encourage entrepreneurial intentions and nascent behavior among minority groups.

Institutional Influences

Another important component of the environment, which facilitates nascent behavior, is institutional pieces. Emotional, psychological, financial supports represent important resources for individuals in the new venture creation process (Sequeira et al., 2007). Perceived resource support and perceived institutional support were considered as part of the institutional factors in this dissertation. It was expected that perceived resource support and perceived institutional support would have a significant positive predicting power in the level of entrepreneurial intentions. Accordingly, the data analysis confirmed a positive relation between these institutional factors and the criterion variable.

Perceived resource support can be divided into perceived emotional and financial support. According to Sequeira et al., perceived resource support can be a crucial component of the venture creation process either as an emotional and psychological factor or resource support for the entrepreneurs (2007). For individuals, the support available can help in resource acquisition, opportunity identification, motivation and accessible information. In this dissertation, emotional and financial perceived resource support were found to be a central

provision of intentions. As previous empirical evidence, social support was found to be a significant predictor of entrepreneurial intention and subsequently nascent activities and behaviors (Bates, 1997; Carr & Sequeira, 2007; Fairlie & Robb, 2008; Linan & Santos, 2007; Shane, 2003).

Nascent entrepreneurs usually require external capital to create new enterprising in general, individuals starting a new business are vulnerable to financial constraints needing external financing support (Davidsson & Honig, 2006). An individual's evaluation of the financial support available modifies their intentions to establish a business by feeling discouraged to even apply for financing. Specifically, vocational services clients voiced that acquiring capital for venture creation was an obstacle for self-employment (De Klerk, 2008; Heath & Reed, 2013). Thus, rehabilitation professional can help clients identify valuable resources, at the social and financial level, to establish new businesses in their community. Similarly, the moral and emotional support provided by loved ones can impact the nascent behavior among individuals. By perceiving others as a source of knowledge, information and support, individuals' entrepreneurial intentions increase. An important consideration for practitioners as perceived resource support was one of the best predictors of entrepreneurial intentions among PWD.

Likewise, perceived institutional support showed a predictive power for the entrepreneurial intentions. The results of this analyses empirically support that institutional factors positively related to nascent entrepreneur behavior, as established in earlier studies (Bowen & De Clercq, 2008). Consequently, institutional factors may play an important role in the entrepreneurial activity in a community. The institutional environment can facilitate or hinder entrepreneurial careers and new venture creation. The different entrepreneurial services available

can help individuals make an enterprising idea a reality. Specifically, practitioners can inform clients of the different services and support available for those interested in opening their own business or those in the nascent stage. Rehabilitation professionals can increase self-employment opportunities among clients by informing and promoting trainings and services for individuals interested in opening a business.

Summary of Outcomes

Personal, socio-cultural, and institutional factors were relevant to entrepreneurial intentions of PWD. In terms of personal characteristics, a significant relationship between proactive personality and entrepreneurial self-efficacy was positive in the multiple regression model while optimism had a significant one only in a single regression. Entrepreneurial self-efficacy showed the strongest predicting weight for it was significant in the reduced and full models. In examining the socio-cultural variables, it was found that the two predictors had a strong predicting power as well as the institutional factors with entrepreneurial goals. Perceived social status and the presence of a role model plus perceived institutional support had significant positive relationships with the level of entrepreneurial intentions. From the three group of variables, socio-cultural factors had the largest influence on the entrepreneurial intentions followed by personality factors and lastly the institutional variables.

Revised Research Model

To modify the proposed dissertation research model, the results of the statistical analyses were considered. Based on this findings, the research model required some revisions and modifications. The new research models illustrated the outcomes of the analyses of the various multiple regressions: the three models for each category and the full model. The proposed research model (Figure 4) includes four personal factors – proactive personality, entrepreneurial

self-efficacy, fear of failure, optimism-, two socio-cultural factors –perceived social status and role models, and two institutional ones – perceived resource support and perceived institutional support. However, the analysis results, from the three models, showed that two personal predictors should be removed: fear of failure and optimism (Figure 5). After answering the research questions 2, 3, and 4, a full regression model was entered for analysis. The results from the full model is displayed in Figure 6. Based on the analysis from the full model, three predictors had to be removed from the proposed research model, including the personal characteristics of fear of failure, and optimism as well as the two institutional predictors – perceived resource support and perceived institutional support.

Personal Predictors

Social Predictors

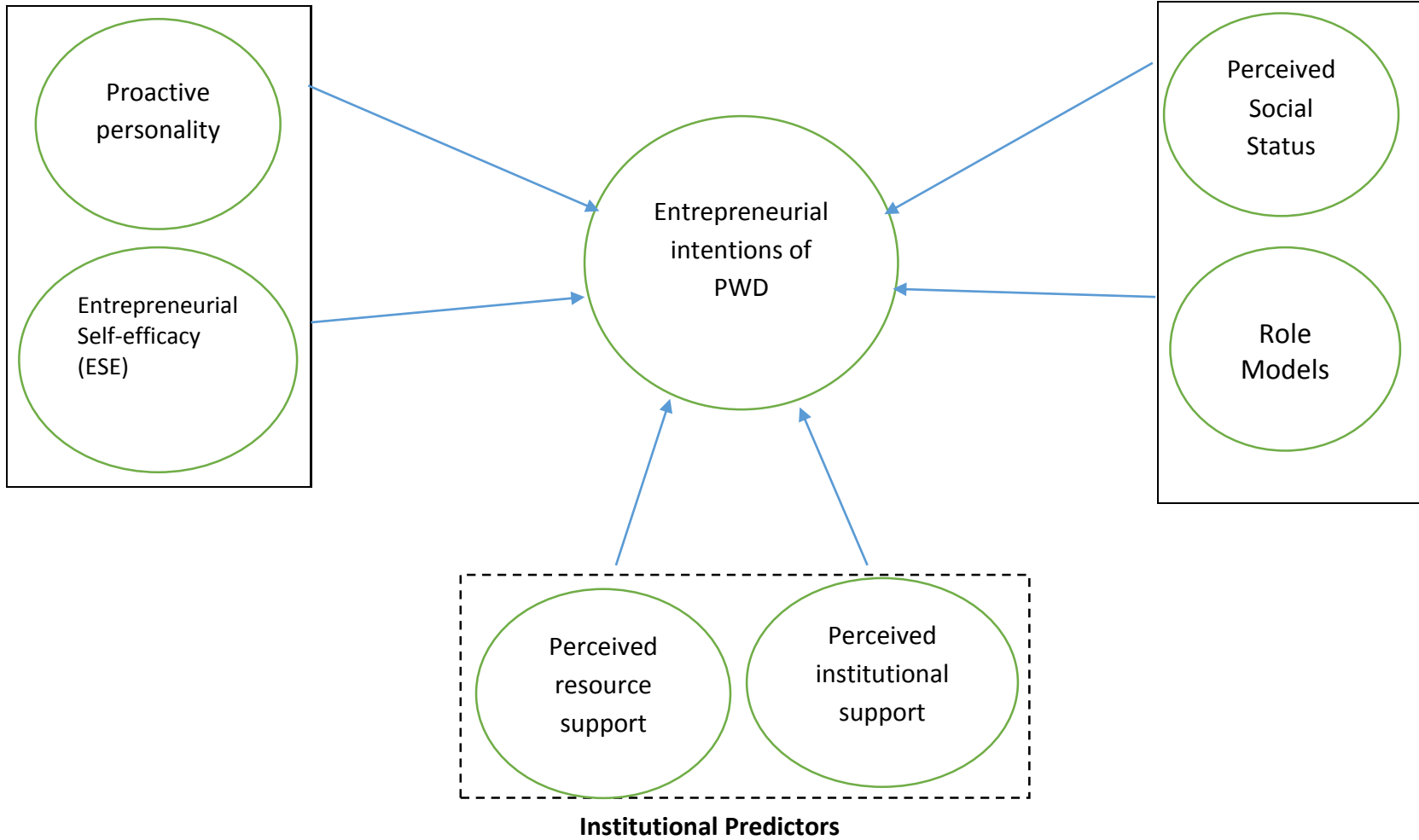


Figure 5. Revised Research Model (Three Models)

Personal Predictors

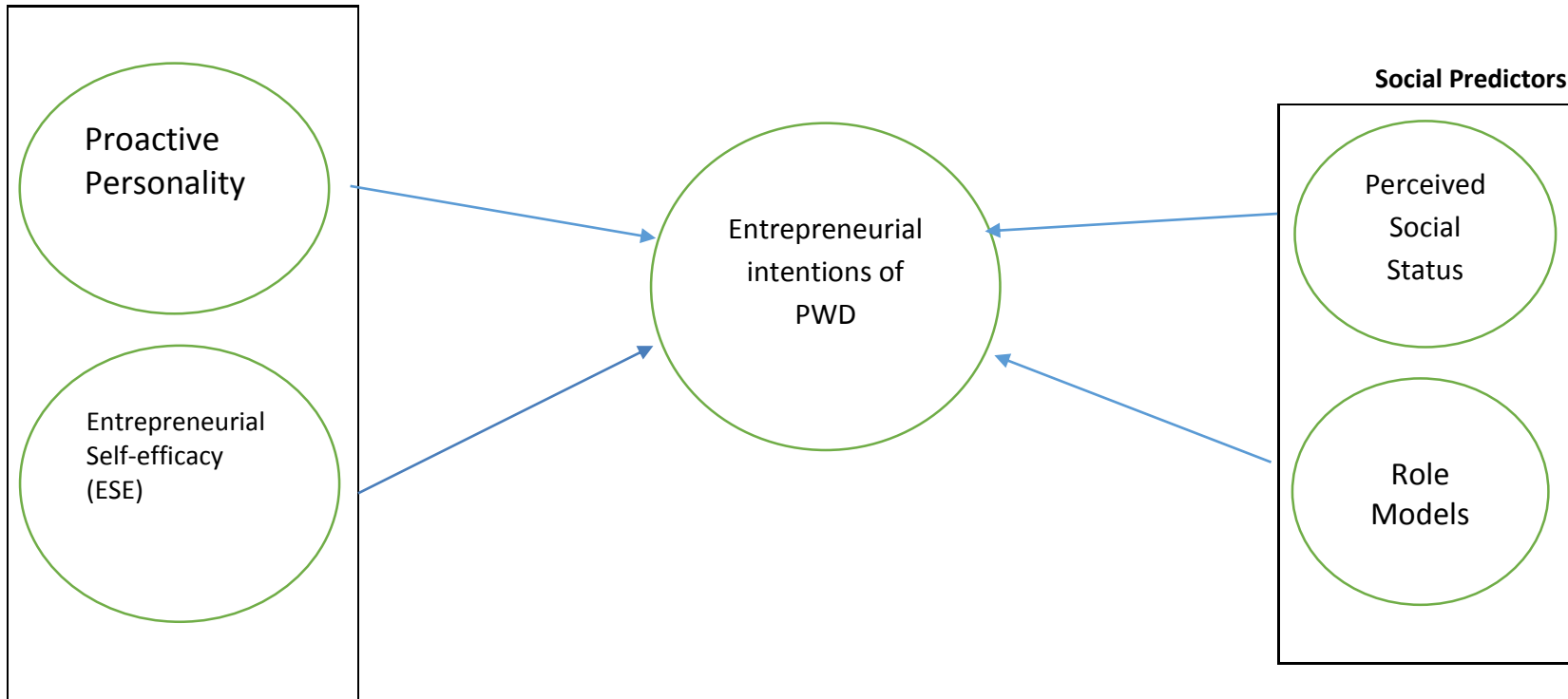


Figure 6. Revised Research Full Model

Limitations

In this dissertation, there are a number of limitations that need to be considered with regard to implementation and future directions. First, the sample size only included participants from certain parts of the nation and was relative small in numbers may be an obstacle in any potential generalization of the findings. In addition, the participants only included PWD who were computer literate or had access to the internet, excluding other possible participants with disabilities. A noteworthy limitation as minority respondents can be difficult to identify for participation in any study. Thus, future studies could include a broader group of PWD with different abilities, disabilities, and locations as well as extending data collection efforts to paper surveys or assisting PWD to complete online surveys. Second, using the Theory of Planned Behavior, as the theoretical framework, implies that having intentions would lead to opening a business but there are other factors that may affect a person's decision. Third, this is a cross-sectional study rather than a longitudinal one collecting data at one point in time only. Fourth, this dissertation defines institutional support mainly as vocational services. In future research, the definition of institutional support can include other type of services such as Small Business Association services. , a consideration for future research.

Despite these limitations, this dissertation provides a foundation to continue examining how personal, socio-cultural, and institutional predictors affect the entrepreneurial activities of PWD. In addition, it contributed to the minority entrepreneurship and vocational rehabilitation literatures by considering internal and external factors involved in self-employment. Future research can build on and evaluate this current findings to continue finding ways to improve the services available for PWD.

Implications of Dissertation

The purpose of this descriptive quantitative dissertation was to investigate the relationship of pertinent factors that might influence entrepreneurial career intentions among PWD. By identifying the impact of individual, socio-cultural and institutional characteristics - including proactive personality, entrepreneurial self-efficacy, fear of failure, optimism, perceived social status, presence of role models, perceived resource support and perceived institutional support- on entrepreneurial career intentions, this dissertation aimed to increase the understanding of career choices and entrepreneurship activities among PWD. Therefore, the implications of this dissertation for practitioners, researchers, and clients are explored in subsequent sections.

Considerations for Professionals

Choosing an occupation or career, a major decision for an individual, can lead to personal satisfaction and a healthy challenge to self. For PWD, career development is a complex process (Enright, 1996) with a variety of prominent individual and environmental factors that affect it (Nary et al., 2004). Vocational professionals can increase their knowledge about the interaction of individual characteristics, social values, and even cultural/governmental institutions when assisting clients in their employment goals. In recognizing and evaluating career choices, clients can benefit from instrumental information from rehabilitation professionals, who understand the intricate process of career development (Szymanski et al., 2003). Accordingly, the identification of factors and strategies, relevant to successful employment for PWD, combined with rehabilitation professional proficiency in the vocational domain, can improve the resources and services available for clients.

In vocational services, understanding factors that affect the employment options of clients is crucial for professionals to provide superior services to those receiving assistance in job search. Particularly, rehabilitation professionals need to be aware that an individual's vocational behavior is influenced by personal attributes, vocational cognitions, individual behaviors, and the environment (Keller, Biggs, & Gysbers, 1982). In addition, counselors need to consider the impact of socio-cultural factors in the career development process as they showed the strongest predicting power. Understanding the interaction of socio-cultural factors with the client's aspirations can provide counselors with information to shape their objective and strategies to achieve the vocational goal. To provide comprehensive services, rehabilitation professionals need to address issues encountered by each client as well as unique personal characteristics. By increasing the understanding of external and internal elements that interact in the career development process, rehabilitation professionals can create a clearer picture of a client's background to incorporate person-centered approaches in their service delivery practices while helping clients in their career development process.

When supporting clients in their job search, rehabilitation professionals need to identify the interests and skills of job seekers and use a person-centered planning approach to strive for a successful employment outcome (Inge & Target, 2006). Equally, individual traits can influence a career choice as well as the positive employment outcomes; therefore, it is important to match a client's abilities and skills to a desired job. Background, personality type and characteristics, outlook in life, among others personal aspects, can influence a vocational choice and personal satisfaction with a job. For instance, a person's beliefs in his or her ability to perform a specific task can influence level of motivation, affective status and behaviors (Bandura, 1977). Accordingly, rehabilitation professionals need to invest time to learn about their clients'

vocational aspirations, knowledge, previous experience, educational background, skills related to a job, and any other information that can smooth the employment process. Another useful tool is a check list for counselors to evaluate the skills, support system and information level of client relevant to their career choice.

In employment services, the influence of personal factors, in combination with social and institutional ones, should be considered and evaluated to recognize their impact on career behaviors and choices. By creating accessible environments and programs for PWD and providing resources for clients and families, rehabilitation professionals and agencies can help clients to prepare for and succeed in employment. Having social and institutional support can facilitate the success of PWD in employment and in their integration to society (Smart, 2008). Likewise, professionals need to identify the social support system available for clients that can support their employment aspirations. For instance, mentors and role models can play a significant part in motivating women with disabilities to strive for career stability and advancement (Lindstrom & Benz, 2002). The presence of a mentor can help clients turn their intentions into plan by learning and obtaining information from an experienced entrepreneur. Practitioners need to capitalize on potential role models and network ties to help clients opening their own business. These mentors and social support system can be utilized Similar networking in a variety of vocational settings, including in self-employment.

A reasonable alternative to traditional employment for PWD is self-employment or entrepreneurship. Due to its increase in popularity, among vocational rehabilitation professionals and clients, understanding the entrepreneurial intentions among PWD can help to provide effective vocational services to those individuals interested in owning a business. Vocational agencies can screen and assess clients for entrepreneurial potential to increase their chances of

successful business venture. Particularly, when socio-institutional factors have a positive relationship with the entrepreneurial behaviors among PWD. The findings of this dissertation may be considered for policy and potential changes in service delivery to improve the self-employment resources and support available for PWD.

Vocational professionals and agencies can also try to establish training programs and offer services that foster nascent entrepreneurial behavior among clients. For instance, implementing and developing tools and programs that enhance entrepreneurial self-efficacy, and motivating those entrepreneurs with disabilities with a proactive personality to start a business venture are also another mechanism to improve employment outcomes. There is empirical evidence that formal academic courses can have a positive impact on intentions to create a venture (Zhao et al., 2005). Additionally, when a personal network of supportive individuals is combined with high levels of entrepreneurial self-efficacy, this can increase entrepreneurial intentions and nascent behavior (Sequeira et al., 2007). Therefore, rehabilitation counselors can help clients to foster entrepreneurial self-efficacy and establish a network to nurture their business intentions. Similarly, a check list and evaluative tools that focus on skills and elements relevant to self-employment can be used by counselors to identify client's abilities and needs.

Moreover, vocational agencies and professional can provide information to entrepreneurs with disabilities about trainings, resources, funding, and organizations that specialize in business creation. Thus, agencies can create a database with entrepreneurial related resources, including human and social capital, to facilitate self-employment. Rehabilitation agencies can also establish and continue working with other governmental and private organizations to smooth the path for clients seeking information and even considering to take the needed steps to become self-employed.

In education, the results of this dissertation can be used to provide valuable insights on the entrepreneurial career intentions to educators, who may teach it to future professionals. By teaching students about the benefits and barriers of self-employment, a positive attitude can be instilled in students as well as increasing their familiarity with this vocational choice. Principally when a counselor's attitudes towards self-employment can significantly influence offering this employment option to clients (Ravesloot & Seekins, 1996). A cognizant inclusion of self-employment, in the curriculum, can help with awareness about the needs and challenges of entrepreneurs with disabilities. Additionally, students, who are interested in entrepreneurship and/or working with people with disabilities, can learn about minority entrepreneurship and factors affecting their business formation decision. Moreover, these findings emphasize that minority groups may experience similar struggles and may benefit from readily available support systems. In the entrepreneurship education, this findings can help students and educators to identify and understand factors that affect minority entrepreneurs.

Considerations for Research

Most of the previous scholarly contribution concerning self-employment among PWD has been qualitative research. This dissertation used past investigational studies to build a research model that could be empirically tested with a different minority population. In addition, it built on past cross-sectional studies that focused on the influence of personal, socio-cultural, and institutional factors on entrepreneurial behavior. Previous studies have collected data from minority groups to measure different variables but without considering PWD as a minority group. This dissertation intended to contribute by considering a different disadvantaged minority group and how different factors play a role in their business startup intentions.

While there is a growing number of empirical studies on entrepreneurial career intentions, additional work can be done to increase the understanding of the different dynamic factors that influence entrepreneurial activities among minority groups. This study aims to encourage researchers to expand our knowledge about minority entrepreneurs and their challenges, including those with disabilities. Using more complex models, and/or investigating other variables, applying a quantitative approach, can help to understand the nascent behavior of PWD. Future studies can build from the limitations of this study by exploring the influence of personal, social, and institutional predictors of entrepreneurial intentions using a large data from various regions of the country. Plus, incorporating a random sampling technique, in the research procedure, combined with a diverse sample size can help in understanding these factors.

This dissertation represents just a potential start for researchers to continue building a stronger foundation from which to examine entrepreneurial behavior among PWD. For instance, the control variables can be reevaluated, as in previous studies they have been found to be a significant predictor of self-employment. Future research could also use a comparative research design to identify potential differences in the level of entrepreneurial intentions among PWD and those without disabilities, among different type of disability groups (e.g. Spinal Cord Injury vs. Schizophrenia, or Learning vs. Sensory Disabilities, and so on), and even comparing PWD with different demographic background (e.g. identified ethnicity groups, gender, national origin, etc.). Comparing PWD to other minority groups can also provide insightful information about unique struggles and challenges faced by each group, including the disability experience. In addition, future research can consider other cognition processes, psychological traits, socio-cultural values, and institutions that may play a role in the entrepreneurial behaviors of individuals with and without disabilities. For example, this dissertation found optimism had predicting power on

the entrepreneurial intentions in a single regression model. Thus, future research could help in the understanding of the influence of affect, heuristics, and cognition and how these variables interact to impact entrepreneurial intentions.

Besides, results from this dissertation aimed to increase the knowledge about PWD in the vocational rehabilitation and entrepreneurship literatures. Findings of this dissertation suggest the need for additional research to further enhance knowledge and best practice in addressing self-employment as an employment option for PWD. Additional individual characteristics to examine the nascent behavior among PWD can be studied, including disability, reasons, personal preferences, previous experience, among others. Moreover, the impact of social and institutional supports on entrepreneurial activities, from accessibility issues to agency services to network ties to programs available, can also be evaluated in future research. An evaluation of the success of self-employed clients, in a longitudinal study, is another research that can shed some light on relevant factors that influence entrepreneurial behaviors and activities. This research can help to understand the long-term success of entrepreneurs with disabilities. Furthermore, a qualitative study can be used to validate the findings of this dissertation while adding to the understanding of self-employment among PWD.

Based on the results of this dissertation, research can also focus on expanding the understanding of the impact of socio-cultural factors on the career choices of PWD. Especially, when these factors showed a strong relationship with entrepreneurial intentions suggesting that they play an important role in employment. Agencies tend to focus on the institutional aspect of support available for clients; however, these factors showed the weakest influence. Reevaluating the focus of services and how can they become effective and supportive of clients' goals seems to suggest an area of great interest for successful outcomes. By understanding factors and

activities of professionals, related to self-employment, it is possible to assist in the development of best practices and improvement of vocational services.

Benefits for Clients

Self-employment has not only gained acceptance as a viable employment option in the vocational rehabilitation system (Weiss, 2002) but also among PWD. Since PWD are almost twice as likely as those without disabilities, individuals can use this findings to identify factors related to self-employment. Individuals can use a self-evaluation technique to become aware of their personal characteristics, such as a proactive personality, which may support their vocational aspirations. By recognizing one's individual traits that affect vocational choice, clients can actively participate the identification and planning stages of their own career development process.

Vocational rehabilitation clients, who may be interested in becoming entrepreneurs, can become aware of factors that may predict and increase their likelihood to succeed in venture creation. Moreover, an understanding of a community resources helps in adapting entrepreneurship support, framework, and services that promote business startup (Vaillant & LaFuente, 2007). Clients can also learn to identify social support, organizations, and financing institutions that can support their entrepreneurial aspirations. Individuals with disabilities tend to have less work experience, access to information about occupations and limited opportunities to make career decisions (Smart, 2008). Furthermore, they can identify positive entrepreneurs as well as loved ones, who can provide with valuable information and skills, to assist in their businesses. Clients can also establish social support networks that can simplify the process of launching a business.

By establishing a new business venture, entrepreneurs with disabilities can generate employment opportunities while meeting personal and financial needs. Self-employment of entrepreneurship option offers flexibility for an individual's personal and medical needs (Callahan et al, 2002; Doyel, 2000; Yamamoto, 2013). In addition, it can provide many accommodations (Clark & Kays, 1999) and help to decrease discrimination (Blank et al., 2000). Due to the frustration and discontent at a traditional, linked to discrimination and stigma, may push a person to use entrepreneurship as an alternative job (Heilman & Chen, 2003). Self-employment represents an opportunity for clients to become independent and become self-sufficient; thus, vocational professionals can provide the adequate tools to become successful entrepreneurs.

In opening a business, a client's perspective and expectations are important for consideration in vocational services. Clients can provide their insights in effective policy, practices, and training that can lead to developing comprehensive services in self-employment. Thus, clients' involvement in activities and programs can create a feeling of empowerment while positively transforming service provision.

Conclusions

Self-employment or entrepreneurship represents a viable vocational option for individuals with disabilities. In an economy, in which small and medium size businesses are abundant, providing assistance, trainings, and resources for those entrepreneurs with disabilities can help to improve their quality of life and embrace their independence. Rehabilitation professionals, as empirically investigated in this dissertation, need to comprehend the different personal, socio-cultural, and institutional factors that affect the entrepreneurial intentions of their clients. The outcomes of this dissertation recognized predictors of nascent behavior among

PWD. Proactive personality and entrepreneurial self-efficacy, and sometimes optimism, are individual psychological and cognitive traits that can be identified and enhanced in entrepreneurs to assist in business venture. In addition, perceived social support and the presence of a role model are strong predictors of having intentions to open a business. Thus, professionals and clients interested in self-employment should incorporate social networks, mentorships, and trainings that utilize this type of social capital. Lastly, understanding the valuable contribution of institutions, in assisting individuals to establish their own business, should be recognized and built-in services and resources provided to prospective entrepreneurs.

REFERENCES

- Abebe, M. A.(2012). Social and institutional predictors of entrepreneurial career intentions: Evidence from Hispanic adults in the U.S. *Journal of Enterprising Culture*, 20(1), 1–23. DOI: 10.1142/S021849581250001X
- Aldrich, H. (1979). *Organizations and Environments*. Englewoods Cliffs, NJ: Prentice-Hall.
- Aldrich, H., & Martinez, M.A. (2001). Many are called, but few are chosen: An evolutionary perspective for the study of entrepreneurship. *Entrepreneurship Theory and Practice*, 25(4), 41–56.
- Allison, C. W., Chell, E., & Hayes, J. (2000). Intuition and entrepreneurial behavior. *European Journal of Work & Organizational Psychology*, 9(1),31–43.
- Allen, W. D. (2000). Social Networks and Self-Employment. *Journal of Socio-Economics*, 29(5), 487–501.
- Adam, P.M., White, M.A., & Lacaille, D.(2007). Arthritis and self-employment: Strategies for success from the self-employment literature and from the experiences of people with arthritis. *Journal of Vocational Rehabilitation*,26, 141–152.
- Americans with Disabilities Act of 1990, Pub. L. No. 101-336, § 2, 104 Stat. 328 (1991).
The ADA Amendments Act of 2008 (Public Law 110-325, ADAAA) (2009).
- Ang, S. H., & Hong, D. (2000). Entrepreneurial spirit among East Asian Chinese. *Thunderbird International Business Review*, 42, 285–309.
- Arbona, C. (2000). The development of academic achievement in school-aged children: Precursors to career development. In: Brown SD, Lent RW (eds.). *Handbook of counseling psychology* (270–309). New York: Wiley.
- Armitage, C. & Conner, M.(2001). Efficacy of the theory of planned behaviour: A meta-analysis review. *British Journal of Social Psychology*, 40,471–499.
- Arnold, N. & Ipsen, C.(2005). Self-employment policies: Changes through the decade. *Journal of disability policy studies*, 16(2), 115–122.
- Arnold, N., & Seekins, T. (1995). Self-employment as a vocational rehabilitation employment outcome in rural and urban areas. *Rehabilitation Counseling Bulletin*, 39, 94–105.

- Arnold, N. L., & Seekins, T. (1996). Self-employment as a vocational rehabilitation closure: An examination of state policies, In *Self-Employment in Vocational Rehabilitation: Building on Lessons from Rural America*. N. L. Arnold (Ed.). Missoula, MT: University of Montana, Research and Training Center on Rural Rehabilitation Services, Rural Institute on Disabilities.
- Arnold, N. L., & Seekins, T. (1997). A comparison of vocational rehabilitation counselors: Rural and urban differences. *Rehabilitation Counseling Bulletin*, 41, 2–14.
- Arnold, N.L., & Seekins, T. (1998). Rural and urban vocational rehabilitation: Counselors perceived strengths and problems. *Journal of Rehabilitation*, Jan/Feb, 5–13.
- Arnold, N., & Seekins, T. (2002). Self-employment: A process for use by vocational rehabilitation agencies. *Journal of Vocational Rehabilitation*, 17(2), 107–113.
- Ajzen, I. (1988). *Attitudes, Personality, and Behavior*. Milton-Keynes, England: Open University Press.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I., & Driver, B. L. (1992). Application of the theory of planned behavior to leisure choice. *Journal of Leisure Research*, 24, 207– 224.
- Bandura, A.J. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. In R. Schwartzer (Ed.), *Self-efficacy: Thought control of action* (pp. 3-38). Washington, DC: Hemisphere.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management* 17, 99–120.
- Barnow, B. (2008). The employment rate of people with disabilities. *Monthly Labor Review*, 44–50.
- Baron, R.A. (1998). Cognitive mechanism in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 19, 221–239.
- Baron, R.A. (2000). Psychological perspectives on entrepreneurship: Cognitive and social factors in entrepreneurs' success. *Current Directions in Psychological Science*, 9(1), 15–18.
- Baron, R. A. 2004. The cognitive perspective: A valuables tool for answering entrepreneurship's basic “why” questions. *Journal of Business Venturing*, 19(2), 221–239.

- Baron, R.A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33(2), 328–340.
- Baron, R.A., & Markman, G.D. (2003). Person-entrepreneurship fit: The role of individual difference factors in new venture formation. *Journal of Business Venturing*, 18, 41–60.
- Baron, R. A., & Tang, J. (2011). The role of entrepreneurs in firm-level innovation: Joint effects of affect, creativity, and environmental dynamism. *Journal of Business Venturing*, 26, 49–60.
- Basu, A., & Virick, M. (2008). Assessing entrepreneurial intentions amongst students: a comparative study. Accepted at the April, 2008, National Collegiate Inventors and Innovators Alliance Conference, Dallas, TX.
- Bateman, T.S. & Crant, J.M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103–118.
- Bates, T. (1994). Utilization of minority employees in small business: A comparison of nonminority and black-owned urban enterprises. [*The Review of Black Political Economy, Springer*](#), 23(1), 113–121.
- Bates, T. (1994a). An analysis of Korean-immigrant-owned small-business start-ups with comparisons to African-American and nonminority-owned firms. *Urban Affairs Quarterly*, 30(2), 227–248.
- Bates, T. (1995). Self-employment entry across industry groups. *Journal of Business Venturing*, 12(2), 109–124.
- Bates, T.(1997). *Race, self-employment & upward mobility: An illusive American dream*. Washington, D.C.: Woodrow Wilson Center Press and Baltimore: John Hopkins University Press.
- Bates, T., Jackson, W., & Johnson, J. (2007). Introduction: Advancing research on minority entrepreneurship. *Annals of the American Academy of Political and Social Science*, 613, 10–17.
- Baum, J. (1996). Organizational ecology. In *Handbook of Organization Studies*, Clegg, S., Hardy, C. Nord, W. (eds.). Sage: London; 77–114.
- Baum, J. R., Frese, M., & Baron, R. A. (2007). *The Psychology of Entrepreneurship*. New Jersey, NJ: Routledge.
- Baumol, W.J..(1990). Entrepreneurship: Productive, Unproductive, and Destructive. *Journal of Political Economy*, 98(5), 893–921.

- Beal, D. J., Weiss, H. M., Barros, E., & MacDermid, S. M. (2005). An episodic process model of affective influences on performance. Special issue on Theoretical Models and Conceptual Analyses. *Journal of Applied Psychology, 90*, 1054–1068.
- Becherer, R., & Maurer, J. (1999). The proactive personality disposition and entrepreneurial behavior among small company presidents. *Journal of Small Business Management, 38*(1), 28–36.
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. 2005. Financial and legal constraints to firm growth: Does size matter?. *Journal of Finance, 60*(1): 137–151;
- Beery, R. G. (1975), Special Feature: Fear of Failure in the Student Experience. *The Personnel and Guidance Journal, 54*, 191–203. doi: 10.1002/j.2164-4918.1975.tb04220.x
- Begley, T., & Tan, W.-L. (2001). The socio-cultural environment for entrepreneurship: A comparison between East Asian and Anglo-Saxon countries. *Journal of International Business Studies, 32*, 537.
- Bergmann, H., & Sternberg, R. (2007). The changing face of entrepreneurship in Germany. *Small Business Economics, 28*(2-3), 205–221.
- Birney, R., Burdick, H., & Teevan, R. (1969). *Fear of Failure*. New York: Van Nostrand Reinhold.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intentions. *Academy of Management Review, 13*(3), 442–454.
- Blanchard, L., Zhao, B., & Yinger, J.(2008). Do lenders discriminate against minority and women entrepreneurs?. *Journal of Urban Economics, 63*,467–497.
- Blanck, P., Sandler, L., Schmeling, J., & Schartz, H.(2000). The emerging workforce of entrepreneurs with disabilities: Preliminary study of entrepreneurship in Iowa. *Iowa Law Review, 85*(5),1583–1661.
- Block, J., & Sandner, P. (2009). Necessity and opportunity entrepreneurs and their duration in self-employment: Evidence from German micro Data. *Journal of Industry, Competition and Trade, 9*(2), 117–137.
- Boden Jr., R., & Nucci, A. (2000). On the survival prospects of men's and women's new business ventures. *Journal of Business Venturing, 15*(4), 347–362.
- Bosma N., Jones, K., Autio, E., & Levie, J. (2007), *Global Entrepreneurship Monitor: 2007 Executive Report*, London: London Business School.
- Bowen, H. P., & De Clercq, D. (2008). Institutional context and the allocation of entrepreneurial effort. *Journal of International Business Studies, 39*(4), 747–767.

- Boyd, R. (1990). Black and Asian self-employment in large metropolitan areas: A comparative analysis. *Social Problems*, 37(2), 258–274.
- Boyd, N.G., & Vozikis, G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18, 63–90.
- Boyett, J., & Boyett, J. (2001). *The guru guide to entrepreneurship*. New York: Wiley.
- Boylan, A. & Burchardt, T. (2003). Small Business Service. *Barriers to self-employment for disabled people*. London, UK: Kingsgate House.
- Bruyat, C. & Julien, P.A. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16 (2), 165–80.
- Bureau of Labor Statistics U.S. Department of Labor.(2012). Persons with a disability: Labor force characteristics --- 2012 [News release]. Retrieved from <http://www.bls.gov/news.release/pdf/disabl.pdf>
- Burkhalter, B.B.& Curtis, J.P.(1989). New opportunities for entrepreneurs with disabilities to start their own businesses. *Journal of Rehabilitation*, 55(2), 17–19.
- Burkhalter, B. B., & Curtis, J. P. (1990). Accessing the new economic infrastructure for quality employment: A viable option for entrepreneurs. *Journal of Rehabilitation*, 56(4), 46–51.
- Burkhauser, R.V., & Stapleton, D.C. (2004). The decline in the employment rate for people with disabilities: Bad data, bad health, or bad policy?. *Journal of Vocational Rehabilitation*, 20, 185–201.
- Burt, R.S. (1992). *Structural holes*. Cambridge, MA: Harvard University Press.
- Buunk, A.P., Peiro, J.M., & Griffioen, C. (2007). A positive role model may stimulate career-oriented behavior. *Journal of Applied Social Psychology*, 37, 1489–1500.
- Buzenitz, L.W. (1996). Research on entrepreneurial alertness. *Journal Small Business Management*, 34 (4), 35–44.
- Busenitz, L.W., & Barney, J.B.(1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12, 9–22.
- Caliendo, M., Fossen, F., & Kritikos, A. (2009). Risk attitudes of nascent entrepreneurs-New evidence from an experimentally validated survey. *Small Business Economics*, 32, 153–167.

- Callahan, M., Griffin, C., & Hammis, D.(2011). Twenty years of employment for persons with significant disabilities: A retrospective. *Journal of Vocational Rehabilitation, 35*,163–172.
- Callahan, M., Shumpert, N., & Mast, M.(2002). Self-employment, choice and self-determination. *Journal of Vocational Rehabilitation, 17*, 75–85.
- Carr, J. & Sequeira, J. (2007) Prior family business exposure as intergenerational influence: A mediation test of family support, entrepreneurial self-efficacy, and entrepreneurial intent. *Journal of Business Research, 60*(10), 1090–1098.
- Casson, M. 1982. *The Entrepreneur*. Totowa, NJ: Barnes and Noble Books.
- Chaganti, R. & Greene, P.G. (2002). Who are ethnic entrepreneurs? A study of entrepreneurs ethnic involvement and business characteristics. *Journal of Small Business Management 40*(2), 126–143.
- Chang, E. P. C., Kellermanns, F. W., & Chrisman, J. J. (2007). From intentions to venture creation: Planned entrepreneurial behavior among Hispanics in the U.S. In T. Habbershon & M. Rice (Eds.), *Perspectives on Entrepreneurship III* (pp.119–145). Westport, CT: Praeger.
- Chen, C.C., Greene, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing, 13*, 295–316.
- Chen, S., Liao, Z., Redd, T., & Wu, S.(2013). Laotian entrepreneurs' optimism and new venture performance. *Social Behavior and Personality, 41*(8), 1267–1278.
- Chung, C (2006). Beyond guanxi: Network contingencies in Taiwanese business groups. *Organization Studies, 27*, 461–468.
- Clark, P., & Kays, A. (1995). *Enabling entrepreneurship: Microenterprise development in the United States*. Washington, DC:Aspen Institute.
- Clark, P., & Kays, A. I. (1999). *Microenterprise and the poor: Findings from the Self-Employment Learning Project five year study of microentrepreneurs*. Washington, DC: Aspen Institute.
- Coate, S. & Tennyson, S. (1992). Labor market discrimination, imperfect information and self-employment. *Oxford Economic Papers, 44*, 272–288.
- Cohen, J. & Cohen, P.(1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: L.Erlbaum Associates.
- Coleman, S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology, 94*, 95–120.

- Coleman, S. (2003). Borrowing patterns for small firms: A comparison by race and ethnicity. *The Journal of Entrepreneurial Finance & Business Ventures*, 7, 87–108.
- Colling, K., & Arnold, N. (2007). A qualitative analysis of the potential for collaboration between vocational rehabilitation agencies and small business developers. *Journal of Applied Rehabilitation Counseling*, 38(2), 35–41.
- Conroy, D. E., & Coatsworth, J. D. (2004). The effects of coach training on fear of failure in youth swimmers: A latent growth curve analysis from a randomized, controlled trial. *Journal of Applied Developmental Psychology*, 25, 193–214.
- Conroy, D. E., Kaye, M. P., & Fifer, A. M. (2007). Cognitive links between fear of failure and perfectionism. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 25, 237–253.
- Conroy, D.E., Willow, J.P., & Metzler, J.N. (2002). Multidimensional fear of failure measurement: The performance failure appraisal inventory. *Journal of Applied Sport Psychology*, 14(2), 76–90.
- Cooper, A.C., Dunkelberg, W.C., & Woo, C.(1988). Entrepreneurs' perceived chances for success (1988). *Journal of Business Venturing*, 3(2), 97–108.
- Crane, F.G., & Crane, E.C.(2007). Management principles: The theory of management dispositional optimism and entrepreneurial success. *Psychologist-Manager Journal*, 10(1), 13-25. doi:10.1080/108871507012054933
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34, 42–49.
- Crudden, A., Sansing, W., & Butler, S. (2005). Overcoming barriers to employment: Strategies of Rehabilitation providers. *Journal of Visual impairment & Blindness*, 99(6), 1–20.
- Cumming, D., Siegel, D. S., & Wright, M. (2007). Evaluating the financial and real effects of management buyouts and private equity investments. *Journal of Corporate Finance*, 13(4), 439–460.
- Davidsson, P. (1991). Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405-429.
- Davidsson, P. (1995). Determinants of entrepreneurial intentions. Proceedings from *RENT IX Workshop*. Piacenza: Italy.
- Davidsson, P. (2006). Nascent entrepreneurship: Empirical studies and developments. *Foundations and Trends in Entrepreneurship*, 2, 1–76.

- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–332.
- Davidsson, P., Lindmark, L. & Olofsson, C. (1995). Small firms, business dynamics and differential development of economic well-being. *Small Business Economics*, 7, 301–315.
- De Bruin, A., Brush, C.G., & Welter, F. (2006). Introduction to the special issue: Towards building cumulative knowledge on women's entrepreneurship. *Entrepreneurship Theory & Practice*, 30, 585–592.
- De Klerk, T. (2008). Funding for self-employment of people with disabilities. Grants, loans, revolving funds or linkage with microfinance programmes. *Leprosy Review*, 79(1), 92–109.
- de Meza, D., & Southey, C. (1996). The borrower's curse: Optimism, finance and entrepreneurship. *Economic Journal*, 106, 375–386.
- Delmar, F., Davidsson, P., & Gartner, W. B. (2003). Arriving at the high-growth firm. *Journal of Business Venturing*, 18(2), 189-216.
- Delmar, F., & Wiklund, J. (2008). The Effect of Small Business Managers' Growth Motivation on Firm Growth: A Longitudinal Study. *Entrepreneurship: Theory & Practice*, 32(3), 437-457.
- Douglas, E. J., & Shepherd, D. A. (2002). Self-employment as a career choice: attitudes, entrepreneurial intentions and utility maximisation. *Entrepreneurial Theory and Practice*(Spring), 81–90.
- Doyel, A.W. (2000). *No More Job Interviews: Self-employment strategies for people with disabilities*. St. Augustine, Florida: Training Resource Network.
- Doyel, A. W. (2002). A realistic perspective of risk in self-employment for people with disabilities. *Journal of Vocational Rehabilitation*, 17, 115–124.
- Duncan, E. M., Forbes-McKay, K.E., & Henderson, S.E.(2012). Alcohol use during pregnancy: An application of the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 42(8), 1887–1903. doi:10.1111/j.1559-1816.2012.00923.x
- Drennan, J., Kennedy, J., & Renfrow, P. (2005). Impact of childhood experiences on the development of entrepreneurial intentions. *International Journal of Entrepreneurship & Innovation*, 6(4), 231–238.
- Dunning, H., & Lundan, S. M. 2008. Institutions and the OLI paradigm of the multinational
- Drucker, P.F. (1985). *Innovation and entrepreneurship*. New York: Harper and Row.

- D.W.S. (1975). Fear of Failure: An Introduction. *Personnel & Guidance Journal*, 184.
- Ekore, J. O., & Okekeocha, O. C. (2012). Fear of entrepreneurship among university graduates: A psychological analysis. *International Journal of Management*, 29(2), 515–524.
- Ekpe, I., Mat, N.B., & Razak, R. (2010). The mediating effect of opportunity for entrepreneurial activity on micro-credit and women entrepreneur's performance: A conceptual framework. *International Journal of Business and Social Science*, 1(3), 234–238.
- Elfring, T., & Hulsink, W. (2003). Networks in entrepreneurship: the case of high-technology firms. *Small Business Economics*, 21(4), 409-422.
- Ellen, A. (2010). Entrepreneurial intentions of business students in Finland: Implications for education. *Advances in Management*, 3(7), 28–35.
- Enright, M. (1996). The relationship between disability status, career beliefs, and career indecision. *Rehabilitation Counseling Bulletin*, 40(2), 134–152.
- Enright, M. S., Conyers, L. M., & Szymanski, E. M. (1996). Career and career-related educational concerns of college students with disabilities. *Journal of Counseling and Development*, 75, 103–114.
- Fairlie, R.W. (2004). Recent trends in ethnic and racial business ownership. *Small Business Economics*, 23 (3), 203–218.
- Fairlie, R.W. & Robb, A.M. (2008). *Race and entrepreneurial success*. Cambridge, MA: The MIT Press.
- Falvo, D. (2011). *Medical and Psychosocial Aspects of Chronic Illness and Disability*. Burlington, MA: Jones & Bartlett Learning.
- Falvo, D. (2013). *Medical and Psychosocial Aspects of Chronic Illness and Disability*. Burlington, MA: Jones & Bartlett Learning.
- Feldman, D.C., & Bolino, M.C. (2000). Career patterns of the selfemployed: Career motivations and career outcomes, *Journal of Small Business Management*, 38(3), 53–67.
- Fesko, S. (1995). Research to practice: Consumer and family perspectives on the meaning of work. *Research to Practice Series, Institute for Community Inclusion*. Paper 44. http://scholarworks.umb.edu/ici_researchtopractice/44
- Fini, R., Grimaldi, R., Marzocchi, G. L., & Sobrero, M. (Eds.). (2009). Foundation of entrepreneurial intention. Proceedings from *the DRUID Summer Conference*. Frederiksberg, Denmark. Retrieved on February 18, 2013 from <http://www2.druid.dk/conferences/viewpaper.php?id=5955&cf=32>.

- Fishbein, M., & Ajzen, I. (1980). *Understanding Attitudes and Predicting Social Behavior*. New Jersey: Prentice Hall.
- Foo, M.D., Uy, M., & Baron, R. (2009). Affect and entrepreneurial efforts, *Journal of Applied Psychology*, 94(4), 1086–1094.
- Foo, M. D., Wong, P. K. & Ong, A. (2005). Do others think you have a viable business idea? Team diversity and judges' evaluation of ideas in a business plan competition. *Journal of Business Venturing*, 20(3), 385–402.
- Ford, I. & Swett, E. (1999). Job placement and Rehabilitation counselors in the State-Federal system. *Rehabilitation Counseling Bulletin*, 42(4), 354–65.
- Fornahl, D. (2003). Entrepreneurial activities in a regional context. In Fornahl, D., & Brenner, T. (eds.), *Cooperation, Networks and Institutions in Regional Innovation Systems* (38–57). Cheltenham: Edward Elgar.
- Fraenkel, J. R., & Wallen, N. E. (1993). *How to Design and Evaluate Research in Education*. New York: McGraw Hill.
- Franke, N. & Luthje, C. (2004). Entrepreneurial intentions of business students: A benchmark study. *International Journal of Innovation and Technology Management*, 1(3), 269–288.
- Froehlich, R., & Linkowski, D. (2002). An assessment of the training needs of state Vocational Rehabilitation counselors. *Rehabilitation Counseling Bulletin*, 46(1), 41–49.
- Fussell, S. (2011). Goodreads. “Quotes about disability”. Retrieved from <http://www.goodreads.com/quotes/tag/disability>
- Gaglio, C.M. (2004). The role of mental simulations and counterfactual thinking in the opportunity identification process. *Entrepreneurship Theory and Practice*, 28, 533–552.
- Gartner, W.B. (1990). What are we talking about when we talk about entrepreneurship?. *Journal of Business Venturing*, 5(1), 15–28.
- Gartner, W. B., Shaver, K. G., Gatewood, E. & Katz, J. A. (1994). Finding the entrepreneur in entrepreneurship. *Entrepreneurship: Theory and Practice*, 18(3), 5–10.
- Gaston, R.J. (1989) *Finding private capital for your firm: a complete Guide*. New York: Wiley.
- Gatens-Robinson, E., & Rubin, S. (2008). Societal values and ethical commitments that influence rehabilitation service delivery behavior. In S.E. Rubin, & R.T. Roessler (Eds), *Foundations of the Vocational Rehabilitation Process* (197–214). Austin, TX: Pro-Ed.

- Geers, A. L., & Lassiter, G. D. (2002). Effects of affective expectations on affective experience: The moderating role of optimism-pessimism. *Personality and Social Psychological Bulletin*, 28, 1026–1039.
- Giacomin, O., Guyot, J-L., Janssen, F., & Lohest, O. (2007). Novice creators: personal identity and push pull dynamics. *CRECIS Working Paper 07/2007, Center for Research in Change, Innovation and Strategy*. Louvain School of Management. Retrieved from www.crecis.be.
- Gibb, A. (2002). In pursuit of a new ‘enterprise’ and ‘entrepreneurship’ paradigm for learning: Creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233–69.
- Griffin, C. & Hammis, D.(2002). Jimbo’s Jumbos: A primer on small business planning, *Journal of Vocational Rehabilitation*, 17, 87–96.
- Godin, G., & Kok, G. (1996). The theory of planned behavior: A review of its applications to health-related behaviors. *American Journal of Health Promotion*, 11, 87–98.
- Gompers, P.A., & Lerner, J. (1999). *The Venture Capital Cycle*. Cambridge: MIT Press.
- Gupta, V. K., & Bhawe, N. M. (2007). The influence of proactive personality and stereotype threat on women’s entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 73–85.
- Guzman-Alfonso, C., & Guzman-Cuevas, J. (2012). Entrepreneurial intention models as applied to Latin America. *Journal of Organizational Change Management*, 25(5), 721–735. DOI 10.1108/09534811211254608
- Hagner, D., & Davies, T. (2002). "Doing my own thing": Supported self-employment for individuals with cognitive disabilities. *Journal of Vocational Rehabilitation*, 17(2), 65–74.
- Hayton, J. C., George, G., and Zahra, S. A. (2002): “National Culture and Entrepreneurship: a Review of Behavioral Research”, *Entrepreneurship Theory and Practice*, 26(4), 33-52.
- Heath, K., & Reed, D. (2013). Industry-Driven Support (IDS) model to build social capital and business skills of low-income entrepreneurs with disabilities. *Journal of Vocational Rehabilitation*, 38, 139–148.
- Heath, K. L., Ward, K. M., & Reed, D. L. (2013). Customized self-employment and the use of Discovery for entrepreneurs with disabilities. *Journal of Vocational Rehabilitation*, 39(1), 23-27. doi:10.3233/JVR-130639
- Heilman, M. E., & Chen, J. J. (2003). Entrepreneurship as a solution: the allure of self-employment for women and minorities. *Human Resource Management Review*, 13, 347.

- Hills, G. E., Lumpkin, G. T., & Singh, R. P. (1997). Opportunity recognition: Perceptions and behaviors of entrepreneurs. In P. Reynolds, W. Bygrave, N. Carter, P. Davidsson, W. Gartner, C. Mason, P. McDougall (Eds.), *Frontiers of Entrepreneurship Research* (pp. 168-182). Babson Park, MA: Babson College.
- Hirsch, R. D., & Brush, C. G. (1984). The Women Entrepreneurs: Management Skills And Business Problems. *Journal of Small Business Management*, 22(1), 31–36.
- Hisrich, R. (1990). Entrepreneurship/Intrapreneurship. *American Psychologist*, 45(2),290–222.
- Hisrich, P., Peters, M., & Shepherd, D. (2005). *Entrepreneurship*. Burr Ridge, IL: McGraw-Hill.
- Hite, J. M., & Hesterly, W. S. (2001). The evolution of firm networks: From emergence to early growth of the firm. *Strategic Management Journal*, 22(3), 275-286.
- Hmieleski, K., & Baron, R. (2009). Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of Management Journal*, 52(3), 472–488.
- Hsu, D. H., Roberts, E. B., & Eesley, C. E. (2007). Entrepreneurs from technology-based universities: Evidence from MIT. *Research Policy*, 36, 768–788.
- Ipsen, C., Arnold, N., & Colling, K. (2003). Small business development center experiences and perceptions: Providing service to people with disabilities. *Journal of Developmental Entrepreneurship*,8(2), 113–133.
- Isen, A. M. (2002). Missing in action in the AIM: Positive affect's facilitation of cognitive flexibility, innovation, and problem solving. *Psychological Inquiry*, 13, 57–65.
- Isen, A. M., & Baron, R. A. (1991). Positive affect in organizations. In L.Cummings & B. Staw (Eds.), *Research in organizational behavior* (pp. 1–52). Greenwich, CT: JAI.
- Jenkins, W.M., Patterson, J.B., & Mora Szymanski E. (1998). Philosophical, historical, and legislative aspects of the rehabilitation counseling profession. In R.M. Parker, & E.M. Szymanski (Eds.), *Rehabilitation Counseling Basics and Beyond* (pp. 1-41). Austin, TX: Pro-Ed.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19, 151–188.
- Kassel, K., & Gibbs, R. (1997). Rural nonfarm earnings edge up. *Rural Conditions and Trends*, 7.
- Katz, J., & Gartner, W.B. (1998). Properties of Emerging Organizations. *Academy of Management Review*, 13, 429–441.

- Keeton, B., Killeen, M., & Shaheen, G. (2009). The entrepreneurship partners dialogue meeting
- Kendall, E., Buys, N., Charker, J., & MacMillan, S. (2006). Self-employment: An under-utilised vocational rehabilitation strategy. *Journal of Vocational Rehabilitation*, 25, 197–205.
- Kessler Foundation. (2014). Optimism mixed with serious concern after numbers decline in last quarter of 2013 [Press release]. Retrieved from <http://kesslerfoundation.org/media/displaynews.php?id=461&title=NATIONAL%20TRENDS%20IN%20DISABILITY%20EMPLOYMENT%202013%20REVIEW/2014%20P>
- Kirsh, B. (2000). Organizational culture, climate and person-environment fit: Relationships with employment outcomes for mental health consumers. *Work: A Journal of Prevention, Assessment and Rehabilitation*, 14, 109–122.
- Kristiansen, S. & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising culture*, 12(1), 55–78.
- Koellinger, P., & Minniti, M. (2006). Not for lack of trying: American entrepreneurship in Black and White. *Small Business Economics*, 27, 59–79.
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship: Theory and Practice*, 18, 5–21.
- Krueger, N. F., Reilly, M., & Carsrud, A. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15 (5/6), 411–432.
- Krueger, N.F. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. In A.L. Carsrud & M. Brannback (Eds.), *Understanding the entrepreneurial mind, international studies in entrepreneurship* (pp.51–72). New York: Springer.
- Lai, J.L., Cheung, H., Lee, W., & Yu, H. (1998). The utility of the Revised Life Orientation Test to measure optimism among Hong Kong Chinese. *International Journal of Psychology*, 33(1), 45–56. doi: 10.1080/0020759984006000
- Landier, A. (2006). *Entrepreneurship and the stigma of failure*. Unpublished manuscript, Stern School of Business New York University.
- Lerner, J. (1999). The Government as Venture Capitalist: The Long-Run Impact of the SBIR Program. *Journal of Business*, 72(3), 285–318.
- Lee, L., Wong, P.K., Foo, M.D., & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing*, 26, 124–136.
- Lee, S.H. & Wong, P.K. (2004). An exploratory study of technopreneurial intentions: A career Anchor perspective. *Journal of Business Venturing*, 19(1), 7–28.

- Liao, J., & Welsch, H. (2005). Roles of Social Capital in Venture Creation: Key Dimensions and Research Implications. *Journal of Small Business Management*, 43(4), 345-362. doi:10.1111/j.1540-627X.2005.00141.x
- Lin, N. (2001). Building a network theory of social capital. In N. Lin, K. Cook & R.S. Burt (Eds.), *Social Capital* (pp. 3-31). New York, NY: Gruyter, Inc.
- Liñán, F., & Chen, Y.-W. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33, 593–617. doi: 10.1111/j.1540-6520.2009.00318.x
- Liñán, F., & Santos, F. J. (2007). Does social capital affect entrepreneurial intentions?. *International Advances in Economic Research*, 13(4), 443–453.
- Lindstrom, L.(2008). Career development: Improving options and opportunities for women with disabilities. *Impact: Feature Issue on Employment and Women with Disabilities*, 21(1), 32–35.
- Lindstrom, L., Benz, M., & Doren, B. (2004). Expanding career options for young women with learning disabilities. *Career Development for Exceptional Individuals*, 27(1), 43–63.
- Livneh, H., & Antonak, R. (2005). Psychological adaptation to chronic illness and disability: A primer for counselors. *Journal of Counseling & Development*, 83, 12–20.
- Liu, C.Y. (2012). The causes and dynamics of minority entrepreneurial entry. *Journal of Developmental Entrepreneurship*, 17(1), 1–23.
- Loprest, P., & Maag, E. (2001). *Barriers to and supports for work among adults with disabilities: Results from the NHIS-D*. Washington, D.C: Urban Institute.
- Luthje, C., & Franke, N. (2003). The ‘making’ of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33, 135–147.
- Mair, J. & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction and delight. *Journal of World Business*, 41, 36–44.
- Malach-Pines, A., Levy, H., Utasi, A., & Hill, T. L. (2005). Entrepreneurs as cultural heroes: A cross-cultural, interdisciplinary perspective. *Journal of Managerial Psychology*, 20(6), 541–555. doi:10.1108/02683940510615460
- Markman, G. D., Balkin, D. B. & Baron, R. A. (2002). Inventors and new venture formation: the effects of general self-efficacy and regretful thinking. *Entrepreneurship Theory and Practice*, 27, 149–165. doi: 10.1111/1540-8520.00004

- Markman, G., & Baron, R. (2003). Person-entrepreneurship fit: Why some people are more successful as entrepreneurs than others. *Human Resource Management Review*, 13(2), 281–301.
- Marlow, S. & Patton, D. (2005). All credit to men? Entrepreneurship, finance, and gender. *Entrepreneurship Theory and Practice*, 29, 717–735. doi: 10.1111/j.1540-6520.2005.00105.x
- Maurer, M. (1993). Victory in the Dennis Groshel case. *Monitor*, 36(2). Retrieved from <https://nfb.org/images/nfb/publications/bm/bm93/brlm9302.htm>
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial Self-Efficacy: Refining the Measure. *Entrepreneurship Theory and Practice*, 33(4), 965–988.
- McNaughton, D., Symons, G., Light, J., & Parsons, A. (2006). "My dream was to pay taxes": The self-employment experiences of individuals who use augmentative and alternative communication. *Journal of Vocational Rehabilitation*, 25(3), 181–196.
- McReynolds, C. J. (2001). The meaning of work in the lives of people living with HIV disease and AIDS. *Rehabilitation Counseling Bulletin*, 44(2), 104–115.
- Minnitti, M.(2008). The role of government policy on entrepreneurial activity: Proactive, unproductive, or destructive?. *Entrepreneurship Theory and Practice*, 32(5), 779–790. <http://dx.doi.org/10.1111/j.1540-6520.2008.00255.x>
- Moreno-Murcia, J., Cervello Gimeno, E., Hernández, E., Belando Pedreño, N., & Rodríguez Marín, J. (2013). Motivational profiles in physical education and their relation to the Theory of Planned Behavior. *Journal of Sports Science & Medicine*, 12(3), 551–558.
- Mueller, S.L., & Thomas, A.S. (2000). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16, 51–75.
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), 15–23
- Nary, D. E., White, G. W., Budde, J. F., & Hoang Yen, V. (2004). Identifying the employment and vocational rehabilitation concerns of people with traditional and emerging disabilities. *Journal of Vocational Rehabilitation*, 20(1), 71–77.
- Newman, L., Wagner, M., Cameto, R., Knokey, A.M., & Shaver, D. (2010). Comparisons across time of the outcomes of youth with disabilities up to 4 years after high school. *A Report of Findings From the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2)* (NCSE 2010-3008). Menlo Park, CA: SRI International.

- O'Day, B., & Foley, S. (2008). What do we know, and not know, about women with disabilities in the workforce? *Impact: Feature Issue on Employment and Women With Disabilities*, 21(1), 4–6. [Minneapolis: University of Minnesota, Institute on Community Integration].
Overview
- Ochs, L. A., & Roessler, R. T. (2004). Predictors of career exploration intentions: A social Cognitive Career Theory Perspective. *Rehabilitation Counseling Bulletin*, 47(4), 224–233
- Olkin, R.(1999). *What psychotherapists should know about disability?* New York, NY: The Guilford Press.
- Open Blue Solutions (2007). *Self-employment in the veteran and service-disabled population*. Report for the Small Business Administration, Office of Advocacy.
- Osborne, J.& Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2). Retrieved from <http://PAREonline.net/getvn.asp?v=8&n=2> .
- Palich, L., & Bagby, D. (1995). Using cognitive theory to explain entrepreneurial risk-taking: Challenging conventional wisdom. *Journal of Business Venturing*, 10, 425–438.
- Palmer, C., Schriener, K., Getch, Y., & Main, D. (2000). Working for yourself: How people with disabilities choose self-employment. *Journal of Applied Rehabilitation Counseling*, 31(3), 30–37.
- Portes, A. & Zhou. M. (1996). Self-employment and the earnings of immigrants. *American Sociological Review*, 61(2), 219–230.
- Podsakoff,P.M., MacKenzie,S.B., Lee, J.Y., & Podsakoff, N.P.(2003). Common methods biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*,88 (5),879–903.
- Prieto, L. C. (2010). Proactive personality and entrepreneurial leadership: Exploring the moderating role of organizational identification and political skill. *Academy of Entrepreneurship Journal*, 16(2), 107–121.
- Prieto, L. C. (2011). The influence of proactive personality on social entrepreneurial intentions among African-American and Hispanic undergraduate students: The moderating role of hope. *Academy of Entrepreneurship Journal*, 17(2), 77–96.
- Ram, M., Theodorakopoulos, N., & Jones, T. (2008).Forms of capital, mixed embeddedness and Somali enterprise. *Work, Employment and Society*, 22(3), 427–446.

- Ravesloot, C. & Seekins, T. (1996). Vocational rehabilitation counselors' attitudes toward self-employment outcomes. *Rehabilitation Counseling Bulletin*, 39(3), 189–201.
- Revell, G., Smith, F., & Inge, K. (2009). An analysis of self-employment outcomes within the federal/state Vocational Rehabilitation system. *Journal of Vocational Rehabilitation*, 31, 11–18.
- Reynolds, P. (1994). Reducing barriers to understanding new firm gestation: Prevalence and success of nascent entrepreneurs. Proceedings from the meeting of the Academy of Management, Dallas, TX.
- Reynolds, P., & White, S.(1997). *The entrepreneurial process: Economic growth, men, women, and minorities*. Westport, CT: Quorum Books.
- Rhodes, C., & Butler, J.S. (2004). Understanding self-perceptions of performance: An examination of Black American entrepreneurs. *The Journal of Developmental Entrepreneurship*, 9, 55–71.
- Rhodes, C., & Butler, J. (2005). Network theory and Black entrepreneurship: An application of threshold theory to firm behavior. Proceedings from *Conference Papers -- American Sociological Association*, 1–42. Retrieved from EBSCOhost.
- Rizzo, D. (2002). With a little help from my friends: Supported self-employment for people with severe disabilities. *Journal of Vocational Rehabilitation*, 17, 97–105.
- Robles, B., &Cordero-Guzman, H. (2007). Latino Self-Employment and Entrepreneurship in the United States: An Overview of the Literature and Data Sources. In T. Bates, W. E. Jackson & J. H. Johnson (Eds.), *Advancing Research on Minority Entrepreneurship* (Vol. 613). Thousand Oaks, CA: Sage Publications.
- Roodt, J. (2005). Self-employment and the required skills. *Management Dynamics*, 14(4), 18–33.
- Rojewsk,J.W., Lee, I., Gregg, N., & Gemici, S. (2012). Development patterns of occupational aspirations in adolescents with high-incidence disabilities. *Exceptional Children*, 78(2). 157–179.
- Ronstadt, R. (1987). The educated entrepreneurs: A new era of entrepreneurial education is beginning. *American Journal of Small Business*, 11(4), 37–53.
- Rubin, S. & Roessler, R.(2008). *Foundations of the Vocational Rehabilitation Process*. Austin, TX: Pro-ed.
- Sánchez, J.C. (2012). Entrepreneurial intentions: The role of the cognitive Variables. In T. Burger-Helmchen (Ed), *Entrepreneurship - born, made and educated* (2–27).Rijeka, Croatia: InTech. Available from: <http://www.intechopen.com/books/entrepreneurship-born-made-and-educated/entrepreneurialintentions-the-role-of-the-cognitive-variables>

- Sanchez-Medina, A. J., Romero-Quintero, L., & Sosa-Cabrera, S. (2014). Environmental management in small and medium-sized companies: An analysis from the perspective of the Theory of Planned Behavior. *Plos ONE*, *9*(2), 1–12.
doi:10.1371/journal.pone.0088504
- Sayce, L.(2011). *Getting in, staying in and getting on: Disability employment support fit for the future*. United Kingdom: The Stationery Office Limited. Retrieved from www.official-documents.gov.uk
- Sax, L.J., Gilmartin, S.K., & Bryant, A.N.(2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education*, *44*(4), 409–432.
- Schlaegel, C., & Koenig, M. (2013). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, *38*(2), 291–332.
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, *4*(3), 219–247.
- Scheier, M., & Carver, C. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, *16*, 201–228.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, *67*, 1063–1078.
- Scherer, F.R., Adams, J.S., Carley, S.S. & Wiebe, F.A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, Spring, 53–71.
- Schifter, D. E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality and Social Psychology*, *49*, 843–851.
- Seibert, S. E., Kraimer, M. L., & J. M. Crant. (2001).What to proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*,*54*(4), winter, 845–74.
- Seekins, T., & Arnold, N. (1999). Self-employment and economic leadership as two promising perspectives on rural disability and work. *Work: A Journal of Prevention, Assessment, and Rehabilitation*, *12*.
- Shepherd, D. & Krueger, N. (2002). An Intentions-Based Model of Entrepreneurial Teams' Social Cognition. *Entrepreneurship: Theory & Practice*, *27*(2)167–187.

- Sequeira, S., Mueller, S., & McGee J. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behavior. *Journal of Developmental Entrepreneurship*, 12(3), 275–293.
- Shane, S., (1999). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448–469.
- Shane, S. (2003). Reflections on the 2010 AMR Decade Award: Delivering on the promise of entrepreneurship as a field of research. *Academy of Management Review*, 37, 10–20.
- Shane, S., & Venkataraman, S.(2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.
- Shapero, A. & Sokol, L. (1982). Social Dimensions of Entrepreneurship. In C. A. Kent, D. L. Sexton & K. H. Vesper (Eds.), *The Encyclopedia of Entrepreneurship* (72–90). Engle woods, NJ: Prentice-Hall.
- Shaver, K., & Scott, L. (1991). Person, process, choice: The psychology of new venture creation. *Entrepreneurship Theory and Practice*, 16(2), 23-45.
- Shepperd, J.A., Ouellette, J.A., Fernandez, J.K.(1996). Abandoning unrealistic optimistic performance estimates and the temporal proximity of self-relevant feedback. *Journal of personality and Social Psychology*, 70(4), 844–855.
- Shoemaker, M. & Zack,T.(2002). Is your client a self-employment candidate? Assessing for entrepreneurial potential. *Rehab Review*, 20(4), 5–7; -determination, *Journal of Vocational Rehabilitation*, 17, 75–85.
- Short, J. C., Ketchen, D. J., Shook, C. L., & Ireland, R. D. (2010). The concept of “opportunity” in entrepreneurship research: Past accomplishments and future challenges. *Journal of Management*, 36(1), 40-65.
- Silverman, R.M. (2008). Mortgage lending disparities in metropolitan Buffalo: Implications for community reinvestment policy. *The Journal of Regional Analysis & Policy*, 38(1), 36–44.
- Singh, R.P. & Crump, M.E. (2008). Educational attainment: A key factor for improving the lagging rate of Black entrepreneurship. *The Review of Black Political Economy*, 34, 217–229.
- Singleton, R.A., & Straits, B.C. (2010). *Approaches to social research*. New York, NY: Oxford University Press, Inc.

- Sivell, S., Elwyn, G., Edwards, A., & Mansfead, A.R.(2013).). Factors influencing the surgery intentions and choices of women with early breast cancer: the predictive utility of an extended theory of planned behaviour. *BMC Medical Informatics & Decision Making*, 13(1), 18. doi:10.1186/1472-6947-13-92
- Small Business Administration.(2008). *Small Business Trends*. Retrieved from <http://www.sba.gov/content/small-business-trends>
- Smart, J. (2008). *Disability, society and the individual*. Austin, TX: Pro Ed.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T.,
- Sowers, J. McLean, D. & Owens, C. (2002). Self-directed employment for people with disabilities: Issues, characteristics, and illustrations. *Journal of Disability Policy Studies*, 13(2), 96–103.
- Stajkovic, A. D., & Luthans, F. (1998b). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 76(4), 62–74.
- Stinchcombe, A.L., 1965, ‘Social structure and organisations’, in: J.G. March (ed), *Handbook of Organizations*, Chicago: Rand McNally & Company.
- Sudman, S., & Kalton, G. (1986). New developments in the samplings of special populations. *Annual Review of Sociology*, 12, 401–29.
- Sullivan, N., & Cooper, A. (1998). *Innovation, entrepreneurship and rehabilitation: A good partnership for the twenty-first century*. Unpublished report prepared for Rehabilitation Services Administration.
- Summers, D. F. (2000). *The formation of entrepreneurial intentions*. New York: Garland Publishing.
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28, 1317–1338.
- Stevens, J., & Ibanez, B.(2007). New Mexico’s Developmental Disabilities Planning Council (DDPC). *Reducing barriers to employment for people with significant disabilities* (NMDDPC 2002). New Mexico: Community Support Alliance Center for Development and Disability, Health Science Center, University of New Mexico.
- Szymanski, E., Enright, M., Hershenson, D., & Ettinger, J. (2003). Career development theories, Constructs and research: Implications for people with disabilities. In E. M. Szymanski & R. M. Parker (Eds.), *Work and disability: Issues and strategies in career development and job placement* (87–132). Austin, TX: Pro-Ed.

- Szymanski, E. M., & Hershenson, D. B. (1998). Career development of people with disabilities: An ecological model. In R. L. Parker & E. M. Szymanski (Eds.), *Rehabilitation counseling: Basics and beyond* (327–378). Austin, TX: Pro-Ed.
- Tumasjan, A., & Braun, R. (2012). In the eye of the beholder: How regulatory focus and self-efficacy interact in influencing opportunity recognition. *Journal of Business Venturing*, 27(6), 622-636. doi:10.1016/j.jbusvent.2011.08.001
- Tang, J., Tang, Z., & Lohrke, F. (2008). Developing an entrepreneurial typology: The roles of entrepreneurial alertness and attributional style. *International Entrepreneurship and Management Journal*, 4(3), 273–294.
- Thornton, P.H. (1999). The sociology of entrepreneurship. *Annual Review of Sociology*, 25, 19–46.
- U.S. Census Bureau (2012). *American Community Survey*. Retrieved from <http://www.census.gov/acs/www/>
- U.S. National Archives & Records Administration. (n.d.). *Social Security Act (1935)*. Retrieved from <http://www.ourdocuments.gov/doc.php?flash=true&doc=68>
- Ucbasaran, D., Westhead, P., Wright, M., & Flores, M. (2010). The nature of entrepreneurial experience, business failure and comparative optimism. *Journal of Business Venturing*, 25, 541–555.
- Uditsky, B., Sannuto, V., & Waters, M.(1996). Self-employment: Entrepreneurship and persons with developmental disabilities, Alberta Association for Community Living, Edmonton. *Developmental Disabilities Bulletin*, 24(1)
- Vaillant, Y., & Lafuente, E. (2007). Do different institutional frameworks condition the influence of local fear of failure and entrepreneurial examples over entrepreneurial activity? *Entrepreneurship & Regional Development*, 19, 313–337.
- Van Auken, H., Fry, F. L., & Stephens, P. (2006). The influence of role models on entrepreneurial intentions. *Journal of Developmental Entrepreneurship*, 11, 157–167.
- Van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E., & van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behavior. *Career Development International*, 13, 538–559.
- Vash, C., & Crewe, N. (2004). *Psychology of Disability*. New York, NY: Springer Publishing Company.
- Van Niekerk, L.L, Lorenzo, T.T., & Mdlokolo, P.P. (2006). Understanding partnerships in developing disabled entrepreneurs through participatory action research. *Disability & Rehabilitation*, 28(5), 323–331. doi:10.1080/09638280500166425.

- Venkataraman, S. (1997). Value at risk for a mixture of normal distributions: The use of quasi-bayesian estimation techniques. *Economic Perspectives*, 21(2), 2–14.
- Verheul, I., & R. Thurik (2001). Start-up capital: Does gender matter?. *Small Business Economics*, 16(4), 329–345.
- Wagley, C., & Harris, M.(1958). *Minorities in the new world: Six case studies*. New York, NY: Columbia University Press.
- Walls, R.T., Dowler,D.L., Cordingly, K., Orslene, L.E., & Greer, J.D. (2001). Microenterprising and people with disabilities: Strategies for success and failure. *Journal of Rehabilitation*, 67(2), 29–35.
- Wang, W., Lu, W., & Millington, J.K.(2012). Determinants of entrepreneurial intention among college students in China and USA. *Journal of Global Entrepreneurship Research*, 1(1), 35–44.
- Wang, L., Prieto, L., & Hinrichs, K.T.(2010).Direct and indirect effects of individual and environmental factors on motivation for self-employment. *Journal of Developmental Entrepreneurship*,15(4),481–502.
- Welpel, I., Sporrle, M., Grichnik, D., Michl, T, & Audrestsch, D. (2012). Emotions and opportunities: The interplay of opportunity evaluation, fear, joy, and age as antecedents of entrepreneurial exploitation. *Entrepreneurship Theory and Practice*, 36, 69–96.
- West, G.P., & Wilson, E.V. (1995). A simulation of strategic decision making in situational stereotype conditions for entrepreneurial companies. *Simulation and Gaming*, 26, 307–327.
- Whitley, R. (1999). *Divergent capitalism: The social structure and change of business systems*. Oxford: Oxford University Press.
- Wilson, F., Marlino, D., & Kickul, J. (2004). Our entrepreneurial future: Examining the diverse attitudes and motivations of teens across gender and ethnic identity. *Journal of Developmental Entrepreneurship*, 9 (3),177–197.
- Wilson, F., Kickul, J. & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*,31, 387–306.
- Wolcott, R. & Lippitz, M. (2007). The four models of corporate entrepreneurship. *MIT Sloan Management Review*, 49(1),75–82.
- World Health Organization (2011). *Summary: World Report on Disability*. Retrieved from: http://whqlibdoc.who.int/hq/2011/WHO_NMH_VIP_11.01_eng.pdf?ua=1

- Wu, L.Y., Wang, C.J., Tseng, C.Y., & Wu, M.C. (2009). Founding team and start-up competitive advantage. *Management Decision*, 47(2), 345–58.
- Yamamoto, S., & Alverson, C.(2013). Successful vocational outcomes: A multilevel analysis of self-employment through U.S .vocational rehabilitation agencies. *Journal of Vocational Rehabilitation*,38, 15–27.
- Yamamoto, S., Unruh, D., & Bullis, M. (2012). The viability of self-employment for individuals with disabilities in the United States: A synthesis of the empirical-research literature. *Journal of Vocational Rehabilitation*, 36(2), 121–134.
- Yanchak, K., Lease, S., & Strauser, D. (2005). Relation of disability type and career thoughts to vocational identity. *Rehabilitation Counseling Bulletin*, 48(3), 130–138.
- Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570–585.
- Young, N.M. (2007). Toward a rethinking of race, culture and the African American entrepreneur. In L.P. Dana (Ed.), *Handbook of Research on Ethnic Minority Entrepreneurship* (157–176). Northhampton, MA: Edgar Elgar Publishers.
- Yusof, M., Sandhu,M., & Jain, K.(2008). Entrepreneurial inclination of university students: A case study of students at Tun Abdul Razak University (UNITAR). *UNITAR E-Journal*, 14(1), 1–14.
- Zhao, H., Seibert, S., & Hills, G.(2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265–1272.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381–404.
- Zhou, M. (2004). Revisiting ethnic entrepreneurship: convergences, controversies and Conceptual advancements. *International Migration Review*, 38(3), 1040–1074.

APPENDIX A

QUESTIONNAIRES

I. Tell Us about Yourself

1) Age: _____

2) Gender: _____ Male _____ Female

3) Marital Status:

_____ Single _____ Married _____ Divorced _____ Widowed _____ Common law

3) What is the highest level of formal education you have achieved?

_____ High School _____ Associate _____ Bachelors

_____ Masters _____ Doctoral _____ Other

4) If you attended college, what was your major? _____

5) Which group do you identify with?

A) Caucasian

B) Asian American (specific group: Chinese, Japanese, Korean,
etc.) _____

C) African American

D) American Indian (specific group: Nez Perce, Couer d'Alene, Shoshone,
etc.) _____

E) Pacific Islander (specific group: Hawaiian, Samoan, Guamanian,
etc.) _____

F) Alaskan Native (specific group: Inuit, Klinguit,
etc.) _____

G) Latino American (specific group: Mexican, Cuban, Puerto Rican, Nicaraguan,
etc.) _____

H) Other _____

6) Are you a veteran? __ Yes __ No

If so, which group do you identify with? (Check ALL that apply)

___ Disabled ___ Wounded Veteran ___ Disability rating

7) Do you have a disability?

Yes () or No () (check ALL that apply)

- Chronic Medical Conditions (e.i. diabetes, cancer, cirrhosis, etc)
- Physical disorders
- Substance Abuse
- Cognitive disorders (i.e. TBI, learning disabilities, etc.)
- Mental Health (i.e. depression, bipolar, etc)
- Sensory disorders (i.e. Blindness, deafness, etc.)

9) Household income/Yr. (in thousands):

___ <\$20 ___ \$20-\$50 ___ \$51-\$80 ___ \$81-\$100 ___ >\$100

10) What is your current employment status?

___ Full-Time ___ Part-Time ___ Unemployed

II. Using the seven-point scale provided below, choose a number next to each statement to indicate the extent to which you agree or disagree with that statement.

Strongly Disagree

Neutral

Strongly Agree

1.....2.....3.....4.....5.....6.....7

- ___ 1) I am constantly on the lookout for new ways to improve my life.
- ___ 2) wherever I have been, I have been a powerful force for constructive change.
- ___ 3) Nothing is more exciting than seeing my ideas turn into reality.
- ___ 4) If I see something I don't like, I fix it.
- ___ 5) No matter what the odds, if I believe in something I will make it happen.
- ___ 6) I love being a champion for my ideas, even against others' opposition.
- ___ 7) I excel at identifying opportunities.
- ___ 8) I am always looking for better ways to do things.
- ___ 9) If I believe in an idea, no obstacle will prevent me from making it happen.
- ___ 10) I can spot a good opportunity long before others can.

III. Using the seven-point scale provided below, write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

Strongly Disagree

Neutral

Strongly Agree

1.....2.....3.....4.....5.....6.....7

- ___ 1) I am interested in setting up my own business.
- ___ 2) I have been preparing to open my own business.
- ___ 3) It is likely that I am going to set up my own business in the near future.
- ___ 4) I am interested in setting up and owning my own business.
- ___ 5) My family and friends will think highly of me if I open my own business.
- ___ 6) The community I live in values being self-employed highly.
- ___ 7) My social status will improve if I become an entrepreneur.
- ___ 8) Entrepreneurs are very respected in my community.
- ___ 9) It will be difficult to get a business loan from banks if I decide to start my own business.
- ___ 10) I believe I will get a business loan from banks if I decide to start my own business.
- ___ 11) Banks are not likely to help me get a business loan if I decide to start my own business.
- ___ 12) My chances of getting a business loan from banks are limited.
- ___ 13) I have access to training on how to open a new business provided by a human services agency
- ___ 14) I have received adequate support and services from human service agencies to establish my own business
- ___ 15) I have been encouraged to open my own business by human services personnel
- ___ 16) Human services personnel are supportive of my self-employment goals
- ___ 17) I have been offered assistance by human services personnel in the development of my plans to open my business.

VII. Using the seven-point scale provided below, write a number next to each statement to indicate how much confidence you have in your ability to engage in the tasks listed below.

Strongly Disagree

Neutral

Strongly Agree

1.....2.....3.....4.....5.....6.....7

- ___ 1) Brainstorm (come up with) a new idea for a product or service
- ___ 2) Identify the need for a new product or service
- ___ 3) Design a product or service that will satisfy customer needs and wants
- ___ 4) Estimate customer demand for a new product or service.
- ___ 5) Determine a competitive price for a new product or service.
- ___ 6) Estimate the amount of start-up/working capital necessary to start my business.
- ___ 7) Design an effective marketing/advertising campaign for a new product or service.
- ___ 8) Get others to identify with and believe in my vision and plans for a new business.
- ___ 9) Network-i.e, make contact with and exchange information with others.
- ___ 10) Clearly and concisely explain verbally/ in writing my business idea in everyday terms.
- ___ 11) Supervise employees.
- ___ 12) Recruit and hire employees.
- ___ 13) Delegate tasks and responsibilities to employees in my business.
- ___ 14) Deal effectively with day-to-day problems and crises.
- ___ 15) Inspire, encourage, and motivate my employees.
- ___ 16) Train employees.
- ___ 17) Organize and maintain the financial records of my business.
- ___ 18) Manage the financial assets of my business.
- ___ 19) Read and interpret financial statements.

Revise Life Orientation Test (LOT-R)

Instructions:

Please answer the following questions about yourself by indicating the extent of your agreement using the following scale:

[0] = strongly disagree

[1] = disagree

[2] = neutral

[3] = agree

[4] = strongly agree

Be as honest as you can throughout, and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers.

- _____ 1. In uncertain times, I usually expect the best.
- _____ 2. Its easy for me to relax
- _____ 3. If something can go wrong with me, it will.
- _____ 4. I'm always optimistic about my future.
- _____ 5. I enjoy my friends a lot.
- _____ 6. Its important for me to keep busy.
- _____ 7. I hardly ever expect things to go my way.
- _____ 8. I don't get upset too easily.
- _____ 9. I rarely count on good things happening to me.
- _____ 10. Overall, I expect more good things to happen to me than bad.

Scoring:

1. Reverse code items 3,7, and 9 prior to scoring (0=4) (1=3) (2=2) (3=1) (4=0)
2. Sum items 1,3,4,7,9, and 10 to obtain an overall score.

Note: Items 2,5,6, and 8 are filler itmes only. They are not scored as part of the revised scale.

The revised scale was contrasted in order to eliminate two items from the originao scale, which dealt more with coping style than with positive expectations for future outcomes. The correlation between the revised scale and original scale is 95.

Reference:

Scheier, M.F., Carver C.S., and Bridges, M.W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078.

The Performance Failure Appraisal Inventory (Short-Form)

		Response Scale			
	-2	-1	0	+1	+2
	Do Not Believe At All		Believe 50% of the Time		Believe 100% of the Time

- _____ 1. When I am failing, I am afraid that I might not have enough talent.
- _____ 2. When I am failing, it upsets my “plan” for the future.
- _____ 3. When I am not succeeding, people are less interested in me.
- _____ 4. When I am failing, important others are disappointed.
- _____ 5. When I am failing, I worry about what others think about me.

Scoring Template:

Performance Failure Appraisal Inventory (Short Form)

General Fear of Failure

(_____ + _____ + _____ + _____ + _____) = _____ / 5 = _____



INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS IN RESEARCH
THE UNIVERSITY OF TEXAS - PAN AMERICAN

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NOTICE OF APPROVAL
Institutional Review Board for Human Subjects (IRB)
PWA#00000805

TO: Yateiny Castillo
FROM: Institutional Review Board for Human Subjects in Research
DATE: April 24, 2014
RE: IRB# 2014-014-02; "Individual and Institutional Predictors of Self-Employment Intentions among People with Disabilities: An Empirical Investigation"

The IRB protocol referenced above has been reviewed and **APPROVED**.

Basis for approval: Expedited, Category #7

Approval expiration date: April 7, 2015

Recruitment and Informed Consent: You must follow the recruitment and consent procedures that were approved. If your study uses an informed consent form or study information handout, you will receive an IRB-approval stamped PDF of the document(s) for distribution to subjects.

Modifications to the approved protocol: Modifications to the approved protocol (including recruitment methods, study procedures, survey/interview questions, personnel, consent form, or subject population), must be submitted in writing to the IRB at irb@utpa.edu for review. Changes must not be implemented until approved by the IRB.

Approval expiration and renewal: Your study approval expires on the date noted above. You will receive a continuing review (renewal) reminder from the IRB approximately 2-4 weeks before approval expiration. At that time you will need to fill out, sign and submit the continuing review form to irb@utpa.edu using the electronic submission form on the IRB website (<http://www.utpa.edu/irb>). If you will be interacting with subjects or working with individually identifiable private information, you need to have active IRB approval. Failure to return the form will result in your study file being closed on the approval expiration date.

Data retention: All research data and signed informed consent documents should be retained for a *minimum* of 3 years after completion of the study.

Reports: Submission of a status report to assess the study's progress, or a final report when a study has been completed (*this applies to all IRB approved protocols*) is required. For exempt protocols, a status report should be submitted on a yearly basis, unless the study has been completed in which case a final report will be required. For expedited and full review protocols, the continuing review request form is equivalent to a status report. A final report should be submitted for completed studies or studies that will be completed by their respective expiration date.

Approved by: 
Dr. Stephanie Brickman
Chair, Institutional Review Board

Date: 04/24/14

cc: Dr. Sayed Sadig Shah, Vice Provost for Research and Sponsored Projects
cc: Dr. Jerome Fischer, Professor, Rehabilitative Services

BIOGRAPHICAL SKETCH

Yuleinys A. Castillo attained her Bachelor of Science in Business Administration with an emphasis in Human Resources Management as well as a Bachelor's of Arts in Sociology from California State University-Fresno in Fresno, CA in 2007. She also earned her Master of Science degree in Rehabilitation Counseling and a Master of Arts in Spanish from Fresno State in 2010 and 2011 respectively. She completed the requirements for her Doctorate degree in Rehabilitation Counseling from the University of Texas-Pan American in Edinburg, TX in 2014.

During her doctoral education, Dr. Castillo worked as a graduate assistant, research assistant and teaching assistant for the Department of Rehabilitation at UTPA. In these positions, she had the opportunity to teach courses, contribute to grants, recruit students, and collaborate in peer-reviewed articles. She has research interests in the vocational choices of people with disabilities, the dynamics of minority entrepreneurship, and managerial decisions and practices in agencies. She has locally, nationally and internationally presented her research in the human services field. She has held different positions to provide services to people with disabilities and to be part of managerial teams. She can be contacted by email at yuchas@hotmail.com