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# Behaviors Contributing to Native American Business Success

Stacey Bolin  
*Walden University*

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# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Stacey Bolin

has been found to be complete and satisfactory in all respects,  
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the review committee have been made.

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Walden University  
2015

Abstract

Behaviors Contributing to Native American Business Success

by

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MBA, University of Oklahoma, 2004

BS, East Central University, 2000

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

November 2015

## Abstract

Native Americans start fewer businesses than do other U.S. populations, and the receipts and employment of those businesses are 70% lower than the U.S. average. However, little knowledge exists concerning Native American (NA) business success. The purpose of this quantitative study was to examine the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict business success amongst NA business owners. Understanding the factors that contribute to NA business success is imperative to developing best practices for business owners and business support agencies. The theory of planned behavior served as the theoretical framework for this study. Of the 550 invited NA business owners registered within a single tribe in the South Central United States, 79 participated in this study. A binary logistic regression analysis produced conflicting results: significant goodness-of-fit yet insignificant individual predictors. Information obtained from this study could assist NA and other underdeveloped business populations with understanding factors influencing entrepreneurial endeavors; however, readers must interpret findings with caution because of conflicting logistic regression results. NA business formation and success could enhance economic prosperity and decrease unemployment in NA communities.

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## Dedication

I dedicate this dissertation to my husband, Brandon Bolin, my children, Ava and Jessica, and the rest of my family. Without their support and encouragement, I could not have achieved this degree.

## Acknowledgments

I began this journey with the full support of my family and colleagues. I acknowledge the newfound support of my new colleagues and faculty at Walden University. My committee chairperson, Dr. Yvette Ghormley, encouraged and guided me even before she became my chairperson. Not only was Dr. Ghormley a significant proponent of my own personal growth as a scholar, but she facilitated a fantastic working relationship among those in our doctoral study courses. This arena allowed for sharing of ideas and encouragement in a way to help us all improve. I would also like to thank two of my Walden colleagues who have helped me continually improve: Phat Pham and Anne Williams. Additionally, I would like to express my sincere appreciation for the support of Dr. Lentz, Dr. Taylor, Dr. Goes, Dr. Turner, and Dr. Munkeby.

## Table of Contents

List of Tables .....	v
List of Figures .....	vi
Section 1: Foundation of the Study.....	1
Background of the Problem .....	1
Problem Statement .....	3
Purpose Statement.....	3
Nature of the Study .....	4
Research Question .....	5
Hypotheses .....	6
Survey Questions .....	6
Theoretical Framework.....	6
Operational Definitions.....	7
Assumptions, Limitations, and Delimitations.....	9
Assumptions.....	9
Limitations .....	9
Delimitations.....	10
Significance of the Study .....	10
Contribution to Business Practice.....	11
Implications for Social Change.....	12
A Review of the Professional and Academic Literature.....	13
Entrepreneurship.....	15



Small Business Success .....	16
Contributions of Small Business Entrepreneurship to the Economy .....	18
Entrepreneurs .....	21
Entrepreneurial Intention .....	28
Theories of Entrepreneurial Intention .....	28
Theory of Planned Behavior .....	30
Sources of Entrepreneurial and Small Business Assistance .....	36
Entrepreneurship Among NAs.....	42
Examining NA Entrepreneurship Using the EIQ.....	45
Transition and Summary.....	48
Section 2: The Project.....	50
Purpose Statement.....	50
Role of the Researcher .....	51
Participants.....	53
Research Method .....	55
Research Design.....	56
Population and Sampling .....	57
Ethical Research.....	59
Instrumentation .....	62
Data Collection Technique .....	65
Data Analysis .....	67
Study Validity .....	70

Reliability.....	71
Validity .....	71
Transition and Summary.....	72
Section 3: Application to Professional Practice and Implications for Change .....	74
Overview of Study .....	74
Presentation of the Findings.....	75
Statistical Assumptions Tests .....	76
Descriptive Statistics.....	77
Hypothesis Tests .....	81
Relating Findings to the TPB.....	86
Relating Findings to the Literature .....	87
Applications to Professional Practice .....	90
Implications for Social Change.....	91
Recommendations for Action .....	93
Recommendations for Further Study .....	95
Reflections .....	97
Summary and Study Conclusions .....	97
References.....	99
Appendix A: Survey Instrument .....	135
Appendix B: Permission to use Entrepreneurial Intention Questionnaire .....	139
Appendix C: Email Message Sent to Participants .....	140
Appendix D: Letter Sent to Participants without Email Addresses.....	141

Appendix E: Reminder Message Sent to Participants .....	142
Appendix F: Reminder Phone Call Script .....	143
Appendix G: Protecting Human Research Participants Certificate of Completion.....	144
Appendix H: Permission Letter to use Business Registry Data for Research Purposes .....	145
Appendix I: Informed Consent Document for Online Surveys .....	146
Appendix J: Informed Consent Document for Mailed Surveys.....	148
Appendix K: IRB Approval Letter .....	150

## List of Tables

Table 1. Synopsis of Sources in the Literature Review .....	15
Table 2. Descriptive Statistics for Population Description Variables.....	78
Table 3. Participant Gender Frequency and Percentages .....	79
Table 4. Reliability Coefficients ( $\alpha$ ) for Independent Variables .....	80
Table 5. Descriptive Statistics for Independent Variables .....	81
Table 6. Dependent Variable Frequency and Percentages.....	81
Table 7. Logistic Regression Predicting Business Success .....	83
Table 8. Logistic Regression Analysis Summary .....	85

## List of Figures

Figure 1. Theory of planned behavior elements with added entrepreneurial cues and dependent variable .....	31
Figure 2. Histogram showing ages of study participants .....	78
Figure 3. Histogram showing number of years in business for study participants .....	79

## Section 1: Foundation of the Study

Despite widespread agreement on the importance of entrepreneurs who start new businesses, Native Americans (NA) start new businesses less often and create smaller businesses than other U.S. citizens (Franklin, Morris, & Webb, 2013; Minority Business Development Agency [MBDA], 2014). The motivational factors that inspire persons to engage in venture creation include attitudes toward entrepreneurship, perceived control over success, and the value culture or society places on entrepreneurship (Schlaegel, He, & Engle, 2013). Despite the smaller number of NAs who start businesses as compared to other U.S. citizens, researchers in the field have yet to conduct research to explain why (Franklin et al., 2013). In this study, I examined the relationship between elements of NA entrepreneurial intention and NA small business success.

### **Background of the Problem**

Local, regional, and national economies need new entrepreneurial endeavors to succeed (Owoseni & Adeyeye, 2012). Entrepreneurs stimulate economies by starting and growing businesses that create jobs and by providing innovative products and services (Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2011). Moreover, entrepreneurship provides a viable option for millions of women, minorities, and immigrants to succeed in business (Elmuti, Khoury, & Omran, 2012).

Because of the social and economic contribution of entrepreneurship to economies, researchers increasingly focus on the topic. Elmuti et al. (2012) and Petridou and Sarri (2011) found that successful entrepreneurs rank training as the most significant element in the success of business ventures. Moreover, Jusoh, Ziyae, Asimiran, and Kadir

(2011) conducted a statistical analysis of survey results to identify skills needed for entrepreneurship success and found that entrepreneurs desire more training in business finance and innovation. Boyles (2012); Do Paço, Ferreira, Raposo, Rodrigues, and Dinis (2011); Sardeshmukh and Smith-Nelson (2011); and Vance, Groves, Gale, and Hess (2012) cited the positive correlation between the motivations to start a business and entrepreneurial education. In addition, Omar (2011) explored entrepreneurs from a minority ethnicity to uncover the push and pull factors that influenced the participants' decisions to pursue business ownership. The aforementioned researchers addressed entrepreneurship among different countries and cultural groups. However, a gap in business practice remains because of the lack of research focusing on NA venture creation and business success (Franklin et al., 2013).

NAs actively engaged in the trade of natural resources, crops, and goods before Euro-American contact and until removal from their homelands (Miller, 2012). Miller (2012) explained that NAs' motivations to pursue entrepreneurial endeavors changed during the removal process. Mathers (2012) and Stewart and Pepper (2011) supported Miller's assertions. Though NAs compose 1.5% of the U.S. population, NAs own only 0.9% of businesses within the United States (MBDA, 2014). The MBDA (2014) listed 236,691 NA-owned firms within the United States. Broader disparity exists with revenue and employment comparisons. Revenue and employment generated by NA businesses accounted for 0.3% of total U.S. business revenue and employment (MBDA, 2014). The U.S. Small Business Administration (SBA) and the U.S. Executive Office called attention to business creation among NAs (U.S. Small Business Administration, 2014b); however,

researchers in the field failed to examine the documented discrepancy between NA venture creation and business success.

### **Problem Statement**

Fifty percent of new small businesses failed to survive beyond 4 years (Rauch & Rijdsdijk, 2013). Despite the failure rate, small businesses accounted for 99% of all U.S. firms (Labeledz & Berry, 2011). On average, businesses owned by NAs earned 70% lower gross receipts than those earned by other U.S. firms (MBDA, 2014). The general business problem was that although small business support services exist for NAs (Benson, Lies, Okunade, & Wunnava, 2011), few NAs pursued entrepreneurial ventures and established successful small businesses. The specific business problem was that NA small business owners may not understand the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success.

### **Purpose Statement**

The purpose of this quantitative correlational study was to examine the likelihood that NA attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success. Independent variables included those that constitute the theory of planned behavior: (a) attitudes toward entrepreneurship, (b) subjective norms, and (c) the entrepreneur's perceived behavioral control of the venture creation process (Liñán & Chen, 2009). A positive profit in the previous business year constituted the dependent variable: business success (Owens, Kirwan, Lounsbury, Levy, & Gibson, 2013).



The study population included approximately 550 business owners registered with a single NA tribe's small business office in the South Central region of the United States. NA business owners are an underdeveloped source of entrepreneurialism and are rarely studied (Franklin et al., 2013). Findings could contribute to social change in a seldom-studied population by offering insight into the relationship between entrepreneurial intention and small business success leading to job creation and innovative new products and services.

### **Nature of the Study**

I used a quantitative research methodology and correlational design to examine the likelihood that entrepreneurial intention factors predict small business success among NAs. A quantitative correlational approach allows for the collection of data from a large population from various locations using a survey (Castellan, 2010). Jaén and Liñán (2013); Liñán and Chen (2009); and Liñán, Urbano, and Guerrero (2011) used surveys to collect data and quantitative methods to analyze data. Du and Kamakura (2012) used quantitative research to measure survey participants' thoughts and attitudes. Additionally, the use of quantitative research provides the ability to determine relationships among data through statistical analysis (Castellan, 2010; Cohen, Cohen, West, & Aiken, 2003). Therefore, in this study, I utilized a quantitative method with a correlational design to study factors contributing to entrepreneurial intention among NAs and the likelihood, if any, that these factors predict the success of NA businesses. For the purpose of this study, the existence of a business profit in the preceding business year constituted business success.

Other research methods considered for the study included qualitative and mixed methods. A qualitative method allows the researcher to explore a concept using interviews or observation to uncover unidentified factors (Mobaraki & Zare, 2012). Though a qualitative method proves appropriate to uncover new information, the goals of this study included the comparison of motivational factors and success metrics rather than the pursuit of new information. Therefore, a qualitative method did not meet the requirements of this study.

A mixed methods approach blends qualitative and quantitative methods to combine both statistical analysis of data and the search for new information (Fretschner & Weber, 2013). However, neither the exploration of new information nor the complexity involved with mixed methods aligned with the goal of this study: to determine the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs. Based on the purpose of this study, I chose a positivistic approach of collecting quantitative data from which measurable results can be determined (Cole, Chase, Couch, & Clark, 2011). A quantitative method guides the researcher in generating relationship measurements and generalizable results (Castellan, 2010).

### **Research Question**

The research question in this study stems from the theory of planned behavior (TPB). According to the TPB, only three elements influence intention; therefore, any other variable proposed would only influence the outcome of the three antecedents to intention (Jaén & Liñán, 2013). The central research question guiding this study was the

following: What is the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict Native American small business success?

### **Hypotheses**

The null and alternative hypotheses tested in the study were as follows:

H<sub>0</sub>: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do not predict the likelihood of NA small business success.

H<sub>1</sub>: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do predict the likelihood of NA small business success.

### **Survey Questions**

I collected data to address the research question using the Entrepreneurial Intention Questionnaire (EIQ). Liñán and Chen (2009) developed the EIQ based on the TPB. The full survey instrument in Appendix A includes slight language revisions appropriate to the study population. Liñán granted permission to use and revise the EIQ (see Appendix B).

### **Theoretical Framework**

The theoretical framework for the study originated from Ajzen's (1991) theory of planned behavior. Ajzen declared that the best indicator of future action is current intention and includes (a) attitude, (b) subjective norms, and (c) perceived behavioral control. Explanations of behavior resulting from intentions using the TPB influence various fields of study, including entrepreneurship (Vissa, 2011). Wide use and acceptance of the TPB provides support for the continued application of the theory in

research (Malebana, 2014; Schlaegel et al., 2013; Wurthmann, 2013). Therefore, the TPB provided a valid theoretical framework for the study regarding the relationship between NA entrepreneurial intention and business success.

The combination of the three elements of the TPB affects intention. An individual's attitude or behavioral belief involves the desirability of the outcome of a behavior (Mobaraki & Zare, 2012). In addition, subjective norms or normative beliefs include the effect one's network of influencers has on one's plans (Iakovleva, Kolvereid, & Stephan, 2011). Moreover, perceived behavioral control exists when the participant feels confident in exercising the skills and knowledge required to be successful (Fretschner & Weber, 2013).

Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control combine to affect intention. Furthermore, intention drives behavior for actions requiring prior planning (Sonenshein, DeCelles, & Dutton, 2014). Variations in attitudes toward entrepreneurship, subjective norms, and perceived behavioral control might influence business success.

### **Operational Definitions**

*Business profit:* Business profit is reflected on a business's income statement when the revenue earned by the business exceeds all costs required to earn that revenue in a given time period (Vranceanu, 2014).

*Business success:* Business success was defined as a business reporting a profit rather than a loss on the company's income statement in the preceding business year (Owens et al., 2013).

*Minority Business Development Agency (MBDA):* The MBDA of the U.S. Department of Commerce administers programs and support centers to promote the creation and growth of minority-owned small businesses (Liu, 2012).

*Nascent entrepreneur:* A nascent entrepreneur is an individual engaged in activities to start a new business (Zanakis, Renko, & Bullough, 2012).

*Native American (NA):* NAs, also referred to as American Indians, are the original inhabitants of the Americas before European settlements (Parham, 2012). The U.S. SBA classifies NAs as a group that qualifies for the small disadvantaged business program (Fernandez, Malatesta, & Smith, 2012).

*Perceived behavioral control:* Perceived behavioral control, one element of the TPB that is similar to self-efficacy, indicates a person's perception of how well he will perform to handle a situation (Nabi & Liñán, 2013).

*Small business:* A small business is a privately held, independent business with fewer than 500 employees (SBA, 2014a).

*Small Business Development Center (SBDC):* SBDCs are educational outreach branches of the U.S. SBA designed to help community members start and run businesses (Knotts, 2011).

*Small Disadvantaged Business (SDB) Program:* Created in response to federal legislation calling on the U.S. SBA to promote fairness in how government contracts are awarded (Fernandez et al., 2012), the SDB program offers contractual assistance to qualifying firms. Small firms that are at least 51% owned and operated by a member of a disadvantaged group also receive additional support through loan and educational

programs (SBA, 2014b).

*Subjective norms:* Subjective norms are the thoughts and pressures from those in a position to influence the decisions of a person, typically family and friends (Hattab, 2014).

### **Assumptions, Limitations, and Delimitations**

#### **Assumptions**

Martin and Parmar (2012) defined assumptions in research as the items that a researcher accepts as true despite no known or anticipated documentation of such truth. This study included four assumptions. First, I assumed that a quantitative correlational approach would serve as an appropriate design to examine the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs. A second assumption was that the business owners in the study would answer the survey questions honestly and thoughtfully. Third, the respondents of the survey represented only NA business owners. A final assumption involved the use of the EIQ instrument to collect data to examine the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs. Liñán, Rodríguez-Cohard, et al. (2011); Moradi, Papzan, and Afsharzade (2013); Sánchez (2013); and Tsai, Chang, and Peng (2014) validated, used, and cited other uses of the EIQ in studies of students, aspiring and current entrepreneurs, and entrepreneurs from different countries.

#### **Limitations**

Limitations exist for all studies and guide study procedures (Solesvik, 2013).

Limitations arise from the research method and design chosen by the researcher for conducting the study and consist of shortcomings in the research (Brutus, Aguinis, & Wassmer, 2013; Kirkwood & Price, 2013). First, using a survey requiring Likert-type scale responses may not capture enough information to explain the thoughts and perspectives of those participating in the study (Yusoff & Janor, 2014). Qualitative researchers could explore these concepts in more depth; however, the results of a qualitative study would not be generalizable to other similar populations (Cronin-Gilmore, 2012). Additionally, time constraints and lack of incentives likely limited the number of participants who completed the survey.

### **Delimitations**

Delimitations are boundaries set to define scope of a study (Wlodarczyk, 2014). The scope of this study only included NAs who owned a business registered with the tribal government. Business owners register with the tribal support office to receive opportunities for assistance and to do business with the tribal government (B. Joplin, personal communication, September 20, 2013). The defined scope of the study delimited the implications of results to one tribe in the South Central region of the United States. Furthermore, much of the area where members of the NA tribe live consists of rural areas and small towns. Therefore, results of the study may not be generalizable to groups in other geographic areas or those having a different socioeconomic status.

### **Significance of the Study**

The significance of the study includes two areas of potential influence: contribution to business practice and implications for social change. NAs compose 1.5%

of the U.S. population (MBDA, 2014). However, NAs own 0.9% of all businesses in the United States, and NA-owned businesses account for only 0.3% of U.S. business revenue (MBDA, 2014). I surveyed NA business owners and compared attitudes toward entrepreneurship, subjective norms, and perceived behavioral control with business success. Results from this study may provide information to business owners and business support programs to increase business success rates. Improved business success rates among NAs might initiate business changes with widespread implications for social change.

### **Contribution to Business Practice**

Other researchers explored or examined aspects of entrepreneurship, entrepreneurship education, entrepreneurial motivation, entrepreneurial intention, and success factors for small business owners (Carsrud & Brännback, 2011; Jusoh et al., 2011; Mars & Ginter, 2012; Rideout & Gray, 2013; Schmidt, Soper, & Bernaciak, 2013). Scholars identified factors that contribute to a firm's success (Elmuti et al., 2012; Grafton, 2011; Heinonen, Hytti, & Stenholm, 2011; Morris, Webb, Fu, & Singhal, 2013; Volery, Müller, Oser, Naepflin, & del Rey, 2013; Yallapragada & Bhuiyan, 2011). However, the previously mentioned studies lack information on specific demographic effects.

Carey, Flanagan, and Palmer (2010); Douglas (2013); Fitzsimmons and Douglas (2011); and Liñán, Rodríguez-Cohard, et al. (2011) focused on intention aspects associated with entrepreneurship. Only Malebana (2014) examined entrepreneurial intention in a rural setting. Moreover, Liñán, Urbano, et al. (2011) and Ugwu and Ugwu



(2012) studied entrepreneurial intention with respect to cultural or ethnic differences.

Based on the results of Liñán, Urbano, et al.; Malebana; and Ugwu and Ugwu, the factors that influence business formation varies based on location and culture.

Liñán, Urbano, et al. (2011) informed readers that culture influences entrepreneurial intention. Liñán, Urbano, et al. found that people in developed regions of Spain placed a higher value on entrepreneurship and exhibited higher levels of entrepreneurial intention. Malebana (2014) found the motivation to start a business to be lower among residents in rural areas of South Africa. In a 14 nation quantitative study, Schlaegel et al. (2013) found that social norms, one of the three elements of the TPB, vary with culture and explain 67% of the variance of entrepreneurial intention. Despite the documented disparity of NA-owned businesses when compared to the general U.S. population and the recognized findings of the influence of culture on entrepreneurial intention, few researchers have focused on NA entrepreneurship (Franklin et al., 2013; Miller, 2012).

This study may contribute to positive social change by educating NA small business owners and business support offices regarding relationships between entrepreneurial intention elements and small business success. Information regarding small business success specific to NA entrepreneurs could support positive social change for both NA populations as well as the economies where NAs live and work. An improved local economy might aid the larger U.S. economy.

### **Implications for Social Change**

Historical records show that NAs engaged in entrepreneurship until removal from

their original homes in the Americas to reservations more central to the United States (Miller, 2012). Following this removal, NAs became less apt to engage in trade or agriculture and instead relied upon government support for their families (Miller, 2012). As a result, unemployment among NAs rose to a level twice the U.S. national average in 2010 and up to 80% in some locations (Juntunen & Cline, 2010). Furthermore, fewer NAs start businesses as compared to the overall U.S. population, and those businesses earn an average of 70% less profit than other U.S. businesses (MBDA, 2014; Stewart & Pepper, 2011).

With the knowledge that entrepreneurs create 86% of new jobs at the national level (Neumark, Wall, & Zhang, 2011), tribal leaders could assist NA communities by supporting entrepreneurship. If armed with knowledge regarding the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success, support services for NAs might be more effective. Acquiring knowledge about entrepreneurial intention and small business success aligns with the overarching research question guiding this study. Understanding contributing factors for NA business success may help those who plan support and training programs designed to encourage and assist NAs in their quest to start a business. An increase in business ownership and business success rates among NAs might decrease unemployment and improve prosperity and overall wellness in the community.

### **A Review of the Professional and Academic Literature**

The search for relevant sources included applicable databases at Walden University on the topics of attitudes toward entrepreneurship, subjective norms, perceived

behavioral control, and small business success. Initial databases explored included Business Source Complete, ABI/INFORM Complete, Emerald Management Journals, SAGE Premier, and PsycINFO. Next, I mined the bibliographies of these articles and citation chains to ensure an in-depth search of all available literature. A citation chain examination included the use of Google Scholar to search for additional applicable articles. The combination of searching databases in the business and psychology sections of the Walden library, following useful sources from scholarly works, and reviewing the citation chain list from references resulted in over 150 peer-reviewed articles published since 2011.

The articles used as references in this study included information relevant to the field of entrepreneurship, the factors that motivate individuals to start a business, business success, and the history and challenges of NA entrepreneurship. In an effort to organize this research logically, I arranged the literature review first to communicate information concerning entrepreneurship and the economic value of small businesses to economies. I then presented information about the motivating factors to start a business and business success. Finally, I included a review of the literature covering the history and contemporary situation of NA economies to illustrate the significance of this research. The content of the literature review supports the need for research regarding the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs. Peer-reviewed articles published since 2011 constitute 88% of the sources referenced in the review of the professional and academic literature (see Table 1).

Table 1

*Synopsis of Sources in the Literature Review*

Reference Type	2011-2015		2010 - Prior	
	Number	% of Total	Number	% of Total
Peer-reviewed Articles	128	90.1	6	4.2
Government sources	2	1.4	0	0.0
Books	1	0.7	0	0.0
Non Peer-reviewed	2	1.4	3	2.1

**Entrepreneurship**

Defining *entrepreneurship* presents a challenge for scholars and practitioners based on the varied nature of the field. In a study concerning entrepreneurship concepts, Mars and Rios-Aguilar (2010) reviewed 44 peer-reviewed articles on entrepreneurship and found no specific definition of entrepreneurship. Moreover, Lahm and Heriot (2013) argued that the definition of entrepreneurship lacked scholarly consensus because of the derivation of entrepreneurship from various business disciplines and social sciences. This lack of consensus might have caused disparity among frameworks used for study in the field (Mars & Rios-Aguilar, 2010).

Despite the disagreement on a single definition in the field, a standard definition of entrepreneurship provides clarity. Therefore, for the purposes of this study, I defined entrepreneurship as the process of identifying and exploiting opportunities while taking responsibility for the risk (Uddin & Bose, 2012). The SBA refers to those who start businesses as *entrepreneurs*; therefore, this study used the term entrepreneur to refer to an individual who starts a business.

When an entrepreneur creates a new business, something of value arises from an

idea yielding benefit to both the entrepreneur and those with whom the entrepreneur does business (Elmuti, Khoury, & Abdul-Rahim, 2011). Yallapragada and Bhuiyan (2011) defined a small business entrepreneur as a business founder and manager with growth and profit goals. The small business entrepreneur's actions boost the economy in the area where the business is located as well as the overall economy (Bharadwaj, Osborne, & Falcone, 2010).

### **Small Business Success**

A small business is a privately held, independent business with fewer than 500 employees (SBA, 2014a). According to the SBA (2014a), small businesses accounted for 99.7% of U.S. employer firms with 28.2 million small businesses. In comparison, the SBA reported that only 17,700 firms existed in 2011 with over 500 employees.

The SBA (2014a) also reported that similar numbers of businesses open and close each year. Additionally, the SBA reported that sustainability rates have changed little over time, with 50% of firms surviving 5 years or more and 33% surviving 10 years or more. The Global Entrepreneurship Monitor (GEM) project considered a business established when sustaining operations for 3.5 years or more (Bosma & Schutjens, 2011; Jones-Evans, Thompson, & Kwong, 2011; Xavier, Kelley, Kew, Herrington, & Vorderwülbecke, 2013). Bharadwaj et al. (2010) and Rauch and Rijdsdijk (2013) noted that almost half of all new businesses do not survive the first 4 years of operations. Yallapragada and Bhuiyan (2011) reported that 34% of entities do not survive the first 2 years in a new small business. Despite the varied terms of measurement, the reported sustainability rates demonstrated the challenging task of business success for small

business owners.

Small business success measurements proved challenging for researchers in previous research studies (Soriano & Castrogiovanni, 2012). Soriano and Castrogiovanni (2012) observed that the difficulty in measuring success stemmed from differing definitions of success by business owners. Not all entrepreneurs start a new business because of financial reasons (Carsrud & Brännback, 2011; Eijdenberg & Masurel, 2013; Zanakis et al., 2012). Boyer and Blazy (2014) concurred and added that entrepreneurs measure their own financial success against their desired standard of living rather than a percentage of revenue growth. However, in a survey of Australian business owners, Vilkinas, Cartan, and Saebel (2012) found that business owners rank making a profit as the most important measure of business success. Considering the number of business failures, Soriano and Castrogiovanni used business profit as an indicator variable depicting business survivability and success.

Soriano and Castrogiovanni (2012) found profitability to be a key measure of business performance. Similarly, Owens et al. (2013) defined entrepreneurial business success as a business with a positive economic profit. Additionally, Keelson (2014) and Ngo and O’Cass (2013) equated business success with profitability. Shehu (2014) confirmed that using profit to define business success applies to small- to medium-sized enterprises (SME). Moreover, Gorgievski, Ascalon, and Stephan (2011) discovered that business profit ranked high among business owners driven by both economic and social motivations. Although other measures of business success exist, business profit pervades the small business and entrepreneurship literature.

For my study, business success measured by profitability was the dependent variable. Business profitability applies to both economic and socially driven small business owners (Gorgievski et al., 2011). Vranceanu (2014) defined *business profit* as the difference between income earned and all costs incurred to earn that income. Similarly, Jacobides, Winter, and Kassberger (2012) stated that business profit occurs when revenue exceeds expenses. Additionally, Ortiz-Walters and Gius (2012) identified profit as the business income minus expenses and taxes. Therefore, for the purposes of this study, business profit was defined as the existence of positive business income.

To collect profit information, I included a survey question asking participants about their business profit in the most recent business year. If participants reported a profit on their income statement, they responded with a yes. A year with no or negative profit warranted a no answer. Ortiz-Walters and Gius (2012) and Welsch, Desplaces, and Davis (2011) collected business success information by asking study participants if they reported a profit in the most recent business year. Correspondingly, Halabí and Lussier (2014) collected business success information from small businesses using profitability without asking for actual profitability values. Hallak, Assaker, and O'Connor (2014) added that small business owners would only answer questions concerning profitability when dollar values were not requested. Profitability is a business success measure common among entrepreneurs and appropriate as a dependent variable for this study.

### **Contributions of Small Business Entrepreneurship to the Economy**

Entrepreneurship plays a constructive role in all economies. Entrepreneurs contribute to prosperity, create jobs, and fuel innovation (Solomon, Bryant, May, &

Perry, 2013; Yallapragada & Bhuiyan, 2011). The positive effects on the economy generated by entrepreneurs spark continued research on the topic (Leung, Lo, Sun, & Wong, 2012). Making three positive influences on the economy, entrepreneurs create jobs, produce innovation, and generate manufacturing production (Ates & Bititci, 2011; Nazir, 2012; Neumark et al., 2011; Winkel, Vanevenhoven, Drago, & Clements, 2013). In the United States alone, small business entrepreneurship creates 86% of new jobs (Neumark et al., 2011). Job creation promotes economic growth and reduces unemployment. Moreover, SMEs account for 70% of the world's production (Ates & Bititci, 2011). Entrepreneurs often begin a new business based on a breakthrough or improvement innovation (Nazir, 2012), and small businesses create 67% of new inventions (Winkel et al., 2013). Not only do entrepreneurs offer innovation, the innovative activity of entrepreneurs pushes established companies to innovate to remain competitive (Kuratko, 2011). This continual cycle of innovation drives economic growth (Kuratko, 2011). The combination of new job creation and the high rate of innovation coupled with the 51% of the U.S. gross domestic product that small businesses generate shows the value of entrepreneurship to national prosperity (Winkel et al., 2013).

The international recognition of the contribution of entrepreneurship to economies led to the creation of the GEM project (Kuratko, 2011). The GEM project, which began in 1999 with 10 countries, grew to include survey responses from 104 economies in the 2013 report to determine their entrepreneurial activities (Amorós & Bosma, 2014; Thompson, Jones-Evans, & Kwong, 2010). University partners conducted the GEM survey annually among the general population and business owners (Thompson et al.,



2010). In each participating economy, at least 2,000 randomly selected adults ages 18-64 answered GEM survey questions via telephone or face-to-face interaction in their own language (Amorós & Bosma, 2014; Griffiths, Gundry, & Kickul, 2013).

Adults surveyed in the GEM project answered questions that cover the entire life cycle of the entrepreneurial process including nascent activity, new business ownership, established business ownership, and business exit (Jones-Evans et al., 2011). The translated results of the surveys provided data to allow entrepreneurship researchers to study the collected data (Griffiths et al., 2013; Thompson et al., 2010). Researchers using data collected from the GEM surveys demonstrated a statistically significant relationship between national entrepreneurial activity and national economic growth (Nazir, 2012). The large sample allowed researchers to conduct reliable studies and offer information to legislators and officials who guide policy decisions for continued stimulation of entrepreneurship.

While the GEM project encompassed the entire entrepreneurial life cycle, a study by University of Michigan researchers focused on U.S. nascent entrepreneurs (Edelman, Brush, Manolova, & Greene, 2010). With an objective of understanding who becomes entrepreneurs and how they accomplish starting a new business, the Panel Study of Entrepreneurial Dynamics (PSED) included questions about motivations, knowledge, and support (Zanakis et al., 2012). The 5-year time span of the PSED allowed data collection about start-up activities and new business operational activities (Hopp & Stephan, 2012). Understanding the transition from nascent entrepreneur to business owner is important because only one-third of the PSED respondents made the shift from business planning to

business operations (Zanakis et al., 2012). The creation and support of the PSED project provided evidence of the contributions of new businesses and longitudinal data for ongoing research to improve the understanding of business formation and success (Hopp & Stephan, 2012; Zanakis et al., 2012).

### **Entrepreneurs**

As with the challenge of defining the discipline of entrepreneurship, narrowing the definition or characteristics of an entrepreneur also presented a challenge. Researchers in the field of management and entrepreneurship characterized an entrepreneur as an innovator and as adept at recognizing and acting on opportunities (Carsrud & Brännback, 2011). Ahmad, Xavier, and Bakar (2014) found that trait research conducted on entrepreneurs provided contradictory results. Similarly, Carsrud and Brännback (2011) shared that attempts to identify personality traits unique to entrepreneurs failed to differentiate managers from entrepreneurs to ensure that investigators adapted their research to focus on intentions and motivations.

Entrepreneurship appeals to individuals for a number of reasons. Sometimes, no better job alternative exists (Ekpe, Razak, & Mat, 2013). At other times, opportunities seem too good to pass up (Bridgstock, 2013). These push and pull factors influence entrepreneurial decisions (Bauer, 2011; Omar, 2011).

**Push factors.** Individuals may start a new business because of a factor or factors pushing them towards these entrepreneurial endeavors. Push factors include (a) insufficient income, (b) discrimination, (c) underemployment, and (d) unemployment (Bauer, 2011). The unemployed may look to entrepreneurship for economic survival

(Liu, 2012). Unsatisfied employees may see entrepreneurship as a way to change their disappointing employment situation (Fairlie & Marion, 2012; Gibson, Harris, Walker, & McDowell, 2014). Both economic survival and unsatisfactory employment may push some to start their own business.

Push factors may vary depending on the economic climate. Xavier et al. (2013) reported that incidences of necessity-driven entrepreneurship, those pushed into entrepreneurship because of no other means to earn an income, remained highest for factor-driven economies that rely on unskilled labor and natural resources. More developed economies report fewer instances of necessity-driven entrepreneurship (Amorós & Bosma, 2014).

**Pull factors.** In contrast, some individuals may become entrepreneurs because of one or more factors pulling them towards entrepreneurship (Eijdenberg & Masurel, 2013). Pull factors include (a) personal interest or passion, (b) flexibility, (c) ethnic enclaves, (d) higher earnings potential, (e) upgrade in social status, (f) role models, and (g) a good opportunity (Omar, 2011). Pull factors entice potential entrepreneurs to engage in something better than their current situation (Bauer, 2011).

Similar to push factors, the incidence of pull factors may vary based on the economic climate of the country or region (Bosma & Schutjens, 2011; Xavier et al., 2013). Economies in the innovation-driven phase of development, where the service sector and knowledge-driven businesses dominate, exhibited higher numbers of opportunity-driven entrepreneurs (Xavier et al., 2013). Entrepreneurship pull factors in innovation-driven economies or economies experiencing growth competed with the

opportunity costs of employment opportunities (Bosma & Schutjens, 2011).

**Variance on push and pull factors.** Eijdenberg and Masurel (2013) argued that push and pull factors do not have to be mutually exclusive. Eijdenberg and Masurel's research of a factor-driven economy in Africa included results that motivations might be a mixture of push and pull factors rather than only one or the other. This finding counters the GEM model of describing entrepreneurs as either necessity-driven or opportunity-driven (Amorós & Bosma, 2014; Figueroa-Armijos & Johnson, 2013; Jones-Evans et al., 2011).

Entrepreneurs pulled toward venture creation to pursue an opportunity may succeed more often than those pushed into self-employment. Fairlie and Marion (2012) noted that disadvantaged groups, who often experience reduced employment prospects, commonly turn to self-employment for survival. The businesses started by necessity-driven entrepreneurs tend to fail more often than the businesses founded by opportunity-driven entrepreneurs (Kariv, 2011). Additionally, entrepreneurs pulled into business tend to experience lower profitability and slower growth (Kariv, 2011; Liu, 2012). Carsrud and Brännback (2011) argued that some entrepreneurs might not seek the lifestyle that they can create as a business owner rather than just to maximize economic gains. Carsrud and Brännback's argument could explain some of the findings of lower profitability for necessity-driven entrepreneurs, as they may focus more on job flexibility or a social cause.

**Other factors.** Other factors push or pull a potential entrepreneur depending upon the content and context of the factor. Because the decision to venture into

entrepreneurship requires planning, numerous factors can influence the decision (Carey et al., 2010). These factors may include age, gender, and entrepreneurship training, which often contribute to the decision to pursue entrepreneurship (Rasli, Khan, Malekifar, & Jabeen, 2013).

**Age.** Age might influence an individual's motivation to start a business.

According to the U.S. SBA (2014a), fewer individuals age 25 and under pursued entrepreneurship in 2012 as than in the previous 10 years. The 23% decline in entrepreneurship among the 25 and younger group over the 10-year period contrasts the 66% increase in those over age 65 (SBA, 2014a). Self-employment for all ages in the same 10 years increased 1% (SBA, 2014a).

Results in the 2013 GEM Global Report revealed that the highest rate of early-stage entrepreneurship existed among the 25-34 and 35-44 age groups (Amorós & Bosma, 2014). Allen and Curington (2014) determined that the probability of self-employment increases with age peaking between 50 and 55 years. Additionally, Jayawarna, Rouse, and Kitching (2013) found age to be a factor in entrepreneurial intention.

**Gender.** Similarly, gender might affect venture creation motivations. The 7.8 million women-owned firms in the United States account for 36% of the total number of businesses in 2012 (SBA, 2014a). While the number of women involved in business ownership varies across countries, women own fewer businesses in most societies (Amorós & Bosma, 2014; Gupta, Goktan, & Gunay, 2014). However, the number of new

women-owned firms has increased of the past 40 years at a rate of two to three times the overall business start-up rate (Sciglimpaglia, Welsh, & Harris, 2013).

Women may approach entrepreneurial ventures differently than men (Jayawarna et al., 2013; Saridakis, Marlow, & Storey, 2014). Allen and Curington (2014) and Figueroa-Armijos and Johnson (2013) reported that women engage in entrepreneurship because of a desire for more flexibility to deal with family-related issues and financial independence. Conversely, Allen and Curington supported previous research findings that men are motivated to start a business for pecuniary reasons (Kariv, 2011). Additionally, van Hulten (2012) found that women entrepreneurs depended more on family and social networks for business support.

***Entrepreneurship Training.*** Entrepreneurship training offerings have grown from their beginnings in the 1940s until now. Entrepreneurship education began at the university level at Harvard University in 1947 (Abduh, Maritz, & Rushworth, 2012). Many other schools followed, and by 2012 over 1,000 institutions in the United States offered entrepreneurship courses (Abduh et al., 2012). Despite debate whether individuals can learn entrepreneurship (Lautenschlager & Haase, 2011), the preponderance of entrepreneurship education studies cite the ability to teach entrepreneurship (Morris et al., 2013; Raposo & do Paco, 2011; Schmidt et al., 2013).

The growth of entrepreneurship preparation was encouraged and supported by government and private resources. Both governments and private foundations provided funding and resources to entrepreneurship training with the goal of developing more entrepreneurs (Mars & Ginter, 2012; Rideout & Gray, 2013). For example, The Ewing

Marion Kauffman Foundation in Kansas City, MO, supports entrepreneurship and entrepreneurship instruction with dollars, curriculum development, and initiatives to spur entrepreneurship (Rideout & Gray, 2013). In addition, the Coleman Foundation provides grant funding specifically for entrepreneurship preparation (Mars & Ginter, 2012). Entrepreneurship education at universities and entrepreneurship training organizations benefit from the influx of support (Mars & Ginter, 2012).

Training programs exist in different lengths, modalities, and targeted audiences. Some entrepreneurship training programs carry the name of *boot camp* in their title to connote the brief yet thorough nature of the program (Bharadwaj et al., 2010). Others meet once per week or month to offer entrepreneurs the opportunity to educate themselves at a slower pace, while continuing to run their businesses (Pruett, 2012). Participants in these types of training programs report high satisfaction with the type and quality of instruction received (Bauer, 2011). These programs offer training to those who might not otherwise have the opportunity for formal entrepreneurship education at a higher education institution.

Higher education institutions offer entrepreneurship education courses, certificate programs, minors, and majors. Over 1600 universities offer at least one entrepreneurship course (Winkel et al., 2013). While entrepreneurship programs exist as an extension to the school of business, recent trends show that entrepreneurship programs exist outside the school of business (Winkel et al., 2013).

Winkel et al. (2013) argued that entrepreneurship housed in the business school might be less than ideal because business schools structure programs around functional

areas. Entrepreneurship education programs require coverage of the entire scope of business (Buller & Finkle, 2013; Wielemaker, Gaudes, Grant, Mitra, & Murdock, 2010). Some entrepreneurship programs reside in their own departments or within centers of entrepreneurship or small business (Bridgstock, 2013; Parthasarathy, Forlani, & Meyers, 2012; Wielemaker et al., 2010). These arrangements encourage cross-disciplinary use (Bridgstock, 2013; Parthasarathy et al., 2012; Rideout & Gray, 2013; Zarafshani, Cano, Sharafi, Rajabi, & Sulaimani, 2011).

Entrepreneurship education may provide benefits to students in many fields. Cross-disciplinary entrepreneurship education offers the necessary knowledge, skills, and abilities to those involved in fields that lend themselves to self-employment (Parthasarathy et al., 2012). The entrepreneurship education of students in fields outside business schools and of secondary students supports economic growth by stimulating entrepreneurial activity (Parthasarathy et al., 2012; Sánchez, 2013).

Entrepreneurship training, along with age and gender, exist as factors that might influence an individual either toward or away from entrepreneurship. However, according to the TPB, only attitudes toward entrepreneurship, subjective norms, and perceived behavioral control influence intention (Jaén & Liñán, 2013). Furthermore, Ajzen's TPB exists in the literature as the dominant model with no serious challenges from other researchers in the field of entrepreneurial intention (Carsrud & Brännback, 2011; Mobaraki & Zare, 2012). Because of the acceptance and credibility of the TPB, I analyzed results in this study through the lens of the TPB.



## **Entrepreneurial Intention**

Choices with significant or long-term outcomes compel the decision maker to consider options before making decisions. Options may include intentionality to fulfill the action of the decision. Mobaraki and Zare (2012) defined intention as the temporary, mental state prior to taking action. Mueller (2011) posited that intention is the immediate antecedent of behavior. Thus, intention includes the thought process of the decision maker prior to taking action or performing a behavior. Planned behavior incorporates the mental precursor to behavior, defined as intention (Dinis, do Paco, Ferreira, Raposo, & Gouveia, 2013). Further, reactionary behavior lacks the mental precursor or intention (Ajzen, 1991).

Intention presupposes a planned behavior. Psychological literature shows that intention is the best predictor of future behavior (do Paço et al., 2011). Any planned behavior, such as career choice, is intentional (Mobaraki & Zare, 2012). For example, a career choice to start a new business involves intentionality. The relationship between decisions and intentionality may lead to an examination of the intentionality aspect of entrepreneurship.

## **Theories of Entrepreneurial Intention**

Literature on intentionality among those who start new businesses predominantly included content concerning entrepreneurial intention. Entrepreneurial intention is a measure of intentionality commonly used in entrepreneurship research literature (Liñán, Rodríguez-Cohard et al., 2011; Rasli et al., 2013). The opportunity recognition process associated with entrepreneurship is clearly intentional; therefore, entrepreneurial

intention merits the attention of entrepreneurship researchers (Douglas, 2013; Ferreira, Raposo, Gouveia Rodrigues, Dinis, & do Paço, 2012; Schlaegel & Koenig, 2014). Three models subsist among research studies on the topic of entrepreneurial intention: (a) Shapero's model of the entrepreneurial event, (b) Bird's model of implementing entrepreneurial ideas, and (c) Ajzen's TPB (Uygun & Kasimoglu, 2013). While these models include overlapping entrepreneurial intention elements, differences exist among the models.

**Entrepreneurial event model.** Shapero introduced the entrepreneurial event model, the earliest model commonly used in entrepreneurial intention research, in 1982 (Uygun & Kasimoglu, 2013). Leung et al. (2012) explained that the model of the entrepreneurial event includes intention arising from the perceived feasibility and desirability of the opportunity, as well as from a propensity to take action. The entrepreneurial event model includes an assumption that actions continue until an interruption occurs. These interruptions might cause decision makers to re-examine the feasibility and desirability presented opportunities (Schlaegel & Koenig, 2014). However, the entrepreneurial event model may lack the elements necessary for researchers to examine cultural influences on a person's decisions to enter entrepreneurship.

**Model of implementing entrepreneurial ideas.** Bird's model of implementing entrepreneurial ideas includes individual and contextual conditions that interact with the thought process of forming entrepreneurial intention (Uygun & Kasimoglu, 2013). Individual conditions include personal history, personality, talents, and skills (Uygun & Kasimoglu, 2013). Contextual conditions arise from the effect of the outside social,

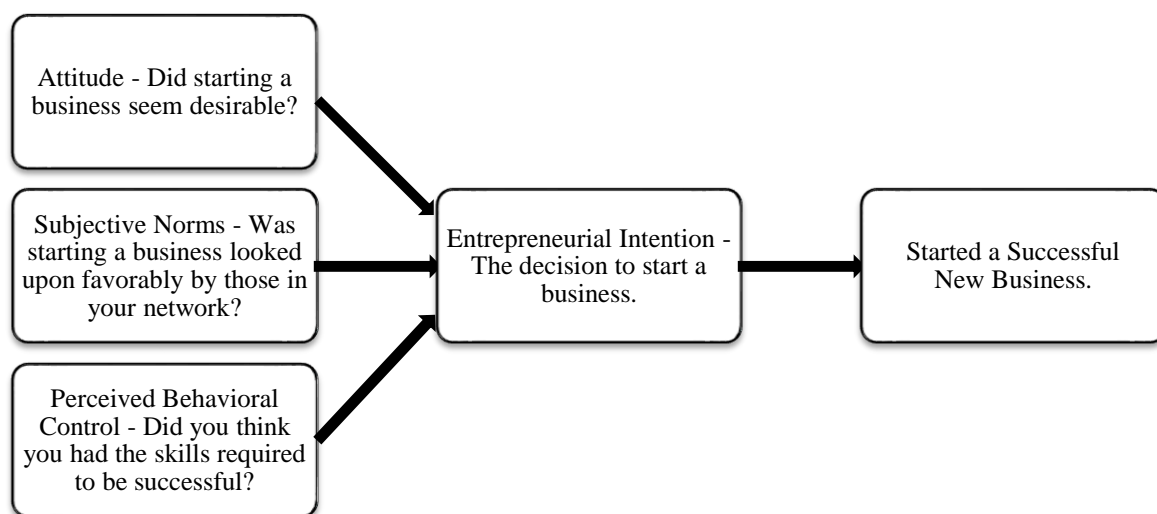
political, and economic environment (Uygun & Kasimoglu, 2013). The blend of individual and contextual conditions combines with time to yield entrepreneurial intentions that lead may to entrepreneurial behavior. Bird's model of implementing entrepreneurial ideas includes elements to address the influence of others on an entrepreneur's decisions; however, the model does not contain elements to address an entrepreneur's perceived control.

### **Theory of Planned Behavior**

The third theory, Ajzen's (1991) TPB, stipulates three attitudinal antecedents of intentions: (a) attitude toward the behavior, (b) subjective norms, and (c) perceived behavioral control. Ajzen affirmed that the motivational factors that exist when a person desires to perform a specific behavior comprise intention. Furthermore, Ajzen stated that intentions can be weak or strong. The greater the intention, the more likely the action will occur (Ajzen, 1991). The TPB is the dominant model in the literature with no serious challenges from other entrepreneurial intention researchers (Carsrud & Brännback, 2011; Mobarak & Zare, 2012). Because of the acceptance and credibility of the TPB, I emphasized the TPB and the use of the TPB in this study.

Liñán and Chen (2009) applied elements of the TPB to entrepreneurial intention through research based on the EIQ. Liñán and Chen created, tested, and validated the EIQ through survey research on 519 participants from two diverse countries to confirm its applicability for entrepreneurial intention research. Through the examination of survey results, Liñán and Chen further validated previous findings of applicability. The elements of the TPB include (a) attitude toward start-up, (b) subjective norms, and (c) perceived

behavioral control (do Paço et al., 2011; Liñán & Chen, 2009). The TPB, as shown in Figure 1, will guide my analysis of the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict business success among NAs.



*Figure 1.* Theory of planned behavior elements with added entrepreneurial cues and dependent variable (based on Ajzen, 1991).

**Attitude toward start-up.** Attitude encompasses a person's personal mindset toward a behavior. Attitude toward start-up refers to the level of positive or negative valuation of the advantages and disadvantages of venture creation (Liñán & Chen, 2009). In the TPB, attitudes towards a behavior correspond to perceived desirability in the entrepreneurial event model (Guzman-Alfonso & Guzman-Cuevas, 2012). Attitudes toward entrepreneurship and the effect of these attitudes on entrepreneurial intention have energized new interest among researchers (Gibson, Harris, Mick, & Burkhalter, 2011; Moi, Adeline, & Dyana, 2011; Solesvik, 2013). Additionally, many studies regarding current and future entrepreneurs include literature on attitudes toward entrepreneurship as

an element even when not using the TPB (Moi et al., 2011; Petridou & Sarri, 2011; Thompson et al., 2010; Wurthmann, 2013). The consistent use of attitudes toward entrepreneurship in entrepreneurial intention literature shows the importance of attitude as a factor influencing intention.

**Subjective norms.** Whereas the TPB includes elements of a person's personal attitude, the TPB also involves the attitudes of those around the decision maker. Subjective norms or normative beliefs incorporate the effect a network of influencers has on a person's plans (Mueller, 2011). Ajzen (1991) noted that subjective norms refer to the actual or perceived social or peer pressure to perform a behavior. The pressure not to perform a behavior may be just as great (Ajzen, 1991).

Subjective norms arise from the approval or disapproval of a person's behavior multiplied by the person's motivation to comply (Ajzen, 1991). Aslam, Awan, and Khan (2012) found that a family background of entrepreneurship positively influences subjective norms associated with entrepreneurial intention. Because some cultures or groups place more or less value on entrepreneurship, the influence of subjective norms varies by population (Ajzen, 1991; Schlaegel et al., 2013). Edelman et al. (2010) observed, when examining data from the PSED, that parents of African American entrepreneurs offered greater support to their children for entrepreneurship than Caucasian parents. African American nascent entrepreneurs also sought backing from peers and church members (Edelman et al., 2010). Shoebridge, Buultjens, and Peterson (2012) added that spouses and extended family exerted influence on entrepreneurial decisions among indigenous populations. Pisani (2012) discovered that the greatest

influence on the decision to engage in entrepreneurship between Latino's in South Texas was encouragement from family. Molaei, Zali, Mobaraki, and Farsi (2014) added that subjective norms affect entrepreneurial intention even when the opinions of one's influencers mislead.

**Perceived behavioral control.** Similar to the concept of self-efficacy, perceived behavioral control entails individuals' perceptions of how well they can perform or handle a situation (De Clercq, Honig, & Martin, 2011). Perceived behavioral control and perceived feasibility share common elements. Lown (2011) characterized (a) perceived behavioral control, (b) perceived feasibility, and (c) self-efficacy as an individual's ability to handle a situation without becoming overwhelmed. Bullough, Renko, and Myatt (2014) described entrepreneurial self-efficacy as the level of confidence in carrying out the duties required to start-up and manage a business. The stronger the sense of one's entrepreneurial self-efficacy or perceived behavioral control, the more likely the individual is to engage in venture creation activities and persist in business start-up and management (Bullough et al., 2014).

Chou, Shen, and Hsia (2011) stated that entrepreneurial self-efficacy has a positive influence on entrepreneurial intention and learning behavior. While a learner benefits more from training or experience when they possess self-efficacy, the reverse is also true (Chou et al., 2011). Entrepreneurship training, entrepreneurial experiences, and entrepreneurial role-models or mentors positively affect the perceived behavioral control component of entrepreneurial intention (Pittaway, Rodriguez-Falcon, Aiyegbayo, & King, 2011; Rideout & Gray, 2013; Sánchez, 2013; Studdard, Dawson, & Jackson,

2013). Mobaraki and Zare (2012) explored and confirmed the importance of self-efficacy among entrepreneurs in a qualitative study.

**Applications of the TPB elements.** Researchers investigating behavioral domains applied the TPB elements in more than 18,000 published research articles (Ajzen, 2012). Kibler (2013) supported the wide spread use of the TPB elements with notations of the wide acceptance for examining human behavior. Particularly relevant to this study, Kibler found the TPB elements to be useful in studying regional and cultural conditions associated with entrepreneurial intention. Kibler, like Liñán, Urbano, et al. (2011), found cultural context to both positively and negatively influence both attitudes toward entrepreneurship and subjective norms. Krueger, Liñán, and Nabi (2013) added that when a culture highly values entrepreneurship, attitudes toward entrepreneurship and subjective norms remain more positive. Krueger et al. continued with confirmation that positive perceived behavioral control arises from an environment that values venture creation. Schlaegel et al. (2013) offered similar results to those of Krueger et al., finding that in a study involving different cultures subjective norms explained most of the variance in entrepreneurial intention.

In a different approach to research on business creation among differing regions, Fernández-Serrano and Romero (2013) conducted empirical research on SMEs in low- versus high-income areas. Through their analysis of survey data collected from 663 SME managers and owners in four different provinces in Spain, Fernández-Serrano and Romero utilized entrepreneurial quality as a framework for their research. The entrepreneurial quality framework approach included both descriptive and correlational

statistical calculations. Fernández-Serrano and Romero found that SMEs in the low-income regions of the study yielded a lower entrepreneurial quality score than SMEs in the high-income regions. In a different study comparing entrepreneurial intention in different economic situations, Iakovleva et al. (2011) found that entrepreneurial intention is higher among those in developing economies as compared to developed economies.

Carey et al. (2010) studied entrepreneurial intention by size and type of venture using the elements of the TPB. Carey et al. calculated descriptive and correlational statistics on the survey data finding support for the TPB elements to examine entrepreneurial intention. However, Carey et al. found that the TPB elements did not correlate well with the intentions of participants who desired to start a small, lifestyle venture. Vissa (2011) explained that attitudes, subjective norms, and perceived behavioral control influenced the desire of an entrepreneur to convert personal ties to ties with economic results. Carey et al. and Vissa demonstrated that some entrepreneurs start businesses for reasons other than financial goals.

Sánchez (2013) studied attitudes toward entrepreneurship, subjective norms, and self-efficacy (perceived behavioral control) among 14 to 17 year-olds. Self-efficacy correlates with proactiveness (Sánchez, 2013). Sánchez's use of the TPB elements provided an example of including an additional variable of comparison. Sommer (2011) offered additional empirical research examining the relationship of the TPB variables to an additional variable.

Additionally, Fretschner and Weber (2013) expanded on the use of TPB variables by adding a qualitative component. Their new model, the entrepreneurship education



model (EEM), was designed specifically to measure the impact of entrepreneurship awareness education on students' attitudes, subjective norms, and perceived behavioral control. Fretschner and Weber created their survey questions from Liñán and Chen's (2009) EIQ and added open-ended questions to collect additional responses from students. Through application of the EEM with German university students, Fretschner and Weber confirmed the applicability of adding research specific questions to the EIQ for the purposes of measuring attitudes toward entrepreneurship, subjective norms, and perceived behavioral control. Leung et al. (2012) included elements of both the TPB and the EEM in their empirical research involving engineering students and entrepreneurial activity.

### **Sources of Entrepreneurial and Small Business Assistance**

Multiple sources of assistance exist beyond the formal training programs previously mentioned. Business incubators lower the barriers to entry into entrepreneurship by offering support services, as well as space to nascent entrepreneurs to pursue their business idea without a large outlay of funds (Al-Mubarak & SchröL, 2011; Mars & Ginter, 2012). Moreover, business accelerators help businesses grow by offering networking support with other entrepreneurs and experts in the field (Audretsch, Aldridge, & Sanders, 2011). The physical spaces provided for entrepreneurs to gather and work amongst peers and support personnel exist to increase the likelihood of business success. Business supporters can help businesses get started in business incubators and facilitate business growth in accelerators.

**Government support.** Further reaffirming the contribution of small businesses to

the economy, the U.S. Congress passed the Small Business Act of 1953 creating the SBA (Litwin & Phan, 2013). The SBA's mission included support of small businesses and programs designed to help small businesses compete for government contracts and secure appropriate financing for their firms (Fernandez et al., 2012; Litwin & Phan, 2013; Mihajlov, 2012; Yallapragada & Bhuiyan, 2011). The SBA creates and operates outreach and financial support programs for small businesses (Fernandez et al., 2012; Mihajlov, 2012). In 2010, the SBA Office of Advocacy advocated business expansion and new venture creation to stimulate job growth for economic recovery (Sciglimpaglia et al., 2013). The SBA's support for small business substantiates the positive economic benefit of small businesses; thereby, justifying the SBA's expenditures on support programs and outreach assistance for U.S. small businesses.

SBDCs exist as an outreach program of the SBA, which works to benefit small businesses (Knotts, 2011). For business support at any stage, entrepreneurs may turn to a small business support office for assistance. Support for existing small- to medium-sized business growth derives from SBDC short-term assistance and referrals (Knotts, 2011; Mars & Ginter, 2012). SBDCs, while sometimes housed on university campuses, focus on community members with businesses or business ideas (Knotts, 2011). Additionally, SBDCs offer training courses for interested community members, personal assistance to entrepreneurs and business owners, online resources, and economic development support for their location (Knotts, 2011). SBDCs offer formal part-time consulting or support to small businesses without the size necessary to employ experts in all areas of business development.

The consulting offered by SBDCs may vary according to the client. Nascent entrepreneurs may benefit from SBDC market and financial analyses (Sciglimpaglia et al., 2013). Sciglimpaglia et al. (2013) found that existing businesses seek operations assistance from SBDCs more often than they seek strategic or administrative assistance. Small existing businesses rated marketing as the most important operations service offered by SBDCs (Sciglimpaglia et al., 2013). Sciglimpaglia et al.'s survey results from the broad range of business industries included responses ranking financial and strategic planning highest in the strategic category of services and special government programs highest among administrative services needed. When considering gender and minority status with the results, Sciglimpaglia et al. found that minority women entrepreneurs desired a broader range of services than men and nonminority women.

Another program supported by the SBA, the Service Corps of Retired Executives (SCORE) began in 1970 (St-Jean & Audet, 2013). Bharadwaj et al. (2010) likened the individualized services of SCORE volunteers to the assistance provided by SBDCs. SCORE volunteers provided 12,000 volunteer hours to mentor over eight million small businesses across the United States (Miles, 2012; St-Jean & Audet, 2013). St-Jean and Audet (2013) discovered that mentoring programs like SCORE increased the mentees' business competence as well as their entrepreneurial self-efficacy.

In addition to SCORE and SBDCs, the SBA promotes small business formation and success among disadvantaged groups through the SDB program (Fernandez et al., 2012). A firm must be at least 51% owned and controlled by an African American, Hispanic American, Asian Pacific American, Subcontinent Asian American, or NA and

meet size qualifications to be eligible for the SDB program (Fernandez et al., 2012).

These firms receive government contract advantages as well as additional support from the SBA and other governmental agencies (Fernandez et al., 2012; SBA, 2014b).

Added government assistance for minority business owners arose from the U.S. Department of Commerce MBDA (Liu, 2012). Focused not only on small businesses, the MBDA programs encouraged growth of small, medium, and large minority-owned businesses (Liu, 2012). The existence of the MBDA within another branch of the U.S. government further demonstrates the level of significance placed on firm creation and growth.

The U.S. government created another program to help small businesses innovate. The Small Business Innovation Research (SBIR) program began in the 1970s to encourage small businesses to bring innovative products to market (Link & Scott, 2012). Hargadon and Kinney (2012) found the SBIR program to be effective in encouraging small businesses research and development. Link and Scott's (2012) research provided evidence that the SBIR program also succeeded in encouraging small businesses to commercialize federally funded research and development projects. The SBIR funding for innovation stimulates small business development and growth (Hargadon & Kenney, 2012).

**Loan assistance.** Entrepreneurs also may benefit from special loan programs designed to help financial institutions make loans to businesses that might otherwise lack collateral or a credit score to meet bank requirements. The SBA provides loan backing to local banks that lend to entrepreneurs (Yallapragada & Bhuiyan, 2011). Despite SBA and

other programs for entrepreneurial loan assistance, minorities find even greater financial capital barriers than other entrepreneurs because of fewer network contacts and a lack of understanding about how outside investment works (Bates & Robb, 2013). Bates and Robb (2013) also found that minority-owned small businesses lack equal access to capital as compared to non-minority small businesses as illustrated in their findings that revealed that 37% of nonminority-owned start-ups used borrowed funds. However, Bates and Robb discovered that only 29% of African American-owned start-ups used borrowed funds. In addition to this discrepancy, the loans provided to African American-owned start-ups were 43% smaller than loans provided to nonminority-owned start-ups (Bates & Robb, 2013).

Minority-owned firms relied heavily on credit cards and other bootstrapping techniques to fund the operations of their start-ups (Bates & Robb, 2013). Some minority entrepreneurs do not seek financing because they fear denial (Servon, Visser, & Fairlie, 2010). Instead, minority entrepreneurs may rely on personal credit cards that further restrict growth because the use of the credit cards also affects the credit scores of the individual entrepreneurs resulting in difficulty in securing a loan (Servon et al., 2010).

According to Okpala (2012), minority entrepreneurs in the Lagos State do not understand venture capital and tend to avoid using outside equity financing. Similarly, indigenous populations also tend not understand equity financing and may be unwilling to give up ownership to an outside party (Peredo & McLean, 2010). New entrepreneurs may balk at giving up ownership of their company for cultural or personal reasons (Peredo & McLean, 2010; Rubin, 2011). Others do not understand or agree with the

estimates of value and are unwilling to give up the percent of ownership that makes the deal feasible for the investor (Amatucci & Swartz, 2011; Anshuman, Martin, & Titman, 2012). Ortiz-Walters and Gius (2012) determined that many minority entrepreneurs lack knowledge on debt management to benefit a business. Entrepreneurship training influences entrepreneurial capacity through affecting cultural and social norms (Diaz-Casero, Hernandez-Mogollon, & Roldan, 2011); therefore, support programs educating minorities about entrepreneurship could help alleviate challenges to business survival and growth.

**Support for minority business owners.** Research on training and support programs revealed positive results. Benson et al. (2011) found that business support programs located in an area where a minority group lives increased business start-ups and reduced poverty. The Lakota Fund provided microfinance loans requiring no collateral to citizens to create businesses that, in turn, created jobs in the area (Benson et al., 2011). Benson et al.'s results provide evidence that microfinance loans and small business support can boost entrepreneurial endeavors, increase job creation, and reduce poverty among groups with lower rates of entrepreneurship.

As more minorities succeed as entrepreneurs, new entrepreneurial networks will grow (Rubin, 2011). New investors may arise from the pool of new entrepreneurial network members to support nascent women and minority business owners (Rubin, 2011). The entrepreneurs who benefited from this support program can now provide support to others in the area with entrepreneurial intentions, thereby, potentially reducing the need for the government subsidized support office over time. Bates and Robb (2013)

showed that despite the growth of minority-owned businesses, challenges still exist. The challenges faced by minority entrepreneurs may stem from different cultural or personal background, and few studies have examined the differences in the business formation process among different racial/ethnic groups (Liu, 2012; Peredo & McLean, 2010; Rubin, 2011). The cultural and personal background of NAs entrepreneurs may differ from that of other entrepreneurs; therefore, different factors may contribute to entrepreneurship decisions among NAs.

### **Entrepreneurship Among NAs**

Entrepreneurship has not always been scarce among NAs. NAs traded the fruits of their labors with other tribes and European settlers in the years preceding American expansion westward (Miller, 2012). Miller (2012) explained that this system of trade continued until the U.S. government removed NAs from their homelands and forced them to give up their property. Miller noted that U.S. leaders in the early 1800s did not seem to understand the property and economic systems of the NAs caused by the dissimilar nature of the NA culture to the Euro-American culture. This misunderstanding or indifference toward the NAs that resulted in their removal from their homelands subsequently caused losses of tribal populations, higher unemployment, and little entrepreneurial activity (Harmon, 2010; Miller, 2012). With no way to support their families economically, NAs became dependent upon tribal or governmental assistance (Miller, 2012).

Because of the poor health of tribes after their removal, many turned to dependence upon government assistance (Miller, 2012). This dependence led to a cycle

of poverty. More than 20% of NAs live on one of the 310 NA Indian reservations managed by the U.S. Department of the Interior's Bureau of Indian Affairs (Benson et al., 2011). Through 2011, unemployment rates reached 80% on the reservations compared to an average of 6% in most other regions in the United States (Benson et al., 2011). Household income on Indian reservations averages 75% lower than the U.S. average, and poverty rates average 36%, which is three times the U.S. average (Benson et al., 2011). Flynn, Duncan, and Evenson (2013) examined 2008 U. S. census information to establish the low median annual income of \$33,627 for NAs.

In other measures of socioeconomic position, less than 1% of NAs on reservations earn bachelor's degrees and 15% do not own a vehicle or a telephone (Frantz, 2010). The lack of adequate water, sewage, and telecommunications infrastructure in NA communities (Mathers, 2012) also perpetuates poverty and hinders progress. The external factors that exist more prevalently in NA communities than in other areas hinder small business creation, growth, and survival (Miller, 2012). Dayanim (2011) also found that the resources available in a location affect firm survival. The resource challenge for NAs living on reservations decreases their likelihood to start and grow businesses.

The socioeconomic status of NAs living off reservation is less dismal than the status of those who live on the reservations but is still below U.S. averages. Overall NA unemployment and poverty levels are twice as high as the national averages (Juntunen & Cline, 2010; Mathers, 2012). Four percent of NAs earned a bachelor's level degree as compared to 27% of the general population (Association for the Study of Higher Education, 2012). The dropout rate of American Indians, 36%, ranked higher than any



other U. S. minority group (Flynn et al., 2013). The lower education attainment rates by NAs also diminished their chances of business success (van den Born & van Witteloostuijn, 2013). An increase in entrepreneurial activity could improve the socioeconomic outlook of NA communities as has occurred in other regions of the United States (Miller, 2012). The outlook improvement could spur additional interest in business formation.

Increased entrepreneurial activity spurred by tribal organizations offers greater benefit than support from organizations not specifically focused on NAs. Dreveskracht (2013) covered the fundamentals of NA economic development and how solar energy could positively benefit reservations and tribal development without compromising cultural values. The commitments of the U.S. presidential administration to NA economic development offer funds to support endeavors in entrepreneurship and entrepreneurship training (Dreveskracht, 2013; SBA, 2014b). Dreveskracht insisted that the key to successful implementation of programs for NA economic development lies in the tribal administration being in control rather than outsiders. Because of many past exploitation and fraud attempts from outside business interests, tribal communities view outside attempts at boosting the tribal economy skeptically (Dreveskracht, 2013). Dreveskracht also emphasized the importance of tribal sovereignty to create capable institutions that can sustain economic growth within a tribe. Consequently, efforts to assist in entrepreneurial development of NAs must align culturally and come from trusted sources or tribal organizations to be well received and effective.

### **Examining NA Entrepreneurship Using the EIQ**

An exhaustive literature search provided a clear description of entrepreneurship, the importance of entrepreneurship to the economy, the factors that contribute to entrepreneurial intention, entrepreneurship training and assistance, and how these topics relate to NA business ownership. Entrepreneurship involves forming a new business, creating new products or services, and creating jobs, all of which stimulate the economy (Nazir, 2012; Uddin & Bose, 2012). The importance of entrepreneurship and small businesses to the economy has resulted in many research studies on the topic.

Of the research studies concerning the factors contributing to a decision to pursue entrepreneurship as a career and start a new business, some employ qualitative methods while others employ quantitative methods. Zellweger and Sieger (2012) completed a qualitative, case study research project to explore the entrepreneurial orientation of long-lived family-owned firms. Other researchers interviewed small business owners to explore the factors contributing to entrepreneurship (Abduh et al., 2012; Bauer, 2011). Furthermore, Gerba (2012b) explored curriculum and approaches to teaching entrepreneurship. Gerba found that experiential learning fostered venture creation aptitude and skills. These qualitative studies provide textual information to aid in understanding of different entrepreneurial contributing factors for women, students, and different nationalities but not NAs.

Other researchers concerned with the field of entrepreneurial intention utilized quantitative methods to conduct their research. The entrepreneurial attitudes orientation (EAO) survey builds upon Shapero and Sokol's entrepreneurial event model (SEE) with a

focus on perceived feasibility and perceived desirability as contributing factors to a decision to start a business (Wurthmann, 2013). Gibson et al. (2011) employed the EAO survey instrument to compare the entrepreneurial intention of community college students to 4-year college students. Wurthmann (2013) compared propensity toward innovation with EAO results from business students to compare attitude toward innovation with attitude toward starting a business. The EAO and SEE do not align as closely as the EIQ with the research goals of this study because of their lack of focus on the influence of network participants in deciding to start a business.

While some scholars examined push, pull, and other factors that influence a person's decision to pursue entrepreneurship rather than other career choices, the strong linkage between intention and behavior warrants a research approach inclusive of entrepreneurial intention (Bauer, 2011; Elmuti et al., 2012; Liñán & Chen, 2009; Mobaraki & Zare, 2012). The decision to use an entrepreneurial intention approach using Liñán and Chen's (2009) EIQ to answer the research questions stemmed from the literature review. During the literature review, I explored other frameworks. The entrepreneurial event model lacked an element that considered the influence of culture on a person's decisions to start a business (Uygun & Kasimoglu, 2013).

The TPB included a subjective norms variable to measure the effect of culture (Iakovleva et al., 2011). Furthermore, the variables included in the TPB dominate the literature with wide acceptance and credibility for studies of entrepreneurial intention (Mobaraki & Zare, 2012). By examining the results of the EIQ instrument completed by NA small business owners, I uncovered information about the likelihood that attitudes

toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs.

This study utilized the EIQ as the instrument for data collection. Liñán and Chen (2009) developed the EIQ in hopes of standardizing entrepreneurial intention measurement to allow for meaningful comparisons across multiple research studies performed by scholars across the world. Liñán and Chen utilized the EIQ to compare entrepreneurial intention scores between Spanish and Taiwanese university students. Liñán, Urbano, et al. (2011) then used the EIQ to study regional variations of entrepreneurial intention in Spain. Gerba (2012a) used the EIQ in Africa to study the effect of entrepreneurship instruction on entrepreneurial intention.

Do Paço et al. (2011) found that subjective norms do not influence entrepreneurial intention as strongly among 14 and 15 year old study participants using the EIQ. Each of these uses of the EIQ supports the utilization of the EIQ for studies involving multiple different ages and locations of groups (Liñán, Urbano, et al., 2011), yet none of the documented studies examined these factors among NAs. The EIQ offers the ability to capture information relating to all three elements of the TPB, the theoretical framework guiding this study.

Elements of the TPB guided the creation of the research questions for this study (Iakovleva et al., 2011). The first element of the TPB is a person's attitude toward starting a business (Liñán & Chen, 2009). The responses from five EIQ questions averaged to create the attitude variable (Liñán, Urbano, et al., 2011). The average of three EIQ responses combined to create the subjective norms variable that measures the

influence of others on entrepreneurial decisions (Liñán, Urbano, et al., 2011).

The average of another seven question responses combined to create the perceived behavioral control variable (Liñán, Urbano, et al., 2011). I compared these variables with the success of each NA-owned business. The EIQ elicited the responses necessary to answer the research questions of the study (Iakovleva et al., 2011). Other survey instruments exist similar to the EIQ; however, the similar instruments do not elicit the responses required to answer the research questions in this study (Iakovleva et al., 2011). Section 2 contains detailed information concerning the research approach and participants.

### **Transition and Summary**

In Section 1, I called attention to the contributions of new business formation on the economy. Some studies have addressed different aspects of entrepreneurship and small business success and failure, but few studies address NA businesses despite the disparity in the number of businesses started and owned by NAs in comparison to others in the United States (Franklin et al., 2013; MBDA, 2014; Stewart & Pepper, 2011). The purpose of this study was to describe the factors related to NA business formation and success by surveying successful NA business owners. I applied a quantitative correlational methodology to examine the relationships, if any, between attitudes toward entrepreneurship, subjective norms, perceived behavioral control, and business success. The theoretical framework, Ajzen's (1991) TPB, provides guidance for the analysis of factors contributing to the decision to start a business.

Entrepreneurship adds value to societies. First, entrepreneurship stimulates

economic growth (Hitt, Ireland, Sirmon, & Trahms, 2011). Additionally, entrepreneurship provides opportunities for people to improve their employment situation, pursue personal interests, and upgrade their income and social status while providing jobs to others (Bauer, 2011; Neumark et al., 2011; Omar, 2011). The SBA supports small businesses through online resources, local support offices, and the SDB program to assist disadvantaged businesses (Fernandez et al., 2012; Mars & Ginter, 2012). Despite the appeal and support available, NAs lag other groups in new business formation and business growth (MBDA, 2014; Stewart & Pepper, 2011). Liu (2012) called for additional research on the factors that contribute to new venture creation among minority groups. NAs compose 1.5% of the U.S. population (MBDA, 2014). This study might address a gap in business practice regarding the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs.

In Section 2, I included a detailed description of the role of the researcher, study participants, research methodology, population, sampling criteria, data collection instruments and techniques, data analysis, and reliability and validity measures. Section 3 includes a presentation of study findings, explanation of how the findings apply to professional practice, and a discussion concerning the implications for social change. Additionally, I offered recommendations for future actions and further study and reflected on the research process and experiences.

## Section 2: The Project

NAs engage in entrepreneurship at lower rates than other demographic groups within the United States despite widespread agreement on the benefits of entrepreneurship (Franklin et al., 2013). I explored the gap in business practice related to NA venture creation and business success. By surveying NA business owners and performing statistical analyses of the resulting survey data, I examined the relationships between attitudes toward entrepreneurship, subjective norms, perceived behavioral controls, and business success. This section of the study includes a description of (a) the purpose of the research study, (b) my role as the researcher, (c) the participants, (d) the research method and design, (e) the ethical treatment of the participants and data, (f) data collection and analysis, and (g) the reliability and validity of the data.

### **Purpose Statement**

The purpose of this quantitative correlational study was to examine the likelihood that NA attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success. Independent variables included those that compose the theory of planned behavior: (a) attitudes toward entrepreneurship, (b) subjective norms, and (c) the entrepreneur's perceived behavioral control of the venture creation process (Liñán & Chen, 2009). A positive profit in the previous business year constituted the dependent variable: business success (Owens et al., 2013).

The study population included approximately 550 business owners registered with a single NA tribe's small business office in the South Central region of the United States. NA business owners are an underdeveloped source of entrepreneurialism and are rarely

studied (Franklin et al., 2013). Findings might contribute to social change in a rarely studied population by offering insight into the relationship between entrepreneurial intention and small business success leading to job creation and innovative new products and services.

### **Role of the Researcher**

My involvement as the researcher included the selection of the survey instrument, delivery of the survey via email or postal mail, and analysis of the survey data. Liñán, Urbano, et al. (2011) used the EIQ, the survey instrument selected for this research study, to collect data related to cultural influences on entrepreneurial intention. I modified the survey instrument, with permission from the author (see Appendix B), with wording appropriate to the NA population to prepare the survey for use in this study. Members of the tribal business support office of the targeted population verified that this language was appropriate for the participants (H. Williams, personal communication, March 24, 2014).

After acquiring approval for the study, I transferred the survey questions to an online survey instrument hosted on SurveyMonkey.com<sup>®</sup> for use with participants with access to email and the Internet. Those business owners without a listed email address in the business registry received a paper version of the survey instrument. Dodou and Winter (2014) found no differences in a meta-analysis of online and offline survey responses. Distribution of the survey to participants included no plans for in-person contact, as survey distribution occurred via email and postal mail invitations (see Appendices C & D). All business owners whose contact information was published on



the tribal public business registry website received an invitation to participate.

Survey responses were collected from the SurveyMonkey.com<sup>®</sup> website after the initial 2-week survey window had closed. After the 2-week survey window, not enough participants had responded to meet sample requirements; a reminder email was sent via SurveyMonkey.com<sup>®</sup>. By using unique links in SurveyMonkey.com<sup>®</sup>, reminder emails went only to invitees who had not yet responded (see Appendix E). Similarly, single phone call reminders went out to 35 survey recipients who had yet to respond via listed phone numbers on the public NA business registry website (see Appendix F). After the email reminder and phone call reminders, 79 participants had completed either the online or the paper survey. After the required sample had responded, I combined the online responses and the paper-based responses in a password-protected Excel<sup>®</sup> spreadsheet for data analysis.

As the director of an entrepreneurship program at a university, I have studied entrepreneurial intention only among students. Moustakas (1994) indicated that researchers must recognize potential for bias. To avoid the potential for bias in this study, the population selected did not include students.

My responsibility in this study was to ensure that principles outlined in the Belmont Report were upheld. The Belmont Report protocol calls for respect for persons, beneficence, and justice in the selection of participants (Manasanch et al., 2014). Beneficence refers to a researcher's ability to maximize benefit while minimizing risks (Annoni, Sanchini, & Nardini, 2013; C. R. Quinn, 2015). For ethical guidance compliance, I completed the online course entitled Protecting Human Research

Participants earning certificate number 1079401 (see Appendix G).

### **Participants**

Participants in the study received invitations via email or postal mail (see Appendices C & D). The small business support center for the tribe, which is located in the South Central region of the United States, maintains a listing of all businesses owned by tribal members. This listing resides on a publicly available website and contains all necessary contact information for the study. A tribal procurement officer granted permission for the use of the information for this study (see Appendix H).

Each of the business owners who had an email address on the list received an email invitation to participate in the online survey (see Appendix C). The email invitation included a brief explanation of the study and an individual link to the survey to ensure that participants did not answer questions multiple times. Similarly, those on the list without an email address received a postal mail invitation to complete the survey (see Appendix D). The participation package included the survey and an informed consent document. Paper surveys included sequential numbering to prevent duplication of survey submissions from a single participant or from others outside the invited members of the business registry. Participants returned survey documents in an included, postage-paid return envelope. Dodou and Winter (2014) confirmed that response rates of online and paper surveys are similar and do not lead to response bias. Similarly, researchers in numerous fields studying various age groups found no variance between online and paper surveys (Davidov & Depner, 2011; Perrett, 2013; Raghupathy & Hahn-Smith, 2013). Furthermore, Fang, Wen, and Prybutok (2014) confirmed the lack of variance among

paper, online, and social media data collection.

The selection of participants for this study involved purposive sampling of NA business owners. Purposive sampling requires knowledge of the population and participants to reach the required sample size (Barratt, Ferris, & Lenton, 2015). Additionally, a purposive sampling method allows selection based on a participant's relevance to the research (Orser, Elliott, & Leck, 2011). The majority of the participants live in the South Central region of the United States. A few participants with ties to this region who participate in tribal small business activities received an invitation to participate. The tribal registry identifies 550 independent businesses owned or founded by tribal members (H. Williams, personal communication, March 24, 2014). The business must be at least 51% owned by a citizen of the tribe for listing in the registry (H. Williams, personal communication, March 24, 2014).

The email invitation shown in Appendix C and the postal mail invitation shown in Appendix D list the data security measures and include the informed consent language. By clicking the link to participate in the email (see Appendix C), participants were able to review the informed consent document featured in Appendix I. Upon completion of the informed consent document, the participants gained access to an online version of the survey shown in Appendix A. Failure to complete the informed consent document terminated the survey. The informed consent document was included in the envelope with the postal mail invitation and survey instrument for those on the business registry list without an email address (see Appendix J). The postal mail invitation included

language guiding the participants to read and retain the informed consent document before completing and returning the completed survey (see Appendix D).

### **Research Method**

After framing research questions, the researcher must determine which method can best answer those questions (Case & Light, 2011). The method chosen by a researcher dictates the actions taken during data collection and analysis (Martin, Surikova, Pigozne, & Maslo, 2011). Qualitative research involves an attempt to improve the understanding of patterns of behavior or responses (Moustakas, 1994). Using a qualitative approach, researchers collect data such as words and phrases from interviews and observations (Moustakas, 1994). Qualitative research methods enable researchers to seek a subjective understanding of the topic. In contrast, quantitative research involves the use of deductive reasoning, an objective approach that results in consistency of measurement (Patterson & Morin, 2012). Positivist researchers call for a method to collect quantitative data that produces measurable results from which a researcher can draw conclusions or determine relationships (Cohen et al., 2003; Cole et al., 2011). Mixed methods researchers employ both qualitative and quantitative research methods (Östlund, Kidd, Wengström, & Rowa-Dewar, 2011).

The goal of this research study was to examine the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict NA small business success. Consequently, a quantitative research method aligned with the research question and produced measurable results from which conclusions could be drawn. Though a qualitative method could allow for a subjective understanding of a research

topic, a qualitative method would not facilitate the discovery of generalizable results (Cole et al., 2011). A mixed methods approach would have complicated the scope of this study beyond the goal of examining the relationships between NA entrepreneurial intention factors and NA business success (Östlund et al., 2011). A quantitative method was the best choice for a study addressing the relationships of TPB elements of a person of NA heritage choosing to pursue entrepreneurship, based on alignment of the method with this study's goals.

### **Research Design**

I used the correlational research design to analyze data collected from surveys completed by NA business owner participants. A correlational design facilitates examination of the relationships between independent variables for predictive or explanatory purposes (Cohen et al., 2003; Welford, Murphy, & Casey, 2012). Other quantitative designs, quasi-experimental and experimental, involve a goal of establishing cause and effect (Cronholm & Hjalmarsson, 2011). Cantrell (2011) and Tabachnick and Fidell (2013) illustrated differences between a correlational design and experimental designs as the lack of manipulation of the independent variable and no random assignment to groups in a correlational study as opposed to an experimental study. Quasi-experimental designs differ from experimental designs by allowing nonrandom assignment of individuals in the research study (Venkatesh, Brown, & Bala, 2013). With no control over any of the variables included in this research study, neither an experimental nor a quasi-experimental design proved feasible.

Castellan (2010) listed other nonexperimental designs of descriptive and ex post

facto approaches. However, neither a descriptive nor an ex post facto approach includes design elements for the examination of relationships among data. I chose a correlational design for this study because the purpose was to examine possible relationships between entrepreneurial intention factors and small business success among NAs.

### **Population and Sampling**

The population for this study included NA business owners in the South Central region of the United States. I included a purposive sample of business owners from a tribe in this area to examine the relationship between entrepreneurial intention factors and small business success among NAs. Each of the business owners listed on the tribe's public registry website who provided an email address received an email invitation to participate in the survey (see Appendix C). Similarly, each of the business owners listed without an email address received a postal mail invitation (see Appendix D). In addition to providing information pertinent to the research topic, I planned to share a summary of the research findings with all invited participants of the study.

I considered both probability and nonprobability sampling procedures for this study. A probability sampling method would give every NA business owner the opportunity to participate through random selection of a specified number of participants (Daniel, 2012). Nonprobability sampling allows sampling when a researcher cannot determine the total population at the time of sampling (Daniel, 2012). Membership and inclusion on the tribal registry allows the business to be eligible for preferential treatment in some tribal purchasing situations and to receive business support services from the tribe. Members of the tribal business support offices verify NA ownership before adding

the business to the registry; all 550 businesses recorded are at least 51% owned by a NA (H. Williams, personal communication, March 24, 2014). Because the tribal office asked that all members of the registry receive an invitation to participate, a probability sampling method was not required.

A purposive sampling approach offered the best plan for acquiring survey responses from NA entrepreneurs. Petty, Thompson, and Stew (2012) stated that a purposive sample is selected based on relevance to the study. A purposive sampling procedure involves selecting members of the population based on their fit for the purposes of the study (Daniel, 2012). Additionally, purposive sampling allows a researcher to maximize the depth of the collected data for the purposes of the research (Marais & Van Wyk, 2014).

Other nonprobabilistic sampling methods exist. Convenience sampling involves a researcher choosing participants based on the ease of contact (Petty et al., 2012). However, convenience sampling might not lead to a sample representative of the population under investigation (Daniel, 2012). Snowball sampling builds upon a convenience or purposive sample by asking participants to suggest others to participate (Siciliano, Yenigun, & Ertan, 2012). However, snowball sampling opens the study to the potential of obtaining data from participants who might not meet study requirements (Hyysalo et al., 2015). Therefore, I employed a purposive sampling strategy for this study.

The purpose of this study was to examine the relationship between entrepreneurial intention factors and small business success among NAs. By employing a purposive

sampling procedure to survey NA small business owners, I collected data to examine the relationship between the independent variables (the three elements of the TPB) and business success. In addition, the choice to use purposive sampling in this study affirmed the tribal office's desire to extend an invitation to all registry members for inclusion in the study.

I utilized the formula provided by Tabachnick and Fidell (2013) to calculate the appropriate sample size. Tabachnick and Fidell stated that the sample size should exceed  $50 + 8(m)$ , where  $m$  = the number of predictor variables. This study included three independent variables. Therefore, 74 or more samples ( $50 + 8(3) = 74$ ) would be required for the study. To give every member on the tribal registry the opportunity to participate, all 550 members listed received an invitation. Participants returned 79 completed surveys; therefore, a 14.4% response rate was achieved.

### **Ethical Research**

According to Wester (2011), the researcher assumes the responsibility to maintain ethical standards in conducting research. Ethical practices include respect, beneficence, and justice (Manasanch et al., 2014). I assured that the research design and implementation for this study maintained high ethical standards to ensure the protection of the survey participants and their responses. Additionally, the Walden institutional review board (IRB) reviewed and approved (IRB Approval No. 06-30-15-0390849) the study before the research was conducted (see Appendix K). IRB applications are subjected to review for the principles of respect, beneficence, and justice for participants (Kelly et al., 2013).



I sent invitations to participate in the survey via email or postal mail using information published on a single tribe's public business registry website (see Appendices C & D). For those with a listed email address, the invitations included language to explain that participation in the survey was voluntary. Voluntarism embodies respect for persons and must be clear in informed consent documents (Enama et al., 2012). Additionally, informed consent documents should explain data collection, storage, and utilization clearly to participants (Griffith, 2014). If a person chose to participate in the survey, the email link routed the participant to an online informed consent document that included information regarding the research study and how data was collected, stored, and utilized (see Appendix I).

If participants chose to continue to the survey after reviewing and electronically signing the informed consent document, they gained access to the survey. Participants could choose to exit the survey at any time by closing the browser window. Participants could also choose to withdraw their completed survey from the study by sending an email request noting their desire to leave the study. Participants completed the surveys online using the tools available from SurveyMonkey.com<sup>®</sup> at the convenience of the participants and in privacy. Only I have the password to access the survey responses on SurveyMonkey.com<sup>®</sup> and downloaded the responses after all surveys were complete.

For those without a listed email address, the letter they received in the mail explained that participation in the survey was voluntary. If a person chose to participate in the survey, the letter included language requesting that the participant read the included informed consent document that included information about the research study

and how I collected, stored, and used the data (see Appendix I). Completion and return of the survey implied informed consent. All research studies should include informed consent documents to protect participants and document that the study is voluntary (Johnsson, Eriksson, Helgesson, & Hansson, 2014). Participants then chose to complete or not complete the paper survey after reviewing the informed consent document. Participants could also choose to withdraw their completed survey from the study by sending me a letter requesting to leave the study. A preaddressed, stamped envelope accompanying the letter, informed consent document, and survey allowed participants to return completed survey to my personal mailbox.

Corti (2012) stated that researchers should store data securely for future findings verification. After the survey window closed, I developed an Excel<sup>®</sup> spreadsheet containing the online and paper survey responses. Carpenter, Stoner, Mundt, and Stoelb (2012) recommended replacing participant names with a unique number to ensure privacy. Participant names were replaced with a unique number and the data input into a statistical software package (SPSS<sup>®</sup>) for analysis. All participant and organizational identities remain stored electronically on a password-protected external hard drive. Sole access to all data resides with me as the researcher. The final study results included only aggregate data to protect the identity of the participants. Furthermore, neither any individual participant's name nor the name of any business appeared in the study documents. Study data will be destroyed after 5 years. Participants in the study did not receive an incentive to complete a survey. However, participants received a summary of the final research results.

### **Instrumentation**

The EIQ, developed by Liñán and Chen (2009), allows researchers to collect information aligning with the TPB, as well as demographic variables and a measure of business success for comparison purposes. Block, Hoogerheide, and Thurik (2013); Liñán, Rodríguez-Cohard, et al. (2011); and Liñán, Urbano, et al. (2011) used the EIQ to collect entrepreneurial intention data. Extensive use of the EIQ with multiple different cultures and ages shows that the EIQ survey instrument is a trusted and effective survey instrument for collecting entrepreneurial intention data (do Paço et al., 2011; Gerba, 2012a; Liñán, Urbano, et al., 2011).

The EIQ includes groupings of questions. In addition to elements that directly influence the three elements of the TPB, the EIQ includes demographic information questions that may relate to personal attitudes toward entrepreneurship, subjective norms, and perceived behavioral control (Liñán & Chen, 2009). In this study, Part 1 contained the questions related to the TPB and Part 2 contained the demographic and informational questions.

The format of the survey questions varies among short answer, yes or no, and multiple-choice arrangements to fit each of demographic questions. The EIQ instrument includes statements to which the participant responds on a 7-item Likert-type scale to collect data on the three elements of the TPB (Liñán & Chen, 2009). A researcher developed the Likert scale to measure attitudes (Boone Jr. & Boone, 2012). The use of an ordinal scale, such as a Likert-type scale, allows participants to indicate the level of agreement yielding more accurate results than with dichotomization (Iselin, Gallucci, &

DeCoster, 2013). The collection of data via Likert-type scales prompts participants to report varying levels agreement or disagreement but without equally defined intervals (Gadermann, Guhn, & Zumbo, 2012). I combined the responses to achieve an aggregate score for each of the three elements of the TPB.

The study used the aggregate scores from each section to calculate descriptive statistics to describe the attitudes toward entrepreneurship, subjective norms, and perceived behavioral control of the sample. Boone Jr. and Boone (2012) suggested combining multiple Likert-type scale items measuring the same construct into one variable for data analysis. Hayes and Preacher (2014) referred to this process of aggregating scores as collapsing multiple items into one variable. Aggregating scores requires calculating the mean for each individual question then computing the overall mean of the group of responses for a single variable (Smock, Ellison, Lampe, & Wohn, 2011).

I combined the mean scores of each of the Likert-type scale responses from Part 1, Item 1, to report the total mean to calculate scores for attitudes toward entrepreneurship. Then, a similar process was performed for the three subjective-norm items in Part 1, Item 2, and six perceived-behavioral-control items in Part 1, Item 3. Appendix A includes a copy of the complete survey instrument.

A calculation of aggregate scores concerning the exposure of the participants to other entrepreneurs and the participants' knowledge of sources of assistance for entrepreneurs provided data for population description and comparison purposes. These questions are located in Part 2 of the survey instrument. Comparisons among

demographic data points offered additional descriptive information about the population (Sousa & Rojjanasrirat, 2011; Tabachnick & Fidell, 2013).

A business success question in the survey included wording to request a yes or no response for my inquiry regarding whether or not the owner reported profit on the business income statement in the previous year. I employed correlational statistics to examine the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict business success. According to Tabachnick and Fidell (2013), logistic regression allows the prediction of a dichotomous dependent variable from a group of independent variables. The study utilized logistic regression to examine the research question.

Liñán and Chen (2009) developed and validated the EIQ survey instrument. In the development process, Liñán and Chen crosschecked the EIQ with previously developed instruments for applying the TPB variables to entrepreneurship. After development, the instrument's psychometric properties were tested. Cronbach's alpha reliability measures ranged from .773 to .943 for each of the newly developed scales to measure the factors affecting entrepreneurial intention (Liñán & Chen, 2009). Solesvik, Westhead, and Matlay (2014) stated that the EIQ development team performed convergent validity analysis using factor analysis and discriminant validity analysis by examining correlations. Furthermore, Ferreira et al. (2012); Gerba (2012a); Liñán, Rodríguez-Cohard, et al. (2011); Liñán, Urbano, et al. (2011); and Solesvik et al. (2014) cited the reliability and validity of the EIQ. The results of the aforementioned analyses revealed that the EIQ fulfilled both reliability and validity requirements.

I made minor modifications to utilize the EIQ in the current study. Because this study focused on current entrepreneurs rather than students, attitudinal questions required adaption to ask participants to reflect on their attitudes toward entrepreneurship before they started their business. Howard (2011) demonstrated that persons could accurately recall retrospective data and yield usable survey data. Additionally, a question about the participant's NA status was added to the survey instrument with permission from the original developer of the EIQ (see Appendix B). Because this study is an empirical study concerning the relationship between attitudes toward entrepreneurship, subjective norms, perceived behavioral control, and small business success among NAs, the EIQ instrument was an appropriate tool to collect data for the research study.

### **Data Collection Technique**

A few businesses on the public tribal business registry website do not use email for communication. These business owners received an invitation via postal mail using the mailing address listed on the public tribal business registry website using a paper version of the EIQ shown in Appendix A. Those businesses using email received an email invitation with a link to a SurveyMonkey.com<sup>®</sup> online version of the EIQ shown in Appendix A. Following completion of informed consent, volunteers for the study participated by either completing the EIQ paper survey or an electronic version of the EIQ survey instrument. Participants completed the survey privately through the individual link in the invitation email or on the paper version of the EIQ received in the postal mailed invitation. Appendix A includes a full listing of the survey questions.

Concerns about the dual modality of data collection are minimal. Using a dummy

variable to identify online versus paper survey responses, Dodou and Winter (2014) found the effect of administration to have an effect of close to zero. Dodou and Winter also found that sub-groups based on Internet connectivity, surveys including questions of a sensitive-nature, and the possibility to skip answers or backtrack to answers were not significantly different from zero either. Similarly, researchers in various fields studying multiple age groups found no variance between online versus paper surveys (Davidov & Depner, 2011; Fang, Wen, & Prybutok, 2014; Perrett, 2013; Raghupathy & Hahn-Smith, 2013). Furthermore, de Bernardo and Curtis (2013) supported the use of Internet surveys with groups including participants over the age of 50 despite others' assumptions of older persons being less likely to have online access. Prior researchers confirmed that paper and online data collection methods provide analogous data among populations ranging in age from teen to older adult (de Bernardo & Curtis, 2013; Raghupathy & Hahn-Smith, 2013).

With the knowledge that paper and online surveys offer essentially no variance in response data, I used both online and paper surveys to increase efficiency and decrease costs. Although paper surveys increase the expense of conducting research because of paper and postage costs, mailing paper surveys to those without email addresses mitigated the reliability risks associated with Internet accessibility challenges, inadequate response rates, and inaccurate populations (Chang & Vowles, 2013). Using online surveys when possible not only reduces costs but also increases response time (Sharp, Moore, & Anderson, 2011). Chang and Vowles (2013) and Sharp et al. (2011) found that over half of online survey participants respond within 48 hours of a survey's launch. In

addition to the time and cost advantages associated with online data collection, online survey data allows for fewer data processing errors (Chang & Vowles, 2013).

All survey responses from both online and paper surveys remain confidential. After collecting more than the required 75 responses, I downloaded the online responses to a password-protected Excel<sup>®</sup> spreadsheet and keyed in the responses from the completed paper surveys on the spreadsheet. Additionally, a dummy variable was included to identify if the data in each record derived from an online or paper survey. A unique number identified each group of data. Furthermore, I have exclusive access to the data to ensure confidentiality. Raw data was uploaded into SPSS<sup>®</sup> for analysis. The Excel<sup>®</sup> spreadsheet containing the raw data and the paper surveys will be stored securely for 5 years, and then destroyed.

### **Data Analysis**

The central research question guiding this study was the following: What is the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict Native American small business success?

The null and alternative hypotheses to be tested were as follows:

H<sub>0</sub>: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do not predict the likelihood of NA small business success.

H<sub>1</sub>: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do predict the likelihood of NA small business success.

The study used the inferential statistical analysis technique, logistic regression analysis, to examine the research question. Logistic regression is the statistical technique



used when the research goal is to examine the likelihood of a set of independent variables predicting a dependent variable (Streletzki & Schulte, 2013; Tabachnick & Fidell, 2013). I found logistic regression appropriate for this study because the intent is to examine the likelihood of the independent variables (attitudes toward entrepreneurship, subjective norms, and perceived behavioral control) predicting the dependent variable, business success, as measured by profit. Kawada and Yoshimura (2012) stated that logistic regression is the appropriate statistical method for predicting a dichotomous dependent variable, as is used in the study. The study included descriptive statistics, such as means (*M*) and standard deviations (*SD*) for scale variables using results produced by IBM SPSS® Version 22.0.

Because the goal of this study was to examine the likelihood of predicting a dichotomous dependent variable, logistic regression provided the best option for statistical analysis. Researchers employ regression analysis to examine relationships among data absent from manipulation of variables (Field, 2013). Multiple regression allows a researcher to assess the relationship between independent variables and a continuous dependent variable (Cohen et al., 2003; Tabachnick & Fidell, 2013). When independent variables are prioritized, hierarchical regression is appropriate (Tabachnick & Fidell, 2013). In this study, I examined three ordinal independent variables determined from participant Likert-type scale responses to determine the likelihood of predicting a dichotomous dependent variable, business success. Both multiple and hierarchical regression require a continuous dependent variable dismissing their applicability to the research goal of this study.

After collecting the data for the independent and dependent variables, appropriate data cleaning and screening procedures commenced before data analysis. Data cleaning refers to the process of examining of data for outliers, normality, and missing data (Osborne, 2013). A basic step of data cleaning is to proofread data entry for errors (Osborne, 2013); therefore, I carefully proofread entered data for accuracy. Field (2013) listed producing scatterplots to check for outliers and linearity as the first step in conducting regression analysis. Garson (2012) stated that outliers, data points more than three standard deviations away from the mean, resulting from data entry errors and unintended sampling must be removed to avoid model error. Scatterplots created using SPSS® allowed for outlier checks.

Data screening refers to testing data for normality. Normal data distribution occurs in the shape of a bell curve (Garson, 2012). A researcher can observe normality by creating a histogram of each variable (Field, 2013). Additionally, a Kolmogorov-Smirnov D test run in SPSS® tests for normality (Field, 2013; Garson, 2012). However, Tabachnick and Fidell (2013) stated that residual plots for regression created in SPSS® that look normal eliminate the need for screening each individual variable for normality. However, Tabachnick and Fidell stated that logistic regression has no assumptions for normality or linearity.

The final data-cleaning step involves missing data. Missing data occurs when participants do not respond or because of recording errors (Osborne, 2013). Randomly missing data poses little threat; however, data missing in a nonrandom fashion may yield meaning and cannot be ignored (Tabachnick & Fidell, 2013). Cohen et al. (2003)

suggested assigning a dummy variable to missing data since the missing data might predict the dependent variable. Additionally, Tabachnick and Fidell (2013) recommend that researchers repeat analysis with and without the missing data. Because none of the 79 completed surveys included missing data points for independent or dependent variables, I determined that repeated analysis was unnecessary.

Field (2013) listed the four most important assumptions in statistical analysis as (a) linearity, (b) normality, (c) homoscedasticity, and (d) independent errors. As previously discussed, linearity and normality checks are not required for logistic regression (Tabachnick & Fidell, 2013). Homoscedastic, homogeneity of variance, will be tested using Levene's test (Garson, 2012). If violations of homogeneity occur, Tabachnick and Fidell (2013) recommend correction via transformation of the dependent variable scores, but no violations of homogeneity occurred. I tested for independent errors with a Durbin-Watson test looking for values less than one or greater than three (Field, 2013). If a lack of independence of variables had existed, a Box-Cox transformation in SPSS<sup>®</sup> could have been performed (Garson, 2012).

### **Study Validity**

Quantitative research studies should utilize reliable and valid instruments to conduct reliable and valid results (Drost, 2011). Researchers consider data reliable when they achieve similar results when repeating the same measurement (Cohen et al., 2003; Drost, 2011). According to Cohen et al. (2003), validity refers to the ability of an instrument to measure what it is intended to measure. The following two subsections include the reliability and validity information related to the EIQ.

**Reliability**

Liñán and Chen (2009) tested the reliability of the EIQ survey instrument. Each of the instrument's reliability properties was measured and resulted in Cronbach's alpha scores ranging from .773 to .943. Lown (2011) considered these scores to be high measures of internal reliability of a survey instrument. The Likert-type scale used for participant responses in the EIQ remains a reliable tool for collecting quantitative, closed-end question responses (Sardar, Rehman, Yousaf, & Aijaz, 2011). The evidence in the literature offers assurance that the EIQ is a reliable survey instrument for measuring entrepreneurial intention factors (do Paço et al., 2011; Gerba, 2012a; Liñán, Rodríguez-Cohard, et al., 2011; Liñán, Urbano, et al., 2011). I presented the same entrepreneurial intention factor questions using the EIQ with Likert-type scale responses to all NA business owner participants in the study and checked for completion on each returned survey to ensure reliability.

**Validity**

Liñán and Chen (2009) considered internal validity measures throughout the development of the survey instrument. The EIQ developers contemplated the structural and content validities during development (Solesvik & Matlay, 2014). Moreover, the designers ensured that the EIQ questions aligned with the TPB (Liñán, Rodríguez-Cohard, et al., 2011).

After performing reliability checks, Liñán and Chen (2009) tested the EIQ for external validity. The EIQ developers performed convergent validity analysis using factor analysis and discriminant validity analysis by examining correlations (Solesvik et al.,

2014). Using factor analysis, they performed convergent validity analysis with a high result of .912. Furthermore, Liñán and Chen used correlational analysis to test and confirm discriminant validity for the EIQ. Each of the three independent variables correlated more strongly with their own construct than the others (Liñán & Chen, 2009). Personal-attitudes questions correlated with personal attitudes at .834, correlated with subjective norms, and perceived-behavioral-control questions in a range between .242 and .363 (Liñán & Chen, 2009). Similarly, subjective-norms correlation scores were .766 with the correlations with questions on the other two constructs ranging between .152 and .318 (Liñán & Chen, 2009). Finally, perceived-behavioral-control correlation scores were .793 with the correlations with questions on the other two constructs ranging between .164 and .447. Additionally, Do Paco et al. (2012); Ferreira et al. (2012); Gerba (2012a); Liñán, Rodríguez-Cohard, et al. (2011); Liñán, Urbano, et al. (2011); and Solesvik et al. (2014) cited the reliability and validity of the EIQ and each of the factors addressed on the EIQ. By examining the results from each analysis, I confirmed that the EIQ fulfills reliability and validity requirements.

### **Transition and Summary**

The purpose of this study was to examine likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict NA business success. The study included the process used for data collection, organization, and analysis in Section 2. NA business owners responded via a modified EIQ survey instrument during the data collection phase of the research process. The EIQ, as a survey instrument for collecting entrepreneurial intention data, has endured reliability and

validity testing by the developers (Liñán & Chen, 2009; Liñán, Urbano, et al., 2011). I utilized descriptive and correlational analyses for the survey data using SPSS® Version 22.0. The next section includes the results, analysis, and discussion of the findings. Furthermore, Section 3 also includes how the results this study concerning NA entrepreneurship may contribute to professional practice and social change. Finally, I shared recommendations for future research and reflect on the research process and experience.

### Section 3: Application to Professional Practice and Implications for Change

The purpose of this correlational study was to examine the likelihood that NA attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success. I presented the business problem and purpose of this research study in Section 1. Section 1 also included the research question guiding this study, the hypotheses, the nature of the study, and a review of the literature. Section 2 included detailed information regarding (a) quantitative analysis, (b) logistic regression, (c) ethical considerations, (d) data collection, and (e) reliability and validity. Section 3 includes (a) an overview of the study, (b) a comprehensive presentation of the findings, (c) application to professional practice, and (d) implications for social change. This section concludes with recommendations for action and further study, and my reflections on the research process.

#### **Overview of Study**

Though NAs compose 1.5% of the U.S. population, NAs own only 0.9% (236,691) of businesses within the United States (MBDA, 2014). Although the U.S. SBA and the U.S. Executive Offices have called attention to business creation among NAs (SBA, 2014b), researchers have not examined the documented discrepancies between NA venture creation and business success (Franklin et al., 2013). My study includes a survey of NA small business owners to determine whether attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success.

Using logistic regression, I examined the correlations between the independent variables and dependent variable for the research problem by testing the following

hypotheses:

H<sub>0</sub>: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do not predict the likelihood of NA small business success.

H<sub>1</sub>: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do predict the likelihood of NA small business success.

Based on the logistic regression analysis, the null hypothesis was supported. Therefore, I could not accept the alternative hypothesis. Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control did not predict the likelihood of NA small business success in this study.

### **Presentation of the Findings**

The research question that guided this study was the following: What is the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict NA small business success? The study findings did not support the alternative hypothesis and indicated conflicting results regarding the correlation between the independent variables (attitudes toward entrepreneurship, subjective norms, and perceived behavioral control) to predict the dependent variable (likelihood of NA small business success).

The independent variables were based on the theory of planned behavior: (a) attitudes toward entrepreneurship, (b) subjective norms, and (c) the entrepreneur's perceived behavioral control of the venture creation process (Liñán & Chen, 2009). A positive profit in the previous business year constitutes the dichotomous dependent variable: business success (Owens et al., 2013). Descriptive statistics for the variables



were calculated in SPSS<sup>®</sup> Version 22.0 after I determined that the data met all statistical assumptions (see Table 2).

### **Statistical Assumptions Tests**

I examined the data with regard to statistical assumptions for logistic regression analysis. First, the data was proofread for entry errors. Finding no data entry issues, I examined the data for missing values. Osborne (2013) recommended that the first step in examining data is to proofread data for entry errors and missing data. Two missing data points existed in the data: one point in the age field and one point in the years in business field. However, the age and years in business data were collected only to describe the sample and not for analysis; therefore, the missing values were ignored in calculating the descriptive statistics.

Logistic regression analysis does not require linearity or normally distributed data (Tabachnick & Fidell, 2013). However, the selection of a proper Levene's test for homogeneity of variance does require knowledge of the distribution (Nordstokke, Zumbo, Cairns, & Saklofske, 2011). Homogeneity of variance, or homoscedasticity, refers to the residuals at each level having the same variance (Tabachnick & Fidell, 2013). Violations of homoscedasticity invalidate confidence intervals and significance tests in logistic regression (Field, 2013). Because the histogram indicated that the data for the independent variables did not include normal distribution, I used a nonparametric Levene's test in SPSS<sup>®</sup> to test for differences in variances. A nonparametric Levene's test should be employed to test for homogeneity of variance when data is not normally distributed (Nordstokke et al., 2011). Results for attitudes toward entrepreneurship,

subjective norms, and perceived behavioral control were not significant with  $p$  values of 0.38, 0.31, and 0.57, respectively. A  $p$  value less than 0.05 in a Levene's test constitutes significance (Field, 2013); therefore, I found no violation of homogeneity of variance.

Finally, I included an evaluation of statistical assumptions with a test for independent errors using a Durbin-Watson test, which allows a researcher to verify a lack of autocorrelation (Durbin & Watson, 1950). The result of the Durbin-Watson test for study variables was 1.64. With a value between 1 and 3, no transformation of variables is required (Field, 2013). With no transformation required, I concluded that study data met all statistical assumptions.

### **Descriptive Statistics**

Descriptive statistics allow a researcher to describe data in terms of numbers (Tabachnick & Fidell, 2013). I collected data to describe the population and to address the research question using the EIQ developed by Liñán and Chen (2009). Invitations to participate went to the 550 NA businesses listed on a single tribe's business registry list. All participants received an invitation via email to an online version of the EIQ hosted on Survey Monkey® or via postal mail with a paper copy of the EIQ. Seventy-nine business owners responded; 66 respondents completed online surveys and 13 completed paper surveys. Seventy-nine participants exceeded the required sample size of 75 and resulted in a response rate of 14.36%. Table 2 includes statistics describing the sample. The average participant age was 52.14 years, and the average business age was 16.63 years with a median of 13 years.

Table 2

*Descriptive Statistics for Population Description Variables*

	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Age in years	25	78	52.14	12.84	78
Years in business	1	99	16.63	15.64	78

For an additional description of the participants in the study, I included two histograms to explain the distribution of participant ages and years in business. While the average age was 52.14 years, the histogram in Figure 2 illustrates that most participants were between the ages of 40 and 70 years. Similarly, Figure 3 includes a histogram showing the number of years in business for study participants.

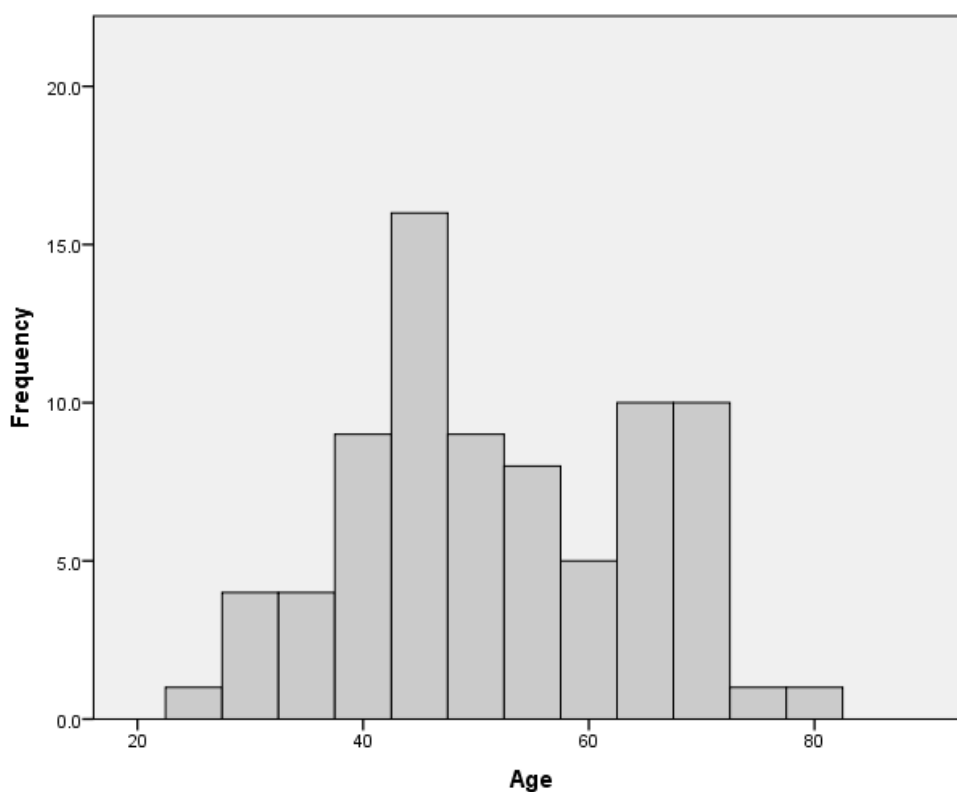


Figure 2. Histogram showing ages of study participants.

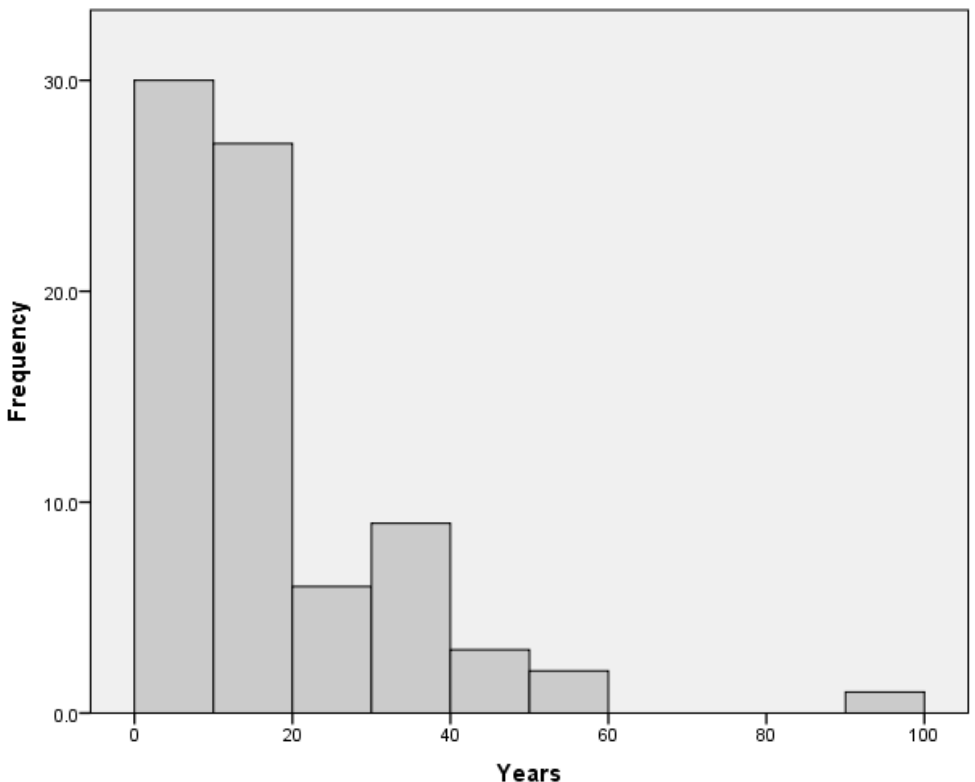


Figure 3. Histogram showing number of years in business for study participants.

Table 3 includes frequency and percentages for gender of participants.

Frequencies and percentages characterize the demographics of participants in a study (Anderson, Sweeney, & Williams, 2015). Forty-eight males participated, accounting for 60.76% of the participants. Females accounted for 39.24% ( $N = 31$ ) of the participants.

Table 3

*Participant Gender Frequency and Percentages*

Category	Frequency	Percent
Male	48	60.76
Female	31	39.24

I conducted a Cronbach's alpha ( $\alpha$ ) measure of reliability for each composite score. Cronbach's alpha measures allow a researcher to measure the reliability of a scale (Pallant, 2013). The reliability coefficients ( $\alpha$ ) of the three independent variables ranged from 0.83 to 0.90. Field (2013) stated that the minimum standard for reliability should be 0.80. All three independent variables exceeded the minimum standard of 0.80. Table 4 includes the reliability coefficients ( $\alpha$ ) for the three independent variables.

Table 4

*Reliability Coefficients ( $\alpha$ ) for Independent Variables (N = 79)*

	Cronbach's $\alpha$	No. of Items
Attitudes Toward Entrepreneurship	0.90	5
Subjective Norms	0.83	3
Perceived Behavioral Control	0.90	6

Descriptive statistics data contains information to assist the reader of a study in understanding the variables (Anderson et al., 2015). Table 5 shows the descriptive statistics for the independent and dependent variables. The 79 participants responded to five attitudes-toward-entrepreneurship questions on a 7-point Likert-type scale ( $M = 5.87$ ,  $SD = 1.40$ ). Similarly, participants responded to three subjective-norms statements ( $M = 5.48$ ,  $SD = 1.42$ ). Additionally, participants responded to six perceived-behavioral-control questions ( $M = 4.77$ ,  $SD = 1.42$ ).

Table 5

*Descriptive Statistics for Independent Variables (N = 79)*

	<i>M</i>	<i>SD</i>
Attitudes Toward Entrepreneurship	5.87	1.40
Subjective Norms	5.48	1.42
Perceived Behavioral Control	4.77	1.42

The dependent variable, business success, included measurement with a single yes-or-no question related to business profit in the most recent business year. Hallak et al. (2014), Ortiz-Walters and Gius (2012), and Welsch et al. (2011) recommended establishing a yes-or-no question to inquire about business success based on profitability. Sixty-three (79.75%) of NA business owners responded affirmatively with regard to business success. I coded business success with a 1 and lack of business success with a 0. Dependent variable descriptive statistics are included in Table 6.

Table 6

*Dependent Variable Frequency and Percentages*

	Category	Frequency	Percent
Business Success	Success	63	79.75
	Lack of Success	16	20.25

**Hypothesis Tests**

A binary logistic regression test was conducted to assess the likelihood of attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predicting business success. Logistic regression is the statistical test applied when the research goal is to examine the likelihood of a set of independent variables predicting a

dichotomous dependent variable (Streletzki & Schulte, 2013; Tabachnick & Fidell, 2013). The predictor variables were attitudes toward entrepreneurship, subjective norms, and perceived behavioral control. The dependent variable was business success.

To interpret results from the binary logistic regression test, I first reviewed the Omnibus test of model coefficients from the SPSS<sup>®</sup> output. An Omnibus test of model coefficients measures how well a model performs (Tabachnick & Fidell, 2013). Based on the Omnibus test of model coefficients, the full model containing all predictors was not significantly significant,  $\chi^2(3, N = 79) = 4.38, p = 0.22$ . Nonsignificant results from the Omnibus test of model coefficients indicated that the tested model was not significantly different than the null model (Tabachnick & Fidell, 2013). This nonsignificant result for the study model indicated that the tested model was not superior to the null model for distinguishing business success. In this study, the tested study model as a whole accounted for between 5% (Cox and Snell  $R^2$ ) and 9% (Nagelkerke  $R^2$ ) of improvement over the null model. Cox and Snell  $R^2$  and Nagelkerke  $R^2$  are two different pseudo  $R^2$  that reflect the ratio of likelihood improvement over the null model (Field, 2013). As shown in Table 7, none of the predictor variables significantly contributed to the model.

The confidence interval for the odds ratios (*OR*) each cross the value one. When both the lower and upper values for the confidence interval are above one, then as the predictor variable increases, the odds of a positive dependent variable increases (Field, 2013). An *OR* greater than one reflects the increase in odds for a dependent variable outcome of one when the predictor variable increases by one unit (Tabachnick & Fidell, 2013). If the value of the *OR* is less than one, the odds for a dependent variable outcome

of 1 decreases with an increase in value by the predictor variable (Tabachnick & Fidell, 2013). With the 95% confidence interval overlapping the value one, I cannot confirm that the predictor has a directional influence on predicting the dependent variable.

Table 7

*Logistic Regression Predicting Likelihood of Business Success*

	$\beta$	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I. for <i>OR</i>	
							Lower	Upper
Attitudes Toward Entrepreneurship	0.34	0.19	3.17	1	0.08	1.41	0.97	2.06
Subjective Norms	0.10	0.21	0.24	1	0.63	1.11	0.73	1.69
Perceived Behavioral Control	0.05	0.23	0.05	1	0.82	1.05	0.67	1.66
(Constant)	-1.38	1.49	0.86	1	0.35	0.25		

A Hosmer and Lemeshow test of the full model with three predictor variables was statistically different from the null model,  $\chi^2(8, N = 79) = 6.61, p = 0.58$ . The Hosmer and Lemeshow test, the preferred goodness-of-fit indicator for logistic regression, indicates good fit with a result greater than 0.05 (S. J. Quinn, Hosmer, & Blizzard, 2015; Tabachnick & Fidell, 2013). Therefore, with conflicting goodness-of-fit indicators and prediction efficiency, caution should be used when interpreting these results. Results from different logistic regression tests may lead to varied conclusions requiring the reader to display cautiousness when interpreting the predictive capacity of models (Mendard, 2002).

In logistic regression, another method used to evaluate the ability of independent variables to predict the outcome is classification of cases (Tabachnick & Fidell, 2013). Using the full model to classify each case using the independent variables from the



sample data set, 81.0% of the cases were classified correctly, with 98.4% of business success cases and 12.5% of lack of business success cases predicted correctly. However, the full model's classification rate only exceeded the classification rate of the constant model by 1.3%. A good model includes few cases of misclassification (Field, 2013). With only 19% misclassification but only slight improvements over the null model in classifications using the full model, the classification test confirms that results should be interpreted with caution.

As shown in Table 8, binary logistic regression yielded conflicting results when used to analyze the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict business success. Despite the Hosmer and Lemeshow test yielding results indicating significance, the Omnibus test of model coefficients resulted in a lack of significance for the full model. Additionally, not one of the three predictors was significant individually. Furthermore, classification of cases resulted in only minimal improvement over the null model. A researcher should apply caution when making conclusions based on conflicting logistic regression analysis results from different types of tests of model fit and predictive efficiency (Menard, 2002). Without a majority of the logistic regression tests providing results to support the fit of the model, I must fail to reject the null hypothesis.

Table 8

*Logistic Regression Analysis Summary*

Test	Result
Omnibus test of model coefficients	Not significantly different than null model
Individual predictor variables	No significant contribution to model
Odds ratios	Inconclusive
Hosmer and Lemeshow	Good fit
Classification of cases	81% correct but only minimal improvement over null model

A review of the conflicting results produced by data analysis prompted reflection of the research sample data. The first consideration as the cause of conflicting results was the influence of multicollinearity. Because multicollinearity can bias logistic regression parameters, Pallant (2013) recommended conducting a variance inflation factor (VIF) test. Any single VIF for an independent variable greater than 10 or an average VIF substantially greater than 1 could signify bias (Field, 2013). VIF values for the three independent variables in my study ranged from 1.01 to 1.22 with an average of 1.12. Therefore, I can conclude that multicollinearity among the predictors likely did not influence the conflicting logistic regression analysis results.

A second consideration of for the cause of conflicting logistic regression analysis results was the results of changing economic factors. While Jaén and Liñán (2013) stated that only attitudes toward entrepreneurship, subjective norms, and perceived behavioral control influence entrepreneurial intention, the dependent variable of business success may depend upon additional factors outside the scope of this study. The majority of the sample population operates their businesses from a single state in the South Central

region of the United States. Oil production drives the economy of this state (Kang, Penn, & Zietz, 2011). During 2015, many businesses experienced fluctuations in profitability because of the economic downturn from falling oil prices (Fort, Haltiwanger, Jarmin, & Miranda, 2013); therefore, business profits of the study participants could have been abnormal during the study period. The degree of influence is stronger for firms that have been in operation for less than 5 years (Fort et al., 2013); my study includes 15 businesses that have been in operation less than 5 years accounting for 19% of the sample. With data originating from an area heavily influenced by a decline in oil prices, the success of some businesses could have been affected by the fluctuation in the economy rather than the predictors.

### **Relating Findings to the TPB**

Ajzen (1991) specified three attitudinal antecedents of intentions within the TPB: (a) attitude toward the behavior, (b) subjective norms, and (c) perceived behavioral control. I collected information aligning with the TPB as well as demographic variables and a measure of business success to address the research question in this study using the EIQ, developed by Liñán and Chen (2009). Data emerged regarding the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs.

In this study, findings were consistent with previous research utilizing the TPB as a theoretical framework. The combination of the three elements of the TPB may have affected intention to start a business; however, the relationship to subsequent business success was not supported. Attitudes toward entrepreneurship involve the desirability of

the outcomes of a behavior (Mobaraki & Zare, 2012). Subjective norms include the effect a network of influencers has on an individual's plans (Iakovleva et al., 2011). Moreover, perceived behavioral control exists when the participant feels confident in exercising the skills and knowledge required to be successful (Fretschner & Weber, 2013). As shown in Table 7, the three TPB elements did not significantly contribute to the model.

Additionally, the 95% confidence interval overlapped the value one leading to the conclusion that the predictors may not have a directional influence on predicting the dependent variable.

According to the TPB, only three elements influence intention; therefore, any other variable proposed would only influence the outcome of the three antecedents to intention (Jaén & Liñán, 2013). Conversely, Carey et al. (2010) found that the TPB elements do not correlate well with business owners who own and operate lifestyle businesses, where owners seek to maintain a comfortable income rather than to grow, to those managed by growth-oriented owners, who continually strive for business growth. Additionally, Zanakis et al. (2012) confirmed that many entrepreneurs start businesses for reasons of work flexibility and independence rather than wealth or growth. Wright and Stigliani (2012) added that some business leaders make decisions to benefit the family owners rather than to grow the firm. The conflicting logistic regression results might be a result of some participants' choices to operate lifestyle or family businesses with no lower regard for profitability.

### **Relating Findings to the Literature**

The findings in this study did not allow the rejection of the null hypothesis:

Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do not predict the likelihood of NA small business success. As discussed in the previous section, a model using the combination of the three independent variables from the TPB accurately predicted 81.0% of cases of business success. However, readers should interpret results with caution because of conflicting results from binary logistic regression tests. Considering the SBA reported 50% failure rate among new businesses (SBA, 2014a), Soriano and Castrogiovanni (2012) used business profit as an indicator variable depicting business survivability and success. Conclusions from the tested model developed for this study provide information that could guide business decisions that may increase business success among NA business owners; further research should be conducted to confirm results.

The three elements of the TPB illustrated in Figure 1, attitudes toward entrepreneurship, subjective norms, and perceived behavioral control, did not significantly predict the likelihood of business success in the study results. Table 7 shows the regressions statistics associated with each individual element. The results indicate that attitudes toward entrepreneurship may be the most influential of the predictor variables but is not significant on its own. The *OR* for attitudes toward entrepreneurship, 1.41, indicates that for every unit increase in attitudes toward entrepreneurship, the business is 1.41 times more likely to exhibit business success. However, an examination of the 95% confidence interval of the odd ratio shows a small chance that an increase in attitudes toward entrepreneurship might decrease the likelihood of business success. The strong influence of attitudes toward entrepreneurship aligns with findings in previous research.

The effect of attitudes toward entrepreneurship on venture creation and success is recognized among researchers (Gibson et al., 2011; Moi et al., 2011; Solesvik, 2013). Additionally, many studies regarding current and future entrepreneurs include literature on attitudes toward entrepreneurship as an influential element even when not using the TPB (Moi et al., 2011; Petridou & Sarri, 2011; Thompson et al., 2010; Wurthmann, 2013).

Consistent with the findings of Franklin et al. (2013), this study confirmed that subjective norms influence business start-up and success. Because some cultures or groups place more or less value on entrepreneurship, the influence of subjective norms varies by population (Ajzen, 1991; Schlaegel et al., 2013). Shoebridge et al. (2012) added that spouses and extended family exerted influence on entrepreneurial decisions among indigenous populations. Franklin et al. noted that norms are more favorable among NA tribes that are more favorable toward entrepreneurship and that have a more transformational tribal leadership. Franklin et al. described attributes similar to those of the tribe included in this study. These findings support the notion that subjective norms influence business start-up and success. However, the direction of influence by subjective norms identified in this study was non-confirmable.

Similar to the concept of self-efficacy, perceived behavioral control entails individuals' perceptions of how well they can perform or handle a situation (De Clercq et al., 2011). Further, Bullough et al. (2014) described entrepreneurial self-efficacy as the level of confidence in carrying out the duties required to start-up and manage a business. Perceived behavioral control, the third element of the TPB shown in Figure 1, does not

significantly predict business success on its own.

### **Applications to Professional Practice**

This research may be valuable to NA business owners, prospective business owners, nascent entrepreneurs, and business support organizations. The results of the data analysis in this study showed that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control might combine to predict the likelihood of business success. However, the results from binary logistic regression tests of the model were conflicting causing the need for caution when interpreting results. The results from this study may provide knowledge to increase business success rates; however, I recommend further analysis.

Business success, as measured by profitability, may increase for NA business owners armed with the new knowledge from this study. Vilkinas et al. (2012) found that business owners rank making a profit as the most important measure of business success. Moreover, Gorgievski et al. (2011) discovered that business profit ranked high among business owners driven by both economic and social motivations. The SBA (2014a) reported that sustainability rates remain consistent with 50% of firms surviving 5 years or more and 33% surviving 10 years or more. The mean age in years of NA firms participating in this study was 16.63 years with a median age of 13 years. With knowledge obtained from the study findings of well-established businesses, current and aspiring business owners may learn valuable information to improve the probability business success.

Armed with the knowledge that attitudes toward entrepreneurship, subjective

norms, and perceived behavioral control may combine to predict the likelihood of business success, NA business support offices may be able to exert positive influences on attitudes toward entrepreneurship, subjective norms, and attitudes toward entrepreneurship among NA entrepreneurs. While the influence of subjective norms varies by culture (Ajzen, 1991; Schlaegel et al., 2013), Franklin et al. (2013) confirmed that NA government structure and support services could offer a positive influence. Liñán, Santos, and Fernández (2011) added that positive subjective norms encourage positive attitudes toward entrepreneurship. Entrepreneurship training, entrepreneurial experiences, and entrepreneurial role models or mentors positively affect the perceived behavioral control component of entrepreneurial intention (Pittaway et al., 2011; Rideout & Gray, 2013; Sánchez, 2013; Studdard et al., 2013). Therefore, NA business support organizations may positively influence NA business success by offering training or mentorship programs for nascent entrepreneurs and business owners.

### **Implications for Social Change**

From the findings in this study and the literature review, awareness that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control may predict the likelihood of business success among NA businesses may help more business succeed. However, readers must interpret findings from this study with caution because of conflicting logistic regression test results. New business owners stimulate economies by starting and growing businesses that create jobs and by providing innovative products and services (Liñán, Rodríguez-Cohard, et al., 2011). With the knowledge that entrepreneurs create 86% of new jobs (Neumark et al., 2011), tribal leaders could assist



NA communities by offering support for nascent entrepreneurs and business owners.

Armed with knowledge regarding the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control may predict small business success, support services for NAs might result in more NA business success. NA's motivation to start and run successful businesses, as was the norm before Euro-American contact, changed after the removal of NAs from their homelands (Miller, 2012). Within the United States, NAs only own 0.9% of businesses despite composing 1.5% population (MBDA, 2014). Understanding contributing factors for NA business success may help those who plan support and training programs designed to encourage and assist NAs in their quest to start a business. Because of analysis results that do not allow confirmation of the predictive capacity of the model including the independent variables, readers should interpret results with caution. Nevertheless, the study adds to information regarding a gap in business practice concerning the potential relationship between the predictors and business success that might benefit business owners.

An increase in business ownership and business success rates among NAs might decrease unemployment and improve prosperity and overall wellness in the NA and surrounding community. Revenue and employment generated by NA businesses accounted for 0.3% of total U.S. business revenue and employment (MBDA, 2014). Unemployment among NAs reached a 12.3% in 2012, compared to 8.1% for the general population (U.S. Bureau of Labor Statistics, 2013). Unemployment rates exceed 15% on 222 NA reservations and exceed 50% on 13 NA reservations (U.S. Census Bureau, 2013). More than 20% of NAs live on one of 310 NA reservations where average

household income is 75% lower than the U.S. average (Benson et al., 2011). According to the 2013 U.S. census data, median annual income for NAs not living on reservations was \$36,641, compared to \$52,250 for the average U.S. citizen (U.S. Census Bureau, 2013). An increase in business ownership and business success rates among NAs might decrease unemployment and improve household income.

Elmuti et al. (2012) and Petridou and Sarri (2011) found that successful entrepreneurs rank training and education as the most significant element in the success of business ventures. A lower education attainment rate by NAs diminishes their chances of business success (van den Born & van Witteloostuijn, 2013). The commitments from the U.S. presidential administration to NA economic development offer funds to support endeavors in entrepreneurship and training (Dreveskracht, 2013; SBA, 2014b).

Dreveskracht (2013) insisted that the key to successful implementation of programs for NA economic development lies in control by the tribal administration. Consequently, efforts to assist in entrepreneurial development of NAs must come from trusted sources or tribal organizations to be well received by the NA community and thereby effective. As in other populations of the United States, an increase in entrepreneurial activity could improve the socioeconomic outlook of NA communities (Miller, 2012). The outlook improvement could spur additional interest in business formation and continue the positive cycle of business success, job creation, and economic prosperity.

### **Recommendations for Action**

Study findings indicated that business owners and business support agencies may be able to increase business success rates. Increases in business success could improve

business decisions and contribute to social change. The knowledge that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control may predict the likelihood of business success may provide information to improve business success rates. To confirm these findings, researchers should conduct additional research.

Based on this study, NA business owners may increase their likelihood of success by learning more about attitudes toward entrepreneurship, subjective norms, and perceived behavioral control. Attitudes toward entrepreneurship refer to the level of positive or negative valuation of the advantages and disadvantages of venture creation (Liñán & Chen, 2009). Subjective norms incorporate the effect a network of influencers has on a person's plans (Mueller, 2011). Moreover, perceived behavioral control entails individuals' perceptions of how well they can perform or handle a situation (De Clercq et al., 2011). Subsequent to acknowledging the potential influence of the three predictors from this study, business owners could make decisions for improvement leading to a greater likelihood of business success.

Tribal business support agencies may improve their support offerings by adopting policies congruent to findings in this study. An increase in the availability of entrepreneurial training and mentors could positively affect the perceived behavioral control and subjective norms for NA business owners and nascent entrepreneurs (Pittaway et al., 2011; Rideout & Gray, 2013; Sánchez, 2013; Studdard et al., 2013). St-Jean and Audet (2013) discovered that mentoring programs increased the mentees' business competence as well as their entrepreneurial self-efficacy. Therefore, establishing formal mentoring opportunities for NA small business owners might increase perceived

behavioral control, equivalent to self-efficacy, thereby increasing NA business start-ups and successes.

Benson et al.'s (2011) study results provided evidence that microfinance loans and small business support can boost business creation and success. Benson et al. found that an increase in business formation leads to additional entrepreneurial endeavors, increased job creation, and reduced poverty. As more NAs succeed in business, networks will grow to support upcoming business owners (Rubin, 2011). As evidenced by the literature and findings in this study, NA business support offices could strive to increase training and mentoring opportunities for NA business owners and nascent entrepreneurs. These new support offerings might encourage positive attitudes toward entrepreneurship, subjective norms, and perceived behavioral control that could subsequently increase the likelihood of business success.

### **Recommendations for Further Study**

This study serves as a starting point for further research on NA business formation and success. Little research exists concerning NA business success (Franklin et al., 2013). Liu (2012) called for additional research business formation among minority groups. NAs compose 1.5% of the U.S. population (MBDA, 2014). This study might address a gap in business practice regarding the likelihood that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict small business success among NAs.

Although my study findings did not demonstrate significant results, future researchers might conduct qualitative studies with NA business owners to explore

business success characteristics. The U.S. government recognizes 565 tribes (Franklin et al., 2013), and this study drew participants from one. To improve generalizability, further research could begin by repeating the study with additional tribes. Furthermore, differences exist between the 310 tribes living on reservations and those living off reservations (Benson et al., 2011); therefore, researchers should investigate the potential different results from different tribal living arrangements.

The purpose of this correlational study was to examine the likelihood that NA attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict NA small business success. The challenges faced by NA entrepreneurs may stem from different cultural or personal backgrounds, and few studies have examined the differences in the business formation process among different racial/ethnic groups (Liu, 2012; Peredo & McLean, 2010; Rubin, 2011). Comparative studies between NA business success and non-native business success in the same geographic area could also relevant information. A comparative study could help to determine if economic factors influenced the conflicting results of this study. A study comparing lifestyle businesses, where owners seek to sustain a level of income but not grow, to those managed by growth-oriented owners, who strive for business growth, could substantiate the findings of Carey et al. (2010) and possibly explain the conflicting logistic regression results from this study. Additional information about the predictors and their relationship to business success in the same geographic area might enhance the ability make good business decisions by both NA and other local business owners; therefore, improving the economic situation for all populations in the geographic area.

## **Reflections**

My interest in this topic arose from my personal interest in business formation and success and my geographic proximity to NA populations. As a non-NA living and working near several tribal organizations who support the local economy, my hope was to offer insight that could benefit NA businesses and spur economic growth. Previous use of the TPB to conduct studies among students enhanced my curiosity of its applicability to NA business success. Because of my possible bias toward the TPB, I drafted a research question answerable by using a quantitative method to prevent any potential bias from inadvertently influencing the study results.

Despite not offering an incentive to participate, collection included four more completed surveys than required for statistical significance. Future researchers may consider avoidance of postal mail invitations to participate, as this process greatly increased research cost and time. Response rates via postal mail were low (25%), because many addresses listed in the database were incorrect.

## **Summary and Study Conclusions**

Small businesses account for 99% of all U.S. firms (Labeledz & Berry, 2011). Though NAs compose 1.5% of the U.S. population, NAs only own 0.9% of businesses within the United States (MBDA, 2014). Furthermore, on average, NA-owned businesses earned 70% lower gross receipts than those earned by other U.S. firms (MBDA, 2014). Additionally, unemployment among NAs rose to a level twice as high as the U.S. national average in 2010 and up to 80% in some locations (Juntunen & Cline, 2010). New businesses create 86% of new jobs (Neumark et al., 2011); therefore, NA small

business owners, aspiring and nascent entrepreneurs, and tribal business support offices could benefit from increased knowledge about NA business formation and success.

I conducted a correlational study to examine the likelihood that NA attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predict business success. A logistic regression analysis failed to reject the null hypothesis: Attitudes toward entrepreneurship, subjective norms, and perceived behavioral control do not predict the likelihood of NA small business success. A statistical model using the combination of the three independent variables from the TPB accurately predicted 81.0% of cases of business success; however, additional tests provided conflicting information prompting the need for interpreting the results with caution. The study included data from a single tribe. Additional studies could investigate additional NA tribes and other groups. Business owners who apply knowledge acquired from this study may increase their likelihood of success. Additionally, tribal business support offices might improve the quality of offerings to their constituents. Both applications of the study findings contribute to positive business and social change.

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***Personal Data***

1. Age: \_\_\_\_\_
2. Gender:  Male  Female
3. City of Residence: \_\_\_\_\_
4. State of Residence: \_\_\_\_\_
5. Are you Native American?  Yes  No
6. Did you start the business that you currently operate?  Yes  No
7. How many years has your business been in operation? \_\_\_\_\_
8. Did you record a business profit on the income statement of your most recent business year?  
 Yes  No
9. What is the highest level of education you have achieved?  
 Primary  Secondary  Vocational training  University  Other
10. Did you complete any entrepreneurial or business training before beginning your business?  
 Yes  No
11. Have you pursued any additional entrepreneurial training or counseling since beginning your business?  
 Yes  No

## Appendix B: Permission to use Entrepreneurial Intention Questionnaire

**From:** Francisco Liñán [mailto:flinan@us.es]  
**Sent:** Wednesday, May 15, 2013 1:56 AM  
**To:** Bolin, Stacey D.  
**Subject:** Re: entrepreneurial intention questionnaire

Dear Stacey,

Thank you for your interest in our work.

Please find attached 2 versions of the EIQ and the papers in which they were used.

...

You can use them as you feel is best, but do please acknowledge your source.

Best regards,

--

Prof. Francisco Liñán  
Universidad de Sevilla // University of Seville  
Av. Ramon y Cajal, 1. 41018 - Sevilla (Spain)



### Appendix C: Email Message Sent to Participants

As a Native American business owner, I invite you to participate in a research study examining Native American attitude towards entrepreneurship, subjective norms, and perceived behavioral control and any relationship they might have to small business success. The study could benefit both current and aspiring Native American business owners as well as the tribal support offices by providing information to guide business support services. Study participation involves completing a one-time survey that takes an average of 8 minutes to complete. All invited participants will receive a 1-2 page summary of the final study results. If you have any questions, you may contact me via email ([stacey.bolin@waldenu.edu](mailto:stacey.bolin@waldenu.edu)) or phone (580-559-5596). I am conducting this study in partial fulfillment of the requirements for the degree of Doctor of Business Administration from Walden University.

To participate in the study, click the link below to access the survey.

#### Appendix D: Letter Sent to Participants without Email Addresses

As a Native American business owner, I invite you to participate in a research study examining Native American attitude towards entrepreneurship, subjective norms, and perceived behavioral control and any relationship they might have to small business success. The study could benefit both current and aspiring Native American business owners as well as the tribal support offices by providing information to guide business support services. Study participation involves completing a one-time survey that takes an average of 8 minutes to complete. All invited participants will receive a 1-2 page summary of the final study results. If you have any questions, you may contact me via email ([stacey.bolin@waldenu.edu](mailto:stacey.bolin@waldenu.edu)) or phone (580-559-5596). I am conducting this study in partial fulfillment of the requirements for the degree of Doctor of Business Administration from Walden University.

To participate in the survey, please review the consent letter before beginning the survey. If you choose to participate after reviewing the consent letter, complete the two-page survey, and return the survey in the included postage paid envelope. You may keep both this letter and the informed consent document for your records.

### Appendix E: Reminder Message Sent to Participants

Recently you received an invitation to participate in a study that could benefit both current and aspiring Native American business owners as well as tribal business support offices. The survey window is still open and your input as a Native American business owner is desired. I invite you to participate in a research study examining Native American attitude towards entrepreneurship, subjective norms, and perceived behavioral control and any relationship they might have to small business success.

Study participation involves completing a one-time survey that takes an average of 8 minutes to complete. All invited participants will receive a 1-2 page summary of the final study results. If you have any questions, you may contact me via email ([stacey.bolin@waldenu.edu](mailto:stacey.bolin@waldenu.edu)) or phone (580-559-5596). I am conducting this study in partial fulfillment of the requirements for the degree of Doctor of Business Administration from Walden University.

To participate in the study, click the link below to access the survey.

## Appendix F: Reminder Phone Call Script

Recently you received an invitation to participate in a study that could benefit both current and aspiring Native American business owners as well as tribal business support offices. The survey window is still open and your input as a Native American business owner is desired. I invite you to participate in a research study examining Native American attitude towards entrepreneurship, subjective norms, and perceived behavioral control and any relationship they might have to small business success.

Study participation involves completing a one-time survey that takes an average of 8 minutes to complete. All invited participants will receive a 1-2 page summary of the final study results. If you have any questions, you may contact me via email ([stacey.bolin@waldenu.edu](mailto:stacey.bolin@waldenu.edu)) or phone (580-559-5596). I am conducting this study in partial fulfillment of the requirements for the degree of Doctor of Business Administration from Walden University.

Do you still have the original survey packet, or should I mail you another packet?

Thank you for your time.

## Appendix G: Protecting Human Research Participants Certificate of Completion



Appendix H: Permission Letter to use Business Registry Data for Research Purposes

The screenshot shows a Gmail interface with the Google logo at the top left. A search bar is present with a magnifying glass icon. Below the search bar, there is a notification: "Click here to enable desktop notifications for Walden University Mail. Learn more Hide". The "Mail" header is visible with navigation icons for back, forward, refresh, delete, archive, and more. On the left side, there is a sidebar with a "COMPOSE" button and a list of folders: "Inbox", "Starred", "Important", "Sent Mail", "Drafts (17)", "BULK", "Migrated/OUTBOX", "Notes", and "More". Below the folders is a search bar for the email account "Stacey". The main content area displays an email with the following details: "From: [Redacted]", "Date: July 16, 2014 at 11:08:39 AM CDT", "To: 'Bolin, Stacey D.' [Redacted]", and "Subject: RE: Research Study Information". The email body starts with "Hi Ms. Bolin," followed by "Hope you are having a good day!". The main text states: "Because the business registry information is public information and accessible through [Redacted] we would prefer you to obtain vendor contact information through the public site." Below this, it says: "Below please find the link to the [Redacted] Business Registry: [http://www.\[Redacted\]](\"http://www.[Redacted]\")". The email concludes with "Thank you for your patience through this process and I hope the site above will be useful to you. If you have any questions on how to use the site, please let me know." and "Very best, [Redacted] Tribal Procurement".

## Appendix I: Informed Consent Document for Online Surveys

### CONSENT FORM

A quantitative study of Native American small businesses

You are invited to take part in a research study of Native American small business success. The researcher is conducting a study of Native American business owners. This form is part of a process called “informed consent” to allow you to understand this study and what is expected of you as a participant, before deciding whether to take part.

This study is being conducted by a researcher named Stacey Bolin, who is a doctoral student at Walden University.

#### **Background Information:**

The purpose of the study is to examine Native American attitudes toward entrepreneurship, subjective norms, and perceived behavioral control and any relationship they might have to small business success.

#### **Procedures:**

If you agree to be in this study, you will be asked to:

- Complete a single survey with an average completion time of 8 minutes.

Here are some sample questions from the study:

- How many years has your business been in operation?
- Indicate your level of knowledge about business associations, support bodies and other **sources of assistance for entrepreneurs** from 1 (no knowledge) to 7 (complete knowledge).
  - Public support bodies (e.g. SBDC, REI, etc.)
  - Specific training for entrepreneurs

#### **Voluntary Nature of the Study:**

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later by requesting that the information you submitted be deleted.

#### **Risks and Benefits of Being in the Study:**

Participating in this type of study may involve some risk of the minor discomforts that can be encountered in daily life, such as stress. Participating in this study would not pose risk to your safety or wellbeing.

Results of the study could benefit both current and aspiring Native American business owners as well as the tribal support offices by providing information to guide business support services.

#### **Payment:**

No compensation for participation will be offered.

**Privacy:**

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. At no point will any response you make in the survey be identified with you. Data will be kept secure by not associating names or email addresses with survey data and, by storing survey data in a password-protected file on a password-protected computer that only the researcher will be able to access. Data will be kept for a period of at least 5 years as required by the university, and then securely destroyed.

**Contacts and Questions:**

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at [stacey.bolin@waldenu.edu](mailto:stacey.bolin@waldenu.edu) or by phone at 580-559-5596. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is 06-30-15-0390849 and it expires on June 29, 2016.

Please print or save this consent form for your records.

**Statement of Consent:**

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. Completing and submitting the survey will indicate your consent to participate. By clicking the link below, I understand that I am agreeing to the terms described above.



## Appendix J: Informed Consent Document for Mailed Surveys

### CONSENT FORM

A quantitative study of Native American small businesses

You are invited to take part in a research study of Native American small business success. The researcher is conducting a study of Native American business owners. This form is part of a process called “informed consent” to allow you to understand this study and what is expected of you as a participant, before deciding whether to take part.

This study is being conducted by a researcher named Stacey Bolin, who is a doctoral student at Walden University.

#### **Background Information:**

The purpose of the study is to examine Native American attitudes toward entrepreneurship, subjective norms, and perceived behavioral control and any relationship they might have to small business success.

#### **Procedures:**

If you agree to be in this study, you will be asked to:

- Complete a single survey with an average completion time of 8 minutes.

Here are some sample questions from the study:

- How many years has your business been in operation?
- Indicate your level of knowledge about business associations, support bodies and other **sources of assistance for entrepreneurs** from 1 (no knowledge) to 7 (complete knowledge).
  - Public support bodies (e.g. SBDC, REI, etc.)
  - Specific training for entrepreneurs

#### **Voluntary Nature of the Study:**

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later by requesting that the information you submitted be deleted.

#### **Risks and Benefits of Being in the Study:**

Being in this type of study may involve some risk of the minor discomforts that can be encountered in daily life, such as stress. Being in this study would not pose risk to your safety or wellbeing.

Results of the study could benefit both current and aspiring Native American business owners as well as the tribal support offices by providing information to guide business support services.

#### **Payment:**

No compensation for participation will be offered.

**Privacy:**

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. At no point will any response you make in the survey be identified with you. Data will be kept secure by not associating names or email addresses with survey data and, by storing survey data in a password-protected file on a password-protected computer that only the researcher will be able to access. Data will be kept for a period of at least 5 years as required by the university, and then securely destroyed.

**Contacts and Questions:**

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at [stacey.bolin@waldenu.edu](mailto:stacey.bolin@waldenu.edu) or by phone at 580-559-5596. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is 06-30-15-0390849 and it expires on June 29, 2016.

You may keep this consent form for your records.

**Statement of Consent:**

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. To protect your privacy, no signature confirming consent will be collected. Completing and returning the survey will indicate your consent to participate. By completing and returning the survey, I understand that I am agreeing to the terms described above.

## Appendix K: IRB Approval Letter

IRB Materials Approved - Stacey Bolin inbox x

IRB <IRB@waldenu.edu>  
to me, Yvette

Jun 30

Dear Ms. Bolin,

This email is to notify you that the Institutional Review Board (IRB) has approved your application for the study entitled, "An Examination of Behaviors Contributing to Native American Business Success."

Your approval # is 06-30-15-0390849. You will need to reference this number in your dissertation and in any future funding or publication submissions. Also attached to this e-mail are the IRB approved consent forms. Please note, if these are already in an on-line format, you will need to update those consent documents to include the IRB approval number and expiration date.

Your IRB approval expires on June 29, 2016. One month before this expiration date, you will be sent a Continuing Review Form, which must be submitted if you wish to collect data beyond the approval expiration date.

Your IRB approval is contingent upon your adherence to the exact procedures described in the final version of the IRB application document that has been submitted as of this date. This includes maintaining your current status with the university. Your IRB approval is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, your IRB approval is suspended. Absolutely NO participant recruitment or data collection may occur while a student is not actively enrolled.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB application, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the IRB section of the Walden website: <http://academicguides.waldenu.edu/researchcenter/orec>

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:  
[http://www.surveymonkey.com/s.aspx?sm=qHBJzkIMUx43pZegKImdIQ\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=qHBJzkIMUx43pZegKImdIQ_3d_3d)

Sincerely,  
Libby Munson  
Research Ethics Support Specialist  
Office of Research Ethics and Compliance  
Email: [ireb@waldenu.edu](mailto:ireb@waldenu.edu)  
Fax: 626-606-0472  
Phone: 612-312-1283

Office address for Walden University:  
100 Washington Avenue South, Suite 900  
Minneapolis, MN 55401

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link: <http://academicguides.waldenu.edu/researchcenter/orec>