Relationship Between Generations of Entrepreneurs and Entrepreneurial Traits

Ihsan Eken
University of the Incarnate Word

Quantitative descriptive study investigated the relationship between 3 different generations of entrepreneurs and entrepreneurial traits. The purpose of this study was to investigate the relationship between entrepreneurial traits and generations of U.S. entrepreneurs in Southwest, Northeast, Central, and Southeast Texas, to see whether generational differences are associated with entrepreneurial traits. 3 different generations of entrepreneurs were investigated in the study. The research aimed to contribute beneficial insights to their understanding in enterprising potential and differentiate themselves in entrepreneurial traits. GET2 test was used to collect the data to analyze the differences and similarities between generations of entrepreneurs and entrepreneurial traits.

INTRODUCTION

The United States has become the world’s most entrepreneurial, dynamic, and flexible economy as opposed to other countries (Decker, Haltiwanger, Jarmin, & Miranda, 2014). Providing individuals a freedom to easily and quickly start a business (Sadeghi, 2008), holding a higher self-employment rate (Rupasingha & Goetz, 2013), and having numerous small firms that create tremendous amounts of jobs (Audretsch, 2002) to name a few are reasons why the United States is considered as leading the most dynamic economy in the world. Zimmerer, Scarborough, and Wilson (2008) asserted that economic growth and prosperity rely on entrepreneurs who focus merely on reaching success by creating and marketing innovative, customer-focused products and services. The importance, benefits, and virtuosity of entrepreneurship, on the growth of the U.S. economy, have been theoretically and scientifically recognized by numerous research studies (Banda, 2007).

The term entrepreneur was first used in an economic context in 1755 (Banda, 2007). Since then, the study of entrepreneurship has increased, kept its popularity, and has been an interesting research topic for many books and articles within economics (Banda, 2007; Kerr, Nanda, & Kropf, 2014). Many psychologists, anthropologists, sociologists, and economists have contributed new definitions of entrepreneurship into their academic research fields (Banda, 2007). For instance, Zimmerer et al. (2008) defined entrepreneur as “one who creates a new business in the face of risk and uncertainty for the purpose of achieving profit and growth by identifying significant opportunities and assembling the necessary resources to capitalize on them” (p. 3). As a new contribution to this research field, this study focuses on the relationship between different generations of entrepreneurs and entrepreneurial traits, and how entrepreneurs from different generations differ in entrepreneurial traits in the creation, assessment, development of entrepreneurs, or operation of new ventures (McGourty, 2009). Zemke, Raines, and Filipczak (2000) stated that “there is a growing realization that the gulf of misunderstanding and
resentment between older, not so old, and younger employees in the workplace is growing and problematic” (p. 1).

The statistical data of the U.S. Census Bureau (2015) stated that the population of the United States, since 2010, tends to be larger, older, and racially and ethnically more diverse than ever before. According to the 2015 U.S. Census Bureau report, the United States hosts a population of 321.4 million people and there is a 3.9% growth in a population of 281.4 million people since 2010. How could the United States sustain the most dynamic economy in the world with such a large population? The answer to this question is embedded in the importance of having a tremendous amount of small-businesses which enhance local economic growth and quality of life, and new job opportunities in the United States (Bednarzik, 2000; Decker et al., 2014; Hathaway & Litan, 2014; Longenecker & Schoen, 1975; Olson, 1987; Rupasingha & Goetz, 2013; Scales, 2011). According to the U.S. Small Business Administration’s (SBA) 2014 statistics, the number of small-businesses, owned and operated by different generations of entrepreneurs, has quickly increased and the rate of failures for small businesses has dropped while big corporations are downsizing. Small Business Administration (2014) reported that 28 million small-businesses created 56 million jobs across the United States in which real gross domestic product (GDP) grew at an annual rate of 5% in the third quarter of 2014. These are findings reported since 2003.

A positive relationship between entrepreneurship and economic growth has empirically been detected by many economists as a result of entrepreneurs from different generations establishing small businesses in the United States (Banda, 2007; Batabyal & Nijkamp, 2012; Galindo & Picazo, 2013; Glaeser, Kerr, P., & Kerr, 2015). The important role of entrepreneurs from different generations in the U.S. economy has been taken into consideration in this study. Three different generations of entrepreneurs and five different entrepreneurial traits were examined to determine whether generational differences affect entrepreneurial traits. Analyzing the characteristically different generations of entrepreneurs (Baby Boomers, Generation Xers, and Millennials) and their entrepreneurial traits (need for achievement, need for autonomy, creative tendency, calculated risk taking, and locus of control) may shed a new light on their perspectives on business activities.

PURPOSE OF THE STUDY

The purpose of this study is to investigate the relationship between entrepreneurial traits and generations of U.S. entrepreneurs in Southwest (San Antonio), Northeast (Dallas), Center (Austin), and Southeast (Houston) Texas, to see whether generational differences are associated with entrepreneurial traits.

PROBLEM STATEMENT AND SIGNIFICANCE OF THE STUDY

Entrepreneurs have substantially contributed to local economic growth, quality of life, and the workforce to the United States economy positively. Furthermore, Stephens, Partridge, and Faggian (2013) suggested that higher levels of entrepreneurship in rural and remote regions is a key means to increasing economic growth. To enhance or at least keep the United States economic growth steady, the need of addressing, understanding and analyzing generationally diverse entrepreneurs and their distinguished characteristics has come out of necessity. Previous research studies reported that failure to understanding generational differences may result in misunderstanding and miscommunication, conflict in the workplace, and lower employee productivity (Fyock, 1990; Adams, 2000).

Generations differ from each other in values and views, workplace aspirations, politics, music, sports, movie heroes, dreads, hopes, fears, delights, and disappointments (Zemke et al. 2000) while generations that were born in the same time period share common historical experiences, economic and social conditions, and technological advances (Spector, 2008). Lancaster and Stillman (2002)’s theory claims that three different generations of entrepreneurs, Baby Boomers, Generation Xers, and Millennials, have their own work ethics and they tend to be diverse in today’s high-performance workplace. Therefore, three different generations of entrepreneurs’ characteristics are needed to be analyzed. These
characteristics are as follows: need for achievement, need for autonomy, creative tendency, calculated risk-taking, and locus of control (Caird, 2006). Measuring and analyzing these entrepreneurial characteristics among different generations of entrepreneurs may contribute beneficial insights to their understanding in enterprising potential and differentiate themselves in entrepreneurial traits. Entrepreneurship has become a powerful factor in the United State economy in which it is believed that economic growth, dynamic workforce, and wealth reside in the hands of entrepreneurs. As the scope of small-business increases in the United States, paying attention to entrepreneurship in local business has been increasing and has been a challenge among different generations of entrepreneurs.

REVIEW OF LITERATURE

The purpose of this research study was to provide an understanding of the relationship between generations and entrepreneurial traits, and contribute new, productive and dynamic concepts into the business area. A variety of studies have been referenced in this research study in order to underpin and compare information regarding interactions between generations and entrepreneurial traits. This research further provides an in-depth presentation of generation of entrepreneurs, entrepreneurial traits, and a discussion of how entrepreneurs from different generations distinguish themselves in entrepreneurial traits. The benefits of this study would be providing entrepreneurs from different generations, such as Baby Boomers, Generation Xers, and Millennials, an interpretation, assessment, a comparison, and a chance of measuring their potential entrepreneurial traits within the framework of: (a) need for achievement, (b) need for autonomy, (c) creative tendency, (d) calculated risk taking, and (e) locus of control among Entrepreneurs’ Organization (EO) in Southwest (San Antonio), Northeast (Dallas), Center (Austin), and Southeast (Houston), Texas.

Generation

The term generation has sociologically been conceptualized and articulated by well-known generational scholars that have done most of the revolutionary work in this field (Strauss & Howe, 1991; Zemke, Raines, & Filipczak, 2000). They define generation as a “a cohort-group whose length approximates the span of a phase of life and whose boundaries are fixed by peer personality” (Strauss & Howe, 1991, p. 60). In this definition, Strauss and Howe underlined peer personality as “a generational persona recognized and determined by (1) common age location; (2) common beliefs and behavior; and (3) perceived membership in a common generation” (p. 64) to find the boundaries and identify a generation. In the twenty-two years period, generations share a set of collective attitudes such as “family life, sex roles, institutions, politics, religion, lifestyle, and the future. It can be safe or reckless, calm or aggressive, self-absorbed or outer-driven, generous or selfish, spiritual or secular, interested in culture or interested in politics” (Strauss & Howe, 1991, p. 63).

According to Zemke et al. (2000), having “the mix of race, gender, ethnicity, and generation make today’s American workforce unique and singular” (p. 1). Zemke et al. (2000) further added that “the three generations that occupy today’s workplace and the fourth generation that is entering it are clearly distinguishable by all these criteria – their demographics, their early life experiences, the headlines that defined their times, their heroes, music, and sociology, and their early days in the workplace” (p. 17). However, misunderstanding and hatred could be a problem between older, not so old, and younger generations in the workforce that needs to be addressed and confronted (Zemke et al., 2000). Just like in today’s American workforce, each generation of entrepreneurs displays its own generational personality as well. Strauss and Howe (1991) state that these “personalities are arrayed in a generational constellation that changes according to a predictable generational cycle. Projecting the cycle is a new way to predict consumer attitudes and lifestyles” (p. 25). Zemke et al. (2000) asserted that “understanding generational differences is critical to making them work for the organization and not against it” (p. 17).
Baby Boomers

Many researchers have adapted different birth years for each generation in the field of generational studies. For instance, Baby Boomers’ birth dates have a range of 1946-1964 (Lancaster & Stillman, 2002; Martin & Tulgan, 2006; U.S. Census Bureau, 2014). Strauss and Howe (1991) and Zemke et al. (2000) consider Baby Boomers as those born between 1943 and 1960. “There really is no magic birth date that makes you a part of particular generation” (Lancaster & Stillman, 2002, p. 59). This research study utilized the dates proposed by Lancaster & Stillman (2002) who state that Baby Boomers were born between the years 1946 and 1964. The reason of relying on Lancaster & Stillman’s (2002) age range in three generations was that their long-time investigations illustrated the generation gap and general communication failures across generations in workplaces.

The Baby Boomers, as the generation of Americans, is commonly believed to have begun at World War II which was marked by one of the largest generations in U.S. history (Lancaster & Stillman, 2002; U.S. Census Bureau, 2014). As its name “boom” implies, this generation remarkably boomed American economy, education, housing, and science and was featured in Fortune magazine as “the Great American Boom” in 1946 (Strauss & Howe, 1991). It is believed that a generation of 80 million Americans born between 1946 and 1964 which formed a Baby Boomer generation (Lancaster & Stillman, 2002). At present in 2016, the Baby Boomers are at the age of between 52 and 70. The Boomers generation witnessed and participated in the political and social turbulent of their time such as the Vietnam War, the women’s and human rights movement, the Kennedy and King assassinations, Watergate and the sexual revolution (Adams, 2000; Lancaster & Stillman, 2002).

Generation X

This generation is also called Gen X, Gen Xers, Post-Boomers, Twenty-Something’s, Baby Busters (Wiedmer, 2015), and The Thirteenth generation, because it is the 13th generation to know the American nation and flag (Howe & Strauss, 1991; Keeling, 2003). Using a range of birth years has helped many researchers to define and differentiate generations. Many researchers have set up different birth years for this generation as well. For instance, Generation X is referred to as those who were born between the 1960s and 1980s (Lyons & Kuron, 2013; Zemke et al. 2000), between 1961 and 1981 (Howe & Strauss, 1991; Keeling, 2003; Wiedmer, 2015), and lastly between 1965 and 1980 (Lancaster & Stillman, 2002). This research study utilized the dates proposed by Lancaster & Stillman (2002) who stated that Generation Xers were born between the years 1965 and 1980, following the Baby Boomer generation.

The Generation X was born after the Western Post-World War I Baby Boomers when the United States experienced severe economic recessions during this time period, due to the existence of lower birth rates, as opposed to previous Baby Boomers (Martin & Tulgan, 2006; Wiedmer, 2015; Zemke et al., 2000). According to U.S. Census Bureau (2014), Generation Xers contribute a population of 84 million people in the United States. The Generation Xers are, at present in 2016, at the age of between 36 and 51. Therefore, sometimes differentiating whether some individuals are Generation Xers or late Boomers could be difficult. As a solution to this, the researcher asked participants to indicate their age range in demographic questionnaire in the survey (Baby boomers: 52-70, generation Xers: 36-51, millennials:18-35).

Generation Y (Millennials)

Generation Y is also known as the Echo Boom, the Baby Busters, Generation Next (Lancaster & Stillman, 2002), the Internet Generation, Nintendo Generation, Generation 2001 (Zemke et al., 2000), and Millennials (Howe & Strauss, 2000; Lancaster & Stillman, 2002; Zemke et al., 2000). Different birth year parameters have been set by different researchers, for this generation. For instance, Millennials are referred to as those who were born between 1980 and 2000 (Zemke et al., 2000), 1981 and 1999 (Lancaster & Stillman, 2002), and 1982 and 2000 (Strauss & Howe, 1991). This research study adopted the dates proposed by Lancaster & Stillman (2002) who stated that Generation Y was born between the years 1981 and 1999 followed by the Baby Boomers generations and Generation Xers. Wiedmer (2015) stated that a generation of 71 million Millennials, born since the Boomers, forms the largest generational
cohort group. According to United States Census Bureau (2015), Millennials have reached 83.1 million in numbers, and they represent more than one quarter of the nation’s population. Millennials are currently between the ages of 17 and 35.

The Millennials have witnessed several historical incidents that include the death of Princess Diana, the World Trade Center attacks, the Columbine High School shootings, and the Oklahoma City federal building bombing (Wiedmer, 2015; Zemke et al., 2000). This generation is talented in using technology that has been a part of their lives (DeMaria, 2013; Howe & Strauss, 2000; Lancaster & Stillman, 2002; Murray, 2015; Zemke et al., 2000). As a result of Millennials having grown up with the Internet, cell phones, text messaging, and social media (Murray, 2015), differentiating them from prior generations, they are considered “Internet Pioneers” (DeMaria, 2013). Being “Internet Pioneers” and having an innate capability to use technology, Millennials, who are the first to be born when Internet and cell phones already existed, have the opportunity to be a transformational generation (DeMaria, 2013). According to Lancaster and Stillman (2002), many industries recruit young Millennials to take advantage of their technical knowledge while they are still in school. Having this talent made American companies shift their focus to children that means they wanting to hire younger employees (Howe & Strauss, 2000).

Entrepreneurship and Traits

Entrepreneurs from different generations and entrepreneurial traits were the focus of this research study. The topic of entrepreneurship is not a new phenomenon and its reputation is ever-increasing in the business field. Conceptualizing the term entrepreneurship has been ongoing since 1755 (Banda, 2007) by numerous scholars to contribute new definitions, terms, and beneficial information into different disciplines. However, interest in entrepreneurship has never been greater than in the twenty-first century (Zimmerer & Scarborough, 2005). As Zimmerer and Scarborough predicted back in 2005, the future of entrepreneurial activity is outstanding as entrepreneurs continue launching their businesses at high levels. This has caused large companies to continue downsizing and focusing on transitioning to small-businesses in order to sustain market share. Interest in entrepreneurship has steered many researchers toward consensus on the importance of entrepreneurial activity in promoting considerable local economic growth, enhancing quality of life, expanding the job market, reduction in poverty, and unemployment rates in the U.S. economy (Batabyal & Nijkamp, 2012; Bednarzik, 2000; Decker et al., 2014; Demirci, 2013; Galindo & Picaz, 2013; Glaeser, Kerr, P., & Kerr, 2015; Longenecker & Schoen, 1975; Picazo, Martin, & Soriano, 2012; Rupasingha & Goetz, 2013). This literature review was designed to contribute to our understanding of entrepreneurship and entrepreneurial traits as described by Caird (2006).

Need for achievement

McClelland (1953) asserted that entrepreneurs with high motivation are characterized by the need for achievement by which entrepreneurs are driven (as cited in Caird, 1990a). The need for achievement associated with motivation stems from an individual’s desire for excellence while excellence is derived from personal accomplishments (Caird, 2006; Johnson, 1990; Nistler, Lamm, & Stedman, 2011). As a foundation of motivation, the need for achievement is recognized as an important characteristic of entrepreneurs (Demirci, 2013). Entrepreneurs with a high need for achievement score have a strong desire to be successful and are highly committed to getting things done (Caird, 2006). Previous research studies conducted by several scholars indicated that there is a significant relationship between the need for achievement and entrepreneurship (Collins, Hanges, & Locke, 2004; Johnson, 1990; Shaver, 1995). McClelland (1968) underlined that the high need for achievement is associated with certain attributes. For example, possessing self-awareness, determination, motivation, and decision making abilities, and being energetic, innovative, a risk-taker, and responsible (as cited in Caird, 1990a).

Need for autonomy

According to Watkins (1976), in Caird, 1990a, the need for autonomy is the strongest reason for entrepreneurs to start a business. Broeck, Vansteenkiste, Witte, Soenens, and Lens (2010) defined autonomy as the inherent need or desire of individuals to feel volitional and to experience a sense of
choice and psychological freedom when performing an intended task to be accomplished. Hackman and Oldham (1976) defined autonomy as “substantial freedom, independence and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (as cited in Broeck et al., 2010, p. 258). Entrepreneurs with test results showing a high need for autonomy often display dissatisfaction and a feeling of discomfort when expected to work within the constraints, boundaries, and business rules that were previously established (Demirci, 2010). According to the 2006 research results by Caird, and the 2008 results by Raposo, Paco, and Ferreira, entrepreneurs with a high need for autonomy are independent, that is, preferring to work alone, self-expressive, individualistic and unresponsive to group pressure, leaders, unconventional, opinionated, and determined.

Creative tendency

The entrepreneurial trait of creative tendency is one of the core driving forces that plays a crucial role that is associated with innovation and entrepreneurship (Caird, 2006; Demirci, 2010). According to Caird (1991a), the definition of creative tendency should involve imagination, innovation, curiosity, and versatility. Demirci (2010) described successful entrepreneurs as “those who can develop new ideas, seize the gaps in the market and create value through bringing ideas and resources together in a different way” (p. 24). An enterprising person should have a broad horizon regarding new ideas, new products and processes such as new technologies, businesses, projects, organizations, have a tendency for constructive problem solving, and look at life in a different way from others (Caird, 2006).

Calculated risk-taking

One of the very inherent parts of entrepreneurial behaviors is risk-taking. The role of risk in entrepreneurial behavior was first pointed out by Cantillon in 1755 (as cited in Caird, 1991a; Zhao et al., 2010). Entrepreneurs who are wise and calculate and assess the risk involved in the initiative, often take into consideration the risk-taking option when their decisions are made under uncertainty, driven by the lack of knowledge and information (Demirci, 2010). Atkinson (1957), as cited in Caird (1991a), underlined the importance of being a moderate risk-taker by suggesting that it is a function of strength of the motive to achieve or avoid failure which, according to Demirci (2010), differentiates between gambling and calculated risk-taking. According to Caird (2006), an enterprising person should be opportunistic and be seeking information and expertise when taking risks as these characteristics would be valued in any initiative. Entrepreneurs who are scored as high calculated risk-takers have the following qualities: decisiveness, self-awareness, are analytical and goal-oriented, and possess effective information management skills (Caird, 2006).

Locus of control

This psychological behavior is known as one of the dominant psychological traits in which individuals have control over their own life and are responsible for the outcomes of the decisions they make (Dada et al., 2015; Demirci, 2010; Lyons et al., 2015). Weinstein (1969) argued that individuals with an internal locus of control tend to be responsible for successes and failures, and attribute outcomes to his or her own ability and effort while individuals with an external locus of control attribute outcomes to task ease or difficulty, luck, fate, the influence of powerful others (such as doctors, the police, or government officials) or being in the right place at the right time (as cited in Caird, 1991a). Beugelsdijk (2007) stated that “success is not a matter of luck and having connections, but of hard work” (p.196). According to Caird (2006), individuals with an internal locus of control are opportunistic, self-confident, proactive, determined and express a strong-willed control over life, and self-belief, that is, equating the results achieved with the effort made.
RESEARCH DESIGN

A quantitative research study was performed in order to investigate the relationship between generations and entrepreneurial traits. This quantitative descriptive research study, specifically, aimed to understand to what extent generations of entrepreneurs display similarities and differences in entrepreneurial traits. Using statistical analyses to describe critical characteristic traits of different generations of entrepreneurs, the study provided a description of the enterprising tendencies of Texas based entrepreneurs who deal with operating small-business companies as self-employers. According to Creswell (2012), quantitative data help researchers measure variables, provide particular numbers and results which assess the frequency and magnitude of trends, and present beneficial information to describe trends about a large number of people.

Research Question and Hypothesis

The central questions for this research are:

1. What are the distributions of entrepreneurial traits of entrepreneurs?
2. What are the distributions of generations represented by entrepreneurs?
3. Is there a significant difference in entrepreneurial trait scores between generations?
   - Hypothesis: Using one-way ANOVA in the Null (H0) and Alternate (H1), the hypotheses are:
   - H0: There is no significant difference in entrepreneurial trait scores between generations.
   - H1: There is a significant difference in entrepreneurial trait scores between generations.
4. Is there a significant difference in entrepreneurial trait scores between generations after controlling the effects of covariates?
   - Hypothesis: Using five multiple regression analyses in the Null (H0) and Alternate (H1) the hypotheses are:
   - H0: There is no significant difference in entrepreneurial trait scores between generations after controlling the effects of covariates.
   - H1: There is a significant difference in entrepreneurial trait scores between generations after controlling the effects of covariates.

Sample

The participants of interest in the research study consisted of three different generations: Baby Boomers, Generation Xers, and Millennials of entrepreneurs that operate small-business within fewer than 500 employees. Data was acquired using a web-based tool (Survey Monkey) in Southwest (San Antonio), Northeast (Dallas), Center (Austin), and Southeast (Houston) in metropolitan region, Texas with the titles of entrepreneur at EO. The G*Power sample size calculator was used to determine minimum sample size for the study. “Power and sample-size (PSS) analysis is a key component in designing a statistical study. It investigates the optimal allocation of study resources to increase the likelihood of the successful achievement of a study objective” (StataCorp, 2015, p.1). Using the G*Power sample size calculator, the suggested sample size yielded, after applying an 80% confidence level, α level at .05, and effect sizes at .30 and .15 for One-Way ANOVA and multiple regression analyses required a minimum sample size of 111 and 131.

Data Collection

The questionnaire chosen for this study was GET2. The permission of administrating this survey was acquired from Dr. Caird, UK via e-mail. Measuring three different generations of entrepreneurs’ enterprising tendencies through GET2 test helped the researcher to differentiate the similarities and differences between different generations of entrepreneurs and entrepreneurial traits in need for achievement, need for autonomy, creative tendency, calculated risk taking, and locus of control. GET2 test is a survey instrument that is comprised of items with dichotomous response options – tend to agree or tend to disagree. The instrument measures levels of agreement. The scale and subscales were treated as continuous in compliance with research questions. The generation variable is a single variable with three
categories: baby boomers, generation Xers, and millennials and the five entrepreneurial traits were treated as categorical (low, medium, high). The overall GET2 score is a number between 0 and 54. In the study, participants answered every question regarding the following two categories: demographic and five different entrepreneurial traits (enterprising tendencies). An analysis of the results revealed the demographics of the three different generations of entrepreneurs and unearthed findings regarding the four descriptive quantitative research questions. The sample size was obtained by sending an online invitation link via Internet on social-media to 517 small business owners entrepreneurs and asking them to participate the online questionnaire software (Survey Monkey).

**Data Analysis**

Conducting a survey and drawing conclusions from that was a process of gathering and analyzing data. The data collected for this study were analyzed descriptively. The purpose of the descriptive analysis was to describe, present, and summarize the means for all of the descriptive data such as the survey participants’ demographic variables. Descriptive statistics were used to determine the distributions of entrepreneurial traits of entrepreneurs and the distributions of generations represented by entrepreneurs. “Analysis of variance is used to compare two or more means to see if there are any statistically significant differences among them” (Tabachnick & Fidell, 2013, p. 37).

For the last research question, multiple regression analysis was used to test the hypothesis whether there is a statistically difference in the Total Entrepreneurial Traits scores across three generations of entrepreneurs after controlling covariates. Multiple regression analysis technique that allows researchers to build a model that explore the relationship between one continuous dependent variable and a number of independent variables or predictors (Pallant, 2013). Multiple regression analysis suited the last question well because this analysis allowed the researcher to test whether adding a variable contributes to the predictive ability of the model, over and above those variables already included in the model (Pallant, 2013). According to Pallant (2013), there are three main research questions that multiple regression can be used to address: “how well a set of variables is able to predict a particular outcome”, “which variable in a set of variables is the best predictor of an outcome”, “whether a particular predictor variable is still able to predict an outcome when the effects of another variable are controlled for” (p. 155).

**FINDINGS AND DISCUSSIONS**

This study quantified the relationship between entrepreneurial traits and generations of U.S. entrepreneurs in Southwest (San Antonio), Northeast (Dallas), Central (Austin), and Southeast (Houston) Texas, to see whether generational differences are associated with entrepreneurial traits. Of the 117 respondents, 37 (32%) were females and 80 (68%) were males. The three different generations were selected using Lancaster & Stillman (2002)’s birth years for each generation. Respectively, Baby Boomers n=24, (20% of total response), Generation n= 50 (43% of total response), and Millennials n= 43 (37% of total response) participated in the study.

McClelland (1987) and Cromie (2000) stated that Need for Achievement is a primary entrepreneurial feature that forms single driving force for the successful entrepreneurship. In this study, in parallel to McCelland (1987) and Cromie (2000)’s claim, the score of Need for Achievement was found higher than any other entrepreneurial traits based upon the 12 items scale (mean: 9.85 out of 12 possible highest score). The second highest score belongs to Locus of Control based upon the same 12 items scale which accounted for 8.89 out of 12 possible highest score. Respectively, Total Calculating Risk Taking (8.09 out of 12 possible highest score) and Total Creative Tendency (6.32 out of 12 possible highest score). Total Need for Autonomy accounted for 3.69 in mean score which can only achieve a maximum score of 6. Total Need for Autonomy had a higher relative mean score than Total Creative Tendency when accounting for the maximum scores.

Collected data from 117 entrepreneurs showed that 88% of total population (103 entrepreneurs) tend to have a medium level of enterprising tendency. Caird (2013) stated that entrepreneurs with medium level enterprising tendency tend less likely to set up an innovative high growth business venture.
However, they may be able to express their enterprising tendency within employment as intrapreneurs on in their leisure time (e.g. through voluntary community projects).

In the Tukey HSD test, only the group of Millennials (M = 8.70, std = 1.34) and Baby Boomers (M = 7.50, Std = 1.96) were detected statistically significant different from one another in the Total Calculated Risk Taking scores. The generation Xers (M = 7.84, std = 1.98) did not differ significantly from either Baby Boomers and Millennials. Having addressed statistically significance difference between Millennials and Baby Boomers in the mean score in the Total Calculated Risk Taking score, Millennials have the highest risk taking trait in comparison of the Baby Boomers. The researcher failed to reject the null hypothesis as the p value of total GET2 scores was larger than .05 (p > .05). Overall, results showed that there is no statistically significant difference at the p < .05 in the mean scores on four Total Entrepreneurial Trait scores across the three generation groups.

### Table 1
**Multiple Comparisons**

<table>
<thead>
<tr>
<th>Mean Difference</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Age</td>
<td>(J) Age</td>
</tr>
<tr>
<td>18-35</td>
<td>36-51</td>
</tr>
<tr>
<td>52-70</td>
<td>.198</td>
</tr>
<tr>
<td>36-51</td>
<td>18-35</td>
</tr>
<tr>
<td>52-70</td>
<td>.340</td>
</tr>
<tr>
<td>52-70</td>
<td>18-35</td>
</tr>
<tr>
<td>36-51</td>
<td>-.340</td>
</tr>
</tbody>
</table>

*Note.* *The mean difference is significant at the .05 level.*

A five-multiple regression analysis was performed to investigate whether there was a significant difference in entrepreneurial trait scores between generations after controlling the effects of covariates. Multiple regression test was performed for each entrepreneurial trait. There was no statistically difference in the five entrepreneurial traits between generations after controlling the whole covariates in the first model. Neither in the first nor final model, statistically significant difference in the Total Need for Autonomy and Total Locus of Control scores between generations after controlling the effects of covariates was detected. In compliance with the principle of parsimony method, multiple linear regression was retested by removing nonsignificant variables systematically until the researcher reached a statistically significant difference in the dependent variables between generations (p < .05). However, removing and adding predictors in the final model to get a significant result did not help. None of the predictors in the model predicted a significant amount of the variance in both Total Need for Autonomy and Total Locus of Control scores.

In the final model, in compliance with the principle of parsimony method, a multiple linear regression was reperformed with Total Need for Achievement as a dependent variable and Baby Boomers, Generation Xers, and Less than 10 Years (number of years as a business owner) as independent variables. The value of Adjusted R Square indicated that 4% (rounded) of the variance in the Total Need for Achievement scores was explained by the model. The ANOVA table indicated that the new model with predictors is statistically significant, $F (5, 111) = 2.505$, p < .05. The coefficient p values indicated that there is a statistically significant difference in entrepreneurial trait scores between Baby Boomers and Millennials after controlling the effects of covariates in the model (p < .05). The researcher found that, when the effects of the number of years as a business owner (Less than 10 Years vs Ten or More), the difference in average Total Need for Achievement scores between Baby Boomers and Millennials was significant, with Baby Boomers estimated to score 1.067 less than Millennials on average.
In the final model, in compliance with the principle of parsimony method, a multiple linear regression was reperformed with Total Creative Tendency as a dependent variable and Baby Boomers, Generation Xers, and Trade (type of business) as independent variables. The value of Adjusted R Square indicated that 7% (rounded) of the variance in Total Creative Tendency scores was explained by the model. The ANOVA table indicated that the final model with predictors is statistically significant, F (3, 113) = 3.746, p < .05. The coefficient p values indicated that there is a statistically significant difference in entrepreneurial trait scores between Baby Boomers and Millennials after controlling the effects of Trade in the model (p < .05). The researcher found that, when the effects of the type of business (trade vs. all other types of business), the difference in average Total Creative Tendency scores between Baby Boomers and Millennials were significant, with Baby Boomers estimated to score 1.122 less than Millennials on average. In addition to that those in the Trade (type of business) score significantly lower on Total Creative Tendency than those in other types of business.

In the final model, in compliance with the principle of parsimony method, a multiple linear regression was reperformed with Total Calculated Risk Taking score as a dependent variable and Baby Boomers, Generation Xers, Graduate Degree (education level), and Undergrad Degree (education level) as independent variables. The value of Adjusted R Square indicated that 6% of the variance in Total Calculated Risk Taking scores was explained by the model (see Table 42). The ANOVA table indicates that the final model with predictors is statistically significant, F (4, 112) = 2.949, p < .05. The researcher found that when the effects of education (graduate degree vs. undergrad degree), whether or not education in undergrad degree (vs. graduate degree), the difference in average Total Calculated Risk Taking scores between Baby Boomers and Millennials, and Generation Xers and Millennials were significant, with Baby Boomers estimated to score -.950 and Generation Xers - .746 less than Millennials on average. It can be also reported that those with Undergraduate and Graduate degrees score significantly higher on Total Calculated Risk Taking than those without a College degree.

RECOMMENDATIONS

Practitioners

A variety of studies have been referenced in this research study in order to provide useful information for practitioners, policy makers, and future researchers. This study intends to explore whether there is a statistically difference between generations of entrepreneurs and entrepreneurial traits. In this study, participants are entrepreneurs with small businesses. The research study can also make contribution to the academic literature by profiling Southwest, Northeast, Center, and Southeast Texas metropolitan region entrepreneurs. This study has intended to contribute to the academic literature in understanding the differences in the five entrepreneurial traits across three different generations of entrepreneurs. This quantitative descriptive study can be useful for practitioners in self-assessment in their entrepreneurial (enterprising) potential and can get an idea of the competency to start up and manage projects. For instance, scores on the five trait dimensions can provide feedback to practitioners regarding the degree to which they have a high, medium, or low entrepreneurial tendency level.

Recommendations

Policy Makers

It is undisputed that entrepreneurship has made a significant contribution to the economic growth, dynamic workforce and wealth in the U.S. economy. Entrepreneurs focus merely on reaching success by creating and marketing innovative, customer-focused products and services in the purpose of contributing economic growth and prosperity in the nations that they reside. Therefore, entrepreneurship should be an essential factor for policymakers, local economic development departments, to understand the degree to which generations’ differences are associated with entrepreneurial traits, in order to receive a higher quality of output from entrepreneurs in the Southwest, Northeast, Center, and Southeast Texas metropolitan regions. In addition to this, policy makes should build the supportive business environment for entrepreneurs to contribute their new ventures. As entrepreneurship is a key contributor to increasing
workforce and economic growth, policy makers can reduce the effects of taxes on the financing of new ventures (Gale & Brown, 2013).

Future researchers

The study presented a quantitative descriptive research study of entrepreneurs from different generations and entrepreneurial traits by utilizing GET2 instrument. The results of this research were important in determining the possible statistically differences in entrepreneurial traits across generations of entrepreneurs in major cities in Texas. Present and future entrepreneurs may want to take advantage of the research findings to better understand their entrepreneurial tendencies and develop their entrepreneurial skills for positive outcomes.

Further research was recommended to extend the understanding of the differences between entrepreneurial traits and entrepreneurs representing different generations. Future researchers can extend this study as a qualitative or mix-method study with various elements of entrepreneurial traits, to explore the relationship between generations of entrepreneurs and entrepreneurial traits in order to develop a more comprehensive research study.

REFERENCES


