TRANSFORMATIONAL LEADERSHIP BEHAVIORS OF FRONTLINE SALES PROFESSIONALS: AN INVESTIGATION OF THE IMPACT OF RESILIENCE AND KEY DEMOGRAPHICS

by

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Abstract

Transformational leadership has emerged as a dominant leadership style necessary for both individuals and organizations alike in the twenty-first century and is extensively supported by academic and organizational leaders in the published literature. However, the current literature lacks an exploratory analysis of the relationship between resilience and the demonstration of transformational leadership behaviors. Therefore, this research explores the study of the impact of the dimensions of resilience and key demographics on the transformational leadership behaviors of sales professionals operating on the frontlines of a variety of industries. This investigation utilized three surveys. The effect of the independent variables, the dimensions of resilience and gender, age, education, years of experience, and salary level, have on the transformational leadership behaviors was measured through an online survey panel of 356 sales professionals. The data was analyzed using four statistical tests: Pearson's Moment Correlation, *t* test, ANOVA, and backward elimination Regression Analysis to evaluate the outlined hypotheses. Analysis of this data demonstrated that resilience was a low to moderate predictor of transformational leadership behavior explaining approximately 23% of the variance in the transformational leadership behaviors demonstrated by the frontline sales professionals in this study. Implications and priorities for future research on both resilience and transformational leadership are also discussed since resilience, an attitudinal variable, and transformational leadership, a behavior variable, can be learned and are critical components to successfully managing continuous change in the current century.

Dedication

This work is dedicated to my husband, Steve, for his love, patience, and unending encouragement and assistance. Without his support, this project and all that I do in life would not be possible. I also dedicate this to my parents for always directing and guiding me toward my future. To my in-laws, extended family, and friends, I have valued your understanding and support for this seven year journey that I have been on.

We are not permitted to choose the frame of our destiny.
But what we put into it is ours.

-Dag Hammarskjold

Acknowledgments

This dissertation is the summation of my journey into academic development and the commencement of both my personal and professional development from an exciting and new perspective. I would like to thank everyone who guided, suggested, and assisted in the preparation of this manuscript. To all (family, friends, colleagues, direct reports, and the research participants of the study) who have traveled with me during the past several years, I express much gratitude for your unwavering support and encouragement. Some provided moral support and encouragement while others assisted with direction. There is not enough space here to acknowledge all of them individually, yet they all have my sincere gratitude.

My journey has been filled with gains, losses, learnings, and transformations. For the most part, the lessons have brought me greater awareness of my own inner resilience and ability to flow with the currents of change. At other times, the difficult lessons created an internal struggle that could be resolved only through self-reflection and setting new deadlines, and a willingness to surrender to what I did not always fully understand. The process was rarely easy but always stretched my skills and aptitude and was ultimately rewarding.

I would like to provide a special thank you to my dissertation committee for keeping me focused, cheering me on, and being accessible whenever I needed them, and I would also like to thank Frank DeCaro, Ph.D. and Shaun Poovala, Ph.D. for their advice and counsel. Additionally, this project would not have been possible without the direction, guidance, and friendship of my adviser and mentor, Valerie Coxon. Dr. Coxon, to you, I am forever grateful and am prepared to pay it forward.

Table of Contents

List of Tables

List of Figures

CHAPTER 1. INTRODUCTION

Introduction to the Problem

Leadership in corporate America is frequently set against a backdrop of pervasive, multidimensional change that can generate frequent, unexpected, and unforeseen challenges throughout an organization's environment (Bennis, 1989; Marshak, 2002; Miles & Snow, 1986; Miles, Snow, Meyer, & Coleman, 2001). These challenges are characterized today by a global marketplace with intense competition, a constant need to demonstrate corporate growth for investors, rampant technological change, the need to improve product quality, productivity, customer service, and speed to market, while also reducing the organization's cost structure (Becker & Gerhart, 1996; Miles & Snow, 1986; Mische & Bennis, 1996).

Against this backdrop of pervasive change, leaders in the twenty-first century must be equipped to think and act quickly in response to change while sustaining existing operational performance, maintaining market share, and retaining competitive advantage, all while simultaneously and vigilantly observing the environmental landscape for the next new opportunity on which to capitalize (Conner, 1993, 1998, 2000; Land & Jarman, 1992; Masood, Dani, Burns, & Backhouse, 2006). To accompany the pervasive changes that are occurring, a new paradigm of leadership is evolving in which everyone within an organization needs to possess leadership capabilities (Raelin, 2006). As stated by Raelin, "we need to establish communities where everyone shares the experience of serving as leader, not sequentially, but concurrently and collectively" (p. xi). Therefore, developing

leaders or individuals leading on the front lines of organizations is vital to managing business in this century.

While moving through the twenty-first century, leaders are quite likely to encounter obstacles, setbacks, and challenges while dealing with change (Harland, Harrison, Jones & Reiter-Palmon, 2005). Resistance to change, rather than embracing and preparing for change, can result in an organization paying the price of trying to maintain the status quo, added to the costs of reacting to the unanticipated situations and challenges (Dautkoff, 2001; Werther, 2003). Whether leaders encounter challenges and setbacks professionally or personally, organizations as a whole are facing challenging times and the way that individuals and organizations react to change is a feature of being resilient (Harland et al., 2005; Seeger, Ulmer, Novak, & Sellnow, 2005). Resilience is one of the characteristics or attributes that allows an individual and an organization to maintain its original purpose, structure, and identity regardless of the constant chaos, change, and transformations that are taking place in the business environment (Chaharbaghi, Adcroft, & Willis, 2005). In a sense, resilience allows an individual and an organization to be elastic when responding to change. As a result, resilience can be thought of as a building block of transformational change (Chaharbaghi et al., 2005).

The skill to cultivate transformational leaders within an organization that can adapt to change rapidly and effectively may mean the difference between an organization's survival and an organization's failure over time (Baron, 1995; Conner, 2000; Kotter, 1999; Norman, Luthans, & Luthans, 2005). Organizations and individuals must develop the skills to identify possible challenges and work disruptions, to be flexible and possess the ability to adapt in a variety of different situations, to be focused

on creatively and innovatively solving problems in different situations, and to stand prepared to implement solutions as rapidly as possible (Conner, 2000). This capacity or ability to change while moving progressively forward requires both strong transformational leadership and resilient behaviors to help drive organizations into the future (Harland et al., 2005; Raelin, 2006).

Background to the Study

It has been stated by Schein (1990), that leadership possesses the ability to drive culture faster than anything else. Leaders, and therefore, leadership needs be able to change and adapt as the business environment necessitates (Baron, 1995; Conner, 2000; Kotter, 1999; Norman et al., 2005). When adapting to change, it is imperative to recognize that the impact of change on individuals is the most important element of managing the transformation of an organization (Andersen, Klein, & Stuart, 2000; Hind, Frost, & Rowley, 1996; Maddi & Khoshaba, 1994, 1996; 2005). The impact of change on individuals is unavoidably an emotional human process (Hind et al., 1996; Rubin, Munz, & Bommer, 2005). According to Hind et al. (1996), the emotional aspects of change include fear, wonder, exhaustion, loyalty, panic, depression, pessimism, apathy, anger, optimism, revelation, and delight. Barchan (2006) agreed that the most challenging part of leading an organization through change is in managing this human element. According to Colgate (1995) and Bennis (2007), the capacity to handle change effectively is a fundamental life skill necessary to thrive both personally and professionally, and, yet, it can be said that most individuals tend to resist change. Why? Because change alters the status quo and what was previously acceptable and familiar becomes new, unfamiliar,

frightening, and disquieting (Mahoney, 1999; Seeger et al., 2005; Werther, 2003). Being resilient, however, is a transformative ingredient that assists individuals and organizations alike in dealing with and addressing change as it occurs. It is important for leadership that is transformational to be able to deal with this emotional human element since failure to do so can have a major impact on the success of each change initiative and have a negative influence on the entire organization (Hind et al., 1996, p. 18). In fact, of the 100 largest corporations present a century ago only a few of the organizations are still operational today; moreover, many large organizations that were once viewed as resistant and to external forces have shown that they are not impervious to the changes and transformations that are occurring in the marketplace today (Norman et al., 2005, p. 57).

A thorough review of the literature reveals very little empirical research that unequivocally associates the two concepts, transformational leadership and resilience, which are the proposed dependent and independent variables for study in this independent research project. Although outright empirical evidence is limited, there are a number of researchers that have proposed a link between transformational leadership and resilience. Most notably, Luthans and Avolio (2003, p. 256) stated that developing the ability to be resilient is a critical element of authentic leadership development. Luthans and Avolio also stated that the correlation of leadership to resilience "has been largely ignored" (2003, p. 255). According to Daily, McDougall, Covin, and Dalton (2002) and Jensen and Luthans (2006), the attention of the published literature on leadership has focused on the significant responsibility that a leader has in establishing the culture of the organization but little attention has been paid to the psychological capacities of prospective leaders.

Sutcliffe and Vogus suggested that similar to individuals, organizations can increase their efficiency and effectiveness by developing the ability to be more resilient and that the notion of resilience in organizations "has received little independent attention … [and] is worthy of scholarly attention as it can provide insight into the etiology and course of positive adjustments or adaptability under challenging conditions" (2003, p. 99). Academic scholars and business leaders seem to agree that the role and function of resilience in leadership are relevant and important to study. A better appreciation and understanding of the role that resilience plays in leadership, transformational leadership in this case, may help business leaders and organizations alike to adjust, thrive, and succeed in "increasingly complex and incomprehensible environments characterized by hyper competition and rapid change" (Sutcliffe & Vogus, 2003, p. 98-99). In the corporate environment, according to Horne and Orr (1998), the concept of resilience alone has been given very little attention.

There is implied or indirect data that also exists that provides support for the concept that leadership is positively and linearly correlated with resilience (Block & Kreman, 1996). This is apparent through a review of literature on leaders and their subordinates' response to stress as described by Bass in 1990(a). Bass indicated that transformational leaders may play a role in transforming obstacles and crises into developmental opportunities or challenges that can be positively overcome by allowing individuals to problem solve and to arrive at creative solutions to difficulties rather than developing defensive responses that do not allow for growth and mastery (1990a, p. 652).

Isaacs, in 2003, conducted an academic-based research study to assess the relationship between resilience, leadership practices, and demographic variables of high

school principals, assistant principals, and teachers. This investigation demonstrated a significant relationship among several of the dimensions of resilience and transformational leadership effectiveness. The results of this small study provided new information that high school principals could use to assess their own transformational leadership skills in an effort to improve the leadership that exists within their schools as well as ways to think about and manage change as it occurs. Isaacs' study (2003) provided the foundation on which to conduct this investigation into the impact of resilience and key demographics on transformational leadership behaviors of sales professionals operating on the frontlines of their respective organizations.

In 2008, Peterson, Walumbwa, Byron, and Myrowitz completed a study of transformational leadership as a mediator between a CEO's positive psychological traits (hope, optimism, and resilience) and corporate performance for high-tech start-up and established firms. Their study was the first study to investigate resilience (and other positive capacities including hope and optimism) as an antecedent to transformational leadership which resulted in a positive impact to the firms' performance. The premise of this study was that individuals who are positive and see the future filled with possibility will tend to portray transformational leadership behaviors (Peterson et al., 2008, p. 2). The end result of this published study of CEOs was that positive psychological capacities, including resilience, provided considerable promise for understanding the elements of transformational leadership behavior (Bono & Judge, 2003; Peterson et al., 2008; & Wright, 2003). One main difference between this study and the proposed research study is that the study by Peterson et al. (2008) involved subordinate-rated transformational leadership behaviors of CEOs and was focused on the impact of CEO transformational

leadership on subordinates. In contrast, this research study is focused on the impact of self-assessed resilience and key demographics on the self-assessed transformational leadership behaviors of individuals, sales professionals, operating on the frontlines of organizations.

It is imperative that organizations develop transformational leaders throughout all ranks and levels of the corporation and that an organization knows and understands the level of resilience that exists within individuals employed and working on the front lines of the organization (Bass, 1985, 1997; Bennis, 1999; Kotter & Heskett, 1992; Podsakoff, Mackenzie, & Bommer, 1996). The objective of possessing strong transformational leaders on the front lines of the organization who are also resilient is aimed at enabling organizations to make the necessary transformational changes while experiencing a minimum of disruption in organizational productivity and effectiveness (Miles, 2001; Raelin, 2006; Vera & Grossman, 2004). Therefore, possessing a transformational leadership style is critical to navigating the white water rapids of the twenty-first century and possessing a resilient capacity is fundamental to addressing change as it arises (Graetz, 2000; Vaill, 1989). This study considers the impact of resilience and key demographic characteristics on the transformational leadership behaviors of sales professionals working on the front lines of organizations across several industries.

Statement of the Problem

While researchers have advocated for transformational leadership flowing through all levels of an organization, much of the references and empirical research has been focused on upper or mid-level of managers (Bass, 1985, 1997; Bennis, 1999; Kotter &

Heskett, 1992; Podsakoff et al., 1996). This study focuses on the self-assessed level of resilience and the transformational leadership behaviors demonstrated by sales professionals. Sales professionals represent individuals working on the front lines of organizations who have to manage driving the business while being focus on the competitive landscape that may require them to change or alter direction at any given moment. Empirical evidence is needed to adequately document the impact of resilience and key demographics on the transformational leadership behaviors of sales professionals who are on the defense line of organizations, of varying size, driving the revenue line and addressing the competitive landscape on a daily basis.

The Purpose of the Study

The primary purpose of this study is to explore the impact of resilience and key demographics on the transformational leadership behaviors demonstrated by sales professionals operating on the frontlines of their respective organizations. The secondary purpose of this research study includes the following: (a) Determining whether transformational leadership behaviors of sales professionals differs relative to various key demographics, including gender, age, level of education, years of experience, and salary level, and (b) Which of the dimensions of resilience and key demographics are most predictive of the transformational leadership behaviors of frontline sales professionals.

The Rationale

Both transformational leadership behaviors and an attitude of resilience can be learned and applied by most individuals (Burns, 1978; Gardner & Schermerhorn, 2004;

Greenberg, Weinstein & Sweeney, 2001; Masten, 2001; Raelin, 2006; Reinvich & Shatte, 2002; Stogdill, 1948), and, therefore, initiating this investigation allowed for a more thorough understanding to be gained regarding the association between the variables under exploration. The results of this study will provide a better understanding while simultaneously clarify existing questions asked by academia and organizational leaders alike. Ultimately, establishing a better understanding of the impact of resilience and key demographic characteristics on the transformational leadership behaviors of sales professionals may allow organizations to implement support structures, develop appropriate training programs aimed at creating high performance organizations, work to tap into the full potential of employed individuals, and result in the conception of performance management programs that assess these two elements, transformational leadership and resilience.

Research Questions

This research project investigates the impact of two independent variables, sales professionals' resilience and key demographics, on the dependent variable, transformational leadership behaviors demonstrated by these same sales professionals. Since this study is exploratory in nature, the dimensions of resilience and the transformational leadership behaviors were self-assessed using the Personal Resilience Questionnaire (PRQ) and the Leadership Practices Inventory (LPI) respectively (See Methodology section, chapter 3). The research questions for this independent research project are

1. What is the relationship between the dimensions of resilience and the transformational leadership behaviors demonstrated by sales professionals?

2. Does the transformational leadership behaviors of sales professionals differ relative to their gender, age, level of education, years of experience in the current position, and salary level?
3. Which of the dimensions of resilience and key demographic characteristics are most predictive of the transformational leadership behavior demonstrated by sales professionals?

Significance of the Study

The value of this proposed research project is that both transformational leadership and resilience can be learned and have individually been demonstrated to have a positive return on investment in the workplace (See chapter 2, Literature Review; Avolio, Zhu, & Koh, 2004; Bonanno, 2004, 2005; Judge, & Piccolo, 2004; Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans, Avolio, Walumbwa, & Li, 2005; Masten, 2001; Masten & Reed, 2002). Therefore, this independent research study contributes to the available empirical literature in understanding the impact of resilience and key demographics on the transformational leadership behaviors and leadership effectiveness of sales professionals.

Additionally, this study benefits academia and organizational leaders in the following two ways: First, the application of the Leadership Practices Inventory (LPI) Survey (Kouzes & Posner, 2001) provides an opportunity to comprehend the baseline source and role of transformational leadership and leadership effectiveness among sales professionals, individuals leading on the front lines of organizations. Second, incorporating the Personal Resilience Questionnaire (PRQ) provides an opportunity to

understand the resilience and adaptability to change of sales professionals in the U.S. operating in a highly, complex and competitive marketplace. Individuals in sales, regardless of industry, are continuously confronted with the need to manage in a complicated, ever-changing, business setting. Because resilience allows for effective handling of the incessant change that is occurring (Conner, 1993; Flach, 1988), resilience has important application to implementing and managing organizational change for large and small corporations alike. As stated by Henderson and Milstein (1996), resilience is the power to return from adversity or difficulty and become stronger through various life experiences and lessons learned. When resilient individuals encounter change, uncertainty, anxiety, and loss of control that often accompanies organizational change, they are able to spring back, and grow, and develop innovative solutions to situations as they are encountered rather than react in a defeatist manner (Conner, 1993; Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005).

The potential impact of this independent research study is to determine or demonstrate that the more an organization is aware of the level of resilience and transformational leadership possessed by individuals working on the front lines of the organization, the more an organization will ultimately understand about whether its employees are prepared to deal with and address rampant change while leading into the future.

Definition of Terms

The following terminology is defined in accordance with their use in this study:

Leadership. A set of procedures or processes that work together to build organizations in the first place and then modifies the organization in order to address significantly changing circumstances as they arise (Yukl, 1998). Leadership outlines what the future should look like for an organization, then works to prepare people to align with that vision of that future, and creates an inspiration that drives any changes necessary to make the vision happen despite any obstacles (Kotter, 1999).

Leadership Effectiveness. Successful leadership expresses the value of the leader. As stated by Yukl (1998), the measure of leadership effectiveness consists of such assorted elements including the performance of the group, attainment of goals, the survival or viability of the organization, growth and improvement of the group, preparedness, the group's ability to handle and address crises, the satisfaction level of the group with the leader, and the mental, psychological, and emotional well-being and personal and professional growth of group members.

Leadership Practices Inventory (LPI*;* Kouzes & Posner, 1987). An effective leader's distinct contribution or legacy is to the formation or creation of value that endures over time, possibly even beyond their tenure at the organization. The most significant impact that leaders have is on the long-term growth and development of the human resources or people/employees (Kouzes & Posner, 1987; Bass, 1996). According to Kouzes and Posner, extraordinary leadership is made up of five elemental or foundational practices. The key practices are included in the survey of the same name and encompass the following sub-scales

1. *Modeling the way* by making clear or even simplifying one's personal values and standards and by setting a positive example, or reference, for all, to model or portray;

2. *Inspiring a common or shared vision* by creating and communicating a common vision of all that is possible with the goal or objective of uniting everyone around this common purpose,

3. *Challenging the process* by always seeking innovative growth, experiences, opportunities, continuously learning, being willing to take risks (prudent), and learning from mistakes, obstacles, and hardships;

4. *Enabling or empowering others to take action* by creating a trusting environment and nurturing a collaborative spirit, all while building energetic, winning, energized, high-performance teams based on mutual and well-understood goals and creating a shared or participative power; and

5. *Encouraging the heart* by recognizing and rewarding individual and team contributions and celebrating value-based actions, personal and professional accomplishments, and private and public victories in a spirit of family or community. The LPI is assessed along a 10-point Likert scale (Appendix B).

Personal Resilience Questionnaire (PRQ; Conner, 1993). A survey used to measure and assess the level of resilience of individuals. The PRQ includes seven facets or dimensions of resilience (Appendix B). The responses were coded on a 6-point Likert scale varying from 1-*Disagree Very Much* to 6-*Agree Very Much*. The 5 elements and 2 sub-elements of the PRQ include: Positivity (subelements: the World and Yourself), being focused, being flexible (subelements: Thoughts and Social), being organized, and being proactive.

Resilience. The capacity to rebound from significant change, adversity, or risk and to grow and become stronger through various life experiences (Henderson & Milstein, 1996; Luthans & Youssef, 2004; Richardson, 2002, p. 313) and suggests that the individual possesses the ability to turn a challenge or a setback into an opportunity (Lengnick-Hall & Beck, 2003, p. 8) and to "more than bounce back from the edge of

catastrophe…to move forward with even greater vigor and success than before" (2003, p.4).

Sales Professionals or Representatives. Individuals operating on the frontlines of organizations who are customer-facing and responsible for generating revenue for that organization. Sales Professionals or Representatives do not have direct reports.

Sales Managers. Individuals in sales management who have direct reports (frequently referred to as sales professionals) operating on the frontline of an organization who are responsible for generating revenue for that organization.

> ***Transformational leadership.*** [Is an individual] who can formulate or facilitate the formulation of an inspiring vision of something to be sought even if it is unattainable, although it must be approachable without limit. The [transformational] leader must also be able to encourage and facilitate (inspire) the pursuit of the vision by invoking the courage required, even when temporary sacrifices are required, and by making that pursuit satisfying – fun as well as fulfilling. (Ackoff, 1999, p. 22)

Assumptions and Limitations

Several assumptions and limitations were present throughout the research process and this independent research study.

Assumptions

1. The business environment is certainly complex and ambiguous and the environment is typified by rapid technological and organizational change as mentioned previously (Becker & Gerhart, 1996). The drivers for pervasive change are a mixture of economic, political, technological, customer-related, and societal factors (Gassman &

Reepmeyer, 2005; Giglio, Diamante, & Urban, 1998). No industry or organization is immune to these changes and these changes may impact organizations and individuals differently.

2. The sales professionals who participate answered the survey questions truthfully and objectively.
3. The study's research design permitted a thorough evaluation of the research question(s) listed at the outset of the study.
4. Although efforts were employed to reduce common forms of bias, all responses from the research participants in this study were potentially exposed to some form of bias during the research process.

Limitations

1. The survey was self-administered; therefore, beyond the opening memo that accompanied the survey, there was no chance to verbally explain how to complete the questionnaire in an open and honest fashion.
2. The confines of the research design employed in this research must be recognized and acknowledged. This research study was exploratory in nature and, therefore, was entirely self-reported. While it makes sense for the positive attribute of resilience to be self-reported since resilience is a attitudinal variable that requires a self-reflective internal process; on the other hand, transformational leadership represents a behavioral attribute that could invoke not only self-reported evaluations but also peer and manager observations of the observed leadership behaviors. For the purpose of answering the research questions outlined in this study, the researcher made the

decision to complete this exploratory study using self-reported assessments of both resilience and transformational leadership behaviors. Future research, should include both peer and manager evaluation of transformational leadership behaviors where applicable. Additionally, this research methodology did not allow for the manipulation of any of the variables associated with transformational leadership effectiveness or resilience.

3. One of the possible limitations of this study was that computer technology was key and a requirement to completing the survey online. Since the link for the survey was sent via email. Some of the emails sent to prospective research participants could have been caught by a spam filter and/or inadvertently deleted by prospective research participants. However, several attempts were made to obtain a strong and solid participation by the research participants selected as outlined in the section chapter 3 entitled Methodology. All efforts were made to diminish the impact of this possible limitation on the research results/outcomes.
4. This research design limits the capacity to make casual comments about the outcomes. Therefore, other competing causes or dynamics cannot be ruled out.
5. The Leadership Practices Inventory survey (LPI; Kouzes & Posner, 1987) and the Personal Resilience Questionnaire (PRQ; Conner, 1993; ODR, 1996) are two of several instruments that measure transformational leadership and resilience respectively. Therefore, the study results obtained may differ from other studies that have incorporated other instruments that evaluate or assess slightly different facets of leadership and/or resilience.

6. The research sample represents a panel of sales professionals across several industries working on the frontlines of their respective organizations. Therefore, caution should be applied when attempting to generalize the outcome of this or any research study. Any efforts to generalize broadly should be viewed with potential bias, skepticism, and concern.
7. Inherent within the availability of this survey online was the possibility of a lower than expected or estimated response rate. The demanding and multifaceted lives of the research participants, in this case, sales professionals, may have influenced their willingness to participate in this study. A smaller than expected sample could have diminished the statistical power needed to conduct some of the analyses and limited the potential for strongly-supported conclusions from the data to be made. However, efforts were implemented to minimize a small sample response.
8. The accurateness of the study results may have been prejudiced by each of the research participant's ability to recall past events. Additionally, the sales professionals may have rushed to complete this survey and failed to provide true representative assessments for each survey question. Efforts were incorporated to minimize this potential bias.
9. Since this study was a self-reported research study, there was the potential for the research participants to attempt to provide information that demonstrated that they were, indeed, resilient and/or strong transformational leaders by providing socially desirable responses. As a result, the outcome or results of this survey could limit the true magnitude of the relationship between the predictor/criterion (independent/dependent) variables. Additionally, any relationship could be inflated

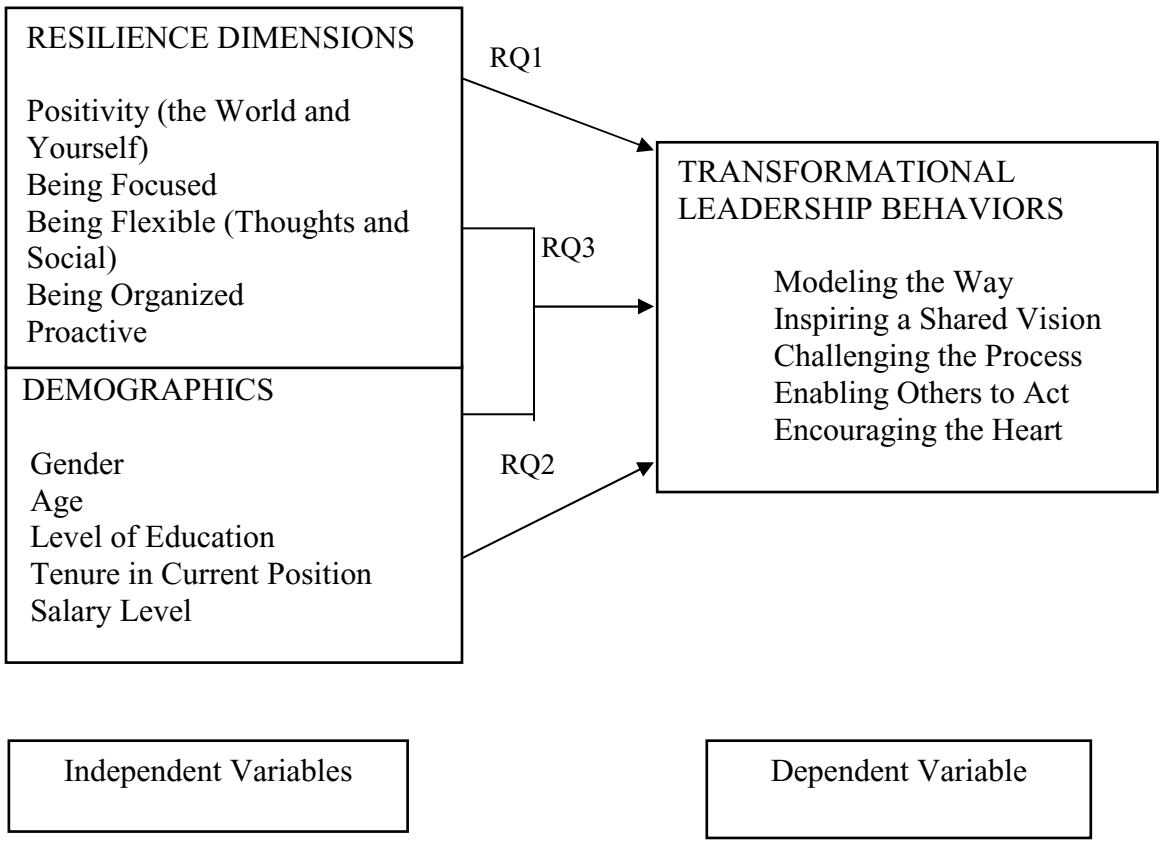
due to a mono-method bias that may have resulted from the same research participants completing one questionnaire that was completely self-reported.

10. Acquiescence is a common problem in survey research that can distort the results obtained from a research project. Acquiescent responses refer to an individual's natural tendency to select 'true' or 'yes' for all or the majority of questions when answering straight down a survey or questionnaire (Paulhaus, 1991). For each of the validated and reliable research tools selected, the LPI and the PRQ, the positively- and negatively-keyed items have been alternated (the LPI) or reverse-coded (the PRQ) throughout the survey in an attempt to identify any bias from responses that do not make sense and thereby limit attempts to allow for acquiescent responses. Additionally, a forced-choice format was used to allow the research participants the opportunity to differentiate their feedback anticipating that all research participants were able to identify an appropriate response from the choices provided. It is because of these potential distortions that many researchers have advocated for the use of other methods besides solely relying on self-reported responses/evaluations (Conway & Huffcutt, 1997; Furnham & Stringfield, 1994; Ganster & Schaubroeck, 1991; Harris & Schaubroeck, 1988). As a consequence of this, this potential issue is listed as a limitation to the research study design and is appropriately noted by the researcher.
11. Finally, there is no method, technique, or process to determine if the research participants that refused to participate in this research study were significantly different from those who willingly chose to participate in this research study.

Nature of the Study (Theoretical/Conceptual Outline)

The main research question asked: What is the impact of the dimensions of resilience and key demographic characteristics on the transformational leadership behaviors demonstrated by sales professionals when transformational leadership behaviors are self-assessed by the sales professionals themselves using Kouzes and Posner's (2002) concepts of challenging the process, inspiring a shared vision, enabling others to act, encouraging the heart, and modeling the way, and where the dimensions of resilience are self-assessed by the sales professionals themselves utilizing a questionnaire developed by Conner (1993) that resilient individuals possess the following characteristics: being positive, being focused, being flexible, being organized, and being proactive. The theoretical framework of this research study is outlined in Figure 1.

Figure 1. Conceptual Outline of the Research Study and Hypothesis Testing.



Quantitative Analysis

RESEARCH QUESTION 1:
What is the relationship between the dimensions of resilience and the transformational leadership behaviors demonstrated by sales professionals?

RESEARCH QUESTION 2:
Does the transformational leadership behaviors of sales professionals differ relative to their gender, age, level of education, job tenure, and salary level?

RESEARCH QUESTION 3:
Which of the dimensions of resilience and key demographics of sales professionals are most predictive of their transformational leadership behaviors demonstrated by sales professionals?

Summary and Organization of the Remainder of the Study

Chapter 1 provided a conceptual outline of the problem under investigation, the background of the study, statement of the problem, purpose and rationale, definition of terms, the outline of the research questions to be tested that led to the development of this project, and defined the significance of this study, while outlining the assumptions and potential limitations of this research study. This remaining research document is organized into four additional chapters. Chapter 2 includes an account of the theoretical framework for this research study and a broad evaluation of the relevant literature on transformational leadership and resilience, the two variables of interest. Chapter 3 provides a description of the methods, sample, and analytical plan used to test the research questions stated previously. Chapter 4 reveals the results of this research; the data collected, and the analysis, and the interpretation of the data. Finally, the last chapter, chapter 5, consists of an integrated discussion of the research results, suggestions for potential application of similar research projects in other settings or industries, and implications for further research proposals on this topic.

CHAPTER 2. LITERATURE REVIEW

This chapter provides a review of the literature on leadership and resilience to change. Leadership and change are two common themes that run almost parallel as areas for emphasis in the twenty-first century. As confirmed by Drucker (1999), this century requires individuals and organizations to be ready to change and, therefore, requires leaders who possess transformational leadership behaviors. In 2000, Wanberg and Banas concurred that change is a phenomenon that is inherently tied to present times and that most of the research on change has focused on the impact of change at a macro-level, rather than focusing on individuals and their resilience to change. Thor et al. (2004) further stated that "between 40% and 90%" of efforts to implement organizational change have been documented to fail or achieve less than the intended outcome and yet without attempts to implement change, organizations cannot improve performance, change their competitive position, or increase efforts to be innovative in the marketplace. These two topics, leadership, more specifically, transformational leadership, and resilience to change, are the primary focus of this independent research study (p. 60).

In this chapter, an abridged review of theories on leadership highlights the evolution of leadership theory over the past century building up to a working definition of transformational leadership and why transformational leadership behaviors are needed and desirable today and in the future. This chapter also briefly reviews the available methods to assess transformational leadership as well as the rationale for the method selected to measure transformational leadership in this research study. This chapter also outlines the definitions and background research on the subject of resilience, as well as

presents a brief review of the models developed to assess or measure the level of resilience of individuals and organizations.

Leadership

Leadership has been identified as a critical or important component in shaping an organization's success (Schein, 1990). The concept of leadership is also one of the most extensively researched, studied, and debated topics in the field of organizational behavior and management (Dulewicz & Higgs, 2005; Masood et al., 2006).

It is in a review of the literature where it becomes clear that leadership as a concept is multidimensional. As stated by Yukl (1989, 1998), leadership can be characterized in numerous ways. Definitions of leadership provided in the literature, however, have a tendency to mirror various researchers' approach to the study and evaluation of leadership (See Table 1; Bass, 1990a; Bennis & Nanus, 1985; Fiedler & House, 1994; Hersey & Blanchard, 1977; Kouzes & Posner, 1995; Yukl, 1998; Yukl & Van Fleet, 1992). Consequently, in this research study, leadership was effectively described as a set of behaviors and circumstances that enables an organization to adapt to any significantly changing environment. In other words, leadership defines what the future should look like for an organization and then aligns individuals employed within that organization with that vision and mission of the future by inspiring them to make any and all changes necessary regardless of the obstacles encountered (Kotter, 1999; Yukl, 1998).

Table 1. *Select Definitions of Leadership*

Author	Definition
Burns (1978)	Leadership motivates and achieves end-goals.
Bass (1990a)	Leadership serves as an emblem to an organization and also acts as a model for people.
Kouzes & Posner (1987)	Leadership is an array of capabilities and skills that individuals who are experienced and those who are novices can demonstrate to turn challenges into opportunities.
Kotter (1999)	Leadership outlines the vision of the future; what the opportunities are and aligns people, and inspires them.
Schein (1992)	Leadership shapes organizational success in the short- and long-term.
Goleman (2000)	Leadership is accomplishing things through people.
Bennis (1999)	Leadership is a created through knowing one's self, possessing a vision of the future that can be well communicated, building trust among colleagues, making effective decisions, and taking action to realize one's own leadership potential.
Yukl (1998)	Leadership consists of a group of procedures that produces organizations and modifies them as needed to address significantly changing situations.
Drucker (1999)	Leadership is the job of every manager and every employee within an organization.
Fiedler (1967)	Leadership is predicated on influence and power of group processes and the outcome of various tasks.

A review of the available leadership theories is important for an informed reflection on questions related to leadership and to understand the twenty-first century need for transformational leaders.

Theories of Leadership

Researchers have studied leaders' behavior and traits, including the things that leaders do, how leaders work, how leaders encourage their direct reports, how their decisions, their plans, and their strategies/tactics relate to different situations, and how they affect the people they interact with internally and externally working within an organization (Bass, 1990a; Bennis & Nanus, 1985; Fiedler & House, 1994; Hersey & Blanchard, 1977; Kouzes & Posner, 1995; Yukl, 1998; Yukl & Van Fleet, 1992). A

comprehensive understanding of leaders and leadership has developed, evolved, and changed over time. In the research literature, four major categories define the scientific study of leadership without strict time constraints, boundaries, or limitations (Stogdill, 1974; Pratch & Jacobowitz, 1997; Yukl, 1998). Each of the four major theories or categories is fluid and is neither constant nor mutually exclusive; the four categories are (a) the great man theory and trait theories, (b) the behavioral theories, (c) the contemporary (contingency) and situational theories, and (d) the cognitive or relationship theories (transactional and transformational leadership theories; Pratch & Jacobowitz, 1997; Stogdill, 1974; Yukl, 1999).

Great Man Theory and Trait Leadership Theories

The "great" person theory on leadership was proposed in evaluating the classical trait studies on leadership (Bernard, 1926). This method of defining leadership, advocated in the late 19th and early 20th centuries, emphasized that leadership qualities were inherited; therefore, great leaders were born and not made (Bernard, 1926). According to Bernard, great leaders during this era were politicians, financial officers, men in the military, aristocratics, and cultural elitists who were considered heroes, gods, mythic idols, and meant to assume leadership when needed. Trait theories developed out of the great man theory to imply that leaders appeared to inherit certain traits that made them more apt to assume leadership roles (Bass, 1990a; Seltzer & Bass, 1990). Traits of a leader could include physical characteristics, personality, social background, as well as skills, and abilities (Bass, 1990a). In this theory, as examined by Bass (1990), the basic supposition is that the characteristics possessed by leaders are different from those

possessed by non-leaders. Early leadership studies in business and psychology sought to isolate and identify these attributes or characteristics that great leaders possessed and demonstrated as compared to non-leaders (House & Podsakoff, 1994).

The trait approach calls attention to the innate or inborn personal characteristics of a leader (Feidler, 1996; Pratch & Jacobowitz, 1997). The 1930s and 1940s produced research studies to ascertain the exceptional or extraordinary behaviors that leaders demonstrated (Pratch & Jacobowitz, 1997). In more than 120 separate studies, leaders and followers were studied and assessed on topics extending from power to physical appearance to intelligence and from energy to persuasive skills and behavior. The challenge with great man and trait theories was that these theories could not explain why some individuals who possessed the right traits did not assume leadership roles (Greenberg, 1999; Yukl, 1998). The broad research endeavor during this time period was unsuccessful and inconclusive in identifying any significant or unique traits or characteristics that guaranteed leadership and/or leadership behaviors (Yukl, 1998).

For the majority of researchers of leadership styles and practices today, the accepted philosophy or common school of thought is that "leadership is a learned behavior" or a combination of heredity (trait), experiences, and lessons learned (Bass, 1990a). According to Morris (1996), more recent research has identified a strong and consistent association or connection between heredity, learned traits or qualities, experiences, and leadership. According to Morris, however, there is one major caveat: certain traits do not inevitably lead an individual to leadership success; they are only a precondition for possible success. Leaders who possess certain traits still must take appropriate action to learn and develop these traits to be successful (Hollander, 1995;

McCall, Lombardo, & Morrison, 1988; Morris, 1996). Possessing certain qualities means that an individual is more apt to take the initiative and the appropriate steps that lead to becoming a successful leader (McCall et al., 1988). In this school of thought, leadership extends beyond genes and family (inheritance) to other reasons: work experiences, adversity (overcoming life's obstacles), harnessing opportunities, education, successes, failures, role models, and mentors, which all work together to collectively assist individuals in developing their full leadership potential (Bass, 1990a). In truth, each person is the product of everything he/she sees, hears, touches, feels; the genes and DNA, the environment of family and friends, the level of education, life and work experiences, serendipity, chance, destiny, and everything else in between (Bennis, 1999). Tierney, Farmer, and Graen (1999) put it another way, leaders are a product of chemistry and circumstance.

Behavioral Leadership Theories

In the aftermath of World War II, around the mid-1950s and the early 1960s, research into the trait theories provided no definitive answer to identifying individuals who possessed leadership qualities. At this time, the focus of leadership research changed to the investigation of behaviors of leaders or what effective leaders achieve or accomplish as the foundation of true leadership effectiveness (Burns, 1978). As confirmed by Halpin and Winer (1957) and Hemphill and Coons (1957), behavioral theories of leadership did not concentrate on the characteristics a leader possessed nor the level of influence between the leader and their respective followers but on what leaders do, attain, execute on, and accomplish. Many of the research studies during this period

focused on the behavior or skills of leaders and were related to the categorization of the behaviors and skills that described or defined effective leaders (Yukl, 1998). Most research studies completed during this era used behavior or skill description questionnaires or surveys and assessed and analyzed characteristics of leadership behavior and actions of effective leadership (Yukl, 1998).

Behavioral theories of leadership, again, are built off of the conviction that great leaders are made, not born (Bernard, 1926). According to Bernard (1926), this theory is based on elements of behaviorism. This leadership theory is centered on the actions of leaders, instead of the mental or internal qualities of the person and established two primary leadership behaviors: relationship- and task-orientation (Bernard, 1926). In other words, individuals learn to lead through teaching, through experiences, through observation and, ultimately, through application (Bernard, 1926).

Contingency and Situational Leadership Theories

The behavioral theories lack of elucidating and definitively predicting effective leaders resulted in research that looked to identify a more comprehensive approach which led to the contingency and situational theories of the 1960's-1970's. The contingency theories emphasized the role of the situation or environment on the effectiveness of the leader (Fiedler, 1996; House, 1971). These theories presume that different situations require different leadership styles or approaches (Fiedler & Chemers, 1974). These theories are referred to as contingency theories because a leader's behavior is 'contingent' on the situation or environment (House & Mitchell, 1974, p. 83). Behavioral and contingency theories have common characteristics and are not mutually exclusive

(Fiedler & House, 1994). The distinguishing feature of contingency theories is that there is no single approach to leadership that is effective in every situation (House & Mitchell, 1974). Success of a leader is dependent upon a number of different variables, consisting of the leader's leadership style, the characteristics of the followers, and the situation(s) in which the leader and followers are involved (Fiedler & House, 1994).

There are several evident and recurring themes in the study of the literature and research associated with leadership and leadership effectiveness which deal with the importance of interpersonal interaction and relationship and the need for leaders to adapt to different leadership situations (Hersey & Blanchard, 1977). Contingency theories of leadership such as the Path-Goal Theory (House, 1971), Fiedler's Contingency Theory (1974), Situational Leadership (Hersey & Blanchard, 1977), Leader-Member Exchange Theory (Graen & Uhl-Bien, 1995), Multiple Linkage Theory (Yukl, 1998), as well as later theories on transformational leadership (Bass, 1985; Bennis & Nanus, 1985; Burns, 1978), and best practices (Kouzes & Posner, 1995), all rely on the interpersonal aspect of leadership to determine leadership effectiveness. Fiedler's contingency model and Hersey and Blanchard's Situational Theory of leadership imply that leaders are motivated to opt for either task-oriented or relationship-oriented leadership dependent upon the relationship between the leader and others working within the organization, the task to be completed, and whether the positional power possessed varied in different organizational settings (Hersey & Blanchard, 1977). These leadership behaviors are dependent on the experience level of the follower (Hersey & Blanchard, 1977). Hersey and Blanchard described subordinate experience or maturity as "the capacity to set high but attainable goals (achievement motivation), and the willingness to take responsibility…" (1977, p.

161). According to them, maturity or experience is not a constant variable, as it is measured relative to the explicit task and can be examined in the framework of "job maturity" and "psychological maturity" (1977, p. 161).

At the center of this contingency model is the leader-follower connection (Hersey & Blanchard, 1977). As stated by Hersey and Blanchard (1977), if the follower is given a project or task for which his/her level of capability, skill or education is low (low maturity), the leader should take on a task-oriented behavior. Task-oriented behavior is described as the degree to which the leader is likely to coordinate, describe and/or guide the functions, actions, and tasks to be completed (Hersey & Blanchard, 1977). This behavior is distinguished by "endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting the job accomplished" (1977, p. 104). For situations where the follower or subordinate has a medium level of maturity, the leader should lean toward a relationship-orientation, which is described or defined by sympathetic, encouraging, and considerate behavior (Hersey & Blanchard, 1977). For situations where the subordinate has a significantly higher level of maturity (task or skill competence and self-confidence), the leader should provide independence to the self-sufficient follower/subordinate and delegate responsibility for the execution of the project or task, and only provide limited support or direction in reaction to subordinate questions or requests for assistance (Hersey & Blanchard, 1977).

The Situational Leadership Theory described by Hersey and Blanchard proposed that the leader can assist the follower to develop by incorporating developmental interventions or developmental assignments (1977). Developmental tasks or assignments nurture behaviors such as the relaxation of directive behaviors, entrusting individuals

with more accountability and responsibility, and working with the followers/subordinates on the respective roles of leadership and the follower on the completion of the projects or tasks (Hersey & Blanchard, 1977). Additionally, they stated that maturity can be negatively influenced by outside factors or variables, such as the follower's personal situation, which could necessitate a change in the leader's behavior towards the follower.

As has been seen in other contingency theories, leadership behavior or style can be defined in a multitude of ways that are not covered by the Situational Leadership Theory by itself alone. The follower/subordinate developmental assignment does not take into consideration the importance or significance of the task accomplishment to the benefit or well being of the group of subordinates (Yukl, 1981). The indicated developmental behaviors could become self-indulgent and profit the subordinate at the expense of the group's performance or benefit (Yukl, 1981). Researchers in the area of leadership who have tried to authenticate the research studies of the Hersey and Blanchard's (1977) Situational Leadership Theory have questioned its theoretical basis (Yukl, 1981). Yukl was among the academic researchers that have questioned the concepts behind the Situational Leadership Theory citing that all of the research has been unsuccessful in providing evidence to support this theory and, therefore, the theory lacks validation studies. In addition, Yukl (1981) suggested that leadership behavior is too restrictively labeled and subordinate maturity is the opposite, too broadly described. Even with its inadequacies, according to Yukl (1981), the Situational Leadership Theory provides a context for viewing leadership because it demonstrates the need for adaptable and flexible leadership behaviors relative to the subordinate(s) and balances or

supplements the leader-member behaviors proposed by House's Path-Goal Theory (1971).

All of these leadership theories taken together represent the complicated dynamics involved in leading in modern times such as the type of task to be completed, the leader's influence, the expectations of both the leader and the followers, the level of proficiency and experience of both the leader and the followers, and the environment in which the leadership is taking place. These elements, in part, determine the level of skills, traits, and behaviors that the leader must use to raise up to meet the leadership challenge. Consequently, different situations require different types of leadership and leaders need to be skilled at selecting the best and most appropriate leadership style to address the current situation at hand (Krets de Vries, Loper, & Doyle, 1994; Fiedler & House, 1994; Hersey & Blanchard, 1977). Therefore, effective leadership adapts to the demands of different situations.

Relational Leadership Theories (Transactional and Transformational)

The theories presented above provide the foundation for the relational theories and elements of trait, behavioral, charismatic, situational and contingency theories are present and the foundation for the development of transactional and transformational leadership theories. A transactional and transformational theory of the 1980's concentrated on management-type activities such as organization, supervisory oversight, and attainment of group performance goals (Burns, 1978). Transactional theories base successful leadership on a system of rewards and punishment (Bass, 1985). The concept here is that when employees perform, they are rewarded, and when they miss the mark,

they are reprimanded or punished (Bass, 1990b; Chakraborty & Chakraborty, 2004). Transactional leadership techniques are effective during stable times but are less useful in times of turbulent change (Kirkbride, 2006).

The term *transformational leadership* or leadership that is transformative was first suggested by Downton in 1979 and was coined to describe the connection, relationship, or influence between the leader and their direct reports (Bass, 1985). Transformational leaders incorporate inspiration, enthusiasm, and motivational support to encourage their team members to see the importance of the higher goal of the task or work at hand and to rise up to meet these demands (Bass, 1985; Bolman & Deal, 1997; Sparks & Schenk, 2001; Tucker, 2004). Transformational leaders are aware of the overall performance of the whole team but are also focused on encouraging each person to fulfill his or her full potential (Bass, 1985). As stated by Bass (1985), these leaders, leaders demonstrating transformational leadership, usually have high ethical and moral values. Therefore, transformational leadership goes beyond meeting the basic needs of subordinates (Kouzes & Posner, 1987). It takes the relationship between the leader and the followers to the next level (Burns, 1978, p.20). A joint purpose or common goal results and, therefore, transformational leaders create, change, and improve the culture within the organization and, ultimately, heighten the performance of all participants – from the leader to the followers (Burns, 1978, p.20; Kouzes & Posner, 1987).

As indicated previously, the basic term *leadership* implies a range of possible meanings (Ackoff, 1999; Bolman & Deal, 1997; Tannenbaum & Massarik, 1957; Yukl, 1998) and, therefore, a universal definition for the term *leadership effectiveness* is equally vague and difficult to define. Bolman and Deal proposed that many

elements/components, including the size and complexity of the organization, individual leadership style, and informal relationships impact transformational leadership effectiveness (1997).

It is proposed that effective transformational leadership or transformational leadership effectiveness is to some extent related to how the leader is perceived (Fincher, 1996). Research in this area highlights that group and individual perceptions yield explanations of how leadership performance is evaluated (Burrell & Morgan, 1979). A successful and effective transformational leader is an individual, who seeks better ways to be more effective, is continuously improvement-driven, is not concerned with admitting ignorance, and is good at negotiating and delegating (Weick, 1988). Tannenbaum and Massarik (1957) believed that the observation and perception of leadership changes within the various levels of an organization. In the background of an organization is the multifaceted tradition-laden, complex institution, in which the significance or value of effectiveness among its leaders has important implications (Tannenbaum & Massarik, 1957). Therefore, transformational leadership and leadership effectiveness is better appreciated when examined through the lens of interpersonal interactions between the leader and members of the group (Kouzes & Posner, 2001).

According to Bass (1985) and Burns (1978), transformational leadership theory centers on the leader's attempt to establish commitment and allegiance to the organization. Some transformational theories also scrutinize the way in which leaders influence the culture or norms of the organization (Burns, 1978). Burns (1978) defined transformational leadership as the method of inspiring followers to achieve higher levels of ideals, ethical, and moral behavior by placing the organization's goals before one's

own personal gain which is referred to as idealized influence. Bass (1985) followed up on Burn's (1978) theory and depicted transformational leadership as a leader's efforts to transform and motivate followers by stressing the value of various task and the associated outcomes of those tasks, surpassing their own needs in favor of the organizational agenda that has been set by the leader, and triggering their higher order needs (Bass, 1985; Burns, 1978; Podsakoff et al., 1996; Shamir, House, & Arthur, 1993; Sparks & Schenk, 2001; Yukl, 1998). In this manner, individuals forgo their own personal agendas to support the needs of the organization once they are able to see the outlined vision of the future and are able to invoke creativity in the process by taking prudent risks. Individuals that are transformational leaders are often regarded as coach, teacher, and/or mentor because they provide individualized attention to each follower's needs (Yukl, 1998). In transformational leadership, importance is placed on the leader motivating and energizing the follower to be more dedicated and devoted to the organization, building and creating confidence among followers, and empowering follower(s) to *own* the organization's agenda (Bass, 1985; Burns, 1978).

Effective transformational leaders possess specific behavioral attributes, such as being change agents, prudent risk takers, believing and trusting in people and being compassionate and sensitive to others' needs, expressing a set of core values that direct behavior, being flexible and adaptable and open to continuous improvement through learning opportunities, having cognitive skills and regimented critical thinking, confidence, and conviction in their intuition (Yukl, 1998). Schein (1992) recommended ways that leaders could impact the culture of the organization includes the way in which leaders attend to details involving their followers; how they respond to urgent situations;

how they divide and allocate resources and rewards; what behaviors they demonstrate and model for others; and how they recruit, hire, promote, train and cultivate organizational members. Some of the ways that leaders express their values, standards, and attitudes are deliberate efforts to communicate priorities, goals, and objectives (Schein, 1992). Transformational leadership endorses the value of leadership skills and abilities of all individuals throughout all levels of an organization, and has as its foundation that every employee using the same values and beliefs brings about positive successful organizational change (Bass, 1985, 1997; Bennis, 1999; Kotter & Heskett, 1992; and Podsakoff et al., 1996). Transformational leaders encourage and inspire around the leadership behaviors of collaboration, team effort, cooperation, individual learning, engagement, and enthusiastic participation by all (Bass, 1985). As stated by Kotter and Heskett (1992), transformational leadership behaviors create an organizational culture which results in increased production or performance, an improvement in quality, a heightened individual effort, and positive customer and employee satisfaction.

Shamir et al. (1993) concurred with Schein (1992) and Kotter and Heskett (1992) by stating that the manner in which a transformational leader transforms employees occurs in the values, beliefs, and assumptions held individually that evolve into collectively held norms over time. The efforts of the leader in establishing a positive corporate culture results in employees becoming highly committed to the leader's purpose and to the organization's objectives. Employees go on to make a stronger effort and to perform at a higher level (Shamir et al., 1993). Throughout the theory of transformational leadership, one can see the influence on Burns of Abraham Maslow's

Hierarchy of Human Needs whereby change is formed and goals and objectives are realized while the individuals involved in the process are changed as well (Burns, 1978).

Bass (1985) indicated that leadership that is transformational can result in significant alterations in individuals, the corporations in which they are employed, and society as a whole (p. 17). Bass (1996) further suggested that leadership that is transformational could have an impact on overall organizational performance. According to the research literature on the topic, transformational leadership has been strongly associated with a positive job characteristics including: employee job satisfaction, organizational commitment, organizational effectiveness, and employee productivity (Dunham-Taylor, 2000; McNeese-Smith, 2001; Taylor, 1996). Therefore, with this level of positive impact on organizational goals, the question on whether or not transformation leadership could be documented to have a positive financial impact for an organization was questioned. Barrick, Day, Lord, and Alexander (1991) stated that leadership that is transformational can positively impact an organization financially. They estimated that the financial impact of transformational leadership to be approximately "25 million dollars (after taxes) throughout an executive's average career span" (p. 19). Maister (2001) and Kotter and Heskett (1992) also stated that leadership from individuals working within organizations has a positive impact on the organization's financial performance. Maister (2001) made a further intuitive insinuation that an organization's bottom line could be improved by the quality and level of the customer relationships established and that customer relationships and quality are driven by creatively inspired and motivated employees who are satisfied, content, and fulfilled in their current job. According to Maister (2001), an employee's job satisfaction is positively impacted by the

values and standards of the organization, the training and coaching, and elements of empowerment. High standards, coaching, and empowerment are major elements of transformational leadership (p. 84).

As a consequence of the positive return on investment for organizations with strong transformational leadership, Bass (1996) has proposed that training on transformational leadership should be made accessible to all ranks within an organization. As substantiated by Bass (1996) and further confirmed by Kouzes and Posner (2002, p. 383) and Judge and Piccolo (2004), the core concepts of transformational leadership can be learned and applied by everyone (Bass, 1990b). Experiential premises for this research study have emerged from an examination of research previously conducted on the topic of transformational leadership and leadership effectiveness as documented in this chapter.

Methods Used to Assess Transformational Leadership

In the past several decades, there have been several methods that have been used to assess or measure transformational leadership behaviors. One method available to measure or determine the transformational leadership behaviors of individuals is through the Multifactor Leadership Questionnaire (MLQ; Bass, 1985). The MLQ was developed to determine the degree to which leaders are transactional and transformational and the extent of a subordinates' level of satisfaction and perception of the effectiveness of their leader (Bass, 1985). The MLQ measures three transactional characteristics and four transformational characteristics and consists of 142 statements (Bass, 1985). The transactional components include management-by-exception, contingent reward, and Laissez Faire and the transformational components are individualized consideration,

intellectual stimulation, inspirational motivation, and idealized influence (Bass, 1985). The MLQ also measures corporate performance metrics including the ability and willingness of followers to do extra work, the leader taking the needs of the individual up to the next level for consideration, and job satisfaction, and department and organizational effectiveness (Bass, 1985). The MLQ is a well-established survey tool that measures both elements of transactional and transformational leadership characteristics; however, transactional characteristics are not a primary interest in this research study. Transformational leadership behaviors are the focus and serves as the dependent variable in this research study.

The Conger-Kanungo Scale is a 20-item scale of leadership attributes which assesses charisma, one of several elements linked to transformational leadership (Conger, Kanungo, Menon, & Mathur, 1997). Charismatic leadership is comprised of perceived leader behaviors whereas transformational leadership is more focused on the outcomes realized by followers (Conger, 2004; Conger et al., 1997; Conger & Kanungo, 1994). Limited studies exist to demonstrate that this is a more relevant or appropriate survey for the evaluation of transformational leadership behaviors than the MLQ or the Leadership Practices Inventory (LPI) both of which have been extensively studied in an array of different research populations and, therefore, more extensively documented in the literature.

The Transformational Leadership Behavior Inventory (TLI) is a 20-item, 7-point Likert scale survey that assesses six dimensions of transformational leadership behavior: conveying a vision, establishing a model to follow, recognition and agreement around group goals, raising the bar of performance high or setting high expectations,

encouraging intellectual stimulation, and providing individualized support (Podsakoff, Mackenzie, Moormen, & Fetter, 1990). This survey has solid evidence to confirm the hypothesized six dimension's factor structure, internal consistency, reliability, concurrent, and discriminant validity. However, according to Podsakoff et al. (1990), three of the dimensions (conveying a vision, establishing an appropriate model to follow, and acceptance of group goals) were found to be highly intercorrelated and it is for this reason and the limited use of this survey in other research studies of transformational leadership that the TLI was eliminated from consideration for this independent research study.

The Leadership Assessment Inventory (LAI) is a 35-item, 5-point Likert scale questionnaire that measures both transactional and transformational leadership and was developed by Warren Burke (1994) and reviewed by Bass and Riggio (2006). The LAI has been utilized in programs designed to address leadership development as well as in empirical studies. Unfortunately, according to Bass & Riggio (2006), this instrument is now difficult to obtain and rarely used in research.

The Follower Belief and the Attributes of Leader Behavior Questionnaire was developed by Behling and McFillan in 1996. This survey tool is a 66-item, 5-point Likert-type item in which six key attributes of leader behavior and three of follower behavior were assessed. The article published by Behring and McFillan in 1996 suggests that "further tests of the instrument are in order (p. 134)." Since additional formal tests of this instrument are required, this was not the survey tool selected for inclusion in this research study.

The Global Transformational Leadership Scale (GTL) developed by Carless, Wearing, and Mann in 2000 is a 7-item survey with a 5-point Likert scale and is a shorter assessment of transformational leadership behavior. The GTL measured whether a person is visionary, innovative, supportive, participative, and worthy of respect. Factor analysis indicates that the scale assesses a single dimension of leadership. Preliminary research suggests that the scale has strong and well-documented convergent and discriminant validity (Carless et al., 2000). In research, the GTL has been compared with the MLQ and the LPI and the correlations ranged from .71 to .87 (p. 401). Research demonstrates that the GTL distinguishes between high and weak performing managers as evaluated by their superiors. The alphas associated with the reliability for the survey were as follows: superiors .90, manager self-ratings .82, and subordinates .93 (Carless et al., 2000, p. 402). However, since the GTL has not been used as extensively or as well documented as the MLQ and the LPI, the GTL was eliminated as the best survey to investigate and assess the transformational leadership behaviors of sales professionals in this independent research study.

The Transformational Leadership Questionnaire (TLQ) was developed by Alban-Metcalfe and Alimo-Metcalfe in 2007 and was demonstrated to possess the psychometric criteria of reliability, construct, content, and convergent validity (Alban-Metcalfe & Alimo-Metcalfe, 2007). While a review of the literature appears promising, there is a need to extend the research of the TLQ to a wider sample of organizations and industries and to examine the predictive validity of this instrument.

In 1987, Kouzes and Posner set out to evaluate of transformational leadership effectiveness from an *a priori* viewpoint and referred to their survey tool as the

Leadership Practices Inventory (LPI). This survey tool assesses transformational leadership and the Five Practices of Exemplary Leadership Model was proposed via both qualitative and quantitative data acquired from over 4,000 surveys, case studies, and in-depth one-on-one interviews. The study participants consisted of individuals employed in a diverse array of positions in public and private sector industries (Kouzes & Posner, 1987). The research studies began in 1983 with a line of investigation designed to determine what current leaders did when they achieved their personal best at motivating and empowering others (Kouzes & Posner, 1987). The original "personal best" survey was twelve pages long and included thirty-eight questions which were open-ended and designed to obtain the respondent's personal best leadership achievements or an incident or event in which they believed that they fulfilled their position and/or led subordinates to amazing success on behalf of the organization (Kouzes & Posner, 1987). The first investigation of the survey incorporated more than 550 survey participants. An additional 780 responses resulted from a condensed form of the personal best survey and 42 in-depth interviews. From an analysis of the data in 1987, Kouzes and Posner proposed a model of effective leadership.

Kouzes and Posner's model of transformational leadership effectiveness involves five leadership habits or practices that the research data indicates are part of effective personal best leadership practices (1987). One practice, Challenging the Process, highlights leaders who endure certain risks in the quest for innovation and improved methods of accomplishing tasks. Two behavioral commitments are related to this practice: the quest for a chance to challenge or test the status quo and the eagerness to experiment and take prudent risks (Kouzes & Posner, 1987).

Inspiring a Shared Vision defines the second practice of exceptional leadership as stated by Kouzes and Posner (1987). Leaders convince their followers to believe in the promises of the future. Kouzes and Posner (1987) have suggested that exemplary leaders in their research investigations were particularly eager, zealous, and passionate about their projects. "Their own enthusiasm was contagious and it flowed from leader to followers. The leaders' own belief in and enthusiasm for the vision are the spark that ignites the flame of inspiration" (p. 10). This practice involves two behavioral commitments from the leader: the capacity to imagine the future and the talent to recruit others in the quest of fulfilling the corporation's vision (Kouzes & Posner, 1987).

The third practice of exemplary leadership is Enabling Other to Act (Kouzes & Posner, 1987). Successful leaders solicit the help and cooperation of stakeholders to complete the project work. "They involve, in some way, those who must live with the results, and make it possible for others to do good work. They encourage collaboration, build teams, and empower others" to take action (p. 10). The behavioral commitments affiliated with this practice are persuading group effort and enhancing the confidence of others (Kouzes & Posner, 1987).

Leaders must create the culture and bar of performance; therefore, Modeling the Way is the fourth behavior of exceptional leadership (Kouzes & Posner, 1987). According to Kouzes and Posner (1987), leaders must develop far-reaching plans, obtain necessary financial resources, devise a means of evaluating performance, and possess the ability to guide projects in the right direction and forward to completion. The behavioral commitments for this practice are establishing the appropriate example and arranging small wins along the way (Kouzes & Posner, 1995).

The final behavior of the Kouzes and Posner's (1987) model is Encouraging the Heart. "The climb to the top is arduous and long. People become exhausted, frustrated and disenchanted. They are often tempted to give up" (1987, p.12). The exemplary leader persuades followers by incorporating different strategies and techniques, consisting of celebrating successes along the way, modeling how success is realistic and achievable, and other authentic and legitimate feats of caring (Kouzes & Posner, 1987). The behavioral commitments connected with this practice are identifying individual involvement and celebrating significant achievements.

The LPI was selected as the assessment tool in this study for the following reasons: (a) the LPI assesses the frequency that leadership behaviors are demonstrated and, therefore, the higher the aggregate or total score on the LPI, the more routinely the individual is incorporating effective transformational leadership behaviors in their day-to-day activities; (b) the theory and concepts of the LPI are simply defined and easy to understand, and (c) the LPI has been administered to a wide variety of organizations and a vast collection of normative data exists to compare with the data obtained from this research study.

For the purpose of this exploratory study, the LPI-Self form was used. The LPI-Self form allowed the frontline sales professionals to reflect on their own transformational leadership behaviors. This self-assessment is at least as valid as observations made by others or peers particularly when there is only one other individual that could provide feedback or observations, their direct manager. The LPI-Self form inquires into how frequently each individual or research participant engages in or exhibits each of the 30 different transformational leadership behaviors as outlined by Kouzes and

Posner (1987). The 10-point Likert scale allowed each research participant or sales representative to consider and evaluate their own transformational leadership behaviors with responses ranging from 1 (almost never) to 10 (almost always). According to Kouzes and Posner (2002), individuals who score higher on the LPI contribute to higher performing teams, demonstrate a level of increased level of motivation, and are enthusiastic about doing whatever it takes to be successful and tend to be results-oriented.

Many of the antecedents of transformational leadership have been well documented in the literature and include items such as life events and experiences (Avolio, 1994; Gardner & Avolio, 1998; Walumba, Avolio, Gardner, Wernsing, & Peterson, 2008), early career challenges (Bass, 1985), personality variables (Howard & Bray, 1988), personal attributes (Atwater & Yammarino, 1993), and work motivation (Barbuto, Fritz, & Marx, 2000). Nevertheless, what is missing in the literature and in need of investigation is the impact of attitudinal constructs consisting of mental boundaries, flexibility, adaptation, and resilience (Barbuto, 2005). The goal of this exploratory project is to determine the impact of an attitudinal variable, resilience, and key demographics on a behavior variable, transformational leadership, demonstrated by sales professionals working on the front lines of their respective organizations.

Resilience

The change that is being encountered in the twenty-first century is somewhat like the flow of a powerful stream. At times the flow of the stream is smooth and runs serenely and majestically from the stream to the river and into the ocean. At other times, the stream turns into a wildly, thrashing, and endangering complex sea of instability that

is difficult to travel through or navigate. In these chaotic times, the ability to be resilient as an individual as well as at an organizational level has taken on new meaning (Norman et al., 2005). As the world is transforming itself, organizations and individuals alike are under pressure to keep up. In order to manage today, resilience is needed at all levels of an organization (Luthans & Youssef, 2004; Luthans, Youssef, & Avolio, 2007; Norman et al., 2005). The following section offers a review of the literature on the topic of resilience and is organized into three separate segments. The first section of resilience reviews the vast array of definitions offered in the literature on the construct of resilience. The second part defines the theory associated with the construct of resilience and the third section describes how resilience can be measured and assessed.

Conner (1993) remarked that the word resilience is derivative of a Latin term which suggests one's ability to jump or bounce back. Although the term *resilience* has no widely accepted definition, most of the definitions do possess several similarities. In addition, the definition of resilience has developed over time as the concept has been investigated by independent researchers from a different disciplines including epidemiology, psychology, psychiatry, social sciences, nursing, human development, and change management (Conner, 1993; Flach, 1988; Garmezy, 1993; Henderson & Milstein, 1996; Hollister-Wagner, Foshee, & Jackson, 2001; Joseph, 1994; Masten & Coatsworth, 1998; Murphy & Moriarty, 1976; Pianta & Walsh, 1998; Rutter, 1987, 1993; Wayman, 2002; Werner & Smith, 2001; Wolin & Wolin, 1993).

In the field of psychology, being resilient means that an individual has the ability to bounce back and to endure hardship and work to improve oneself (Higgins, 1994; Wolin & Wolin, 1993). In the discipline of psychiatry, resilient behavior is depicted by

the biological and psychological courage and strength that individuals need to master change successfully (Flach, 1988). In the discipline of psychopathology, resilience is regarded to as the ability to deal with adversity, challenges, obstacles, and threats as they arise, while maintaining an internal capacity to maintain one's direction by possessing a sense of perspective and an understanding of one's self (Flach, 1988; Garmezy & Masten, 1986; Sagor, 1996; Wolin & Wolin, 1993). Within human development, resilience refers to one's ability to successfully navigate through life's difficulties (Werner & Smith, 2001). In the study of epidemiology, the term resilience refers to one's capability of dealing with and surviving stress or trauma and learning to ascend above adversity and disadvantage (Rutter, 2004; Spreitzer et al., 2005). In the field of nursing, resilient behavior refers to the ability to harness the power that resides deep within one's self to take action in order to survive, grow, develop, and heal (Jones, 1991). In the field of medicine, resilience in an individual refers to that individual's ability to assess the pain that they are feeling, acknowledge where the pain comes from, learn to tolerate the pain in the short-term until the individual begins to heal and the pain begins to subside and normalize (Norman et al., 2005). In research concerning the social sciences, resilience signifies bouncing back from the negativity that occurs in day-to-day life to renew one's self and become bolder, stronger, and more tenacious and resolute during the process of overcoming one's disadvantaged status (Henderson & Milstein, 1996). In organizational change management, resilience involves being able to display both strength, flexibility, and adaptability throughout the organizational change process as it occurs, while demonstrating very little dysfunctional or destructive behavior (Conner, 1993; Werner & Smith, 2001). Based on the research literature involving all of these disciplines, one can

find a common denominator and define resilience as a human capacity, a strength, or an ability (See Table 2; Conner, 1993; Flach, 1988; Garmezy, 1993; Henderson & Milstein, 1996; Joseph, 1994; Hollister-Wagner et al., 2001; Masten & Coatsworth, 1998; Murphy & Moriarty, 1976; Pianta & Walsh, 1998; Rutter, 2004; Werner & Smith, 2001; Wayman, 2002; Wolin & Wolin, 1993).

Table 2. *Resilience Defined by Discipline*

Researcher	Discipline	Definition
Wolin & Wolin (1993)	Psychology	Ability to bounce back, tolerate suffering, and restore one's self.
Luthans (2002, p.702)	Positive Organizational Behavior	Bounce back from ambiguity, uncertainty, difficulty, or failure to move forward in a positive manner.
Flach (1988)	Psychiatry	Psychological courage and strength
Garmezy & Masten (1996)	Psychopathology	Ability or capacity to cope with challenges, obstacles, and threats.
Werner & Smith (2001)	Human Development	Ability to successfully navigate through adversity.
Rutter (2004)	Epidemiology	Capable of dealing with and surviving stress or trauma.
Jones (1991)	Nursing	Ability to harness the power that resides within oneself to take action.
Norman et al. (2005)	Medicine	Ability to recognize and transcend above pain.
Henderson & Milstein (1996)	Social Sciences	Possessing the internal aptitude to snap back from negative life experiences.
Conner (1993)	Organizational Change Management	The ability to display strength and flexibility during organizational change processes.

The Theory Behind the Construct of Resilience

Investigation into the area of resilience did not flow out of academic grounding in theory but through the phenomenological characteristics of survivors living in high risk

environments including individuals, children and families, as well as organizations (Conner, 1993; Doe, 1994; Flach, 1988; Horne & Orr, 1998; Mallak, 1998; Pulley, 1997; Richardson, 2002, p. 308; Rutter, 1993). The concept of resilience has also been linked with other psychological constructs such as hardiness (Kobasa, 1979; Maddi, Kahn, & Maddi, 1998), flexibility and adaptability (Miles & Snow, 1986), nimbleness (Conner, 1998, 2000), coping (Block & Block, 1980), and elasticity (Masten et al., 1988).

After reviewing the literature and the series of definitions offered, several inferences can be made that assist in comprehending the term *resilience*. First, as outlined by Higgins (1994), the word *resilience* implies growth or recovery, either mentally and/or physically. In addition, Garmezy (1974) supplemented the literature on the awareness of individuals being resilient after surviving various psychological crises. Resilient individuals learn how to adapt or react in the presence of stress or trauma and are able to function in a more effective manner when stress, adversity, or crises are encountered because past experiences and knowledge provide them with skills to fall back on (Bolgar & Hulse-Killacky, 2006; Reinmoeller & van Baardwijk, 2005).

Second, the term resilient or resilience implies an act of strength, courage, or determination which is frequently referred to as snapping back, possessing the ability to respond to a frustrating situation and/or persisting in the face of adversity, modifying one's behavior or environment, and negotiating stress and obstacles (Colgate, 1995). "A resilient person perseveres until a task is completed or the goal is achieved" according to Dyer & McGuinness (1996, p. 277). Research scientists who have studied resilience in individuals and organizations are as follows: Conner (1993), who defines resiliency as the capacity to demonstrate strength; Wolin and Wolin (1993) clarify this to state that

resilience is “forging lasting strength in the struggle” (p. 5); Dugan and Coles (1989) define the resilience of an individual as the ability to spring back from a setback or challenge; and Joseph (1994) concurs that resiliency is the ability to recoil from a bad, difficult, or adverse situation. In the situations referred to above, individuals feel, think, and act in the presence of adversity and hard times by calling on the strength that they learned in other challenging situations, by using the skill sets that they have developed, and by recalling what actions they took in similar past experiences in order to problem solve and identify an appropriate solution for any new and difficult situation (Colgate, 1995).

Third, the word resilient also engages coping or adaptative mechanisms when an individual is presented with a new or unique situation. Researchers Wang and Gordon (1994), have described resilient behavior as an individual embracing the need to adapt and be flexible and Ahn (1991) and Bennett, Novotny, Green, and Kluever (1998) refer to resilience as the ability to acclimate to diverse situations as they arise, while Garmezy and Masten (1986) refer to an individual’s ability to call on internal strength in order to effectively cope with life’s challenges and threats.

Fourth, resiliency refers to the achievement of success and survival in different situations. Werner and Smith (2001) completed a longitudinal study of children at risk on the island of Kauai and determined that these young, vulnerable individuals matured into successful adults despite their poor upbringing and the other negative environmental factors that they encountered and lived with early in life. Also, Moskowitz and Krell (1990) documented in his study that the individuals who survived inconceivable adverse situations such as the concentration camps during the holocaust did so because they

possessed a resilient disposition. Typically, this type of resilient behavior is obtained based on an individual's own cognitive processes, which results in a higher sense of power that is not routinely shared or possessed by others (Colgate, 1995).

Fifth, the concept of resilience implies that one has influence and impact on the situations and environment in which one resides and works. It is through these experiences and/or situations that Flach (1988) proposed that being resilient is a strength that most individuals can learn in order to turn trauma and crises in one's life to one's own benefit instead of falling victim to one's environment. The possibility that individuals can learn to more effectively handle crises and trauma seems to corroborate Rotter's (1966) theory that one's perception of the positive and negative events that occur in life are directly related to one's own actions or behavior.

In addition to individuals being resilient, Robb (2000) defined organizations as being resilient when they possess various characteristics that include the ability to form or create structure and disperse the structure or organization as needed; the ability to provide safety (not necessarily security and stability) throughout an organizational change process; the capacity to deal with the emotional consequences of continuous change including employee distress, anxiety, and grief; and the capacity of that organization to continue to improve, to progress, to grow, and to learn.

As stated by Mallack (1998), organizations that are resilient design and take action to advance their goals thus increasing the probability that success will be achieved over time and the organization's critical goals will be attained. Individuals employed in organizations that are resilient share in the decision-making process which allows timely action to be taken by the most appropriate individuals within the organization. As stated

by Robb (2000), a resilient organization creates and sustains competitive advantage by delivering excellent performance against current goals, effectively adapting to rapid turbulent changes, and being able to innovate. Consequently, resilient individuals working within these organizations spend less time and less effort in managing or adjusting to organizational change and thereby have the ability to focus their efforts to other items including raising overall productivity or identifying and harnessing new opportunities (Bonnano, 2004; Mallack, 1998).

As remarked by Siebert (2005), resilient individuals cope or manage better under significant disruptive change and possess the ability to maintain good health and energy even when faced with constant pressure and stress. Change, pressure, and stress are elements visibly present in this twenty-first century (Marshak, 2002). Consequently, resilient behavior at the individual level has begun to take on significant meaning within organizations (Norman et al., 2005). According to Norman et al. (2005), as a psychological and organizational strength, resiliency has received attention from both behavioral scholars and managers alike. While the world and especially the corporate environment is changing at a rapid rate, employees, managers, leaders, and organizations are grappling with change as it occurs and the need to take action as quickly as change is initiated (Deevy, 1995). Deevy recognizes that a gap exists in many organizations and that the "challenge of organizations today is to develop a new organizational form; one with the capability for continuously responding to change" (1995, p. 6). He stated that the test of an organization today can be addressed by one single question: is this organization adequately resilient to be able to manage in a global business environment that is increasing in turmoil and frequently chaotic? The basic element of resilient individuals

working within an organization is that they serve as "a committed work force that is free to give maximum effort" (Deevy, 1995, p. xv).

Research suggests that personal resilience can improve organizational performance and, therefore, is important as a strength to develop in individuals in order to encourage them to possess a greater capacity for change (Brooks & Goldstein, 2003; Deevy, 1995; and Maddi & Khoshaba, 2005). Research by Wanberg and Banas (2000) further suggested that individuals with greater resilience are more adept at accepting change as it occurs in a reorganizing workplace.

Therefore, resilience is the capacity of a substance or material to return to or be restored to its initial shape or form after force or pressure has been applied on its surface, or after having been stretched, twisted, or pushed and pulled out of shape. A resilient individual mimics a sponge or silicone rubber in that no matter what pressure is applied to them, they continue to return to their initial shape. According to Dyer and McGuinness (1996), resilient individuals are malleable and pliable and tend to flex back after confronting life's challenges appearing stronger and more determined and resolute.

Following an extensive review of the literature on the topic of resilience, it appears that the concept of resilience applies mostly to the self-reflective characteristics that reside internally deep within an individual. Being resilient, implies that an individual has acquired certain traits or characteristics that affords them the capabilities to face difficulties or challenges and provides them with the skills to overcome these issues (Conner, 1993). As referenced by Joseph (1994), individuals who are resilient are not unassailable or invulnerable; they can be still be hurt and suffer from traumatic experiences. But during trauma and crises, individuals who are resilient appear more

determined, dynamic, resolute, and spirited. A resilient person takes an opportunity to learn from the crises or challenge and uses these learned concepts to better cope with life events in the future (Gardner & Schermerhorn, 2004). Resilience can be seen as a protective barrier that does not diminish or eliminate the negative consequences of life's adversities but provides an individual with the skills and life experiences to deal with these obstacles effectively (Werner & Smith, 2001). Additionally, according to Conner (1993), individuals who are resilient are not resistant or unaffected by the stress of daily life. The idea or notion of being resilient indicates that an individual possesses a self-reflective capacity and a self-soothing ability during difficult or challenging times (Gardner & Schermerhorn, 2004). Conner commented that resilient individuals "have a much greater capacity for bouncing back quickly after a shock, though they face no less of a challenge than others when confronting a crisis" (1993, p. 203). In fact, individuals who possess resilience are likely to function more effectively in uncertain and ambiguous situations and across all of life's experiences (Gardner & Schermerhorn, 2004). As life in organizations becomes more turbulent, highly resilient leaders and/or individuals should be better prepared to adapt, change, and prosper. Garmezy and Masten (1986) affirmed that resilience occurs when individuals learn to adapt to challenging situations that confront them and build competence or skill in an environment in which inadequacy is expected. Thus, being resilient applies to individuals who possess the capacity to rise above the stress and challenges of daily life (Wyman, Cowen, Work, & Parker, 1991).

Werner and Smith's (1982) study, mentioned previously, is regarded as one of the pivotal research studies on the theory of resilience and the impact that resilience on individuals' lives. This research study involved the investigation of 698 high-risk

individuals who lived in Kauai in 1955. Their family situation involved risk factors such as growing up with divorced parents, poverty, mental illness, and/or alcoholism. The research population was diverse in nature and the parents possessed less than an eighth grade education (Werner & Smith, 1982). While two-thirds of the research participants had significant behavioral problems throughout childhood, the remaining one-third displayed no appreciable problems or issues. By the end of the study, research participants had reached their mid-thirties and the majority had overcome their past and had become highly motivated and responsible adults involved in society (Werner & Smith, 1982). The outcome of the study highlighted that the children had possessed certain resilient characteristics such as being kind, good-hearted, and energetic, possessing an above average level of self-confidence, a high tolerance for dealing with other's problems, solid verbal skills, strong achievement-orientation, and the capacity for embracing both love and humor.

Moreover, in Britain, Rutter (1987) concluded a research study of women who were institutionalized after being abused and/or deserted as small children. In spite of possessing a high risk profile, almost one-third of the women became successful, highly motivated, responsible, and productive adults (Rutter, 1987). The means in which they took accountability for their lives can be seen in the selection of their spouse and in their successful marriages (Rutter, 1987). Resilience could also be recognized in the way in which the individuals employed diligence and insight into the selection of employment (Rutter, 1987).

In a separate study, Flach (1988), a psychiatrist, committed almost 30 years to researching patients in psychiatric hospitals and evaluating how these patients survived

and overcame the hardships they had experienced while learning to cope in a variety of risky situations. Flach's years of experience afforded him the opportunity to develop a synopsis of the possible features of resilient individuals, including the following characteristics: possessing self-esteem; an independent nature; a sense of accountability; the capacity to develop and build skill and talents to cope with a variety of different situations; a self-proclaimed dreamer; an open mind that is receptive to new ideas; a vast array of interests; the capacity to see humor in every situation; an insight into how and what they were feeling at different times, receptivity to the feelings of others and the capacity to communicate their feelings and concerns; the power to not let stress control their lives; and a commitment and energy to living for today and experiencing all that life has to offer (Flach, 1988; Reinmoller & van Baardwijk, 2005; Tugade & Fredrickson, 2004).

In 1993, Wolin and Wolin, a psychiatrist and a psychologist, completed a series of qualitative clinical interviews with children of alcoholic parents and documented their findings in their book: *The Resilient Self: How Survivors of Troubled Families Rise Above Adversity.* Through their research, they identified the opposite of the disappointment, isolation, fear, disgrace, and suffering regularly felt by survivors of families in trouble. They discovered, for the first time, the level of strength or resilience that can be developed by survivors in the process of overcoming challenges and adversity. According to Wolin and Wolin (1993), the seven characteristics of resilient individuals included acquiring great insight, early independence, and the ability to form strong relationships, to take initiative, be creative, to possess humor, and to make strong moral decisions. Within the study analyses, they identified that there were many

individuals who were broke the cycle of abuse, addiction, and failure. After a thorough investigation and analysis of their qualitative data, they identified a set of qualities or attributes, which were present in those individuals who rose above their troubled circumstances to achieve success. These qualities were identified as insight, independence, initiative, creativity, humor, and integrity.

In terms of insight, resilient individuals possess the mental capacity to deal with tough questions and respond candidly and honestly about their experiences. Resilient individuals assess signals from other people to determine the basis of the problem and make an effort to use past experiences to apply many of those beliefs and ideas to current situation being faced. Wolin and Wolin (1993) also stated that resilient individuals exert the right to establish limits or boundaries between one's self and others, including emotional distancing as necessary and recognizing when to end bad or non-supportive relationships. Therefore, resilient individuals are able to establish and sustain emotionally strong connections to other individuals which involve identifying and selecting an appropriate partner, the ability to develop new relationships, and to retain or stay in healthy relationships over time. Individuals who are resilient acquire the fortitude to achieve mastery over one's situation by incorporating innovative skills in solving problems, investigating how things operate, and developing positive projects (Wolin & Wolin, 1993). Those who are resilient also used their goals and dreams to take refuge and used these resources as a means of reorganizing the unhappy events of life to make life more palatable and easier to deal with. They were able to use their imagination to escape from the pain and adversity, realizing how to display emotion appropriately, and used humor to reduce the stress and tension in order to make a bad circumstance bearable

(Tugade & Fredrickson, 2004). Ultimately, individuals who are resilient realize right from wrong and live and apply those beliefs (Connor, 2006; Wolin & Wolin, 1993).

Daryl Conner's primary work experience has been as a consultant to corporations undergoing major organizational change (1993). As a result of his research, Conner recognized features of individuals who are capable of successfully implementing organizational change, while maintaining a focused, positive, and proactive approach. As identified by Conner (1993), these characteristics are made evident by individuals acquiring certain beliefs, skills, experiences, and knowledge. Connor also ascertained that individuals who demonstrated a resilient personality were more likely to use the skills and talent that they had developed previously to identify new situations that offered an opportunity of some sort while individuals who are less resilient tend to be more likely to identify or assess the same situation as a real and significant threat. According to Conner (1993), resilient individuals exhibit strength, adaptability, and flexibility under situations of adversity and challenge.

As stated above, Conner, in his role as a psychologist and the author of several publications including the following book, *Managing at the Speed of Change: How Resilient Managers Succeed and Prosper Where Others Fail*, has incorporated his focus and the majority of his efforts in examining and researching the concept of resilience that exists internally and externally to major organizations (1993). The organizations of interest for Conner are corporations that are experiencing significant organizational change. Initially, Conner studied the behavior of individuals dealing with transition and change in the United States but later broadened his research scope to include companies located in other countries (1993). In 1974, he established the organization, Organizational

Development Resources, Inc. (ODR, Inc.) which was a research-based organization that has studied the manner in which individuals are resilient in managing major change. More recently, ODR has changed names to become Conner Partners, Inc. (ODR, 2001).

In 1993, Conner and his associates identified five (or seven if the subelements are included) general qualities or dimensions that are related to resilience, and are routinely possessed by individuals who demonstrate resilient behaviors. These dimensions include the following: (a) the capacity to be positive, (b) being proficient at being focused, (c) adapting the capacity to be flexible, (d) organized, and (e) being proactive. Additionally, the dimension of being positive includes two sub-elements: the World and Yourself and being flexible includes two sub-elements: Thoughts and Social. One of the qualities possessed by resilient individuals includes: Positivity (the World). In most life experiences, individuals possess both positive and negative characteristics to their personalities. Research demonstrates, however, that individuals who are positive differ in their ability to keep focused on the positive facets of their life and environment regardless of how complex, demanding, and indeterminate life is (Conner, 1993).

Individuals who tend to be more positive perceive the opportunities and possibilities in situations and eagerly face the issue or situation. Individuals who focus primarily on the challenges or negativity of a given situation can face anxiety and depression that preclude them from being able to find value and opportunity in different situations. Demonstrating a positive or optimistic outlook is essential, because a positive attitude is the frame for turning negative situations into developmental opportunities. Additionally, individuals who are positive possess a greater capacity to create or engender situations that are positive**.** Positive (Yourself) refers to a belief in oneself as

being valuable and capable to handle most situations encountered. Individuals need to possess or develop enhanced skills that will enable them to deal with change, uncertainty, and ambiguity as it occurs (See Table 3). This foundation can be developed by routinely leveraging one's strengths while making a strong commitment to continuing to build knowledge, mature, and grow over time. When an individual has faith in their own abilities and builds the confidence in the skills they have acquired, they can accomplish and realize the goals they set without losing their self-worth or their sense of awareness in this world.

Similarly related to the positive concept of one's self is the understanding that resilient individuals possess a level of control over their personal and professional surroundings and, ultimately, what occurs in their life. The opposite of this is the conviction that forces are working outside of one's control collaborating and working to bring about negative consequences, adversities, and challenges. Individuals who are focused are able to manage through the ambiguity and uncertainty that comes with change; therefore the ability to set goals and to align priorities is a beneficial skill. Resilient individuals have a purpose or mission that directs their lives and all that they do. The research in the literature on the topic of resilience suggests that individuals who have a purpose to their life are better prepared to address challenges and adversity when they arise (Conner, 1993).

Resilient individuals tend to possess strong skills in coping with uncertainty and are able to flex or adapt to situations as they occur. Resilient individuals are able to look at different situations and assess just what is required to be successful. Some of the skills involved are avoiding snap judgments, assessing the issue from multiple perspectives,

and learning to manage life issues as they arise. Individuals who are resilient are inclined to solve problems by using creativity and innovation to address the issues at hand. Being flexible, adaptable, and accommodating to change allows a resilient individual to consider many possible solutions and alternatives in order to move forward, working to achieve key goals and objectives. According to Conner (1993), the capacity to use other human resources adds to one's flexibility and resilience. His research insinuates that highly resilient individuals are conscious of the importance and value that others play in their lives. Additionally, resilient individuals tend to be very organized and are able to find some order in the uncertainty and ambiguity often associated with change and transformation (Conner, 1993).

Table 3. *Dimensions of Resilience (A higher score means that an individual…; ODR, 2001)*

Dimension of Resilience	Description
Positive-the World	Sees possibilities and opportunities in every situation Accepts a certain amount of risk
Positive-Yourself	Has a high self-perception of the skills possessed Is aware of impact or value of others and the current situation Avoids moving into a victim role Is aware of one's ability to influence one's environment Believes in one's ability to confront, meet, and exceed challenges as they occur
Focused	Possesses a strong set of goals combined with the ability to identify priorities as they occur Has a clear definition or vision of goals or tasks to be accomplished
Flexible-Thoughts	Develops ability to deal with change and ambiguity or the unknown Incorporates new and creative ideas avoiding the use of the same ineffective approaches time-and-time again
Flexible-Social	Utilizes one's awareness of strengths and limitations to offer assistance to others and seek assistance and the utilization of other resources when required
Organized	Is able to put a plan in place no matter the chaos that is occurring Draws on past experiences and strengths previously developed Is able to use deductive analytical skills to assess the benefits of competing options

Table 3. *Dimensions of Resilience (A higher score means that an individual is…; ODR, 2001; continued)*

Dimension of Resilience	Description
Proactive	Possesses a strength is the ability to multi-task several projects at one time Has a willingness to seek out unfamiliar projects or tasks Incorporate creative and innovative ideas and applies them readily

All through her work at the Western Center for Drug-free Schools and again when conducting educational research, Bonnie Bernard proposed the concept that resilient children possessed the following similar characteristics: comfort in familiar settings, strong organizational and problem-solving skills, and a level of control and autonomy over their life (1993). Bernard stated that resilient children usually possessed these attributes confirming similar information to that of Krovetz (1999). As specified by Bernard (1993), individuals come into the world with a certain innate capacity for being resilient and the aptitude at using these competencies to improve their world.

The available research studies documented in the literature also suggest that there are unique skills acquired by individuals that enable them to confront challenges, obstacles, and adversity and rise above them, changed, resolute, and confident (Bernard, 1993). Sagor (1996) acknowledged that individuals who are resilient possess a set of characteristics that empower them with strength, courage, and resolve enabling these individuals to tackle the obstacles they are bound to encounter throughout life.

In the mid-1990s, Higgins compiled several field interviews after administering a series of psychological tests on approximately 40 adults who had managed to survive severe mental and physical traumas as small children (1994). In the interview sessions

with these adults, she discovered that resilient children actively recruited individuals to play substitute parents which permitted them to obtain love and to selectively internalize and build relationships that were positive. These children grew into adolescents who used these adoptive associations to form protective surroundings which allow them to distance themselves from the emotional struggles that accompanied their previous abusive and traumatic situations (Higgins, 1994). According to Higgins (1994), in this study, the resilient research subjects spoke of an active faith and reliance upon personal meaning to overcome the challenges that they faced. Moreover, these research subjects were outspoken champions and supporters for social and political issues, and obtained great satisfaction in being compassionate and benevolent to causes with which they identified. She determined that resilient individuals go on to develop very positive relationships in their lives, and have learned to be effective problems solvers, and possess a passion and inclination toward personal self-improvement. In her 1985 study, she isolated what she felt were common features of resilient individuals that included a level of intelligence and the ability to take risks, a connectiveness and activism on behalf of social and political issues, self-confidence and self-esteem in one's own abilities, and in the end a higher economic status than their family (Higgins, 1994).

Nan Henderson, a clinical social worker, and Mike Milstein, a professor of Educational Administration, collaborated in 1996 on the book, *Resiliency in Schools*, which provided some degree of optimism based on scientific research that many, if not most, individuals who come into contact with adversity can overcome most of the challenges that they encounter. Moreover, Henderson and Milstein (1996) established through their published work, that many of the concepts of resilience can be applied to

and put into place in education system because resiliency often flourishes in the lives of young adults. In their research, Henderson and Milstein (1996) identified the following qualities that should be possessed by school administrators: Individuals need to develop strong, nurturing relationships among the faculty members, the entire extended staff, and the students; and individuals need to establish norms, rules, and limitations. According to these researchers, these items should be clearly stated and all changes should be communicated as they arise. Administrators must become engaged, and must gain the participation of others in creating limitations that define accountability and also foster a sense of ownership and responsibility. Additionally, in every organization but especially in school systems, there needs to be an opportunity for learning and development. They proposed that learning something new increases the staff or educator's self-worth. Therefore, opportunities should be established for routine and regular feedback in order to encourage administrators to maintain a satisfactory progress level and to encourage continued personal development. Rewards and recognition for high performing employees should be provided frequently and with regularity to acknowledge the high level of performance. School administrators should work to comprehend their involvement in a cause that is greater than their position alone and they must develop a level of passion about working to achieve a higher purpose for the benefit of all individuals attending and working in the school system. Individuals should be supplied plenty of opportunity to apply their skills and energies to their work for the continuous and enhanced learning that can occur (Henderson & Milstein, 1996).

A study published in the *Journal of Environmental Health* by Sandra Hagevik in 1998 corresponded with many of the facts and figures that Dr. Hagevick included in her

book. Hagevik has worked as a corporate consultant for Enviro Temps, Inc., which is a female-owned, national organization that provides staffing services in the environmental field. Dr. Hagevik (1998) started her career originally as a science/health teacher before eventually moving into the area of human resource counseling and career placement as a consultant. Over a 20 year period, she has advised hundreds of individuals as to how to flourish in the work world. Dr. Hagevik (1998) herself has changed jobs and tried new careers several times. Having to identify new jobs has given her the necessary experience to overcome the difficulty and challenges and turn adversity into an ultimate gain in the employment environment. These experiences facilitated her personal development of resilience. From her research and own experience and that of her constituents, resilience is vital to achievement and to the success of individuals and corporations managing with constant change (Hagevick, 1998). In her research, she acknowledged the following qualities of an individual who is resilient: being positive, focused, flexible, organized, and proactive.

One can easily conclude that most of these models possess many dimensions, characteristics, or qualities that are similar. What can be determined from the available literature is that resilient individuals are capable of managing and confronting the overwhelming obstacles that are faced in life. These qualities center on an individuals' ways of thinking, perception, and behavior, and how they manage through ambiguity, uncertainty, and evolving situations in the rapidly changing world around them (Isaacs, 2003).

As a result of this literature review, for the purpose of this research study of sales professionals, the construct of resilience was defined as involving a set of qualities or

characteristics that could identify a sales professional's level of strength, courage, and confidence in overcoming challenges and obstacles, determining whether they can recover quickly from disappointments and failures, and whether they are prepared to facilitate the effective adaptation to organizational change despite facing risks and adversities along the way.

The components of resilience recognized by the research completed by Conner (1993), Flach (1988), Wolin and Wolin (1993), Hagevik (1998), and Henderson and Milstein (1996) incorporate concepts of resilience that can be applied to individuals, teams, and organizations. Resilience is seen as a trait that is stable and enduring over time rather than a state of mind, a resource, or a skill available only following certain events or significant difficulty (Luthans, 2006; Luthans & Youssef, 2007). Consequently, Conner's model (1993) seems to offer the most far-reaching compilation of the components of resilience. Additionally, Conner (1993) stated that leadership dimensions also incorporate areas such as perception, thinking, and behavior and, therefore, seem to be associated to several elements of resilience. This suggests that leaders who are resilient are better prepared to handle change.

The dimensions that describe an individual or organization who are resilient are not found singularly as if they are separate and distinct components but, instead, are equally self-enhancing which means that possessing one dimension or quality encourages the use of others dimensions or elements of resilience. The product of being resilient that is outlined in the literature consists of a significant level of ego development (Higgins, 1994); will power and self-discipline (Flach, 1988); and the strength of mind to survive traumatic experiences (Moskowitz & Krell, 1990). Henderson and Milstein (1996) and

Conner (1993) also suggest that some of the other benefits associated with being a resilient individual include becoming effective and capable leaders. In 1991, Jones also proposed that resilient individuals experience growth and development beyond that encountered by individuals who do not possess a resilient nature. Giglio et al. (1999) stated that individuals and organizations that are resilient tend to be better equipped to adapt to change and, as a consequence, are better prepared to endure over the long-term. Last, but not least, Billings and Moos (1984) talk about the health benefits and feeling of well-being for individuals who are resilient over those who are not resilient. Resilience can be learned and it is measurable and has been documented to be linked with improved job performance (Luthans et al., 2005; Luthans, Vogelsang, & Lester, 2006).

When taking into consideration the revenue-generating role fulfilled by sales professionals for any organization, one can see why transformational leadership, resilience, and change are key topics of interest. Sales professionals need strong leadership in order to achieve their mission, vision, and performance goals but must also be resilient and able to deal with rejection and adverse conditions during times of almost constant change, ambiguity, and uncertainty.

Methods Used to Assess Resilience

This section provides a synopsis of the methods used to assess the attitudinal construct of resilience and the rationale for selecting the research model and approach for this study. For many research projects, the measurement of resilience has been conceptualized through the use of open-ended life histories (Colgate, 1995). This approach has been appropriate and aided investigators in recognizing the various

dimensions and dynamics associated with individuals or organizations that are resilient. Block and Block (1980) utilized a survey instrument in their research on ego-resiliency which incorporated five different personality dimensions among their research participants. Their investigation included ego-resiliency and ego-control, which are both variables that create behavior across time and in various situations. This research tool measured resilience as a sub-scale but did not assess resilience as an independent variable (Colgate, 1995).

A research instrument was developed and used by Folkman and Lazarus (1985, 1988) and Moos and Billings (1994) that measured one's ability to cope. One's ability to cope represents only one element or component of being resilient. The Stress Appraisal Measure measured individual ability to deal with stress (Peacock & Wong, 1990), while Murphy and Moriarty (1976) created a research instrument to assess two elements: helplessness and vulnerability, they did not include items that encompass the construct of resilience. The view of resilience and individuals who are resilient is best defined by the developmental psychopathologists as being a scale in which vulnerability resides at one end of the spectrum and resilience is at the other (Garmezy, 1993; Masten & Coatsworth, 1998; Rutter, 1987).

After realizing that there was no really good instrument in the research arena to measure resilience, Biscoe and Harris (1994) developed three different assessment tools to measure resilience. The three different surveys measured resilience in early childhood development, resilience in adolescence, and resilience in adult women who were alcoholics and/or drug abusers. These research tools were developed to investigate resilience according to the definition provided by Wolin and Wolin in their 1993 book

Challenge Model of Resiliency. Wolin's research model (1993) proposed a list of internal qualities that were frequently possessed by individuals who are resilient. These qualities included the ability to sustain relationships, personal insight, independence, initiative, humor, creativity, and morality. Biscoe and Harris's research instruments assessed certain strengths and elements of resilience, however, their instruments were not designed to include or incorporate all of the variables and dynamics related to the concept of resilience (1994). Consequently, for this independent research study, it was important to select an instrument that measured as many of the variables of resilience as possible.

In 1993, Daryl Conner and his colleagues at ODR worked to refine an instrument to be used in corporate or organizational settings to measure the elements of resilience that they had identified in their research on organizational change. This research instrument was called the *Personal Resilience Questionnaire* (PRQ; See Appendix F). Originally, Conner drafted a document that included those variables that appeared to distinguish individuals who possessed the capacity to address and handle difficulties and distractions and learn from and through change (1993). With the financial support being provided by ODR, Conner completed an extensive review of the literature that included several different disciplines. As Conner began to identify the dimensions or components of resilience, the *Personal Resilience Questionnaire* (PRQ) began to assume its final form (ODR, 1996).

The PRQ consists of 70 items that assess the five general qualities (seven including sub-elements) that are associated with the concept of resilience (See Appendix C) (a) demonstrates a level of self-confidence that has its base an optimistic or positive attitude with life being multifaceted and complicated but also overflowing with abundant

opportunities (Positive-the World and Yourself), (b) has created a vision of the future and has possessed the personal drive to go after that vision and any and all dreams (Focused), (c) possesses a special flexibility and adaptability by being able to respond to challenges, adversity, and change as needed (Flexible–Thoughts and Social), (d) exhibits higher-level skills in responding to change, uncertainty, and ambiguity (Organized), and (e) confronts and welcomes change instead of avoiding it (Proactive; Conner, 1993, p. 238). This research instrument has been widely used and comprehensively tested in over 50,000+ research participants. The research participants and the data documented in the literature have included various employees, managers, and leaders within organizations (ODR, 1996). As stated by the ODR official report completed in 1996, the PRQ was intended as a means of measuring all the variables that all previous research had documented as being key to personal resilience. The PRQ had been used to assist organizations in maximizing the resilience demonstrated by their employees, managers, and leaders (Conner, 1993).

In using the PRQ, each of the dimensions and each of the sub-scales are important, however, not all dimensions or elements of resilience are utilized in every situation of challenge or adversity (ODR, 2001). Occasionally, a given situation may offer the opportunity to use some of the dimensions (e.g., a leader who contemplates the impact of change and prepares a strategic response applies a proactive approach). In a different situation of change or adversity, this same leader might be given a low score for this particular dimension. If an individual receives a somewhat low score, however, one must be cautioned not to assume that this individual lacks this particular skill altogether; this skill just may not be applicable for the particular situation at hand or in question. To be an effective leader, an individual should work to demonstrate all of the dimensions of

resilience with the goal of being able to incorporate these skills if and when these attributes are needed and, therefore, develop, refine, and strengthen these skills in dealing with and managing ongoing change (ODR, 2001). In this research study, the PRQ was utilized to measure the seven dimensions of resilience (Conner, 1993).

This PRQ is designed, reliably tested, and validated and is a great match to Conner's model of resilience. This survey encompasses the research that he had completed and it also contains many of the attributes of resilience as identified by the other researchers presented earlier in chapter 2. Additionally, several studies by other researchers (See Colgate, 1995; Taylor, 1996) further assessed and provided additional validation and documentation of the reliability and reproducibility of the PRQ in different research settings. It is important to note, that resilience as a psychological theme is a hypothesis that by characterization is perceptual in nature and therefore should encounter little debate that it is a concept that is suitable to be measured through self-reports similar to other attitudes and values which are also most appropriately assessed through self-reported means (Spector, 1994). Howard (1994) posits that self-reporting is an appropriate methodology for investigating human attitudinal characteristics such as resilience. The theory and data behind the validity and reliability of this research instrument is reviewed in the Research Methodology, chapter 3.

Transformational Leadership and Resilience

An analogy of change streaming through organizations has been compared to operating in whitewater rapids (Graetz, 2000). Using this analogy, transformational leadership could be symbolized as an individual in a kayak placing themselves in white

water rapids with resilience being the oars. As the rafter assesses the current situation, the personal skill needed, and all associated risks, the kayaking experience is transformed from angst and fear into an exciting adventurous journey. Resilience is the transformative ingredient in this situation. While it would appear logical and almost intuitive that leaders who are transformational would want to possess the ability to be resilient, at least as eluded to throughout this paper, a comprehensive literature review reveals very modest experimental research that definitively associates the concepts of leadership and resilience especially on the frontlines of organizations and in sales professionals specifically. According to Bass (1996), transformational leadership leads to positive organizational changes, consequently, it would seem that individual leaders who are more resilient may possess the ability to handle failure and setbacks that occur routinely in the business environment. Invoking resilience, especially during challenging times, may help to encourage others to higher effort and performance. It is these concepts of transformational leadership and resilience that are the focus of this study.

Individual Factors

There are several demographic variables that have been investigated and well documented in the research literature according to Myers (1987). For the purpose of this research study, demographic data including age, gender, level of education, tenure/years of experience in their current job, and base salary level are of particular interest in evaluating the impact of resilience on the transformational leadership behaviors demonstrated by sales professionals. Additional factors were collected for background

purposes: race, frontline sales professionals vs. sales management, total years or tenure in sales, and the industry that the research participant is employed in.

Summary

The aim of this dissertation is to first explore the impact of resilience and transformational leadership behavior of sales professionals operating on the front lines of organizations and whether these two variables are related, and second, does the transformational leadership behaviors of sales professionals differ based on their age, gender, level of education, job tenure, job title, and salary level, and third, and finally, does self-assessed dimensions of resilience along with key demographics predict the self-assessed frequency of demonstrating transformational leadership behaviors by frontline sales professionals.

CHAPTER 3. METHODOLOGY

The research objective of this study was to investigate the impact of resilience and key demographic characteristics on the transformational leadership behaviors that are demonstrated by an online survey panel of frontline sales professionals. The purpose of chapter 3 is to review the research methodology proposed to test the outlined research objectives. Specifically, this chapter reviews the hypotheses driven by the initial research question, identifies and describes the sample population, and the process of data collection and data analysis. Further, the reliability and validity data for the instruments used in this research study are reviewed and summarized.

Research Questions and Hypotheses

Based on a review of the literature presented in chapter 2 this research study is designed to determine if there is a combination of key demographic variables and dimensions of resilience that would account for a significant portion of the variance in transformational leadership behaviors demonstrated by front line sales professionals working in a wide range of industries. The specific research questions that were addressed in this study are as follows:

1. What is the relationship between the dimensions of resilience and the transformational leadership behaviors demonstrated by sales professionals?

Hypothesis 1: Higher resilience scores of sales professionals will be related to a higher aggregate transformational leadership behavior score.

2. Does the transformational leadership behaviors of sales professionals differ relative to their gender, age, level of education, years of experience in current position, and salary level?

   Hypothesis 2-1: There is a significant difference in the aggregate transformational leadership behavior score of male and female sales professionals.

   Hypothesis 2-2: There is a significant relationship between the ages of sales professionals and their aggregate transformational leadership behavior score.

   Hypothesis 2-3: There is a significant relationship between the level of education and the aggregate transformational leadership behavior score of sales professionals.

   Hypothesis 2-4: There is a significant relationship between the years of experience in current position and the aggregate transformational leadership behavior score of sales professionals.

   Hypothesis 2-5: There is a significant relationship between the salary level and the aggregate transformational leadership behavior score of sales professionals.

3. Which of the dimensions of resilience and key demographic characteristics are most predictive of the transformational leadership behavior demonstrated by sales professionals?

   Hypothesis 3: A change in the level of resilience along with a change in key demographics of sales professionals can be used to predict a change in their aggregate transformational leadership behavior score.

Research Design

This study involves a quantitative survey of a previously recruited, randomized sample of 2250 sales professionals in various industries. The survey was conducted using previously validated instruments and it was cross-sectional or collected at one point in time. The focus of the study was to investigate the impact of several independent variables on a dependent variable. The variables in question were the dimensions of resilience and key demographics (which are the independent variables) on the transformational leadership behaviors (the dependent variable) demonstrated by frontline sales professionals.

Scores from the five sub-scales of the LPI-Self form were used to assess the frequency and level of transformational leadership behaviors demonstrated by each research participant (sales professional) and an aggregate or overall score was obtained by adding the individual's scores of the five sub-scales of transformational leadership together to arrive at an aggregate or total transformational leadership score. Each dimension of resilience was assessed and resulted in an individual score for each dimension.

Description of the Population and Sample Characteristics

The sample consisted of a previously recruited, computer-randomized group of approximately 2250 full- or part-time sales professionals who are employed and live in the United States and represent a panel of research participants obtained from MarketTools, a market research firm. The sample of research participants or frontline sales professionals were identified based on current employment in a sales profession as

specified on their profile retained by MarketTools, representative of both genders, over the age of 18, and representing industries both large and small. The profile of potential panelists was current and remains on file with MarketTools, Inc. The profile of prospective panelists was crossed-referenced or -validated with third party consumer financial institutions to confirm that the prospective panelists or sample was who they say they were and do live and work in the United States. Once the key attributes were identified as outlined above, a list of prospective research participants was identified and then randomized multiple times per minute until the final panel was pulled. Descriptive statistics plays a significant role in describing the research participants for the process of data collection and data analysis and will be provided in further detail in Chapter 4.

While the goal was to maximize the response rate, the desired minimum response rate or number of completed surveys needed was 127 based on a power level of 0.8, assuming medium effect size (Cohen, 1988; Soper, 2008). The power associated with a statistical test is the likelihood that the test will result in a rejection of the null hypothesis given that the null hypothesis is actually false. In this situation, given that multiple linear regression analysis was used, the customary null hypothesis that was considered was that none of the variables of resilience or key demographics had an effect on the dependent variable of transformational leadership behaviors demonstrated by frontline sales professionals. Given the analytic plan, a maximum number of 12 independent variables could have been included in the regression model (7 resilience dimensions and 5 demographic variables).

Instruments: Validity and Reliability

Each instrument used described below including how the tools were graded, the statistics associated with the reliability and validity, and the type of data that each tool generates.

Leadership Practice Inventory (LPI)

The Leadership Practices Inventory (LPI) survey (Kouzes & Posner, 1995) was utilized to evaluate the five facets of transformational leadership as outlined in *The Leadership Challenge*. The LPI as a research tool includes 30 statements aligned to assess the five empirically developed behaviors of exemplary leaders (Kouzes & Posner, 1987). Six questions assess each of the five key behaviors or practices of exemplary leadership as defined by the Kouzes and Posner's theory of transformational leadership (2001). Each statement in the questionnaire was scored on a 10-point Likert scale with a high mark indicating the routine or frequent use of the transformational leadership behavior (Kouzes & Posner, 2002). Research participants estimated how frequently they engaged in transformational leadership behaviors described in each of the 30 questions (LPI-Self). Each question was worth from one (minimum) to 10 points (the maximum). Kouzes and Posner (2002) designed the LPI questionnaire so that each practice was scored separately with an average total that ranges from six to sixty points for each one of the five separate behaviors or sub-scales (p. 88). A perfect score was a sixty on each of the transformational leadership behaviors or a total overall perfect score of 300. Both the Self and the Observer form of the LPI were developed and were exposed to the same psychometric analyses used to determine the reliability and to validate the initial LPI

research instrument. The LPI (Self-form) in an abbreviated form can be viewed in Appendix A. Permission to use the LPI-Self questionnaire was obtained from Dr. Barry Posner.

In analyzing literally thousands of case studies, Kouzes and Posner (1995) have unearthed *The Five Practices of Exemplary Leadership*™. The five facets or common behaviors associated with an individual's personal bests are related to demonstrating effective transformational leadership. The LPI is an empirical evaluative tool, which has been documented in more than 350,000 managers and non-managers alike across a variety of organizations and over more than a million of their direct reports. In truth, more than 120 different studies have established the LPI's reliability and validity (See Appendix D).

To obtain a single aggregate value or total representative value of the transformational leadership behaviors from the LPI, the numerical value of each of the items marked for each of the scales were added to derive a total score and the mean scores were tabulated for each of the sub-scales of the LPI. Ranking the scores in descending order from the highest to the lowest, allowed the researcher to determine which leadership practice or behavior sales professionals applied most often in their current business environment, followed by the second-most, the third, and so forth (Kouzes & Posner, 1993).

As documented by Kouzes and Posner (1987), exemplary or extraordinary leadership incorporates the following practices or behaviors outlined in the following

paragraphs: Modeling the Way, Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, and Encouraging the Heart.

Table 4. *Questions for each of the Leadership Behaviors on the LPI (the Original Survey)*

Transformational Leadership Behaviors	Questions
Modeling the Way	Questions 1, 6, 11, 16, 21 and 26
Challenging the Process	Questions 3, 8, 13, 18, 23, and 28
Inspiring a Shared Vision	Questions 2, 7, 12, 17, 22, and 27
Enabling Others to Act	Questions 4, 9, 14, 19, 24, and 29
Encouraging the Heart	Questions 5, 10, 15, 20, 25, and 30

The statistical calculations of the means and standard deviations that have been computed for each of the LPI scale have shown that Enabling Others to Act is the leadership practice that is most commonly incorporated in day-to-day organizational operations, and is closely followed by Modeling the Way. The lower or average marks for Challenging the Process and Encouraging the Heart are close. Inspiring a Shared Vision is well documented to be the least frequently used of the exemplary or extraordinary leadership skills, behaviors, or practices invoked (Kouzes & Posner, 2001, 2002). The mean for the LPI self-reported questionnaire for modeling the way was 45.15 with a standard deviation of 6.92; the mean for inspiring a shared vision was 41.11 with a standard deviation of 9.44; the mean for challenging the process was 43.02 with a standard deviation of 7.73; the mean for enabling others to act was 49.43 and a documented standard deviation of 5.61; and the mean for encouraging the heart was 44.23 with a standard deviation of 8.58 (Kouzes & Posner, 2009).

The internal consistency or internal reliability of the LPI was tabulated by utilizing the Cronbach's alpha coefficient (Kouzes & Posner, 2001). The coefficient of

Cronbach's alpha is a statistical function that assesses the consistency of a measurement by approximating the degree to which the survey provides the same results on repetitive attempts (Crocker & Algina, 1986). Basically, as stated by Crocker and Algina (1986), the Cronbach's alpha coefficient assesses how well a set of items or variables measures the same constructs, in this particular case, transformational leadership behaviors and effectiveness. The result of a Cronbach's alpha coefficient turns out to be a number between 0 and 1 with values closer to 0 assigned to low consistency, while values that are closer to 1 signifying higher consistency or reproducibility (Crocker & Algina, 1986). In the literature, the documented internal reliability assessment for the LPI is consistently and routinely above .60 (Kouzes & Posner, 2001). The reliability coefficients for the self-reported form range from .75 to .87, regardless of demographic characteristics or organizational affiliations, and the Observer form range from .88 to .92. Research studies already completed incorporating the LPI instrument suggest that for Presidents in a University setting, the composite Self and Observer surveys scores range from .84 to .92; women in executive-type positions also in higher education ranged from .71 to .84; while females working in student affairs scored within the following range .93 and .97. Data on the reliability for non-Caucasians ranged between .68 and .80; while Caucasians ranged between .60 and .78 respectively. Test-retest reliability for the LPI has consistently ranged between .90 and higher (Kouzes & Posner, 2001).

Validation studies for the LPI have confirmed that this survey measures the concept or topic that it is intended to measure. Factor analyses was completed and determined that the five interpretable factors are, indeed, consistent with the sub-scales of the LPI (Kouzes & Posner, 2001). Regression analyses using the Observer scores of the

LPI research tool to measure the dependent variable transformational leader effectiveness and the five separate subscales were the independent variables which confirmed that the regression equation was highly statistically significant (F=318.88, p<.001). The leadership practices accounted for over 55% of the variance around the constituents' assessments of their manager's effectiveness as a leader. Therefore, Kouzes and Posner (2002) have documented strong evidence for discriminant validity for the LPI.

In 2001, Kouzes and Posner commented that there were no statistically significant differences between leaders using the LPI-Self questionnaire and their direct reports using the LPI-Observer questionnaire in two areas: modeling the way and challenging the process. However, there was a statistical difference between leaders and their direct reports in the areas of enabling others to act, inspiring a shared vision, and encouraging the heart (Kouzes & Posner, 2001). They further remarked that even though there are some statistical differences documented in the literature between the last three, these differences may have little practical value or realistic implications except to be able to state that direct reports frequently comment that their respective leaders demonstrate slightly more inspiring and encouraging behaviors and slightly less emphasis on enabling others than the leaders viewed or believed about themselves (2001).

Kouzes and Posner (2002) have consistently evaluated the LPI survey every two years since the initial research tool was developed in 1987. Therefore, the LPI has been well researched and well documented in the literature and demonstrates strong consistency over time (Lewis, 1995, p. 557).

The Personal Resilience Questionnaire (PRQ)

In 1990, the development of the Personal Resilience Questionnaire (PRQ, 1993; See Appendix B) was initiated by Daryl Conner and his associates at ODR, Inc. (now Conner Partners) as they worked to define the elements that accompanied a resilient nature (Conner, 1993). The PRQ consists of 70 questions that align with the seven resilience dimensions outlined below and each question is printed on a seventh grade level which makes certain that most individuals assessed within an organizational environment should be able to read and understand the survey questions/statements as written (Conner, 1993). The possible responses to the questions on the PRQ include the following responses: *Strongly Disagree*, *Disagree*, *Slightly Disagree*, *Slightly Agree*, *Agree,* and *Strongly Agree*. The survey, therefore, contains a 6-point Likert scale. When the PRQ was developed, a decision was made to not offer the option for a neutral response (e.g., don't know, unsure, undecided) in a decisive effort to compel research participants to make a choice on every survey item (Judd, Smith, & Kidder, 1991). Additionally, approximately 50% of the survey items are reverse scored to manage and reduce simple response bias (Conner, 1993). The researcher sought permission to use the PRQ questionnaire from Dr. Linda Hoopes. The researcher signed a non-disclosure agreement that allowed her access to the coding scheme for the PRQ, however, this information is held confidential at the request of Dr. Hoopes and is available only if additional backup documentation is needed to highlight how the data was derived.

The PRQ assesses information on resiliency obtained from individuals and organizations. This instrument was selected for this research study because it is a reliable and well-validated comparative instrument that has been used and well-documented in

other research projects. Additionally, the sub-scales that define the PRQ appear to strongly correspond to or encompass the characteristics of resilience that have been documented in the literature presented earlier (See chapter 2, Literature Review). This instrument was used to assess the seven dimensions of resilience (5 elements and 2 sub-elements): Positive (Sub-elements: The World and Yourself), Focused, Flexible (Sub-elements: Thoughts and Social), Organized, and Proactive (Conner, 1993, p. 238)

As with the LPI, consideration was given to the documentation that the PRQ was reliable and valid. The PRQ as a research instrument has been used in the corporate environment prior to the reliability and validity being tested in 1993 in a research study of students completing their bachelor's degree at the Georgia Institute of Technology (Colgate, 1995). 104 females and 121 males participated in the study designed to establish the reliability and validity of this survey tool. The participation in the research study was anonymous and each research participant had provided consent. Each of the research candidates in this study completed the PRQ and 26 other survey instruments that evaluated the elements, concepts, or constructs of resilience (ODR, 1996). After examining and assessing the numbers, a final set of dimensions was selected; this provided internal consistency and included all characteristics on the topic of resilience. Consequently, the PRQ measures the seven different constructs of resilience as described previously (5 elements and 2 sub-elements). By analyzing and contrasting the score for each dimension from the PRQ with other well-validated scales that were used to measure some of the same resilient constructs, Conner and his associates were able to affirm that the PRQ measures the constructs of resilience that it was intended to measure (ODR, 1996).

To identify the internal consistency or internal reliability for each of the PRQ sub-scales, the Cronbach's alpha coefficient was determined for each of the dimensions of resilience (Conner, 1993, p. 238). These coefficients are reported in the Table 5.

Table 5. *Internal Reliability of the PRQ*

Dimensions of Resilience	Cronbach's Alpha
Positive-The World	0.83
Positive-Yourself	0.81
Focused	0.82
Flexible-Thoughts	0.71
Flexible-Social	0.74
Organized	0.68
Proactive	0.65

The Cronbach's alpha suggests that each of the individual sub-scales has a moderately high covariance, which means that individuals responding to the survey have a tendency to answer in a similar manner to each of the questions in the survey. This suggests that the questions within the PRQ representing a given or individual sub-scale are all evaluating the same concept or principal, resilience (ODR, 1996).

In determining the predictive validity of the PRQ, Conner (1993) worked to identify whether or not high scores on the PRQ matched with individuals demonstrating a higher level of performance. Research data points were obtained from a group of 86 individuals employed at a financial institution that were undergoing significant organizational change; 66 of the research participants were defined as high performers with the remaining 20 were defined as low performers. The scores of all 86 individuals was compared for the seven dimensions of resilience and it was documented that the high

performers had higher scores than the low performers on all five of the dimensions of resilience (Conner, 1993, p. 238). The discriminant validity was, likewise, examined to assess how well the scores obtained from the PRQ differed between individuals who were determined to have high performance versus individuals who had demonstrated low performance. In the PRQ, the results of assessing discriminate validity suggested a low discriminate validity although some sub-scales discriminated better than others and ODR associated this with the possibility that some of the sub-scales are interrelated or inter-correlated (ODR, 1996). To obtain a value for each of the elements of resilience, the group means of each of the dimensions of resilience were calculated.

The psychometrics of both the LPI (Kouzes & Posner, 2007) and the PRQ (Conner, 1993) demonstrate acceptable validity and reliability overall and permission was obtained for the use of these instruments.

Demographic Questionnaire

Demographic data was collected to supply the researcher with descriptive information that defined the online panel of research participants and allowed for the responses obtained to be analyzed in relation to the identified variables. The demographic variables as identified from a comprehensive literature review included in this study were: gender, age, level of education, tenure or years of experience in their current position, and salary level (Myers, 1987). Demographic data was collected and used for research descriptive analyses as well as for background information for this research study (See Table 6).

Table 6. *Status of Inclusion: Research or Background Variable*

Variables	Variables used as Background Information	Variable Used in Research Analyses
Age		X
Gender		X
Race/Ethnicity	X	
Level of Education		X
Occupation	X	
Industry	X	
Years in Current Position		X
Years of Experience in Sales	X	
Salary		X

Research Variables

Gender. Research participants were requested to indicate their respective gender as male (coded as 0) or female (coded as 1).

Age. The age of the research participants was obtained by allowing the research participants to input their year of birth. Age categories were collapsed into smaller groups to aid in the ease of analysis and to improve data interpretation.

Level of Education. Each research participant was asked to specify their highest level of education completed. There were six categories or groups: High school (coded as 1), Community College/Associates Degree/Technical School (coded as 2), 4-year College degree (coded as 3), Masters degree (coded as 4), Doctorate (coded as 5), and Other (coded as 6).

Years in Current Position. Research participants were requested to indicate how many years they have been in their current sales position. Years in current position were collapsed into smaller groups for ease of analysis and to improve data interpretation.

Salary Level. Salary level refers to monthly pay or compensation for the sales professionals (the base salary level and did not include any bonus received as a result of

sales performance). Research participants were asked to insert their base salary level. Salary levels may be collapsed into smaller groups for ease of analysis and to improve data interpretation.

Background Variables

Race. The race/ethnicity of the research participants was requested as part of routine demographic data collection (used for background information only).

Occupation - Frontline sales versus sales management. This survey targeted individuals involved in sales who function on the frontline of various organizations without direct reports. In the demographic survey, there was an option to indicate that the research participant was involved in frontline sales (without direct reports; coded as 0) and/or sales management (with direct reports; coded as 1). This background information was employed to confirm that frontline sales professionals were indeed well represented in this study since the primary focus of this study is on the level of resilience and the transformational leadership behaviors in sales professionals functioning on the frontlines of organizations of varying sizes. Data from the total population of research participants and data on sales managers is available under separate cover from the resdearcher.

Industry. Research participants were allowed to select the industry in which they were employed. There were 32 categories and, therefore, the data will be coded 1 through 32. A preestablished rule for collapsing the number of industries was based on collapsing similar or like industries together (Example: Bio/Pharmaceutical Sales and Healthcare would be collapsed together).

Tenure or years of work (sales) experience. Tenure or total years employed in sales was measured by asking the research participants to indicate the total number of years employed in sales.

Data Collection

This research project incorporated three questionnaires into one survey: The first part of the questionnaire was the LPI (Self-form) comprising 30 questions to measure the transformational leadership behaviors of sales professionals (Kouzes & Posner, 1987). The second section of the survey consisted of the 70 questions from the PRQ (Conner, 1993) which measures the level of resilience of sales professionals. The third section of the survey included the demographic survey comprised of 9 questions which are reflective of demographic characteristics well documented in the organizational and social science literature as ascertained by Muchinsky and Tuttle (1979). Each of the first two surveys possesses several sub-scales or dimensions that were reviewed in chapter 2, the Literature Review, in the sections entitled Methods Used to Assess Transformational Leaders and Methods Used to Assess Resilience. The statistical data for each survey is included in the section below entitled Instruments: Validity and Reliability. The actual survey items are presented in Appendix A, B, and C.

Efforts were incorporated by the researcher during the research process to reduce various types of bias by: (a) the selection of two established, well-documented survey tools with demonstrated reliability and validity (e.g., the LPI and the PRQ), (b) ensuring each research participants' confidentiality was protected to diminish socially attractive and popular answers, (c) sampling a large population of sales professionals with the goal

of decreasing the sampling error, and (d) efforts were made to incorporate follow-up reminders to maximize the capture of as many responses as possible from the online panel of sales professionals.

Permission

Permission for the use of the Leadership Practices Inventory (LPI; Kouzes & Posner, 2002) and the Personal Resilience Questionnaire (PRQ; Conner, 1993) was requested and granted. Additionally, an application for studying human subjects was submitted to the Internal Review Board (IRB) Committee on Human Subjects Research at Capella University and approval was obtained prior to any data collection. Academic training in conducting research involving human subjects was completed prior to any data collection.

Anonymity and Confidentiality

Since quantitative research tools were utilized in this research project, it was important that the personal identification of each research participant be maintained in a confidential manner. As documented by Diener and Crandall (1978), maintaining the anonymity of research subjects and conducting research ensuring confidentiality are well-documented research strategies that work to benefit both the researcher and each research participant. To assure confidentiality to the sample audience, all personal data was eliminated from the research participants' responses and the survey did not seek the name of the research participant. An independent third party research company, MarketTools, Inc., kept track of the identification of the research participants and the number of

completed survey responses. The research participants were informed about the effort made to maintain their anonymity and confidentiality in order to ensure honest, candid, and complete survey responses (Dillman, 2000; Fraenkel & Wallen, 2003; and Morris, 1996). At the completion of the data collection and data analyses phase, all identifying or psychometric data will be protected and kept securely locked in the home of the researcher.

Informed Consent

In a brief memo accompanying the survey, the sample of sales professionals were issued a request to participate and contribute to this research project. The memo outlined that participation in this research study was entirely voluntary and that by completing the surveys, the research participants, in this case, frontline sales professionals, consented to participate in this study. Information included in the brief coverletter highlighted the voluntary aspect of contributing or responding to this study, possible implications of the data and the results obtained, any anxiety or distress anticipated by participating in this research study, the means that were implemented to protect the anonymity and confidentiality of the study participants; and a description of how the data would be used and presented. In the cover letter, each research participant was notified that they were free to abandon and/or decline to take part in the research study at any time throughout the process without penalty or negative consequences. Once consent was obtained voluntarily, the survey included the LPI (Self-form; Kouzes & Posner, 1987), the PRQ (Conner, 1993), and the demographic or descriptive questions (See Appendix A, B, and C respectively). Once the survey was completed and closed pending further analysis,

MarketTools, Inc. provided the data to the researcher via an EXCEL file. The data obtained was imported into the statistical analysis software package entitled Statistical Program for the Social Sciences (SPSS version 16.0, 2008) by the researcher and SPSS was used to conduct all analyses.

Procedures

Since there is limited empirical evidence to unconditionally correlate resilience with transformational leadership behaviors, this research study is primarily exploratory in nature and as a consequence, it is appropriate to use a completely self-evaluated survey although a multi-rater approach would be the next logical step in the research process on this topic. Therefore, in the data collection process, this study utilized an online panel. According to Dennis (2001) and others, online survey panels are regularly used in market research (Sackmary, 1998; Deutskens, de Jong, de Ruyter, and Wetzels, 2006; Duffy, Smith, Terhanian, and Bremer, 2005; Van Ryzin, 2008; and Sparrow, 2006). In fact, almost half of all of the U.S. based-quantitative research is being conducted using online panels (Bortner, Daley, & Lo, 2008, p. 1). Online survey panels are comprised of research participants who are prerecruited to take part in survey research (Dennis, 2001, p. 34). The vast majority of online survey panels are typically professionally managed by survey companies, and the online survey panels are pregrouped into unique panels based on a set of specific attributes possessed (McDevitt & Small, 2002).

In this research study, the survey company being used was MarketTools, Inc. who owns the subsidiary Zoomerang. MarketTools, Inc. maintains a database of 2.2 million prospective research participants who have completed a current profile online that

provides the basis of which to ascribe attributes to these potential research respondents. This information is cross-referenced with third-party data that is readily available that allows the confirmation of much of the information provided by the online panelists on their profile on file such as current address and current employment status, etc. To illicit the participation of an online panel, the researcher specified a set of attributes of the research participants that she wanted to study and submitted these characteristics to the survey company. The survey company then identified prospective research participants from one of their databases based on the preidentified attributes, and invited these research participants to complete the survey.

Online panel research has been documented to provide research results with enhanced speed relative to other research methods and with a lower financial expenditure by making research more graphic, visual, and interactive while simultaneously reducing bias that is often a result of the interviewer's effect on the research process (Duffy et al., 2005). Additionally, online panels allow for targeted or specific sampling of low-incidence groups and to have a low level of intrusiveness as part of the research process and associated biases (Bowers, 1998; Dennis, 2001; Deutskens et al., 2006: Duffy et al., 2005). Additionally, due to technological innovation and recent mechanistic improvements, online survey panels can reduce or eliminate incomplete survey responses which have haunted paper or mail surveys and created a serious challenge for researchers during the statistical analysis phase of the data collection process (Roster, Rogers, Hozier, Baker, & Albaum, 2007).

Vriens, Wedel, and Sandor (2001) remarked that speed, cost-efficiency, and obtaining the right information are the three goals of any effective research design and

data collection process. With these three goals in mind, online survey panels may be preferable to other well-documented research methods due to its advantage in achieving the first two objectives listed above. Proper selection and utilization of an online survey panel should work to ensure that the third goal, obtaining the right information, is also achieved. Nevertheless, with these goals clearly set, a review of the literature reveals that several researchers have highlighted their concern and apprehension regarding the validity of the data collected using online survey panels (Couper, 2000; Duffy et al., 2005). According to Duffy et al. (2005), critical issues associated with sample selection and respondent bias have been past limitations associated with the use of online survey panels. As stated by Bortner et al. (2008), in terms of the sample selection or identification process, some potential respondents are not just under-represented, they are close to being missing altogether. An example of possible under-represented or altogether missing research participants includes the very poor who frequently lack online access and/or access to computers, the very rich who don't use online media for a variety of reasons, the individual or individuals who are phobic about technology, as well as senior-level decision makers or consumers, although this last category's status is improving as seniors seek online information and access more readily (Duffy et al., 2005). It is clear that if the research study necessitates participation by these traditionally under-represented or difficult-to-access populations, then the more traditional methods of data collection such as face-to-face interviews or telephone and mail surveys would offer superior methods of achieving the primary objective of the research project (Taylor, 2000; Bortner et al., 2008; Duffy et al., 2005). However, that was not the case for this

independent research project; therefore, it was deemed appropriate to utilize an online sample population.

A separate but related issue to sample selection that has been raised is that online survey panelists are frequently compensated for their time and their participation which works to result in a prompt and complete responses to the disseminated survey (Dennis, 2001). Online survey panelists have volunteered to take part in online surveys, maintained a current profile on file with the survey company, and are aware of what is expected of them. According to Dennis (2001), some researchers have argued that repeat and compensated participation in survey research might bias online survey panelists' attitudes and behaviors, and may generate professional respondents thereby creating an inherent bias in the data collected. Historically, professional survey takers have signed up to take part in multiple research panels or even worse, signed up for the same panel multiple times (Bortner et al., 2008). As a consequence of this potential concern, Dennis' (2001) conducted an analysis of six separate case studies comparing, among other things, the online panelist's brand and product attitudes, their responses to sensitive questions, and their political opinions and did not detect an evidence of negative panel effects. An even more recent study by Duffy et al. (2005) compared data collected from online and face-to-face surveys, and suggested that the differences may be more obvious in responses to certain survey questions than others. For instance, online and face-to-face survey methodologies generated very similar responses for questions regarding attitudes towards immigration, but generated different results for questions like political activism and knowledge-based cholesterol questions. The authors speculated that such outcomes may be due to the tendency for an online panel to attract more knowledgeable or more

viewpoint-oriented research participants than face-to-face respondents who, on the other hand, may be more susceptible to a social desirability bias by providing socially desirable answers more frequently. Deutskens and colleagues were also interested in whether online and mail surveys would produce convergent results (2006). Their study on a large business-to-business service quality assessment showed that despite minor differences, online and mail surveys generated basically equivalent results. Overall, it was concluded that although online panel surveys may generate some sampling bias, it is a valid and efficient research method, particularly when the representativeness of public opinion is not the primary concern or goal of the study (Duffy et al., 2005; Deutskens et al., 2006).

All of the research participants or online survey panelists in this research study, the sales professionals, have ready access to computers and are assumed to possess the skills necessary to answer this online survey since they have voluntarily signed up through the Survey Company to be polled. The research participants completed and submitted the survey electronically via a secure website link (Zoomerang.com). The website service possesses the functionality to download all data and monitor the response rates. The survey includes a forced-choice 10-point or a 6-point Likert scale (the LPI and PRQ, respectively), dichotomously coded (additional information on each survey tool is included in the section entitled Instruments: Validity and Reliability and Appendix D and E).

This researcher prespecified four demographic and behavioral characteristics of the sample when acquiring the online panel from MarketTools, Inc. Research participants who were listed in the database as currently employed in sales, who are over 18 years of age, volunteering to participate in survey data collection, and having a current and up-to-

date profile on file were the focus of this study. Moreover, a 50-50 gender distribution was desired with other attributes matched to the national census as close as possible.

The survey was conducted from February 17 to February 27. Once the survey was deployed, the survey company sent out 2250 email invitations to a predetermined select group of prospective research participants that matched the prespecified criteria listed on the previous paragraph. The individuals were predetermined, based on a survey panelist's current profile, as meeting the four criteria outlined. To address some of the issues listed above regarding sample selection and respondent biases, MarketTools, Inc., utilizes electronic fingerprinting to ensure that the survey in not taken by the same individual and that individuals do not participate in too many surveys (the professional respondent phenomenon; Bortner et al., 2008). Additionally, MarketTools tracks survey speeders or individuals who simply open an online survey and select the same answer for all questions (M. Wilner, Personal Communication, MarketTools, January 9, 2009). MarketTools works to ensure the quality of their research panels and are able to prove that their survey research panels are real, unique, and engaged in order to address the common pitfalls listed previously in this section (M. Wilner, Personal Communication, MarketTools, January 9, 2009).

For participating in this research study and completing the survey outlined in this research study, the research participants received 50 incentive points for completing the survey. Using incentives is a common practice in online panel survey research (M. Wilner, Personal Communication, MarketTools, Inc., January 9, 2009). In general, there are three types of incentives that are frequently used by survey companies (point incentives, sweepstakes, and occasionally monetary incentives; M. Wilner, Personal

Communication, MarketTools, Inc., January 9, 2009). The present project employed incentive points for completion of the survey which was believed to generate the least bias, when compared to the other two options.

This researcher created the survey online on Zoomerang.com, a well-known website for launching surveys. ASP.net was used in creating the front-end, while Microsoft SQL Server was used at the backend to store the data obtained (M. Wilner, Personal Communication, MarketTools, Inc., January 9, 2009). The survey was launched with a memo from this researcher outlining the purpose and importance of this research project and requesting open and honest communication on the part of the online survey panelists while simultaneously assuring the confidentiality of the research participants. The first question, Question 1, on the survey confirmed whether the prospective research participant had voluntarily consented of their own accord or, in essence, willingly agreed to participate in this research study. After Question 1, the researcher decided to allow the research participants to move right into the survey and answer the survey questions which were made up of the questions derived word-for-word from both the LPI and the PRQ with the demographic data being collected last and requiring a mandatory response although for several sensitive questions such as race there was an opt-out option in the following format, 'Other, please specify _____.'

This research survey consisted of 110 questions and took approximately 20-25 minutes to complete. The majority of responses from prospective research participants were collected and returned within the first 48 hours after the survey was deployed (M. Wilner, Personal Communication, MarketTools, Inc., January 9, 2009).

Each research participant that received the survey link by email were requested to complete all survey questions as soon as possible or within approximately 10 days of receiving the survey. It is anticipated that setting a relatively short due date would encourage a higher level of completion and submission of the survey since it permitted MarketTools, Inc. and, hence, the researcher to determine the number of surveys that had been completed and the number of surveys yet to be completed (Dillman, 2000). A reproduction of the letters, consent question, and surveys are available upon request. The following provides the very specific steps that the researcher took during the data collection process:

1. The survey was placed on Zoomerang.com with the first question being the question about whether or not the research participants willingly consented to participate in this research study.
2. Questions 2-101 on the survey were the questions taken directly from the LPI and the PRQ surveys with no changes made to any of the questions.
3. Questions 102-110 consisted of the demographic questions important for completing the descriptive analyses necessary to describe the online panel of research participants.
4. All individuals in MarketTools' 2.2 million panelists' database were queried to determine a match to the attributes specified (currently employed in sales, 18+ in age, residing in the United States, and 50-50 gender split). The total number of prospective research participants who met these prespecified criteria were then randomized for possible distribution and launch of the survey.

5. On the date specified, the survey was launched electronically to 2250 prospective research panels with an attached memo highlighting the purpose, importance, and potential value of this research project.
6. The majority of research participants completed and returned the survey within the first 48 hours although the survey was available for completion for approximately 10 days.
7. Once a prespecified number of surveys had been completed or 10 days had passed which came first, the survey was automatically closed.
8. Once the survey data collection process was closed, the data was downloaded to EXCEL and SPSS (version 16.0) was used for data analysis.

Follow-up

The estimated average response rate for online surveys has been documented to be between 26-32% (Duffy et al., 2005; Evans & Mathur, 2005; Hamilton, 2003). Based a on the initial survey response rate, a second mailing was planned to occur four days following the initial survey email *only* if a higher response was still required.

As suggested in the literature, the actual data collection process was automatically closed after 10 days had passed or once a prespecified number of surveys had been returned which ever occurred first. When the data collection process was closed, the responses were downloaded and exported into Microsoft Excel for formatting. Finally, the Excel data was imported into SPSS for data analyses (SPSS Version 16.0, 2008). Dr. Linda Hoopes, Resilience Alliance, was sent the data from the PRQ and scored the responses for the PRQ to confirm the results and provided the raw and percentile scores

for each of the seven dimensions of resilience to the researcher (this information allowed for a comparison with norms previously documented with this research tool). The LPI was scored as outlined by the authors of the LPI (Kouzes & Posner, 1993). Descriptive statistics and the remaining data analyses were completed by the researcher. The descriptive statistics and demographic data assisted the researcher in determining if the results from the online sample population of frontline sales professionals were consistent with the assumptions previously published with other sample populations using the same instruments. The analysis of the demographic data allowed the researcher to evaluate multiple subgroups and determined the similarities and differences of the data at a subgroup level.

Type I and Type II Error

For this research study, the alpha level was set at .05. An alpha level of .05 denotes the probability of committing a type I error, which is the likelihood of rejecting the null hypothesis when it is actually true. In other words, a type I error is the same as stating that the groups actually are different when, in fact, they are not. The alpha level of .05 represents the researcher taking a 5% chance of making a type I error (Gall, Gall, & Borg, 2005).

The second type of error that can be made is a type II error. A type II error can be made in statistical testing by accepting the null hypothesis when it is false. Accepting the null hypothesis when it is false is the same as stating that the groups do not differ when, in fact, they do differ. Type I and type II errors are inversely related which means that decreasing acceptable limits for one increase the likelihood of the other (Tabachnick &

Fidell, 2007). It is important for the researcher to find the balance between these two types of errors.

Missing or Incomplete Data

The demographic survey questions were placed at the end of the survey and flagged to require a mandatory response from the research participants prior to completing and submitting the survey. Since there are several sensitive demographic questions, the research allowed for the research participant to opt out of providing a formatted answer, by selecting a category of 'Other, please specify _____.' Because of this option, the demographic section of the survey should not have responses with blanks nor resulted in distress or anxiety to any of the prospective research participants. However, for the section of the survey which includes questions derived directly, word-for-word, from the LPI and the PRQ, the researcher averaged the other responses for that question and filled in any blank response with the average response value for any questions left unanswered (Spector, 1994). The researcher presents the frequency of missing or incomplete data in the descriptive analysis section of chapter 4.

Data Analysis

This research study involves the use of several methods of analysis with the goal of: (a) providing descriptive data on the research participants, (b) testing the hypothesized impact of the dimensions of resilience and key demographics on the transformational leadership behaviors of sales professionals, and (c) ensuring the reliability and validity of each of the measures incorporated in the study. Consequently,

the data analyses from this study invoked the following statistical functions as outlined in Table 6 and 7. Descriptive statistics were used to describe the different features and characteristics of each of the research variables as outlined by Tabachnick and Fidell (2007). Statistical tests including the *t* test, one-way analysis of variance (ANOVA), Scheffe Post Hoc test, the Pearson Product-Moment (PPM), and multiple regression analyses were the statistical tests most appropriate to test the various hypotheses as outlined (Myers, 1987; Morris, 1996; Proctor & Van Zandt, 1994).

Descriptive Statistics

Descriptive statistics of the sample population and the variables measured are presented in simple summaries including tables, scatterplots, histograms, bar charts, etc. (Anderson, Sweeney, & Williams, 2005; See Table 7). The data was reviewed for extreme values (outliers) and missing data as well as kurtosis and skewness.

Table 7. *Descriptive Statistics*

Research Variable	Descriptive Statistics
Response Rates and Various Characteristics of the Study	Frequency, Percentage
Demographics	
Gender	Frequency, Percentage
Race	Frequency, Percentage
Level of Education	Frequency, Percentage
Occupation: Frontline Sales	Frequency, Percentage
Occupation: Sales Management	Frequency, Percentage
Industry	Frequency, Percentage

Table 7. *Descriptive Statistics (continued)*

Research Variables	Descriptive Statistics
Years in Sales	Frequency, Percentage
Years in Current Position	Frequency, Percentage
Modeling the Way	Percentage, frequency, minimum-maximum, means, standard deviation
Challenging the Process	Percentage, frequency, minimum-maximum, means, standard deviation
Inspiring a Shared Vision	Percentage, frequency, minimum-maximum, means, standard deviation
Enabling Others to Act	Percentage, frequency, minimum-maximum, means, standard deviation
Encouraging the Heart	Percentage, frequency, minimum-maximum, means, standard deviation
Positive (the World)	Percentage, frequency, minimum-maximum, means, standard deviation
Positive (Yourself)	Percentage, frequency, minimum-maximum, means, standard deviation
Focused	Percentage, frequency, minimum-maximum, means, standard deviation
Flexible (Social)	Percentage, frequency, minimum-maximum, means, standard deviation
Flexible (Thoughts)	Percentage, frequency, minimum-maximum, means, standard deviation
Organized	Percentage, frequency, minimum-maximum, means, standard deviation
Proactive	Percentage, frequency, minimum-maximum, means, standard deviation

Statistical Testing

Since the purpose of this investigation is to explore the impact of resilience and key demographics on the transformational leadership behaviors of sales professionals, the planned analyses for each hypothesis is specified in Table 8.

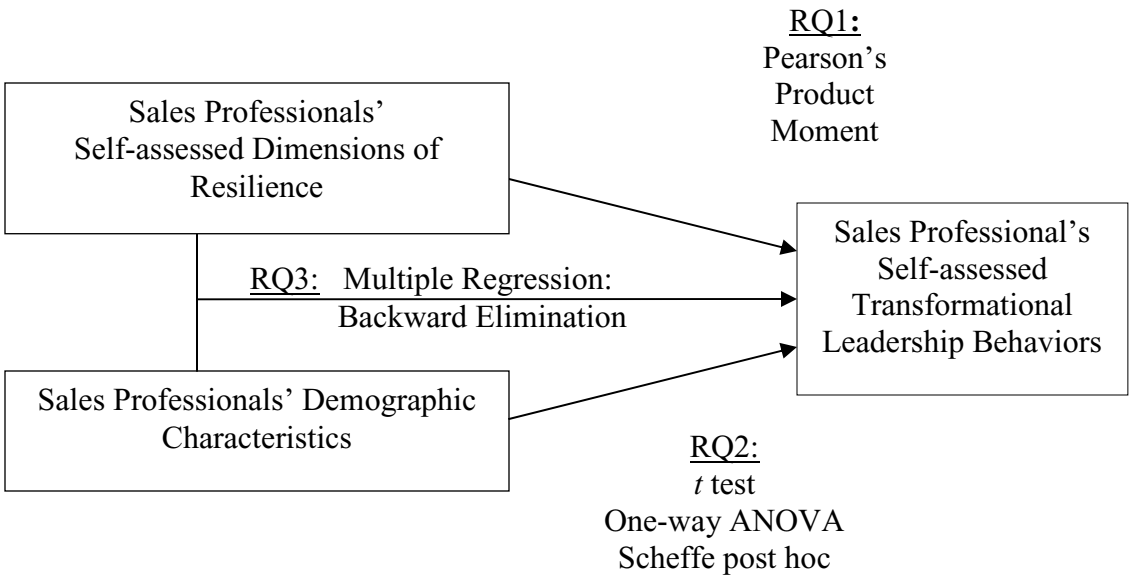
The online survey addressed four constructs with 110 separate questions. There are five demographic variables that were used in the data analyses, four demographic variables that served as supplemental information, five subscales of transformational leadership, and seven dimensions of resilience. The descriptive analyses included

measures of central tendency (mean, standard deviation, minimum, and maximum) to describe the research participants (frontline sales professionals; See Table 7). Cronbach's alpha was calculated for the LPI and the PRQ to further confirm the reliability of each of the instruments. The researcher used correlation analysis to determine if there was a relationship between resilience and total transformational leadership behaviors demonstrated by frontline sales professionals. The researcher also used a *t* test with gender, analyses of variance (one-way ANOVA) for age, level of education, job tenure, and salary level. To test the hypotheses related to the variation in transformational leadership as it relates to the level of resilience and key demographics possessed by frontline sales professionals, the researcher used multiple regression with backward elimination.

Table 8. *Planned Statistical Analyses*

Hypotheses	Statistical Tests
Hypothesis 1	Pearson's Product Moment Correlation
Hypothesis 2-1	*t* Test
Hypothesis 2-2	One-way analysis of variance (ANOVA)
Hypothesis 2-3	One-way analysis of variance (ANOVA)
Hypothesis 2-4	One-way analysis of variance (ANOVA)
Hypothesis 2-5	One-way analysis of variance (ANOVA)
Hypothesis 3	Multiple Regression using Backward Elimination

Conceptually, in order to address the research questions, the data obtained was analyzed in the following manner:



RQ = Research Question

Figure 2. Schematic of the Data Analysis to be Performed.

Psychometric Properties

The psychometric properties of each survey in terms of their reliability, validity, and internal consistency has been well documented previously for the LPI and the PRQ (See Instruments: Reliability and Validity) is included in chapter 4.

Ethical Considerations

This research study involves human subjects and, therefore, it is important to critically assess the ethical impact and implications of this research project. Prior to designing and proposing this research project, the researcher assessed the ethical consequences of this quantitative study's impact to the human subject research panel to be used. Additionally, this research study includes a review by an internal review board at

Capella University who also provided ethical oversight for this research project. Any changes to this research study necessitated communication to the review board of the school and appropriate documentation and approval of all changes. Sections entitled *Permission, Anonymity and Confidentiality,* and *Informed Consent* contained in this chapter further outlines that each research participant voluntarily agreed to participate, were made fully aware of the confidentiality and anonymity of their responses, and the purpose of this research and how the data will be used, and provided informed consent of their willingness to complete this quantitative research project.

Summary

In chapter 3, the following items were provided: an explanation of the research problem and the associated questions to be answered, the hypotheses associated with the research questions, the research design and the study method, the rationale and selection of the sample of research participants, the method of obtaining the data for this quantitative survey-based research study, a description and definition of the research instruments to be used, and the proposed analyses to be conducted. The primary purpose of this research study is to determine the impact of resilience and key demographic characteristics on the transformational leadership behaviors demonstrated by sales professionals operating on the frontlines of their respective organizations. The actual results and/or outcomes associated with this study are presented in chapter 4 while chapter 5 reviews the results of this study, the conclusions, the implications and the consequences, and a discussion of both the limitations and recommendations for consideration of future research studies.

CHAPTER 4. ANALYSIS AND RESULTS OF THE DATA

This independent research study was conducted to assess the impact of resilience and key demographics on the transformational leadership behaviors of frontline sales professionals across several industries. This chapter provides a review of the data analysis and the results obtained in this study. This chapter divides the data into four different sections: (a) the descriptive statistics of the research participants were captured and presented for each of the variables assessed, (b) the relationship between each of the dimensions of resilience of sales professionals and subscales and total transformational leadership behaviors score of sales professionals was explored, (c) the psychometric properties of the survey tools were reviewed; and finally, (d) the hypotheses were tested and the results presented. The presentation of the data is followed by a brief explanation of the analysis for each hypothesis and this chapter concludes with a brief summary of the relationships between the dependent and independent variables of interest.

Description of Research Participants

Integral to the presentation of any research data is the description of the population under investigation. The following section provides the descriptive statistics associated with this study. The data for this study was collected using the LPI, the PRQ, and the demographic survey. At the outset of this study, the survey was distributed to 2250 sales professionals identified by MarketTools, Inc. for inclusion in this study (See chapter 3, Methodology).

Sample Survey Response Rate and Characteristics

Responses. The survey packets included a brief cover letter, a question providing consent, and the three surveys (the LPI, the PRQ, and the demographic survey) combined into one. Four days later a reminder memo was sent via email to potential research participants who had failed to respond in one capacity or another or who did not reply to the first initial mailing of the online survey. Data was obtained from 356 of the 2250 frame of research participants. The response rate was 15.8% which is slightly below the estimated goal of 26-32% based on traditional response rates for online survey panels (See chapter 2). A total of 1894 contacted research participants declined to take part in and/or failed to respond to this survey. The final sample included 295 (13.1%) research participants (minus outliers) which provides sufficient data for the planned analyses as outlined (Table 6). A total of 197 (66.8%) of these 295 were frontline sales professionals (104 were sales managers or individuals with direct reports; See Table 9). Table 12, 14, and 16 depict the research participants' responses on the demographic survey, the LPI, and the PRQ.

Table 9. *Number of Emailed Surveys, Research Respondents, and Percentage of Responses*

Research Participants	Number of Surveys emailed	Number Responding to the Survey	Number of Respondents Minus Outliers	Number of Frontline Sales Professionals	Percentage of Frontline Sales Professionals
Frontline Sales Professionals	2250	356	295	197	8.8%

Outliers. After a careful review of the final data set, the researcher determined that there were a few research participants who declined to provide consent although they

responded to all of the questions on the survey ($N = 21$; the research participant indicated 'no' to the question, "Are you willing to participate in this independent study?"). In addition, several survey responses possessed data that was more than three standard deviations from the mean and/or did not answer the question correctly ($N = 35$; some responses erroneously responded to the question of annual base salary with an hourly wage without specifying how many hours they worked per month). These research participants who failed to indicate consent and the outliers/responses that were removed prior to analyses resulted in a final total sample size of 295. As the objective of this research study was to investigate the impact of resilience and key demographics on the transformational leadership behaviors of frontline sales professionals, the total sample was separated into sales professionals (no direct reports) and sales managers (with direct reports).

Normality. Visual review of frequency distributions (Figure 3) and kurtosis and skewness statistics and normality tests (Tables 10 and 11) indicate a lack of normal distribution (except for the independent variables of Flexible-Thoughts and Proactive). However, as outlined in the Central Limit Theorem, sample frames that are larger than 30 research participants will tend to have sample means that are normally distributed around the population mean even if the population is not normally distributed (Cooper & Schindler, 2000). As a consequence, all deviations from normality are not anticipated to have a significant effect on the statistical results of this independent research study (See Figure 3). The two variables, resilience and transformational leadership behaviors, were also assessed for linearity in the relationship and homoscedasticity of the data are

apparent as suggested by the scatterplots in Figure 4. Tabachnick and Fidell (2007) stated that while linearity is a necessary attribute in correlation-regression analyses of data, homoscedasticity is not critical or necessary; however, the predictability of the analyses is improved if the data distributions are homoscedastic.

Missing Data. Spector (1994) proposed a mechanism for dealing with missing data that was applied to the entire data set for this independent research study. As clarified by Spector, the research participant's scores were averaged across each question while controlling for differences in the number of questions that were actually answered. Consequently, for each research participant, the rows of each question were added up and then divided by the total number of questions answered. This process resulted in computed scores that were not reduced when the participants accidentally skipped a question(s).

Table 10. *Kurtosis and Skewness Statistics*

Variables	Skewness/Kurtosis	Statistic	Std. Error
Leadership	Skewness	-.608	.173
	Kurtosis	.231	.345
Positive – World	Skewness	-.554	.173
	Kurtosis	.358	.345
Positive – Yourself	Skewness	-1.063	.173
	Kurtosis	2.561	.345
Focused	Skewness	-.683	.173
	Kurtosis	1.442	.345

Table 10. *Kurtosis and Skewness Statistics*

Variables	Skewness/Kurtosis	Statistic	Std. Error
Flexible-Thoughts	Skewness	-.013	.173
	Kurtosis	-.034	.345
Flexible-Social	Skewness	-.484	.173
	Kurtosis	.890	.345
Organized	Skewness	-.067	.173
	Kurtosis	.670	.345
Proactive	Skewness	-.009	.173
	Kurtosis	-.134	.345

Table 11. *Normality Tests for Leadership and Resilience*

Variables	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Leadership	.065	197	.042	.973	197	.001
Positive–the World	.074	197	.011	.975	197	.001
Positive–Yourself	.089	197	.001	.945	197	.000
Focused	.071	197	.018	.965	197	.000
Flexible–Thoughts	.057	197	.200*	.994	197	.588
Flexible–Social	.053	197	.200*	.981	197	.010
Organized	.080	197	.004	.981	197	.009
Proactive	.068	197	.026	.991	197	.228

a. Lilliefors Significance Correction

b. This represents the lower bound of the true significance.

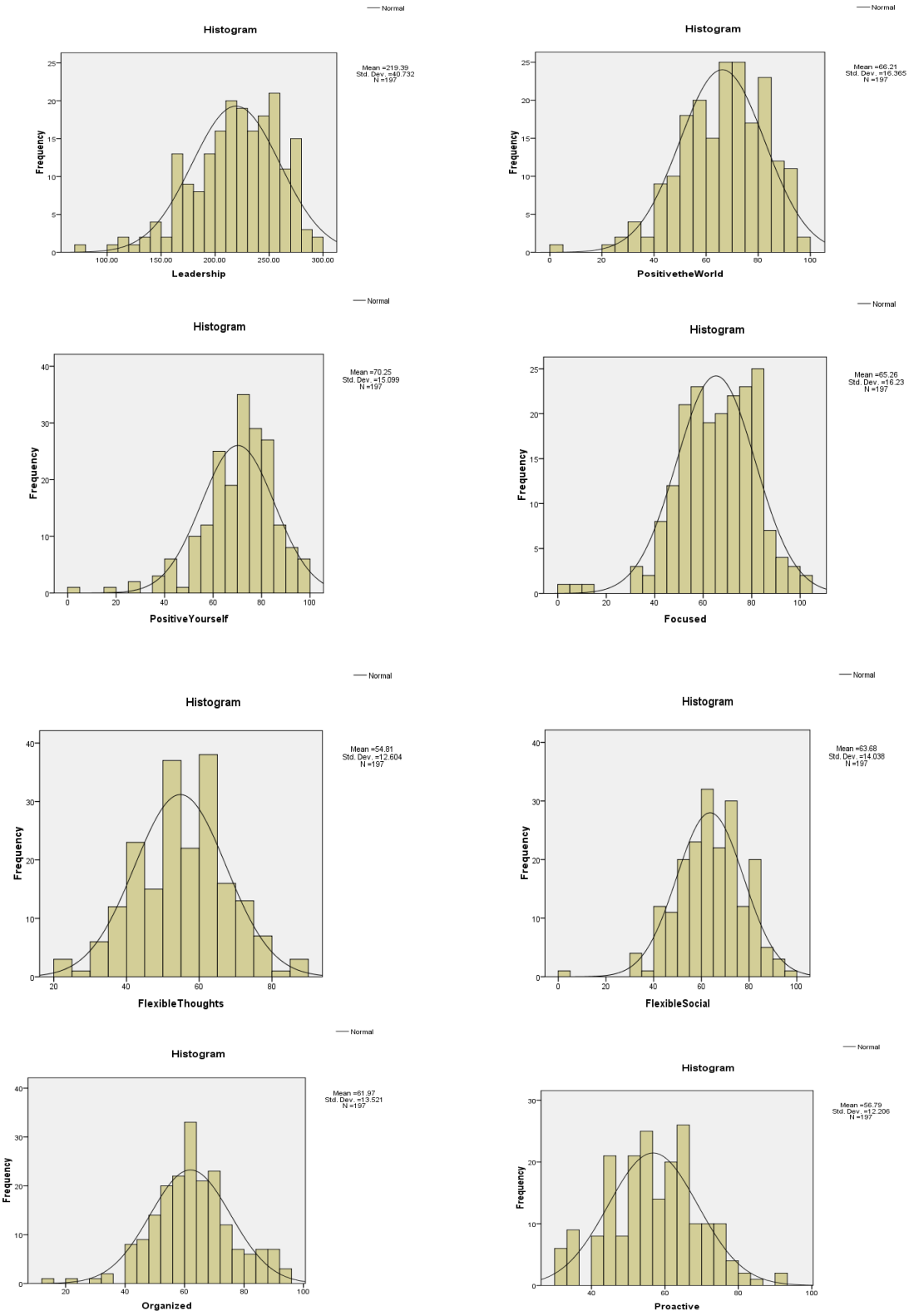


Figure 3. Visual Review of Frequency Distributions.

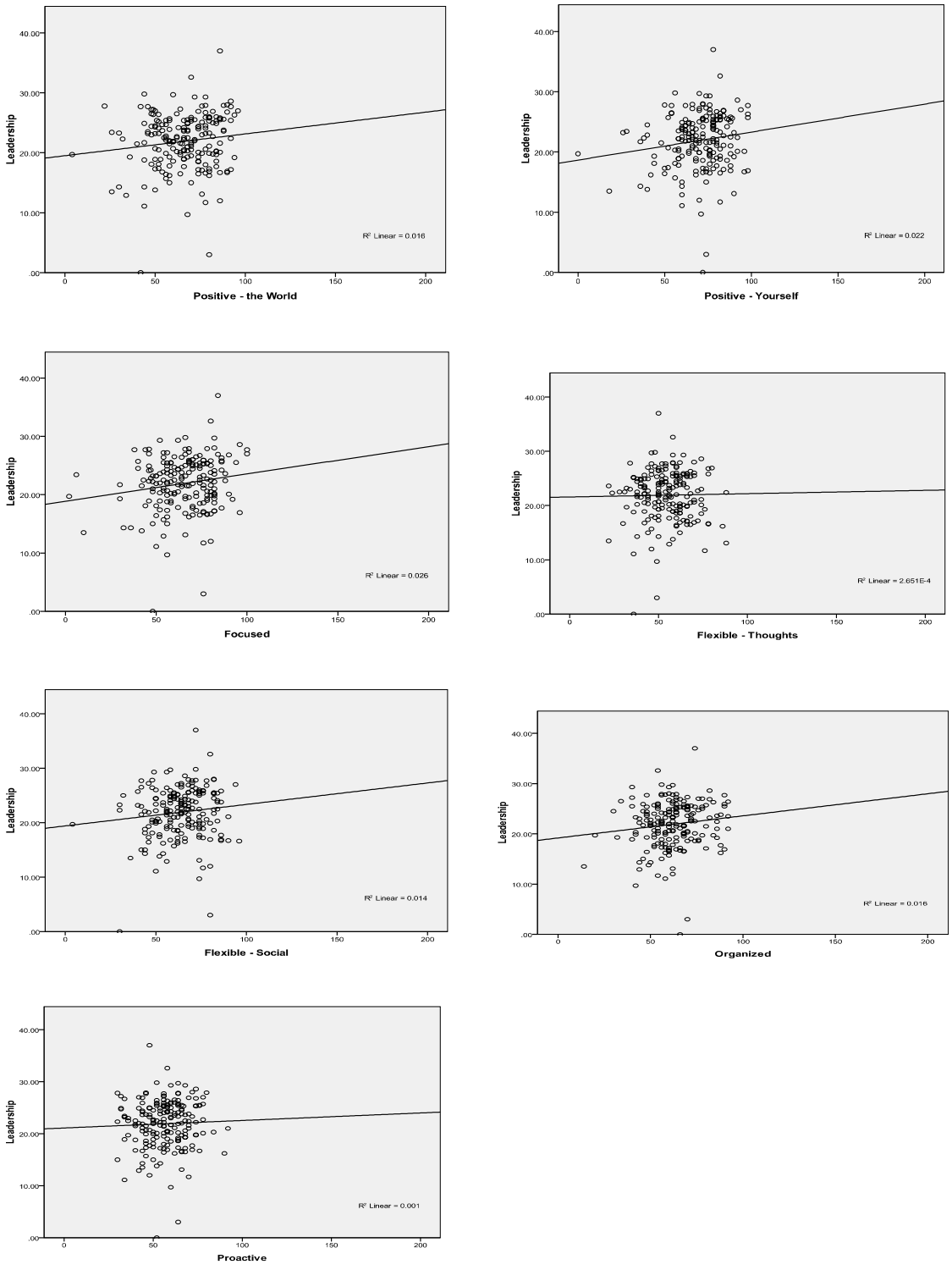


Figure 4. Scatterplot of Resilience Plotted against Transformational Leadership Behavior ($N = 197$).

Sample Demographics. The research participants for this independent study included 197 frontline sales professionals who reside and are employed in the United States. 55% of the research participants were male (Table 12) and the modal response category for age was between 19 and 80 years. Roughly 85.3% of the sample indicated that they were white. The average industry experience for employees or research participants was 12.93 (range of 45 years), while the average tenure in their current employment was 6.86 years (with a range of 45 years). The level of education for the research participants was as follows: 37% of the research respondents indicated that they possessed a high school diploma and 22% indicated that they possessed an associate and/or technical degree, while 30% possessed a 4-year college degree. Approximately 26 different industries with sales professionals were represented in this study. A detailed analysis of the sample characteristics for the frontline sales professionals are outlined in Table 12.

Table 12. *Frequencies for Sample Demographic Characteristics (N = 197)*

Variables	*N*	% (percent)
Age		
<21	10	5.2
21-25	24	12.4
26-30	26	13.4
31-35	23	11.9
36-40	17	8.8
41-45	20	10.3
46-50	13	6.7
51-55	21	10.8
56-60	13	6.7
>60	27	13.9
Gender		
Male	109	55.3
Female	88	44.7

Table 12. *Frequencies for Sample Demographic Characteristics (N = 197; continued)*

Variables	*N*	% (percent)
Race/Ethnicity		
Asian/Pacific Islander	6	3.0
Black/African American	22	11.2
Hispanic/Latin American	8	4.1
White/Caucasian	168	85.3
Native American/Alaskan Eskimo	2	1.0
Middle Eastern	1	0.5
Level of Education		
High School Diploma	72	36.5
Community College or Technical Training Degree	44	22.3
4-year College Degree (Bachelors)	59	29.9
Master's Degree	6	3.0
Doctorate Degree	3	1.5
Occupation		
Frontline Sales Professionals	197	100
Sales Managers	0	0
Industry		
Retail Sales	69	35.0
Other	34	11.5
Food and Beverage Sales	22	11.2
Missing	20	10.2
Real Estate Sales	12	6.1
Insurance Sales	10	5.1
Construction Sales	8	4.1
Healthcare Sales	7	3.6
Manufacturing Sales	7	3.6
Advertising Sales	6	3.0
Automotive Sales	6	3.0
Computer Software Sales	6	3.0
Merchandise	6	3.0
Travel	6	3.0
Bio/Pharmaceuticals	5	2.5
Entertainment	5	2.5
Internet/Web	5	2.5
Business Services	4	2.0
Financial Services	4	2.0
Information Management	4	2.0
Industrial Sales	3	1.5

Table 12. *Frequencies for Sample Demographic Characteristics (N = 197; continued)*

Variables	*N*	% (percent)
Communication	2	1.0
Media	2	1.0
Engineering	1	0.5
Printing	1	0.5
Training	1	0.5
Utilities/Energy	1	0.5
Medical Equipment Sales	0	0
Office Automation	0	0
Publication	0	0
Security	0	0
Staffing/Recruiting	0	0
Technical	0	0
Tenure		
< 1	2	1.0
1-3	35	17.8
4-6	28	14.2
7-9	27	13.7
10-12	29	14.7
13-15	13	6.6
16-18	10	5.1
19-21	15	7.6
22-24	9	4.6
25-27	9	4.6
28-30	6	3.0
> 30	14	7.1
Years in Current Sales Position		
< 1	5	2.5
1-3	87	44.2
4-6	34	17.3
7-9	22	11.2
10-12	13	6.6
13-15	11	5.6
16-18	7	3.6
19-21	10	5.1
22-24	4	2.0
25-27	1	0.5
28-30	2	1.0
> 30	1	0.5

Table 12. *Frequencies for Sample Demographic Characteristics (N = 197; continued)*

Variables	*N*	% (percent)
Base Salary		
< $40,000	125	64.4
$40,000-$49,999	27	13.9
$50,000-$59,999	8	4.1
$60,000-$69,999	11	5.7
$70,000-$79,999	6	3.1
$80,000-$89,999	3	1.5
$90,000-$99,999	4	2.1
>$99,999	10	5.2

Descriptive Statistics: LPI. Since this study combined questions from two prevalidated surveys, Table 13 shows the numbers of the questions that comprise each leadership sub-scale for this study and the associated means and standard deviations.

Table 13. *Means and Standard Deviations for Transformational Leadership Behaviors (Outliers Removed)*

Kouzes' and Posner's Leadership Practices Subscales	Questions making up the subscales in this Survey	Mean *(SD)*
Aggregate Leadership Score	Sum of all Questions	219.39 *(40.73)*
Modeling the Way	Sum of 2, 7, 12, 17, 22, 27	45.44 *(8.12)*
Challenging the Process	Sum of 4, 9, 14, 19, 24, 29	40.41 *(9.58)*
Inspiring a Shared Vision	Sum of 3, 8, 13, 18, 23, 28	40.37 *(10.48)*
Enabling Others to Act	Sum of 5, 10, 15, 20, 25, 30	47.86 *(7.37)*
Encouraging the Heart	Sum of 6, 11, 16, 21, 26, 31	45.31 *(9.25)*

Research participants ranked each item on the LPI using a 10-point Likert Scale that ranged from 1-*Almost Never* to 10-*Almost Always*. Table 14 depicts the percentages for the LPI items endorsed by the research participants (the sales professionals). The underlined response signifies the most common response for the research participants.

Table 14. *Percentages for LPI Items Endorsed by Sales Professionals (N = 197)*

	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT	Almost Never	Rarely	Seldom	Once in a while	Occasionally	Sometimes	Fairly Often	Usually	Very Frequently	Almost Always
2.	Question 2	0.5	0.5	0.5	1.5	7.6	5.1	13.2	28.9	24.4	17.8
3.	Question 3	2.0	3.0	4.1	7.1	6.1	23.4	18.8	15.7	14.2	5.6
4.	Question 4	2.0	0.5	1.5	2.0	3.6	6.1	8.1	17.3	19.8	39.1
5.	Question 5	0.5	0.0	0.5	2.0	4.1	7.6	8.1	22.8	22.8	31.5
6.	Question 6	0.5	2.0	2.0	5.6	4.6	17.8	13.7	22.8	16.8	14.2
7.	Question 7	1.5	5.1	7.1	6.1	7.6	20.3	10.7	20.8	13.7	7.1
8.	Question 8	2.0	4.1	9.6	5.1	9.1	17.8	15.7	14.2	‘	5.6
9.	Question 9	0.5	0.0	1.0	2.0	2.5	9.1	17.8	25.9	21.8	19.3
10.	Question 10	0.5	1.0	2.5	3.0	4.1	13.2	19.3	19.8	20.3	16.2
11.	Question 11	1.0	0.0	0.5	0.0	2.5	3.6	6.6	11.7	24.9	49.2
12.	Question 12	4.1	4.6	4.1	2.5	8.1	14.2	12.7	25.9	15.2	8.6
13.	Question 13	3.0	7.6	6.6	8.1	8.1	17.3	13.7	15.7	14.2	5.6
14.	Question 14	0.5	0.0	0.5	0.0	0.5	2.0	3.0	12.2	20.3	61.0
15.	Question 15	4.1	1.5	2.0	5.6	9.1	12.7	13.2	17.8	21.8	12.2
16.	Question 16	4.1	4.6	8.1	7.1	6.6	16.8	14.2	14.7	13.7	10.2
17.	Question 17	2.5	5.6	7.6	3.6	8.6	22.3	15.2	14.2	15.2	5.1
18.	Question 18	2.5	2.5	5.6	7.1	6.1	15.7	17.8	19.3	14.2	9.1
19.	Question 19	0.5	0.0	0.5	2.5	5.1	11.2	17.8	30.5	19.3	12.7
20.	Question 20	1.5	2.5	3.6	6.1	8.1	8.1	13.7	19.8	23.9	12.7
21.	Question 21	1.0	2.5	5.6	4.1	8.1	16.8	14.2	22.3	15.7	9.6

Table 14. *Percentages for LPI Items Endorsed by Sales Professionals (N = 197; continued)*

	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT	Almost Never	Rarely	Seldom	Once in a while	Occasionally	Sometimes	Fairly Often	Usually	Very Frequently	Almost Always
22.	Question 22	1.5	3.0	3.6	6.1	5.6	18.3	10.7	21.8	16.8	12.2
23.	Question 23	1.0	2.0	2.0	2.0	5.6	9.1	13.7	24.9	24.9	14.7
24.	Question 24	2.0	2.0	2.5	0.5	3.0	16.8	16.2	24.9	13.2	18.8
25.	Question 25	1.0	0.5	3.6	5.1	7.6	16.2	15.7	19.3	17.3	13.7
26.	Question 26	1.0	0.0	2.0	3.6	5.6	12.2	12.2	21.3	18.8	23.4
27.	Question 27	3.0	2.5	3.6	5.1	9.1	10.7	15.7	20.8	18.3	11.2
28.	Question 28	1.5	1.5	6.1	8.1	8.1	22.3	13.7	16.8	15.2	6.6
29.	Question 29	3.6	0.0	6.6	5.1	5.6	14.7	13.2	21.3	21.3	8.6
30.	Question 30	1.0	0.0	2.5	2.0	5.1	14.7	14.7	19.8	20.3	19.8

Note. Highest response categories for each question are underlined. Copyright © James M. Kouzes and Barry Z. Posner. Used with permission. The questions can be obtained by request from Wiley & Sons. The underlined item represents the item most frequently reported.

Table 15 depicts the minimum and maximum ranges, the means, and the standard deviations of the research participants' responses to the questions on the LPI. For the LPI, responses ranged from 16.00 to 60.00 for Modeling the Way, 11.00 to 60.00 for Challenging the Process, 7.00 to 59.00 for Inspiring a Shared Vision, 15.00 to 60.00 for Enabling Others to Act, and 15.00 to 60.00 for Encouraging the Heart.

Table 15. *Descriptive Statistics of Survey Responses for the Dependent Variable, Transformational Leadership: LPI (N = 197)*

LPI	Minimum-Maximum	*M*	*SD*
Modeling the Way	(16.00, 60.00)	45.4365	8.11727
Challenging the Process	(11.00, 60.00)	40.4112	9.58200
Inspiring a Shared Vision	(7.00, 59.00)	40.3723	10.48245
Enabling Others to Act	(15.00, 60.00)	47.8589	7.36834
Encouraging the Heart	(15.00, 60.00)	45.3147	9.25337

A comparison of the data from this assessment of the transformational leadership behaviors of frontline sales professionals with normative data provided by Kouzes & Posner (2008) shows that the data trends in a similar fashion as the normative data (see Table 16).

Table 16. *Comparison with Normative Data Provided by Kouzes and Posner's on Self-Reported Form*

Five Exemplary Leadership Behaviors	Kouzes & Posner's Norms – Self-reported Questionnaire (*N* = 74,294) *M* (*SD*)	Frontline Sales Professionals – Self-reported Questionnaire (*N* = 197) *M* (*SD*)
Modeling the Way	45.15 (*6.92*) (2)	45.44 (*8.11*) (2)
Challenging the Process	43.02 (*7.73*) (4)	40.41 (*9.58*) (4)
Inspiring a Shared Vision	41.11 (*9.44*) (5)	40.37(*10.48*) (5)
Enabling Others to Act	49.43 *(5.61)* (1)	47.86 *(7.37)* (1)
Encouraging the Heart	44.23 *(8.58)* (3)	45.31 *(9.25)* (3)

Descriptive Statistics: PRQ. In addition, research participants ranked each item on the PRQ questionnaire using a 6-point Likert Scale that ranged from 1-*Strongly Disagree* to 6-*Strongly Agree*. This number was divided by the number of valid responses then this number was multiplied by 20 creating a scale of 1 to 100 for each individual question. All of the resilience dimensions were calculated in this same manner. Consideration was given to eliminating any individual research participants' response that had 5 or less out of the 10 questions with answers completed/provided by the

research participants because the score for that dimension would be less likely to be accurate due to missing data and could skew the results; however, since this was not an issue no question/research response had to be eliminated for this reason alone. The percentages for each question are listed in Table 17. Once again, the highest response category for each question is underlined.

Table 17. *Scores on the Personal Resilience Questionnaire (PRQ) are shown in terms of Percentages (Recoded; N = 197)*

Item #	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Question 32	4.6	11.2	15.2	34.0	25.9	7.6
Question 33	2.0	1.0	1.5	7.1	48.2	38.1
Question 34 – Recoded	6.1	18.8	19.8	20.8	20.3	14.2
Question 35	1.0	2.5	2.5	22.8	47.2	22.3
Question 36 – Recoded	20.3	32.0	15.2	22.8	5.6	4.1
Question 37	2.5	4.1	11.7	20.8	38.1	22.8
Question 38 – Recoded	3.0	14.7	25.4	29.9	20.8	5.6
Question 39 – Recoded	18.3	28.9	15.7	20.8	12.7	3.6
Question 40	2.0	4.1	12.7	19.8	47.7	13.7
Question 41 – Recoded	5.6	17.8	13.7	27.9	23.4	11.2
Question 42	2.0	2.0	6.6	26.4	34.5	27.9
Question 43	1.0	1.5	4.6	20.8	42.6	28.9
Question 44	2.5	1.5	6.1	23.9	49.7	15.2
Question 45 – Recoded	3.6	7.1	13.2	28.4	38.6	8.6
Question 46	3.0	3.6	9.6	33.0	38.1	12.2

Table 17. *Scores on the Personal Resilience Questionnaire (PRQ) are shown in terms of Percentages (Recoded; N = 197; continued)*

Item #	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Question 47	3.6	1.5	6.6	19.3	49.2	19.8
Question 48	4.1	5.6	16.8	34.5	32.5	6.1
Question 49	1.5	2.0	7.1	35.0	40.6	12.7
Question 50	2.5	6.1	7.1	13.7	38.1	32.5
Question 51	6.6	8.6	10.7	21.3	30.5	22.3
Question 52	1.0	4.1	6.6	28.9	41.1	17.8
Question 53	3.0	3.0	10.7	24.4	35.5	22.3
Question 54	1.0	1.5	11.2	35.0	43.1	7.6
Question 55 – Recoded	1.5	7.1	13.7	32.5	31.5	13.7
Question 56	2.0	6.6	10.2	28.9	38.1	14.2
Question 57 – Recoded	9.1	25.4	20.3	21.8	14.7	7.6
Question 58	8.1	10.7	15.7	30.5	24.9	10.2
Question 59 – Recoded	12.2	20.8	19.3	31.0	11.2	5.6
Question 60 – Recoded	1.0	7.6	15.2	35.5	24.4	16.2
Question 61	5.1	11.2	19.8	30.5	20.8	12.2
Question 62 – Recoded	9.6	33.5	22.8	19.8	11.7	2.5
Question 63 – Recoded	8.1	20.3	13.2	29.9	18.8	8.6
Question 64	1.0	2.0	5.6	25.4	42.6	22.8
Question 65–Recoded	22.8	27.9	16.2	16.2	9.6	7.1
Question 66–Recoded	14.7	33.0	20.8	18.3	10.2	3.0

Table 17. *Scores on the Personal Resilience Questionnaire (PRQ) are shown in terms of Percentages (Recoded; N = 197; continued)*

Item #	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Question 67	2.0	4.6	17.3	41.6	28.4	6.1
Question 68–Recoded	39.1	27.4	13.7	11.2	5.6	3.0
Question 69–Recoded	38.6	26.4	11.2	12.7	5.6	5.6
Question 70	4.1	5.1	7.6	26.4	43.1	13.7
Question 71	4.6	7.1	13.2	30.5	33.0	11.7
Question 72–Recoded	16.8	27.9	18.8	22.8	9.6	3.6
Question 73	1.5	1.5	6.1	15.7	47.7	27.4
Question 74	3.0	1.5	2.0	30.5	48.2	14.2
Question 75–Recoded	11.7	24.9	21.3	26.9	8.6	6.6
Question 76–Recoded	13.2	30.5	19.3	24.9	7.6	4.6
Question 77	4.1	9.1	10.7	26.4	33.0	14.7
Question 78–Recoded	7.1	27.4	25.4	28.4	6.6	3.0
Question 79	2.0	5.1	7.6	29.9	44.2	9.1
Question 80	2.5	6.6	17.8	31.0	32.0	6.1
Question 81	0.5	1.0	8.1	36.0	42.1	9.6
Question 82	1.5	3.0	5.6	16.8	39.6	31.5
Question 83–Recoded	12.2	28.4	17.8	21.8	12.7	4.6
Question 84	2.5	2.5	8.1	25.4	43.1	16.2
Question 85	3.6	5.6	13.2	25.4	37.6	12.2
Question 86–Recoded	19.8	35.0	12.2	15.7	9.1	5.6

Table 17. *Scores on the Personal Resilience Questionnaire (PRQ) are shown in terms of Percentages (Recoded; N = 197; continued)*

Item #	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Question 87	5.6	13.7	17.3	25.4	27.4	8.6
Question 88–Recoded	16.8	28.4	18.8	20.8	8.1	4.6
Question 89	1.0	5.6	12.7	35.5	34.5	8.6
Question 90-Recoded	19.8	49.2	10.2	11.2	3.6	3.6
Question 91	5.1	4.6	16.8	23.4	38.6	9.1
Question 92-Recoded	18.3	37.6	23.9	13.2	3.0	1.5
Question 93-Recoded	23.9	39.6	12.7	14.7	4.6	2.0
Question 94	11.7	12.2	9.6	17.3	31.0	15.7
Question 95-Recoded	21.3	22.3	16.2	16.8	13.2	8.1
Question 96	8.1	19.8	21.3	22.8	18.3	7.6
Question 97-Recoded	1.0	6.1	20.8	36.0	24.9	8.6
Question 98-Recoded	9.6	24.9	20.8	30.5	10.7	1.5
Question 99-Recoded	22.3	34.0	15.2	17.8	6.1	2.0
Question 100-Recoded	10.2	26.4	22.3	23.9	9.1	5.6
Question 101	3.6	15.7	15.2	26.4	28.9	8.1

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Scores on the PRQ are typically presented in terms of percentiles so that the research participants can be assessed against the database of 50,000 pen and paper

surveys and 1,000 online surveys (ODR, 2001). Scores are considered in the high range when they are above the 75th percentile. Scores are considered in the low range when they are below the 25th percentile (ODR, 2001, p. 26). If the percentile score is in the 40th percentile, this suggests that the group of research participants scored higher than 40% of respondents in the database and lower than 60% of research participants in the database. Acquiring strength in one dimension does not offset a weakness possessed in another dimension. A balance in one's resilience scores across the dimensions produces a much more resilient individual, group, or organization (ODR, 2001). In possessing a balance across the subscales or a narrow or tight range, regardless of the absolute percentile, allows one to draw from any of the dimensions or resilient characteristics depending on the situation. "Of significant interest is the fact that individuals with a tight bandwidth of scores even around the 10th percentile were, in many cases, more resilient than those with a few high scores, some mid-range, and some low (ODR, 2001, p. 21)." Therefore, possessing high scores in one or a few dimensions relative to the remaining dimensions could result in the over-utilization of a few of the resilient dimensions while simultaneously under-utilizing other key dimensions. This critical point was first suggested by ODR (2001) in that individuals with a balanced profile are able to draw on their capacity to be resilient or demonstrate resilience in a fluid fashion depending on the situation encountered. The best resilience individual profile is a profile that is stable and balanced with scores on each of the dimensions at around the same level with a tendency to be ranked high on the scale from 1 to 100 (ODR, 2001, p. 60). The bottom line is that resilience is not the possession of a single trait, dimension, or characteristic but a system of characteristics or dimensions that work in concert with one another.

Table 18 depicts the minimum and maximum ranges, the means, and the standard deviations of the research participants' responses to the PRQ. For the PRQ, the range of response for non-outliers was from 4 to 96 for Positive-The World, 0 to 98 for Positive-Yourself, 2 to 100 for Focused, 22 to 88 for Flexible-Thoughts, 4 to 96 for Flexible-Social, 14 to 92 for Organized, and 30 to 92 for Proactive.

Table 18. *Descriptive Statistics of Survey Responses for the Independent Variable, Resilience: PRQ (N = 197; Outliers Removed)*

PRQ	Minimum-Maximum	*M*	*SD*
Positive-The World	(4.00, 96.00)	66.21	16.37
Positive–Yourself	(0.00, 98.00)	70.25	15.10
Focused	(2.00, 100.00)	65.26	16.23
Flexible–Thoughts	(22.00, 88.00)	54.81	12.60
Flexible–Social	(4.00, 96.00)	63.68	14.04
Organized	(14.00, 92.00)	61.97	13.52
Proactive	(30.00, 92.00)	56.79	12.21

Table 19 provides a review of the data on resilience for sales professionals, sales managers, and all research participants. After reviewing this chart in Table 19, it appears that one could say that frontline sales professionals demonstrate a medium level of resilience across all dimensions of resilience.

Table 19. *Data on Resilience for Sales Professionals (N = 197), Sales Managers (N = 104), and All Research Participants (N = 303; Outliers Removed)*

	High Resilience = Above the 75th Percentile	Medium Resilience = Between the 25th and 75th Percentile	Low Resilience = Below the 25th Percentile
Frontline Sales Professionals (*N* = 197)			
Positive-The World	52 (26.4%)	76 (38.6%)	85 (43.1%)
Positive-Self	64 (32.5%)	92 (46.7%)	62 (31.5%)
Focused	25 (12.7%)	79 (40.1%)	101 (51.3%)
Flexible-Thoughts	25 (12.7%)	89 (41.4%)	99 (50.3%)
Flexible-Social	40 (20.3%)	74 (37.6%)	92 (46.7%)

Table 19. *Data on Resilience for Sales Professionals (N = 197), Sales Managers (N = 104), and All Research Participants (N = 303; Outliers Removed; continued)*

	High Resilience = Above the 75th Percentile	Medium Resilience = Between the 25th and 75th Percentile	Low Resilience = Below the 25th Percentile
Organized	37 (18.8%)	77 (39.1%)	92 (46.7%)
Proactive	30 (15.2%)	93 (47.2%)	82 (41.6%)
Sales Managers (*N* = 104)			
Positive-The World	58 (55.8%)	38 (36.5%)	31 (29.8%)
Positive-Self	61 (58.6%)	39 (37.5%)	12 (11.5%)
Focused	37 (35.6%)	43 (41.3%)	35 (33.7%)
Flexible-Thoughts	32 (30.8%)	53 (51.0 %)	30 (28.8%)
Flexible-Social	40 (38.5%)	39 (37.5%)	39 (37.5%)
Organized	38 (36.5%)	50 (48.1%)	27 (26.0%)
Proactive	35 (33.7%)	47 (45.2%)	21 (20.2%)
All Research Participants (*N* = 301)			
Positive-The World	110 (36.5%)	114 (37.9 %)	116 (38.5%)
Positive-Self	125 (41.5%)	131 (43.5%)	74 (24.6%)
Focused	62 (20.6%)	122 (40.5%)	136 (45.2%)
Flexible-Thoughts	57 (18.9%)	142 (47.2%)	129 (42.9%)
Flexible-Social	80 (26.6%)	113 (37.5%)	131 (43.5%)
Organized	75 (24.9%)	127 (42.2%)	119 (39.5%)
Proactive	65 (21.6%)	140 (46.5%)	103 (34.2%)

Table 20 displays the Pearson Product correlation coefficients for LPI and PRQ. The Pearson Product-Moment determines the degree of the linear relationship between two variables in this case, the independent variables (the dimensions of resilience and key demographics) and the dependent variable, the subscales of transformational leadership behaviors. The sign, positive or negative, specifies the direction of the relationship. The magnitude of the linear relationship, from 0 to 1, indicates the degree to which the data fits a straight line exhibiting a linear relationship. The closer the coefficient is to +1, the stronger the relationship (Gall, Gall, & Borg, 2005). According to Gall, Gall, and Borg (2005), correlations at +.89 or -.76 indicate a strong correlation, correlations in the middle, .40s and .50s, whether positive or negative, indicate a moderate correlation, and a

correlation close to 0 (+.15 to -.22) indicates a weak correlation. As shown in Table 20, Pearson's correlation test indicates a significant and positive intercorrelation among all of the subscales of transformational leadership and all of the dimensions of resilience. Key demographics were weakly correlated and often demonstrated a negative intercorrelation with each other and with some of the dimensions of resilience and some of the subscales of transformational leadership. The following items are considered strongly correlated: Challenging the Process and Modeling the Way (.784, $p<.01$), Challenging the Process and Inspiring a Shared Vision (.857, $p<.01$), Challenging the Process and Enabling Other to Act (.723, $p<.01$), Challenging the Process and Encouraging the Heart (.783, $p<.01$), Positive – the World and Positive – Yourself (.746, $p<.01$), Positive – the World and Focused (.779, $p<.01$), Positive – Yourself and Focused (.797, $p<.01$), and Positive – Yourself and Flexible-Social (.624, $p<.01$). According to the definitions offered by Gall, Gall, & Borg (2005), the following items are considered moderately correlated: Positive-the World and Flexible-Thoughts (.503, $p<.01$), Positive-the World and Flexible-Social (.696, $p<.01$), Positive-the World and Organized (.452, $p<.01$), and Positive-the World and Proactive (.486, $p<.01$), Positive-Yourself and Flexible-Thoughts (.452, $p<.01$), Positive-Yourself and Organized (.565, $p<.01$), Positive-Yourself and Proactive (.432, $p<.01$), Focused and Flexible-Thoughts (.467, $p<.01$), Focused and Flexible-Social (.639, $p<.01$), Focused and Organized (.543, $p<.01$), Focused and Proactive (.497, $p<.01$), Flexible-Thoughts and Flexible-Social (.435, $p<.01$), Flexible-Thoughts and Proactive (.637, $p<.01$), and Flexible-Social and Proactive (.459, $p<.01$). The remaining correlations are considered weak correlations. The majority of the correlations are positive.

Table 20. *Intercorrelations Between Research Variables*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1.	1	.783**	.796**	.752**	.808**	.417**	.404**	.396**	.283**	.349**	.346**	.317**	-.007	-.013	.051	-.016	-.023
2.	.783**	1	.857**	.723**	.784**	.303**	.309**	.353**	.276**	.268**	.296**	.364**	.006	.006	.076	.006	.036
3.	.796**	.857**	1	.684**	.824**	.318**	.337**	.359**	.284**	.274**	.291**	.333**	-.038	-.002	.088	.003	.038
4.	.752**	.723**	.684**	1	.762**	.393**	.386**	.390**	.198**	.361**	.332**	.327**	.001	-.045	-.005	-.020	-.048
5.	.808**	.784**	.824**	.762**	1	.350**	.320**	.363**	.236**	.291**	.301**	.334**	-.037	-.021	.050	-.069	.019
6.	.417**	.303**	.318**	.393**	.350**	1	.746**	.779**	.503**	.696**	.452**	.486**	.104	-.057	.068	-.039	-.040
7.	.404**	.309**	.337**	.386**	.320**	.746**	1	.797**	.452**	.624**	.565**	.432**	.070	-.038	.003	-.016	-.022
8.	.396**	.353**	.359**	.390**	.363**	.779**	.797**	1	.467**	.639**	.543**	.497**	.144*	-.054	-.024	-.075	-.042

Table 20. *Intercorrelations Between Research Variables (continued)*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
9.	.283**	.276**	.284**	.198**	.236**	.503**	.452**	.467**	1	.435**	.129	.637**	.053	-.055	.007	.015	-.107
10.	.349**	.268**	.274**	.361**	.291**	.696**	.624**	.639**	.435**	1	.378**	.459**	.165*	-.015	.110	-.121	-.092
11.	.346**	.296**	.291**	.332**	.301**	.452**	.565**	.543**	.129	.378**	1	.235**	.132	-.033	.071	-.039	.080
12.	.317**	.364**	.333**	.327**	.334**	.486**	.432**	.497**	.637**	.459**	.235**	1	.062	-.061	-.014	-.015	-.072
13.	-.007	.006	-.038	.001	-.037	.104	.070	.144*	.053	.165*	.132	.062	1.0	-.192**	.015	-.281**	-.166*
14.	-.013	.006	-.002	-.045	-.021	-.057	-.038	-.054	-.055	-.015	-.033	-.061	-.192**	1	.135	-.692**	.288**
15.	.051	.076	.088	-.005	.050	.068	.003	-.024	.007	.110	.071	-.014	.015	.135	1	.048	.188*
16.	-.016	.006	.003	-.020	-.069	-.039	-.016	-.075	.015	-.121	-.039	-.015	-.281**	.692**	.048	1	.282**
17.	-.023	.036	.038	-.048	.019	-.040	-.022	-.042	-.107	-.092	.080	-.072	-.166*	.288**	.188*	.282**	1

1=Modeling the Way, 2=Challenging the Process, 3=Inspiring a Shared Vision, 4=Enabling Others to Act, 5=Encouraging the Heart, 6=Positive-the World, 7=Positive-Yourself, 8=Focused, 9=Flexible-Thoughts, 10=Flexible-Social, 11=Organized, 12=Proactive, 13=Gender, 14=Age, 15=Education, 16=Job Tenure, 17=Salary Level.

$N = 197$

$^{**}p < .01$

*p <.05

Psychometric Properties of the LPI and PRQ

The reliability of the leadership survey tool was measured using Cronbach's alpha. Alpha coefficients of .60 or higher was included in this study. Although this alpha level is low, as compared to the desired level of significance (.80 or .90) proposed by Anastasi & Urbina (1997), Mitchell and Jolly (1998) stated that $\alpha > .60$ was acceptable. The reliability of the 36-item Leadership Practices Inventory Questionnaire (LPI) is presented in Table 21. Cronbach's alpha coefficients for the transformational leadership behaviors ranged from 0.756 to 0.868 indicating that the internal reliability of all subscales is strong. Overall, the Cronbach's alpha coefficient for the entire LPI survey was 0.955. Consequently, in this study there was sufficient evidence to support the internal consistency of the LPI and each of the individual practices or subscales; therefore, it was appropriate to use all of the transformational leadership subscales and the total transformational leadership score in the various analyses outlined in this research study.

Table 21. *Internal Consistency Reliability for Leadership Practices Inventory Questionnaire*

Scale/(number of Items)	*N*	*M*	*SD*	Cronbach's Alpha
Total LPI (36)	197	7.313	2.073	0.955
Modeling the Way (6)	197	7.573	1.989	0.768
Challenging the Process (6)	197	6.735	2.173	0.830
Inspiring a Shared Vision (6)	197	6.729	2.252	0.868
Enabling Others to Act (6)	197	7.976	1.830	0.756
Encouraging the Heart (6)	197	7.552	2.017	0.860

The internal consistency scores for the Personal Resilience Questionnaire (PRQ) are presented in Table 22. While two of the dimensions, Flexible-Thoughts and Proactive, possessed somewhat lower alpha levels with the overall reliability of the 70-item PRQ being .945, and Cronbach's alpha coefficients for the resilience dimensions ranging from .678 to .846. Once again, there was sufficient evidence to support the internal consistency of the PRQ and, therefore, it was appropriate to use all of the dimensions of resilience in the analyses outlined.

Table 22. *Internal Consistency Reliability for the Personal Resilience Questionnaire*

Scale/(number of items)	*N*	*M*	*SD*	Cronbach's Alpha
Total PRQ (70)	197	4.093	1.319	0.945
Positive-the world (10)	197	4.280	1.302	0.846
Positive-Yourself (10)	197	4.441	1.273	0.834
Focused (10)	197	4.224	1.343	0.842
Flexible-Thoughts (10)	197	3.704	1.273	0.702
Flexible-Social (10)	197	4.166	1.308	0.735
Organized (10)	197	4.049	1.386	0.716
Proactive (10)	197	3.788	1.342	0.678

Hypothesis Testing

The purpose of this investigation is to determine the impact of resilience and key demographics on the transformational leadership behaviors of frontline sales professionals. The specific research questions and hypotheses are proposed:

Based on the research questions above, the following analytic plan was employed:

1. What is the relationship between the dimensions of resilience and the transformational leadership behaviors demonstrated by sales professionals?

Hypothesis 1: Higher resilience scores of sales professionals will be related to a higher aggregate transformational leadership behavior score.

To determine the answer to research question 1, an analysis of Pearson's correlation between the individual resilience scores for each of the dimensions and the overall transformational leadership was conducted. If Pearson's Correlation was non-significant, there would be no correlation between the dependent variable, transformational leadership behaviors, and the independent variables, the dimensions of resilience, and, consequently, there would no reason to continue to test the hypothesis for research question 3. As depicted in Table 23, all of the dimensions of resilience have statistically significant correlations with the overall transformational leadership score ($p<.01$).

Table 23. *Pearson Correlation between Dimensions of Resilience Scores and Overall Transformational Leadership Score (N = 197)*

Dimensions of Resilience and Overall Transformational Leadership	R	R Squared
Positive-the World and Overall Transformational Leadership	.386**	.1490
Positive-Yourself and Overall Transformational Leadership	.382**	.1459
Focused and Overall Transformational Leadership	.407**	.1656
Flexible–Thoughts and Overall Transformational Leadership	.284**	.0807
Flexible-Social and Overall Transformational Leadership	.334**	.1116
Organized and Overall Transformational Leadership	.342**	.1170
Proactive and Overall Transformational Leadership	.370**	.1369

Note. Significance levels: ***0.001, **0.01, *0.05, preset level of significance=0.05.

2. Does the transformational leadership behaviors of sales professionals differ relative to their gender, age, education, years of experience, and salary level?

To determine the answer to research question 2, a *t* test was calculated on the total transformational leadership score as well as each of the subscales of transformational leadership to determine the impact of gender on the transformational leadership behaviors demonstrated and a one-way analysis of variance (ANOVA) was calculated using the total transformational leadership score to determine the impact of age, level of education, job tenure, and salary/income level on the transformational leadership behaviors demonstrated by frontline sales professionals.

Hypothesis 2-1: There is a significant difference in the aggregate transformational leadership behavior score of male and female sales professionals.

A *t* test of equality of means was used to assess the research question of whether or not transformational leadership varied by the gender of the sales professional. Specifically, the *t* test determines if there is a significant difference between the group means for the aggregate (total) transformational leadership behaviors score of frontline sales professionals by gender. The results of the *t* test analysis are shown in Table 24. The mean score for total transformational leadership score was higher for men (220.0491) than for women (218.5818), however, the difference was not statistically significant. Additionally, a statistically significant difference in the transformational leadership behaviors demonstrated by gender was not found with any of the subscales of transformational leadership behaviors. Since there was no significant difference (*p*-value was greater than .05), Hypothesis 2-1 was not supported.

This data conflicts with the normative data provided by Kouzes and Posner (2009). In the recently updated psychometric properties, a comparison of means between male and female LPI-Self research respondents demonstrated a statistically significant difference for the transformational leadership behaviors of Modeling the Way, Enabling Others to Act, and Encouraging the Heart (p <.001) while there was no statistically significant difference between males and females on Inspiring a Shared Vision and Challenging the Process.

Table 24. *t Test for Determining the Significant Difference in Transformational Leadership Behaviors by Gender*

	N		*M*		*SD*			
	Male	Female	Male	Female	Male	Female	*t*	*P*
Modeling the Way	109	88	45.49	45.38	8.38	7.83	0.095	.924
Challenge the Process	109	88	40.36	40.48	9.71	9.47	-0.087	.931
Inspire a Shared Vision	109	88	40.73	39.93	10.53	10.47	0.529	.597
Enable Others to Act	109	88	47.85	47.87	7.51	7.23	-0.012	.990
Encourage the Heart	109	88	45.62	44.93	9.64	8.80	0.521	.603
Total Transformational Leadership	109	88	220.05	218.58	41.50	39.98	0.251	.802

Note. Underlined values signify which gender ranked themselves as demonstrating transformational leadership behaviors more frequently.
*p < .05
-No Difference

Research Question 2 further addresses the association between the demographics of age, level of education, job tenure, and salary level and total transformational leadership behaviors demonstrated by frontline sales professionals. The overall relationship between these selected key demographics with the dependent variable, total transformational leadership behaviors, was tested initially using Pearson's and then Kendall Tau-b statistics (Table 23 and Table 25). Pearson's Product-Moment Correlation is a measure of the strength of the linear dependence between two variables (independent

versus dependent variables; Gall, Gall, & Borg, 2005). Kendall Tau is a nonparametric correlation coefficient based on the ranks of the data when all of the data are ordinal (Gall, Gall, & Borg, 2005).

These measures of association, Pearson's and Kendall Tau-b, did not identified any of the demographic characteristics with a significant relationship at the .05 level or better ($p<.01$) to the dependent variable, total transformational leadership behaviors. There was a significant Kendall tau-b correlation of .552 between tenure and age. Additionally, income was significantly correlated with three demographic variables: age, education, and tenure (age, Kendall tau-b = .295, p < .001; education, Kendall tau-b = .143, $p = .029$; tenure, Kendall tau-b = .279, $p < .001$).

Table 25. *Kendall Tau Correlations for Demographics and Total Transformational Leadership*

Kendall tau-b		Leadership	Age	Education	Tenure	Income
Leadership	Correlation Coefficient	1.000	-.016	.073	-.006	.011
	Sig. (2-tailed)		.745	.197	.899	.839
	N	197	194	184	197	194
Age	Correlation Coefficient	-.016	1.000	.109	.552**	.295**
	Sig. (2-tailed)	.745	.	.058	.000	.000
	N	194	194	181	194	192
Education	Correlation Coefficient	.073	.109	1.000	.044	.143*
	Sig. (2-tailed)	.197	.058	.	.462	.029
	N	184	181	184	184	181
Tenure	Correlation Coefficient	-.006	.552**	.044	1.000	.279**
	Sig. (2-tailed)	.899	.000	.462	.	.000
	N	197	194	184	197	194

Table 25. *Kendall Tau Correlations for Demographics and Total Transformational Leadership (continued)*

Kendall tau-b		Leadership	Age	Education	Tenure	Income
Income	Correlation Coefficient	-.011	.295**	.143*	.279**	1.000
	Sig. (2-tailed)	.839	.000	.029	.000	.
	N	194	192	181	194	194

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 2-2: There is a significant relationship between the aggregate transformational leadership behavior score and the age of sales professionals.

To test whether the transformational leadership behavior demonstrated by frontline sales professionals varied according to the age of the sales professional, a one-way analysis of variance (ANOVA) was calculated. The independent demographic variable, age, was operationalized into 10 categories as listed in Table 26. If significant differences was determined to exist, a Scheffe post hoc analysis was used to elucidate which age groups were significantly different in perceived level of total transformational leadership if the mean differences were statistically significant. The results of the ANOVA and Scheffe post hoc analysis are provided in Tables 26. Table 26 suggests that there was no significant difference between age categories with regard to transformational leadership, so no Scheffe tests were needed. Accordingly, hypothesis 2-2 was not supported.

In the normative data published in August 2009 by Kouzes and Posner they used different age categories than were used in this study and were able to demonstrate that as

research respondents' got older or their age increased so did the frequency with which they demonstrated transformational leadership behaviors.

Table 26. *One-way ANOVA and Scheffe Post Hoc on Total Transformational Leadership by Age*

Years	*N*	*M*	*SD*		
<21	10	217.6200	29.74745		
21-25	24	224.0417	38.30482		
26-30	26	217.7692	46.23186		
31-35	23	209.0587	49.84496		
36-40	17	229.4706	41.09914		
41-45	20	232.7000	29.99667		
46-50	13	195.0769	46.19066		
51-55	21	231.3333	43.18372		
56-60	13	216.3846	21.08530		
>60	27	215.0370	40.23822		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	19649.058	9	2183.229	1.320	.229
Within Groups	304259.278	184	1653.583		
Total	323908.336	193			

*$p < .05$
-No Difference

Hypothesis 2-3: There is a significant relationship between the level of education and the aggregate transformational leadership behavior score of sales professionals.

A one-way analysis of variance (ANOVA) was performed to determine if any significant differences exists between the transformational leadership behaviors of sales professionals varied based on educational attainment. The independent demographic variable, educational level, was operationalized into five categories as depicted in Table 27. If significant differences are present, a Scheffe post hoc analysis was conducted to determine which education level was significantly different in terms of the transformational leadership behaviors demonstrated. The results of the ANOVA and

Scheffe Analyses are shown in Table 27. Once again, however, as indicated by Table 27, there were no significant results since the *p*-value for the ANOVA test was .072 which is greater than .05, so no Scheffe tests were conducted nor displayed. Consequently, in terms of the results from Table 27, there is insufficient evidence to support Hypothesis 2-3.

Table 27. *One-way ANOVA and Scheffe Post Hoc on Total Transformational Leadership by Education*

Education Level	*N*	*M*	*SD*		
High School Degree	72	218.6389	37.67739		
Associate's/Technical Degree	44	216.8864	41.42587		
4-year College Degree	59	224.1559	39.87498		
Master's Degree	6	257.2250	13.89690		
Doctorate Degree	3	183.0000	91.92932		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	13918.573	4	3479.643	2.188	.072
Within Groups	284671.467	179	1590.343		
Total	298590.040	183			

*$p < .05$
-No Difference

Hypothesis 2-4: There is a significant relationship between the aggregate transformational leadership behavior score and the job tenure or years of work experience of sales professionals.

A one-way analysis of variance (ANOVA) was executed to ascertain if any significant differences existed between the transformational leadership behaviors of frontline sales professionals varied based on job tenure or years of experience in their current position. The independent demographic variable, job tenure or years of experience in current job, was operationalized into 11 categories as profiled in Table 28.

The average tenure in current position was 6.86 years with a range of 45 years which seems to be relatively significant in today's current economy. If significant differences are present, a Scheffe post hoc analysis was calculated to determine which years of current work experience (or job tenure) were significantly different in terms of the transformational leadership behaviors demonstrated. The results of the ANOVA and Scheffe Analyses are shown in Table 28. However, Table 28 indicates that no significant differences exist for sales professionals with varying years of experience (*p*-value is .087); therefore, no Scheffe analysis was conducted nor displayed. Hence, Hypothesis 2-4 is not supported.

Table 28. *One-way ANOVA and Scheffe Post Hoc on Total Transformational Leadership by Job Tenure*

Years	*N*	*M*	*SD*		
1-3	37	223.8703	28.72360		
4-6	27	203.6667	54.25935		
7-9	28	216.0000	46.07562		
10-12	29	228.8741	34.10910		
13-15	12	237.8333	54.29353		
16-18	11	240.7273	26.16521		
19-21	15	216.4000	37.57621		
22-24	9	191.4444	28.88819		
25-27	9	215.2222	44.35588		
8-30	6	221.5000	38.44346		
>30	14	215.4286	31.84509		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	27003.399	10	2700.340	1.684	.087
Within Groups	298171.835	186	1603.074		
Total	325175.235	196			

*$p < .05$
-No Difference

Hypothesis 2-5: There is a significant relationship between the aggregate transformational leadership behavior score and the salary level of sales professionals.

A one-way analysis of variance (ANOVA) was conducted to evaluate if any significant differences existed between total transformational leadership behaviors based on the salary level received by frontline sales professionals. The independent demographic variable, salary level, was operationalized into eight categories as depicted Table 29. If significant differences are present, a Scheffe post hoc analysis was conducted to determine if sales professionals with various salary levels was significantly different in terms of total transformational leadership behaviors demonstrated. The results of the ANOVA and Scheffe Analyses are shown in Table 29. Table 29 suggests there was no significant difference in transformational leadership behaviors demonstrated by frontline sales professionals possessing varying income levels (*p*-value was .777), therefore, no Scheffe post hoc analyses was needed and hypothesis 2-5 was not supported.

Table 29. *One-way ANOVA and Scheffe Post Hoc on Transformational Leadership by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	125	220.4256	41.43312		
$40,000-50,000	31	214.9032	35.45923		
$51,000-60,000	10	215.7000	39.76053		
$61,000-70,000	6	206.5000	44.67997		
$71,000-80,000	7	229.8571	43.80802		
$81,000-90,000	5	219.8000	18.43095		
$91,000-100,000	8	211.8750	65.64937		
>$100,000	2	262.6750	1.87383		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	6855.430	7	979.347	.573	.777
Within Groups	317847.551	186	1708.858		
Total	324702.981	193			

*p < .05
-No Difference

In summary, from the data in Table 29, it appears that the demographic variables (gender, age, level of education, job tenure (years of work experience), and salary level) accounted for very little of the variance or impact on the transformational leadership behaviors demonstrated by frontline sales professionals in this research study. In research conducted previously by Kouzes and Posner (2008) and other investigators, 10 separate demographic variables have been evaluated for their ability to predict transformational leadership by research respondents. The 10 demographic variables evaluated previously included: gender, age, level of education, ethnicity, function, hierarchical level, industry, job tenure with the company, organizational size, and country location (Kouzes & Posner, 2008). The conclusion of research conducted previously on the impact of demographic variables on the total transformational leadership demonstrated by research respondents accounted for no more than 0.02 percent of the variance in demonstrating transformational leadership behaviors (Kouzes & Posner, 2008). What this means is that little to no explained variance in transformational leadership behaviors demonstrated is learned by knowing more information on the demographic features about the individuals responding to the respective LPI survey questions. Consequently, this research study on frontline sales professionals concurs with the already published literature on the impact assessed by regression analysis of key demographics on the transformational leadership behaviors of various research respondents/participants. Therefore, the standard demographic characteristics of the frontline sales professionals in this study do not explain the frequency with which transformational leaders invoke the five

transformational leadership behaviors: modeling the way, challenging the process, inspiring a shared vision, enabling others to act, and encouraging the heart.

Based on the data provided thus far, it is known that several dimensions of resilience are strongly correlated with transformational leadership behaviors and that each demographic variable does not explain the transformational leadership behaviors demonstrated by frontline sales professionals. The next question addresses which of the dimensions of resilience (and key demographics) are most predictive of the transformational leadership behaviors of frontline sales professionals.

3. Which of the dimensions of resilience and key demographic characteristics are most predictive of the transformational leadership behavior demonstrated by sales professionals?

   Hypothesis 3: A change in the level of resilience along with a change in key demographics of sales professionals can be used to predict a change in their aggregate transformational leadership behavior score.

To test the hypothesis associated with research question 3, a backward elimination multiple regression analysis was utilized to examine the impact of resilience and key demographics on the transformational leadership behaviors demonstrated by sales professionals. In order to establish the validity of including a regression methodology in this study, the Pearson Product-Moment correlation among the independent and dependent variables was calculated as suggested by Polit and Hungler (1987; See Table 20, Research Question 1). The statistically significant correlations substantiate the validity of the measures and, therefore, provide support for the use of regression techniques in this study. Of interest, is whether or not key demographics and the

dimensions of resilience predict a sales professionals' likelihood of demonstrating transformational leadership behaviors. SPSS REGRESSION was used to perform the analysis, and SPSS EXPLORE was used to evaluate the assumptions. Multiple regression using backward elimination was the methodology selected to determine if the dimensions of resilience and key demographics were predictive of overall transformational leadership score. As stated by Cohen and Cohen (1983) and Hair (1995), incorporating backward elimination permitted an analysis allowing the researcher to calculate a regression equation with all of the independent variables (gender, age, level of education, job tenure or years of work experience, salary level, positive (the World), positive (Yourself), focused, flexible (Thoughts), flexible (Social), organized, and proactive) and then go back in and delete the independent variables that do not contribute significantly to the equation. Using backward elimination allowed the researcher to determine whether resilience adds any significant explanatory power to the model after controlling for the demographics of the frontline sales professionals. The steps that were used are as follows (Hair, 1995, p. 116):

- Calculate a single regression equation using all independent variables
- Calculate a partial F value for each independent variable that tests its unique variance after the variance is accounted for by all other independent variables is removed
- Eliminate the independent variables with partial F values that indicate that they are not statistically significant
- After eliminating the independent variables that are not statistically significant, recalculate the regression equation using only the remaining independent variables
- Complete this process with each variable to determine their contribution

The results of the analyses associated with this data are found in the following Table 27. Multiple regression statistics were used to determine the amount of variance in transformational leadership behaviors that could be explained for by the resilience scores of the sales professionals after controlling for demographics. Multiple regression statistics allowed the researcher to determine "how the best linear combination of independent (predictor) variables is related to the dependent (criterion) variable" (Wilson, 1989, p.509). The larger the proportion of variance that is explained for by the independent variables, the better the calculation of a relationship between the independent variables (predictor) and dependent variable (criterion; 1989). The cross correlation matrix is displayed in Table 28. To avoid over or underestimating the significance of the results, the consideration for the use of multiple regression was analyzed for signs of multicollinearity and were also tested by assessing the histograms and the scatterplots for normality, linearity, and homoscedasticity (Tabachnick & Fidell, 2007). The data was approximately normally distributed so there appeared to be no violations of linearity nor violations or homoscedasticity and the cross correlation matrix indicates a lack of multicollinearity for most of the variables since the correlations between the independent variables are consistently less than .90 (Tabachnick & Fidell, 2007). Through a visual inspection of the data plots on histograms, the researcher determined that the variables were approximately normally distributed without substantial outliers. The scatterplots and histograms reveal a roughly random pattern but with concentration around the origin (Cohen & Cohen, 1983). Additionally, Cohen and Cohen recommend that there be 10-20 times as many subjects in the study as independent variables. In this study, there was a potential for 12 independent variables and since the

number of research participants was 197, Cohen and Cohen's (1983) recommendation of having a ten-fold total number of participants was accomplished. The Kolmogorov-Smirnov test was included and used to assess whether the data is normal. However, presenting histograms is usually enough to satisfy the element of normality. Additionally, two features of this research study helped to reduce the problems associated with an unfavorable ratio of research participants and variables when conducting multiple linear regression. First, not all of the independent variables were used in any given equation. Second, a statistic was determined that suggest an accurate approximation of how well the obtained multiple regression equations would cross-validate in other samples from within the same population. This statistic, the Stein-adjusted R squared, was calculated in order to obtain a reasonable value that would explain the proportion of variance in the dependent variable that was accounted for by the independent (predictor) variables (Stevens, 2002).

Table 30. *Correlation Matrix: Correlation Between Transformational Leadership Behaviors and Dimensions of Resilience of Sales Professionals (N = 197)*

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.	Pearson Correlation	1	.746**	.779**	.503**	.696**	.452**	.486**	.104	-.057	.068	-.039	-.040
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.329	.596	.361	.583	.581
	N	197	197	197	197	197	197	197	197	194	184	197	194

Table 30. *Correlation Matrix: Correlation Between Transformational Leadership Behaviors and Dimensions of Resilience of Sales Professionals (N = 197; continued)*

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
2.	Pearson Correlation	.746**	1	.797**	.452**	.624**	.565**	.432**	.070	-.038	.003	-.016	-.022
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.329	.596	.970	.819	.760
	N	197	197	197	197	197	197	197	197	194	184	197	194
3.	Pearson Correlation	.779**	.797**	1	.467**	.639**	.543**	.497**	-.144	-.054	-.024	-.075	-.042
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.044	.452	.750	.292	.565
	N	197	197	197	197	197	197	197	197	194	184	197	194
4.	Pearson Correlation	.503**	.452**	.467**	1	.435**	.129	.637**	.053	-.055	.007	.015	-.107
	Sig. (2-tailed)	.000	.000	.000		.000	.115	.000	.303	.595	.666	.379	.883
	N	197	197	197	197	197	197	197	197	194	184	197	194

Table 30. *Correlation Matrix: Correlation Between Transformational Leadership Behaviors and Dimensions of Resilience of Sales Professionals (N = 197; continued)*

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
5.	Pearson Correlation	.696**	.624**	.639**	.435**	1	.378**	.459**	.165	-.015	.010	-.121	-.092
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.021	.835	.138	.090	.203
	N	197	197	197	197	197	197	197	197	194	184	197	194
6.	Pearson Correlation	.452**	.565**	.543**	.129	.378**	1	.235**	.132	-.033	.071	-.039	.080
	Sig. (2-tailed)	.000	.000	.000	.171	.000		.001	.064	.648	.337	.589	.266
	N	197	197	197	197	197	197	197	197	197	184	197	194
7.	Pearson Correlation	.486**	.432**	.497**	.637**	.459**	.235**	1	.062	-.061	-.014	-.015	-.072
	Sig. (2-tailed)	.000	.000	.000	.071	.000	.001		.388	.399	.947	.832	.317
	N	197	197	197	197	197	197	197	197	194	184	197	194

Table 30. *Correlation Matrix: Correlation Between Transformational Leadership Behaviors and Dimensions of Resilience of Sales Professionals (N = 197; continued)*

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
8.	Pearson Correlation	.104	.070	.144*	.053	.165*	.132	.062	1	-.192**	.015	-.281**	-.166*
	Sig. (2-tailed)	.147	.329	.044	.458	.021	.064	.388		.007	.837	.000	.020
	N	197	197	197	197	197	197	197	197	194	184	197	194
9.	Pearson Correlation	-.057	-.038	-.054	-.055	-.033	-.015	-.061	-.192**	1	.135	.692**	.288**
	Sig. (2-tailed)	.433	.596	.452	.446	.835	.648	.399	.007		.070	.000	.000
	N	194	194	194	194	194	194	194	194	194	184	194	194
10.	Pearson Correlation	068	.003	-.024	.007	.110	.071	-.014	.015	.135	1	.048	.188*
	Sig. (2-tailed)	.361	.970	.750	.929	.138	.337	.847	.837	.070		.517	.011
	N	184	184	184	184	184	184	184	184	184	184	184	181

Table 30. *Correlation Matrix: Correlation Between Transformational Leadership Behaviors and Dimensions of Resilience of Sales Professionals (N = 197; continued)*

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
11.	Pearson Correlation	-.039	-.016	-.075	.015	-.121	-.039	-.015	-.281**	.692**	.048	1	.282**
	Sig. (2-tailed)	.583	.819	.292	.831	.090	.589	.832	.000	.000	.517		.000
	N	197	197	197	197	197	197	197	197	194	184	197	194
12.	Pearson Correlation	-.040	-.022	-.042	-.107	-.092	.080	-.072	-.166*	.288**	.188*	.282**	1
	Sig. (2-tailed)	.581	.760	.565	.139	.203	.266	.317	.020	.000	.011	.000	
	N	194	194	194	194	194	194	194	194	192	181	194	194

1=Positive-the World, 2=Positive-Yourself, 3=Focused, 4=Flexible-Thoughts, 5=Flexible-Social, 6=Organized, 7=Proactive, 8=Gender, 9=Age, 10=Education, 11=Tenure, 12=Salary Level

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Results of the regression analysis in Table 31 demonstrated a significant relationship between the dependent variable, total transformational leadership and three of the dimensions of resilience, Focused, Organized, and Proactive ($F(3,175) = 17.201$, $p<.001$. The multiple correlation coefficient from the analysis, *R,* was .477 and R^2 was .228. Regarding the individual relationships between the independent variables and the

dependent variable (total transformational leadership behaviors), Focused, Organized, and Proactive significantly and positively predicted the total transformational leadership behaviors demonstrated by frontline sales professionals. These three dimensions of resilience together explain approximately 22.7% of the variance in the transformational leadership behaviors demonstrated by sales professionals operating on the frontlines of various organizations. This level of impact or predictability is considered to be a low to moderate correlation. The regression model is depicted in Table 31 and Figure 5.

Table 31. *Regression Analysis Summary for the Dimensions of Resilience and Key Demographics Predicting Total Transformational Leadership Behavior (N = 175)*

Independent Variables	B	SE B	β	*t*	*P*
Constant	112.113	15.792		7.100	.000
Focused	.443	.220	.177	2.010	.046
Organized	.543	.239	.180	2.275	.024
Proactive	.811	.252	.247	3.214	.002

Note. R=.476, R^2 = .227

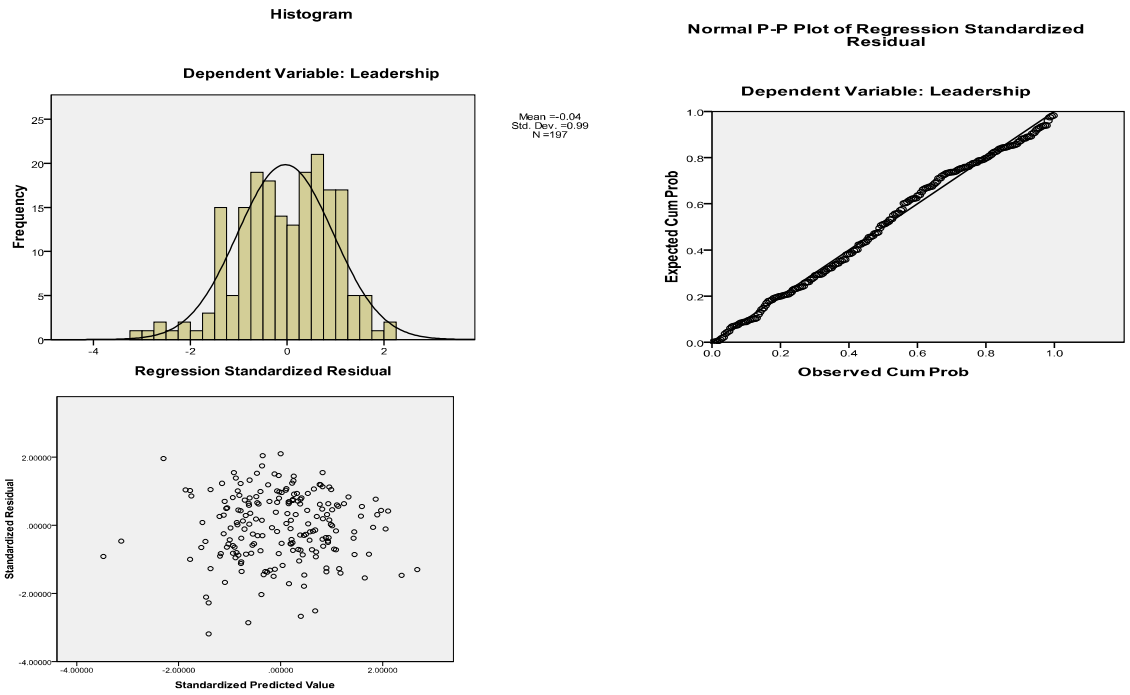

Figure 5. Histogram, Normal P-P Plot, and Scatterplot of Residuals of the Reqression Equation for All of the Dimensions of Resilience and All Key Demographics.

As a result of the regression analyses in Table 31, the null hypothesis for research question 3 is rejected because an increase in three of the dimensions of resilience (Focused, Organized, and Proactive) can be used to partially explain the transformational leadership behaviors demonstrated by sales professionals operating on the frontlines of their respective organizations.

The histogram and residual plot for the regression equation (Figures 6-12) is included in Figure 5 and are roughly standard normal. The plot of residual and predicted are included and indicate a roughly random pattern but with a concentration of responses around the origin.

Summary of Findings of the Hypotheses

This quantitative research study design utilized two well-documented research instruments, the LPI (Kouzes & Posner, 2001), the PRQ (Connor, 1993), and routine demographic questions. Major findings associated with this research study include the following statements. The dimensions of resilience and transformational leadership behaviors of frontline sales professionals are correlated (Hypothesis 1). There was no statistically significant difference in the total transformational leadership behaviors demonstrated by male and female sales professionals working on the frontlines of various organizations (Hypothesis 2-1). There was, also, no statistically significant relationship between the total transformational leadership behaviors demonstrated and the age of the frontline sales professionals (Hypothesis 2-2). There was also insufficient evidence to link the level of education attained and the transformational leadership behaviors demonstrated by frontline sales professionals (Hypothesis 2-3). There was no statistically

significant relationship between the total transformational leadership behaviors demonstrated and the job tenure or years of work experience in their current position for frontline sales professionals (Hypothesis 2-4). There was no statistically significant difference in transformational leadership behaviors demonstrated by frontline sales professionals possessing various income levels (Hypothesis 2-5). As stated previously, demographics variables were not a statistically useful predictors for determining the transformational leadership behaviors demonstrated by frontline sales professionals which confirms the results previously published in the research literature. And finally, the results of the regression analysis (Hypothesis 3) demonstrated a significant and positive relationship between the following dimensions of resilience, Focused, Organized, and Proactive. Therefore, resilience is a predictor of 22.7% of the variance of the transformational leadership behaviors demonstrated by frontline sales professionals and this predictive correlation is considered to have a low to moderate impact (R^2=.227) on the transformational leadership behaviors demonstrated.

Ancillary Analyses

Since resilience during times of significant change is important, it was important to the researcher to investigate the impact of demographics on the dimensions of resilience demonstrated by sales professionals. Consequently, two additional question were of interest and supplemental to the main research question and the subsequent findings.

Ancillary Question 1: Do sales professionals' perception of their resilience differ relative to their gender, age, level of education, job tenure, and salary level?

To answer Ancillary Question 1, a *t* test and one-way analysis of variance (ANOVA) were used to measure the dimensions of resilience with specified background demographics from the research participants. These hypotheses were tested by analyzing data obtained from the PRQ and the demographic survey for frontline sales professions working in the United States.

Ancillary Hypothesis 1-1: There is a significant difference in the dimensions of resilience of male and female sales professionals.

A *t* test was used to determine if significant differences exists in the levels of resilience by gender. The results of the *t* test analysis are shown in Table 32. The results indicate that there is no significant difference in the level of resilience by gender. In this study, women showed marginally more elements of all of the dimensions of resilience (Positive-the World, Positive-Yourself, Focused, Flexible-Thoughts, Flexible-Social, Organized and Proactive) than men. However, only two of the differences were statistically significant (Focused and Flexible-Social), and, therefore, Ancillary Hypothesis 1-1 is supported; therefore, gender is a statistically useful predictor of the level of resilience demonstrated by frontline sales professionals in this particular study.

Table 32. *t Test for Determining the Significant Difference in Resilience by Gender*

	N		*M*		*SD*			
	Male	Female	Male	Female	Male	Female	*t*	*P*
Positive (the World)	109	88	64.69	68.09	17.60	14.57	-1.455	.147
Positive (Yourself)	109	88	69.30	71.42	16.34	13.40	-0.979	.329
Focused	109	88	63.17	67.85	17.58	14.05	-2.031	.044
Flexible (Thoughts)	109	88	54.21	55.56	12.21	13.10	-0.744	.458
Flexible (Social)	109	88	61.61	66.25	14.21	13.46	-2.335	.021

Table 32. *t Test for Determining the Significant Difference in Resilience by Gender (continued)*

	N		*M*		*SD*			
	Male	Female	Male	Female	Male	Female	*t*	*P*
Organized	109	88	60.37	63.95	13.60	13.23	-1.863	.064
Proactive	109	88	56.11	57.62	12.55	11.78	-0.866	.388

Note. Underlined values signify which gender ranked themselves as demonstrating dimensions of resilience to a higher degree.
*$p < .05$

In partial support of this study as well as in contrast, other researchers (ODR, 2001) have previously found that females tended to score higher than males on Positive – the World, Positive-Yourself, Focused, Flexible-Social, Organized and Proactive than males. As mentioned in Table 32, women did score higher on all of the dimensions of resilience and concur with previously published studies by scoring statistically higher than men on the following dimensions of resilience: Focused and Flexible-Social (*p* value < .05).

Ancillary Hypothesis 1-2: There is a significant relationship between the dimensions of resilience and the age of the sales professionals.

A one-way analysis of variance (ANOVA) was calculated to determine if there were any significant differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Positive – the World dimension among the different age categories of frontline sales professionals. If significant differences are determined to exist, a Scheffe post hoc analysis was conducted to determine which age groups were significantly different in perceived level of resilience. The data obtained from the ANOVA and Scheffe post hoc analysis are shown in Table 33. Table 33 indicates that there are no significant relationships between the dimension of resilience,

Positive-the World, and any of the age categories, as the *p*-value for the F-test is .581 (which is greater than $p<.05$), and, therefore, there was no need to conduct or include a Scheffe analysis.

Table 33. *One-way ANOVA and Scheffe Post Hoc on Positive–The World by Age*

Years	*N*	*M*	*SD*		
<21	10	72.00	10.583		
21-25	23	63.83	15.666		
26-30	25	63.96	16.311		
31-35	23	67.57	14.346		
36-40	17	63.53	12.006		
41-45	19	65.84	16.661		
46-50	13	66.69	18.732		
51-55	21	70.14	13.521		
56-60	13	57.77	25.338		
>60	27	68.07	17.227		
Resilience	SS	Df	MS	F	*P*
Between Groups	2015.901	9	223.989	.840	.581
Within Groups	49087.053	184	266.777		
Total	51102.954	193			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was computed to investigate if there were any significant differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Positive-Yourself dimension of resilience among the different age groups. If significant differences are determined to exist, a Scheffe post hoc analysis was used to elucidate which age groups were significantly different in perceived level of resilience. The results of the data obtained from the ANOVA and Scheffe post hoc analysis are shown in Table 34. Table 34 indicates that there is no significant relationship between the dimension of resilience, Positive-Yourself, and age, as the *p*-value for the F-test is .798, so there was no need to run a Scheffe analysis.

Table 34. *One-way ANOVA and Scheffe Post Hoc on Positive-Yourself by Age*

Years	*N*	*M*	*SD*		
<21	10	69.60	16.514		
21-25	23	70.78	9.491		
26-30	25	70.48	17.381		
31-35	23	71.87	12.337		
36-40	17	70.59	14.556		
41-45	19	67.47	15.518		
46-50	13	75.23	11.931		
51-55	21	71.57	15.227		
56-60	13	63.08	23.673		
>60	27	69.67	16.189		
Resilience	SS	Df	MS	F	*P*
Between Groups	1249.490	9	138.832	.598	.798
Within Groups	42703.072	184	232.082		
Total	43952.562	193			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was incorporated to determine if there were any significant differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Focused dimension of resilience among the different age categories. If significant differences are determined to exist, a Scheffe post hoc analysis was calculated to elucidate which age categories were significantly different in perceived level of resilience. The results of the ANOVA and Scheffe post hoc analysis are shown in Table 35. Table 35 indicates that there is no significant relationship between the dimension of resilience, Focused, and age, as the *p*-value for the F-test is .084.

Table 35. *One-way ANOVA and Scheffe Post Hoc on Focused by Age*

Years	*N*	*M*	*SD*		
<21	10	64.10	17.091		
21-25	23	67.04	13.182		
26-30	25	63.60	17.823		
31-35	23	68.96	13.776		
36-40	17	65.29	12.589		
41-45	19	62.37	18.114		
46-50	13	69.77	17.011		
51-55	21	69.90	14.401		
56-60	13	51.62	20.312		
>60	27	64.22	16.051		
Resilience	SS	Df	MS	F	*P*
Between Groups	3923.821	9	435.980	1.735	.084
Within Groups	46241.169	184	251.311		
Total	50164.990	193			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was calculated to assess if there were any significant differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Flexible-Thoughts dimension of resilience among the differing age categories. If significant differences are established, a Scheffe post hoc analysis was conducted to determine which age groups were significantly different in perceived level of resilience. The results of the data obtained from ANOVA and Scheffe post hoc analyses are shown in Table 36. Table 36 indicates that there was no significant relationships between the dimensions of resilience, Flexible-Thoughts, and age, as the *p*-value for the F-test is .243 and so there was no need to conduct a Scheffe post hoc analysis.

Table 36. *One-way ANOVA and Scheffe Post Hoc on Flexible-Thoughts by Age*

Years	*N*	*M*	*SD*		
<21	10	61.00	12.083		
21-25	23	54.96	9.589		
26-30	25	52.40	12.097		
31-35	23	50.39	13.283		
36-40	17	52.00	11.247		
41-45	19	57.63	10.610		
46-50	13	56.38	11.177		
51-55	21	59.24	14.304		
56-60	13	50.69	11.324		
>60	27	55.85	15.698		
Resilience	SS	Df	MS	F	*P*
Between Groups	1827.188	9	203.021	1.293	.243
Within Groups	28885.065	184	156.984		
Total	30712.253	193			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was computed to determine if there were any differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Flexible – Social dimensions of resilience among the individual age categories. If significant differences are determined to exist, a Scheffe post hoc analysis was calculated to determine which age categories are significantly different in their perceived level of resilience. The results of the analyses are depicted in Table 37. Table 37 indicates that there are no significant relationships between the dimension of resilience, Flexible – Social, and age, as the *p*-value for the F-test is .743 and, therefore, there was no need to conduct a Scheffe post hoc analysis.

Table 37. *One-way ANOVA and Scheffe Post Hoc on Flexible-Social by Age*

Years	*N*	*M*	*SD*		
<21	10	65.80	12.164		
21-25	23	60.87	13.656		
26-30	25	63.60	15.578		
31-35	23	66.35	13.138		
36-40	17	61.47	11.598		
41-45	19	66.63	10.751		
46-50	13	64.69	14.326		
51-55	21	63.52	12.600		
56-60	13	56.46	21.957		
>60	27	65.44	12.945		
Resilience	SS	Df	MS	F	*P*
Between Groups	1188.332	9	132.037	.662	.743
Within Groups	36712.106	184	199.522		
Total	37900.438	193			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was used to determine if there were any significant differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Organized dimension of resilience among the varying age categories. If significant differences exist, a Scheffe post hoc analysis was completed to elucidate which age groups were significantly different in perceived level of resilience. The data obtained from the ANOVA and Scheffe post hoc analyses are shown in Table 38. Table 38 indicates that there are no significant relationships between the dimension of resilience, Organized, and age, since the *p*-value for the F-test is .698 and, therefore, no Scheffe analysis needed to be conducted.

Table 38. *One-way ANOVA and Scheffe Post Hoc on Organized by Age*

Years	*N*	*M*	*SD*		
<21	10	64.80	14.793		
21-25	23	62.91	10.466		
26-30	25	61.36	16.276		
31-35	23	63.48	12.199		
36-40	17	61.65	12.733		
41-45	19	64.95	11.914		
46-50	13	64.31	11.456		
51-55	21	61.38	14.493		
56-60	13	55.23	16.823		
>60	27	59.56	14.254		
Resilience	SS	Df	MS	F	*P*
Between Groups	1179.794	9	131.088	.711	.698
Within Groups	33929.876	184	184.401		
Total	35109.670	193			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was used to investigate if there were any significant differences in the frontline sales professionals' perceptions of their level of resilience as measured by the Proactive dimension of resilience among the varying age categories. If significant differences are determined to exist, a Scheffe post hoc analysis was used to expose which age groups were significantly different in perceived level of resilience. Table 39 indicates that there are no significant relationships between the dimension of resilience, Proactive, and age, as the *p*-value for the F-test is .917 and no Scheffe analysis was needed.

Table 39. *One-way ANOVA and Scheffe Post Hoc on Proactive by Age*

Years	*N*	*M*	*SD*		
<21	10	62.60	11.702		
21-25	23	56.78	10.950		
26-30	25	55.76	11.921		
31-35	23	56.70	11.687		
36-40	17	55.76	11.377		
41-45	19	55.05	13.323		
46-50	13	55.08	13.080		
51-55	21	58.57	12.168		
56-60	13	55.08	15.697		
>60	27	55.85	12.709		
Resilience	SS	Df	MS	F	*P*
Between Groups	592.9549	9	65.884	.431	.917
Within Groups	28100.820	184	152.722		
Total	28693.773	193			

*$p < .05$
-No Difference

The dimensions of resilience did not demonstrate an impact of age on the ability to be resilient in frontline sales professionals. In contrast, other researchers have demonstrated that older individuals tended to score higher on Positive-the World, Flexible-Thoughts, and lower on Positive-Yourself, and Flexible-Social than younger individuals (ODR, 2001). However, this was not confirmed by this study of frontline sales professionals.

Ancillary Hypothesis 1-3: There is a significant relationship between the level of education and the dimensions of resilience of sales professionals.

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Positive – the World and their reported education level. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of

experience were significantly different in level of resilience. However, as indicated by Table 40, there was no significant relationship as the *p*-value of .140 was greater than .05 and, therefore, no need to conduct a Scheffe post hoc analysis.

Table 40. *One-way ANOVA and Scheffe Post Hoc on Positive–the World by Education*

Education Level	*N*	M	*SD*		
High School Degree	68	67.81	14.936		
Associate's/Technical Degree	44	60.98	17.863		
4-year College Degree	59	66.80	16.068		
Master's Degree	6	62.00	13.565		
Doctorate Degree	3	76.67	16.166		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	1819.807	4	454.952	1.754	.140
Within Groups	46160.499	178	259.329		
Total	47980.306	182			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was computed to investigate if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Positive-Yourself and their reported level of education. If a significant difference does exist, a Scheffe post hoc analysis was conducted to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 41, there was no significant relationship as the *p*-value of .081 was greater than .05.

Table 41. *One-way ANOVA and Scheffe Post Hoc on Positive–Yourself by Education*

Education Level	*N*	*M*	*SD*		
High School Degree	68	70.90	13.682		
Associate's/Technical Degree	44	66.39	16.341		
4-year College Degree	59	71.34	15.556		
Master's Degree	6	66.67	13.246		
Doctorate Degree	3	88.67	11.372		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	1862.809	4	465.702	2.113	.081
Within Groups	39231.596	178	220.402		
Total	41094.404	182			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was conducted to assess if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Focused and their reported level of education. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 42, there was no significant relationship as the *p*-value of .163 was greater than .05.

Table 42. *One-way ANOVA and Scheffe Post Hoc on Focused by Education*

Education Level	*N*	*M*	*SD*		
High School Degree	68	67.03	16.054		
Associate's/Technical Degree	44	61.52	17.539		
4-year College Degree	59	64.47	15.797		
Master's Degree	6	63.33	17.739		
Doctorate Degree	3	82.67	9.452		
Transformational Leadership Behavior	SS	Df	MS	F	*P*

Table 42. *One-way ANOVA and Scheffe Post Hoc on Focused by Education (continued)*

Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	1750.102	4	437.525	1.651	.163
Within Groups	47161.548	178	264.953		
Total	48911.650	182			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was calculated to assess if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Flexible- Thoughts and their reported education level. If a significant difference does exist, a Scheffe post hoc analysis was calculated to identify how many years of experience were significantly different in level of resilience. As indicated by Table 43, there was no significant relationship as the *p*-value of .816 was greater than .05.

Table 43. One-*way ANOVA and Scheffe Post Hoc on Flexible-Thoughts by Education*

Education Level	*N*	*M*	*SD*		
High School Degree	68	55.18	12.990		
Associate's/Technical Degree	44	53.25	12.202		
4-year College Degree	59	54.78	12.808		
Master's Degree	6	56.67	12.628		
Doctorate Degree	3	61.33	8.327		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	250.5914	4	62.648	.390	.816
Within Groups	28605.879	178	160.707		
Total	28856.470	182			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was used to investigate if there were any differences in the frontline sales professionals' perceptions of their resilience as measured by Flexible-Social dimension and their reported education level. If a significant difference does exist, a Scheffe post hoc analysis was conducted to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 44, there was no significant relationship as the *p*-value of .941 was greater than .05.

Table 44. *One-way ANOVA and Scheffe Post Hoc on Flexible-Social by Education*

Education Level	*N*	*M*	*SD*		
High School Degree	68	64.18	12.933		
Associate's/Technical Degree	44	61.66	15.106		
4-year College Degree	59	63.42	14.609		
Master's Degree	6	63.33	11.219		
Doctorate Degree	3	64.67	7.024		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	156.1244	4	39.031	.195	.941
Within Groups	35554.237	178	199.743		
Total	35710.361	182			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was calculated to assess if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Organized and their specified education level. If a significant difference does exist, a Scheffe post hoc analysis was completed to identify how many years of experience were significantly different in level of resilience. However, as

indicated by Table 45, there was no significant relationship as the *p*-value of .231 was greater than .05.

Table 45. *One-way ANOVA and Scheffe Post Hoc on Organized by Education*

Education Level	*N*	*M*	*SD*		
High School Degree	68	61.37	13.948		
Associate's/Technical Degree	44	59.41	14.106		
4-year College Degree	59	64.22	12.527		
Master's Degree	6	60.00	4.561		
Doctorate Degree	3	73.33	9.238		
Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	995.5834	4	248.896	1.414	.231
Within Groups	31327.270	178	175.996		
Total	32322.852	182			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was incorporated to measure if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Proactive and their reported level of education. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 46, there was no significant relationship as the *p*-value of .959 was greater than .05.

Table 46. *One-way ANOVA and Scheffe Post Hoc on Proactive by Education*

Education Level	*N*	*M*	*SD*
High School Degree	68	57.09	12.057
Associate's/Technical Degree	44	55.80	13.543
4-year College Degree	59	56.54	11.884
Master's Degree	6	58.33	9.245
Doctorate Degree	3	58.67	3.055

Table 46. *One-way ANOVA and Scheffe Post Hoc on Proactive by Education (continued)*

Transformational Leadership Behavior	SS	Df	MS	F	*P*
Between Groups	94.360	4	23.590	.158	.959
Within Groups	26618.000	178	149.539		
Total	26712.361	182			

*$p < .05$
-No Difference

In this research study, education did not impact whether an individual demonstrated the various dimensions of resilience. However, in contrast to this study, other researchers have demonstrated that higher level of education have been associated with higher scores on Positive-the World, Positive-Yourself, Focused, Flexible-Thoughts, Flexible-Social, and Proactive (ODR, 2001).

Ancillary Hypothesis 1-4: There is a significant relationship between the dimensions of resilience and the job tenure of sales professionals.

A one-way analysis of variance (ANOVA) was used to investigate if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Positive-the World and their reported job tenure or years of experience in the job. If a significant difference does exist, a Scheffe post hoc analysis was calculated to identify how many years of experience were significantly different in level of resilience. The data obtained from the ANOVA and Scheffe post hoc analysis are outlined in Table 47. Once again, Scheffe tests were not needed because there was no significant relationship detected in the ANOVA test, as the *p*-value was .637, which is greater than .05.

Table 47. *One-way ANOVA and Scheffe Post Hoc on Positive – the World by Job Tenure*

Years	*N*	*M*	*SD*		
<4	36	66.06	14.259		
4-6	27	66.93	13.059		
7-9	28	62.43	17.608		
10-12	27	70.11	15.182		
13-15	12	61.83	23.779		
16-18	11	61.45	15.902		
19-21	15	64.53	16.383		
22-24	9	66.11	15.736		
25-27	9	75.78	14.687		
28-30	5	66.40	20.268		
>30	14	65.71	17.765		
Resilience	SS	Df	MS	F	*P*
Between Groups	2097.136	10	209.714	.791	.637
Within Groups	49037.247	185	265.066		
Total	51134.383	195			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Positive-Yourself and their reported job tenure or years of experience in their current position. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of experience were significantly different in the level of resilience demonstrated. Once again, Scheffe tests were not needed because there was no significant relationship detected in the ANOVA test, as the *p*-value was .150, which is greater than .05.

Table 48. *One-way ANOVA and Scheffe Post Hoc on Positive-Yourself by Job Tenure*

Years	*N*	*M*	*SD*		
<4	36	69.83	11.636		
4-6	27	73.22	12.110		
7-9	28	67.64	15.339		
10-12	27	72.93	15.254		
13-15	12	61.67	25.137		
16-18	11	65.27	16.692		
19-21	15	68.93	12.326		
22-24	9	73.11	11.185		
25-27	9	82.00	9.849		
28-30	5	71.00	11.000		
>30	14	67.57	20.758		
Resilience	SS	Df	MS	F	*P*
Between Groups	3253.582	10	325.358	1.479	.150
Within Groups	40707.086	185	220.038		
Total	43960.668	195			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was calculated to determine if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Focused and their reported job tenure or years of experience in the current position. If a significant difference does exist, a Scheffe post hoc analysis was conducted to identify how many years of experience were significantly different in level of resilience. The data obtained are shown in Table 49. Scheffe tests were not conducted because there was no significant relationship detected in the ANOVA test, with a *p*-value of .293, which was less than .05.

Table 49. *One-way ANOVA and Scheffe Post Hoc on Focused by Job Tenure*

Years	*N*	*M*	*SD*		
<4	36	66.83	13.313		
4-6	27	68.11	14.186		
7-9	28	61.93	16.649		
10-12	27	68.89	14.048		
13-15	12	56.83	21.649		
16-18	11	60.73	21.841		
19-21	15	64.00	15.743		
22-24	9	62.44	15.804		
25-27	9	74.78	19.077		
28-30	5	60.80	9.859		
>30	14	62.29	18.159		
Resilience	SS	Df	MS	F	*P*
Between Groups	3085.064	10	308.506	1.201	.293
Within Groups	47538.426	185	256.964		
Total	50623.490	195			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was used to assess if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Flexible- Thoughts and their reported job tenure or years of experience in the job. If a significant difference does exist, a Scheffe post hoc analysis was calculated to identify which of the years of experience were significantly different in terms of the level of resilience demonstrated. The results of the ANOVA and Scheffe post hoc analysis are shown in Table 50. Once again, Scheffe tests were not needed because there was no significant relationship detected in the ANOVA test, as the *p*-value was .385, which is greater than .05.

Table 50. *One-way ANOVA and Scheffe Post Hoc on Flexible-Thoughts by Job Tenure*

Years	*N*	*M*	*SD*		
<4	36	54.39	10.890		
4-6	27	56.19	9.767		
7-9	28	53.14	15.207		
10-12	27	54.52	11.630		
13-15	12	45.50	11.123		
16-18	11	59.00	14.498		
19-21	15	55.73	13.355		
22-24	9	54.44	13.776		
25-27	9	59.89	14.598		
28-30	5	54.40	4.775		
>30	14	56.86	15.226		
Resilience	SS	Df	MS	F	*P*
Between Groups	1687.280	10	168.728	1.073	.385
Within Groups	29101.720	185	157.307		
Total	30789.00	195			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was used to measure if there were any significant differences in the frontline sales professionals' perceptions of their resilience as measured by Flexible- Social and their reported job tenure or years of experience in the job. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of experience were significantly different in level of resilience. Once again, Scheffe test was not needed because there was no significant relationship detected in the ANOVA test, as the *p*-value was .307, which is greater than .05.

Table 51. *One-way ANOVA and Scheffe Post Hoc on Flexible-Social by Job Tenure*

Years	*N*	*M*	*SD*
<4	36	62.56	14.987
4-6	27	66.89	11.264
7-9	28	62.93	13.957
10-12	27	63.70	12.910
13-15	12	56.00	18.330
16-18	11	62.91	9.481
19-21	15	62.87	12.088
22-24	9	62.00	15.937

Table 51. *One-way ANOVA and Scheffe Post Hoc on Flexible-Social by Job Tenure (continued)*

Years	*N*	*M*	*SD*		
25-27	9	74.33	11.853		
28-30	5	68.40	15.453		
>30	14	61.64	14.526		
Resilience	SS	Df	MS	F	*P*
Between Groups	2275.622	10	227.562	1.180	.307
Within Groups	35668.760	185	192.804		
Total	37944.383	195			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Organized and their reported job tenure or years of experience in the job. If a significant difference does exist, a Scheffe post hoc analysis was calculated to identify how many years of experience were significantly different in level of resilience. The results of the ANOVA and Scheffe post hoc analysis are shown in Table 52. Once again, Scheffe tests were not needed because there was no significant relationship detected in the ANOVA test, as the *p*-value was .276, which is greater than .05.

Table 52. *One-way ANOVA and Scheffe Post Hoc on Organized by Job Tenure*

Years	*N*	*M*	SD
<4	36	60.67	12.133
4-6	27	66.19	11.536
7-9	28	60.29	13.960
10-12	27	61.93	14.071
13-15	12	61.25	17.710
16-18	11	67.09	15.056
19-21	15	56.00	10.690
22-24	9	60.00	13.964
25-27	9	70.00	13.784
28-30	5	61.60	10.900
>30	14	58.86	14.691

Table 52. *One-way ANOVA and Scheffe Post Hoc on Organized by Job Tenure (continued)*

Resilience	SS	Df	MS	F	*P*
Between Groups	2192.227	10	219.223	1.227	.276
Within Groups	33045.446	185	178.624		
Total	35237.673	195			

*$p < .05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Proactive and their reported job tenure or years of experience in the job. If a significant difference does exist, a Scheffe post hoc analysis was completed to identify how many years of experience were significantly different in level of resilience. The results of the ANOVA and Scheffe post hoc analysis are shown in Table 53. Scheffe tests were needed because there was a significant relationship detected in the ANOVA test, as the *p*-value was .023, which is less than .05. However, none of the post-hoc tests were significant.

Table 53. *One-way ANOVA and Scheffe Post Hoc on Proactive by Job Tenure*

Years	*N*	*M*	*SD*		
<4	36	55.94	12.071		
4-6	27	61.11	8.026		
7-9	28	53.14	12.394		
10-12	27	58.52	8.746		
13-15	12	45.67	8.305		
16-18	11	61.36	17.990		
19-21	15	55.60	12.380		
22-24	9	54.89	12.170		
25-27	9	61.33	13.820		
28-30	5	58.80	18.472		
>30	14	55.43	13.821		
Resilience	SS	Df	MS	F	*P*
Between Groups	3005.560	10	300.556	2.142	.023
Within Groups	25955.190	185	140.298		
Total	28960.750	195			

*p<.05

Table 53. *One-way ANOVA and Scheffe Post Hoc on Proactive by Job Tenure (continued)*

(I) Tenure	(J) Tenure	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1.00	2.00	-4.949	2.998	.986	-17.96	8.06
	3.00	3.019	2.967	1.000	-9.85	15.89
	4.00	-2.665	2.938	1.000	-15.41	10.08
	5.00	10.495	3.935	.713	-6.58	27.57
	6.00	-5.201	4.068	.998	-22.85	12.45
	7.00	.562	3.626	1.000	-15.17	16.29
	8.00	1.273	4.402	1.000	-17.83	20.37
	9.00	-5.171	4.402	.999	-24.27	13.93
	10.00	-2.638	5.644	1.000	-27.12	21.85
	11.00	.734	3.717	1.000	-15.39	16.86
2.00	1.00	4.949	2.998	.986	-8.06	17.96
	3.00	7.968	3.195	.794	-5.89	21.83
	4.00	2.284	3.168	1.000	-11.46	16.03
	5.00	15.444	4.109	.178	-2.38	33.27
	6.00	-.253	4.237	1.000	-18.63	18.13
	7.00	5.511	3.814	.995	-11.04	22.06
	8.00	6.222	4.559	.997	-13.56	26.00
	9.00	-.222	4.559	1.000	-20.00	19.56
	10.00	2.311	5.767	1.000	-22.71	27.33
	11.00	5.683	3.901	.995	-11.24	22.61
3.00	1.00	-3.019	2.967	1.000	-15.89	9.85
	2.00	-7.968	3.195	.794	-21.83	5.89
	4.00	-5.685	3.138	.973	-19.30	7.93
	5.00	7.476	4.087	.971	-10.25	25.21
	6.00	-8.221	4.215	.954	-26.51	10.06
	7.00	-2.457	3.790	1.000	-18.90	13.99

Table 53. *One-way ANOVA and Scheffe Post Hoc on Proactive by Job Tenure (continued)*

(I) Tenure	(J) Tenure	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
	8.00	-1.746	4.539	1.000	-21.44	17.94
	9.00	-8.190	4.539	.974	-27.88	11.50
	10.00	-5.657	5.751	1.000	-30.61	19.29
	11.00	-2.286	3.877	1.000	-19.11	14.53
4.00	1.00	2.665	2.938	1.000	-10.08	15.41
	2.00	-2.284	3.168	1.000	-16.03	11.46
	3.00	5.685	3.138	.973	-7.93	19.30
	5.00	13.161	4.066	.405	-4.48	30.80
	6.00	-2.536	4.194	1.000	-20.73	15.66
	7.00	3.228	3.767	1.000	-13.12	19.57
	8.00	3.939	4.520	1.000	-15.67	23.55
	9.00	-2.506	4.520	1.000	-22.11	17.10
	10.00	.028	5.736	1.000	-24.86	24.91
	11.00	3.399	3.855	1.000	-13.32	20.12
5.00	1.00	-10.495	3.935	.713	-27.57	6.58
	2.00	-15.444	4.109	.178	-33.27	2.38
	3.00	-7.476	4.087	.971	-25.21	10.25
	4.00	-13.161	4.066	.405	-30.80	4.48
	6.00	-15.697	4.944	.438	-37.15	5.75
	7.00	-9.933	4.587	.908	-29.84	9.97
	8.00	-9.222	5.223	.977	-31.88	13.44
	9.00	-15.667	5.223	.535	-38.33	6.99
	10.00	-13.133	6.305	.929	-40.49	14.22
	11.00	-9.762	4.660	.926	-29.98	10.45
6.00	1.00	5.201	4.068	.998	-12.45	22.85
	2.00	.253	4.237	1.000	-18.13	18.63
	3.00	8.221	4.215	.954	-10.06	26.51
	4.00	2.536	4.194	1.000	-15.66	20.73
	5.00	15.697	4.944	.438	-5.75	37.15

Table 53. *One-way ANOVA and Scheffe Post Hoc on Proactive by Job Tenure (continued)*

(I) Tenure	(J) Tenure	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
	7.00	5.794	4.702	.999	-14.63	26.16
	8.00	6.475	5.324	.999	-16.62	29.57
	9.00	.030	5.324	1.000	-23.07	23.13
	10.00	2.564	6.389	1.000	-25.15	30.28
	11.00	5.935	4.772	.999	-14.77	26.64
7.00	1.00	-.562	3.626	1.000	-16.29	15.17
	2.00	-5.511	3.814	.995	-22.06	11.04
	3.00	2.457	3.790	1.000	-13.99	18.90
	4.00	-3.228	3.767	1.000	-19.57	13.12
	5.00	9.933	4.587	.908	-9.97	29.84
	6.00	-5.764	4.702	.999	-26.16	14.63
	8.00	.711	4.994	1.000	-20.96	22.38
	9.00	-5.733	4.994	.999	-27.40	15.93
	10.00	-3.200	6.117	1.000	-29.74	23.34
	11.00	.171	4.402	1.000	-18.92	19.27
8.00	1.00	-1.273	4.402	1.000	-20.37	17.83
	2.00	-6.222	4.559	.997	-26.00	13.56
	3.00	1.746	4.539	1.000	-17.94	21.44
	4.00	-3.939	4.520	1.000	-23.55	15.67
	5.00	9.222	5.223	.977	-13.44	31.88
	6.00	-6.475	5.324	.999	-29.57	16.62
	7.00	-.711	4.994	1.000	-22.38	20.96
	9.00	-6.444	5.584	.999	-30.67	17.78
	10.00	-3.911	6.607	1.000	-32.57	24.75
	11.00	-.540	5.061	1.000	-22.49	21.42
9.00	1.00	5.171	4.402	.999	-13.93	24.27
	2.00	.222	4.559	1.000	-19.56	20.00
	3.00	8.190	4.539	.974	-11.50	27.88
	4.00	2.506	4.520	1.000	-17.10	22.11

Table 53. *One-way ANOVA and Scheffe Post Hoc on Proactive by Job Tenure (continued)*

(I) Tenure	(J) Tenure	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
	5.00	15.667	5.223	.535	-6.99	38.35
	6.00	-.030	5.324	1.000	-23.13	23.07
	7.00	5.733	4.994	.999	-15.93	27.40
	8.00	6.444	5.584	.999	-17.78	30.67
	10.00	2.533	6.607	1.000	-26.13	31.20
	11.00	5.905	5.061	.999	-16.05	27.86
10.00	1.00	2.638	5.644	1.000	-21.85	27.12
	2.00	-2.311	5.767	1.000	-27.33	22.71
	3.00	5.657	5.751	1.000	-19.29	30.61
	4.00	-.028	5.736	1.000	-24.91	24.86
	5.00	13.133	6.305	.929	-14.22	40.49
	6.00	-2.564	6.389	1.000	-30.28	25.15
	7.00	3.200	6.117	1.000	-23.34	29.74
	8.00	3.911	6.607	1.000	-24.75	32.57
	9.00	-2.533	6.607	1.000	-31.20	26.13
	11.00	3.371	6.171	1.000	-23.40	30.14
11.00	1.00	-.734	3.717	1.000	-16.86	15.39
	2.00	-5.683	3.901	.995	-22.61	11.24
	3.00	2.286	3.877	1.000	-14.53	19.11
	4.00	-3.399	3.855	1.000	-20.12	13.32
	5.00	9.762	4.660	.926	-10.45	29.98
	6.00	-5.935	4.772	.999	-26.64	14.77
	7.00	-.171	4.402	1.000	-19.27	18.92
	8.00	.540	5.061	1.000	-21.42	22.49
	9.00	-5.905	5.061	.999	-27.86	16.05
	10.00	-3.371	6.171	1.000	-30.14	23.40

In this research study, there was statistical relationship between the Proactive dimension of resilience and job tenure in the current position or years of work experience and the dimensions of resilience demonstrated by frontline sales professionals. Presently, there is no data in the published literature to contrast the results of this study in terms of the relationship of the dimensions of resilience and job tenure or years in current position.

Ancillary Hypothesis 1-5: There is a significant relationship between the dimensions of resilience and the salary level of sales professionals.

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Positive World and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 54, there was no significant relationship as the *p*-value of .103 was greater than .05.

Table 54. *One-way ANOVA and Scheffe Post Hoc on Positive–the World by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	64.65	15.971		
$40,000-50,000	30	64.63	13.642		
$51,000-60,000	10	72.40	16.965		
$61,000-70,000	6	71.33	14.841		
$71,000-80,000	7	68.86	13.837		
$81,000-90,000	5	56.00	31.401		
$91,000-100,000	8	80.50	12.728		
>$100,000	2	68.00	2.828		
Resilience	SS	Df	MS	F	*P*
Between Groups	3106.477	7	443.782	1.736	.103
Within Groups	47539.652	186	255.590		
Total	50646.129	193			

*$p<.05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Positive-You and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis was calculated to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 55, there was no significant relationship between Positive–You and the salary level of frontline sales professionals since the *p*-value of .105 was greater than .05.

Table 55. *One-way ANOVA and Scheffe Post Hoc on Positive-Yourself by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	69.49	15.260		
$40,000-50,000	30	69.00	10.812		
$51,000-60,000	10	73.00	15.868		
$61,000-70,000	6	71.67	8.140		
$71,000-80,000	7	79.14	12.536		
$81,000-90,000	5	56.40	36.398		
$91,000-100,000	8	81.25	8.430		
>$100,000	2	68.00	0.000		
Resilience	SS	Df	MS	F	*P*
Between Groups	2676.207	7	382.315	1.726	.105
Within Groups	41206.128	186	221.538		
Total	43882.335	193			

*$p<.05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Focused and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis was conducted to identify how many years of experience were significantly different in level of resilience. As indicated by Table 56, there was no

significant relationship as the *p*-value of .094 was greater than .05, therefore, there was no need to conduct a Scheffe post hoc analysis.

Table 56. *One-way ANOVA and Scheffe Post Hoc on Focused by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	64.97	16.311		
$40,000-50,000	30	63.17	12.312		
$51,000-60,000	10	69.00	18.166		
$61,000-70,000	6	65.00	10.412		
$71,000-80,000	7	66.86	10.189		
$81,000-90,000	5	49.20	31.925		
$91,000-100,000	8	78.75	14.811		
>$100,000	2	61.00	4.243		
Resilience	SS	Df	MS	F	*P*
Between Groups	3143.838	7	449.120	1.779	.094
Within Groups	46965.419	186	252.502		
Total	50109.258	193			

*$p<.05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Flexible Thoughts and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis was computed to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 57, there was no significant relationship as the *p*-value of .184 was greater than .05.

Table 57. *One-way ANOVA and Scheffe Post Hoc on Flexible-Thoughts by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	54.66	12.475		
$40,000-50,000	30	52.53	13.372		
$51,000-60,000	10	66.00	10.066		
$61,000-70,000	6	52.00	13.387		
$71,000-80,000	7	52.00	11.195		
$81,000-90,000	5	55.20	19.110		
$91,000-100,000	8	54.50	9.366		
>$100,000	2	56.00	2.828		
Resilience	SS	Df	MS	F	*P*
Between Groups	1602.535	7	228.934	1.460	.184
Within Groups	29164.352	186	156.798		
Total	30766.887	193			

*$p<.05$
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Flexible Social and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis will be used to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 58, there was no significant relationship as the *p*-value of .130 was greater than .05.

Table 58. *One-way ANOVA and Scheffe Post Hoc on Flexible-Social by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	63.02	13.336		
$40,000-50,000	30	62.47	13.816		
$51,000-60,000	10	72.60	10.244		
$61,000-70,000	6	62.00	13.023		
$71,000-80,000	7	66.00	8.000		
$81,000-90,000	5	51.20	27.770		
$91,000-100,000	8	70.25	13.750		
>$100,000	2	66.00	14.142		
Resilience	SS	Df	MS	F	*P*
Between Groups	2164.674	7	309.239	1.627	.130
Within Groups	35347.640	186	190.041		
Total	37512.314	193			

*p<.05
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Organized and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis was completed to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 59, there was no significant relationship as the *p*-value of .090 was greater than .05.

Table 59. *One-way ANOVA and Scheffe Post Hoc on Organized by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	60.87	13.360		
$40,000-50,000	30	63.47	10.928		
$51,000-60,000	10	60.00	13.367		
$61,000-70,000	6	57.67	19.242		
$71,000-80,000	7	73.14	12.158		
$81,000-90,000	5	51.40	18.863		
$91,000-100,000	8	68.75	7.851		
>$100,000	2	58.00	2.828		
Resilience	SS	Df	MS	F	*P*
Between Groups	2151.139	7	307.3061	.796	.090
Within Groups	31825.768	186	171.106		
Total	33976.907	193			

*p<.05
-No Difference

A one-way analysis of variance (ANOVA) was utilized to determine if there were any significant differences in the sales professionals' perceptions of their resilience as measured by Proactive and their reported salary level. If a significant difference does exist, a Scheffe post hoc analysis was used to identify how many years of experience were significantly different in level of resilience. However, as indicated by Table 60, there was no significant relationship as the *p*-value of .241 was greater than .05.

Table 60. *One-way ANOVA and Scheffe Post Hoc on Proactive by Salary Level*

Salary Level	*N*	*M*	*SD*		
<$40,000	123	56.33	12.530		
$40,000-50,000	30	55.03	12.568		
$51,000-60,000	10	64.60	7.121		
$61,000-70,000	6	52.67	11.639		
$71,000-80,000	7	58.86	11.305		
$81,000-90,000	5	47.20	12.458		
$91,000-100,000	8	59.00	10.309		
>$100,000	2	60.00	5.657		
Resilience	SS	Df	MS	F	*P*
Between Groups	1365.571	7	195.082	1.324	.241
Within Groups	27408.413	186	147.357		
Total	28773.985	193			

*$p<.05$
-No Difference

In this research study, there was no statistical relationship between salary level and the dimensions of resilience demonstrated by frontline sales professionals. Presently, there is no data in the published literature to contrast the results of this study with to confirm and/or refute that the dimensions of resilience do or do not vary by the salary level earned by the various research participants.

Additional information regarding the general similarities and differences associated with the demographics, transformational leadership behaviors, and dimensions of resilience demonstrated by sales professionals and sales managers who responded to the survey were also reviewed. In general, research participants who indicated they were sales professionals (individuals with no direct reports) were somewhat younger than individuals who indicated that they were sales managers (individuals with direct reports; See Figure 6). 85% of the frontline sales professionals listed ethnicity/race as White/Caucasian. The number for sales managers was 94% White/Caucasian.

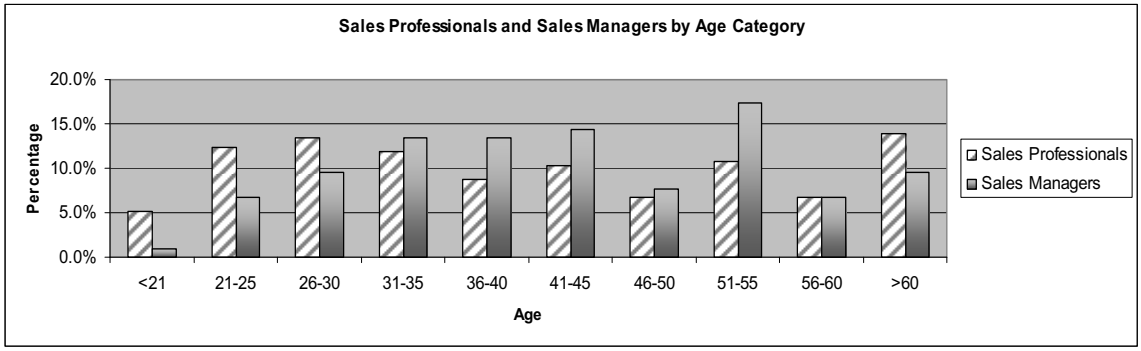

Figure 6. Graphic Depiction of Age for Frontline Sales Professionals and Sales Managers.

The education level of frontline sales professionals is depicted in Figure 7. The level of education for the research participants identified as sales professionals was as follows: 36.5% high school diploma, 22.3% associate degrees, 29.9% 4-year college degrees, 3.0% master's degrees, and 1.5% doctoral degrees while sales managers reported a slightly higher frequency of associates and technical degrees (27%), 4-year college degrees (33%), and master's level education (8%; information and data analysis of sales managers can be obtained from the researcher).

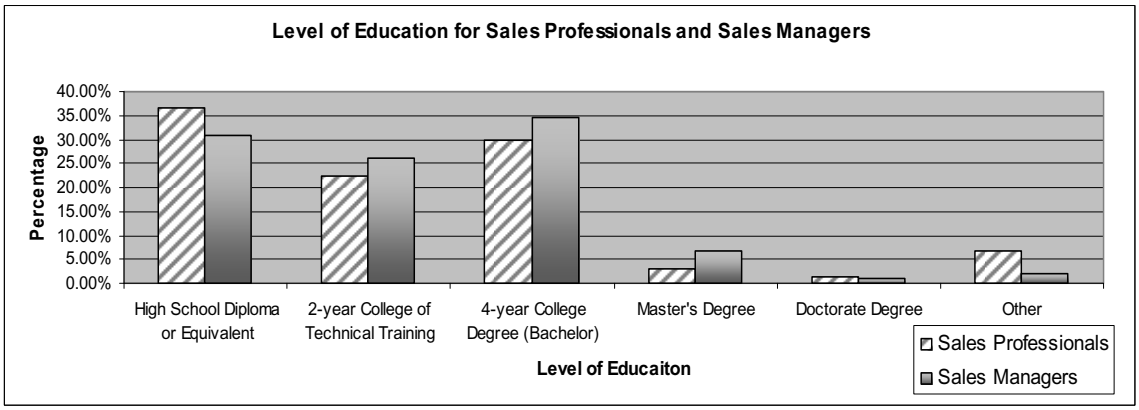

Figure 7. Graphic Depiction of Level of Education for Frontline Sales Professionals and Sales Managers.

The industries represented by frontline sales professionals were very diverse (data for frontline sales professionals can be found in Table 12). 35% of the sales professionals listed their industry of employment as retail sales, 11% listed food and beverage sales, followed by real estate sales (6%) and insurance sales (5%), and with the remaining research participants being spread across 20 remaining industries.

The average total sales experience of frontline sales professionals was 12.93 years (range of 45 years) while the average tenure in current employment was 6.86 years (with a range of 45 years). The 6.83 years in current job indicates relatively stable employment by the online panel of frontline sales professionals who elected to respond to this survey (See Figure 8).

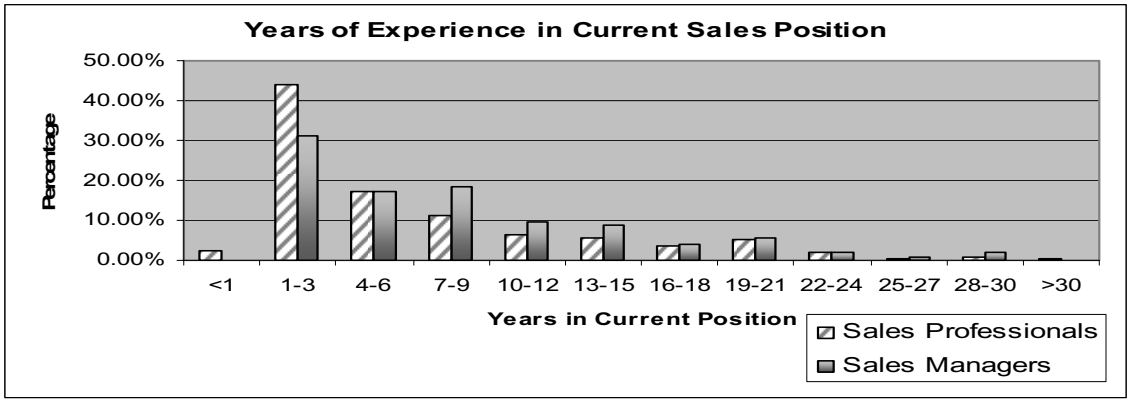

Figure 8. Graphic Depiction of Years in Current Sales Position for Frontline Sales Professionals and Sales Managers.

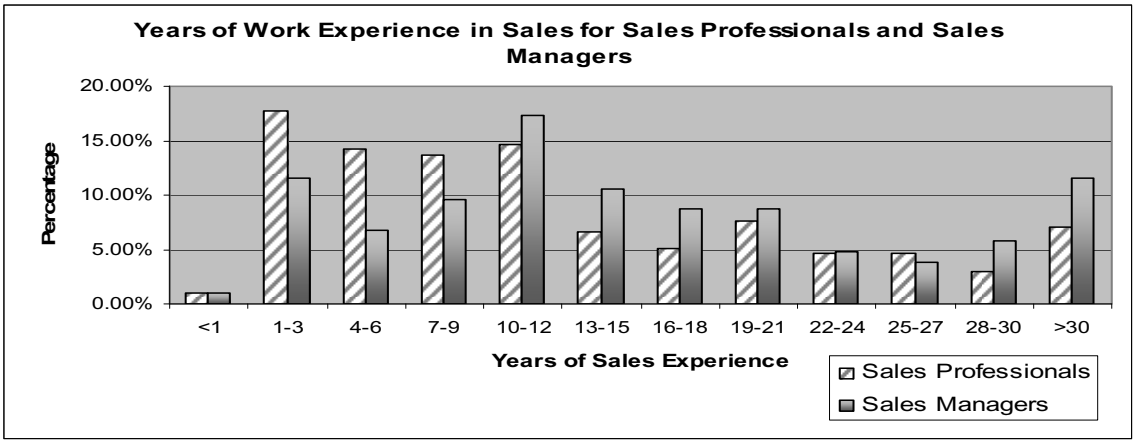

Figure 9. Graphic Depiction of Years of Work Experience in Sales for Frontline Sales Professionals and Sales Managers.

Sales professionals tended to have fewer total years in sales and less tenure in their current position than the research participants who self-identified themselves as sales managers (individuals with direct reports; See Figure 9). Sales managers tended to report higher base salaries for all categories of reported salary levels except for two categories (<$40,000 and $91,000-$100,000; See Figure 10).

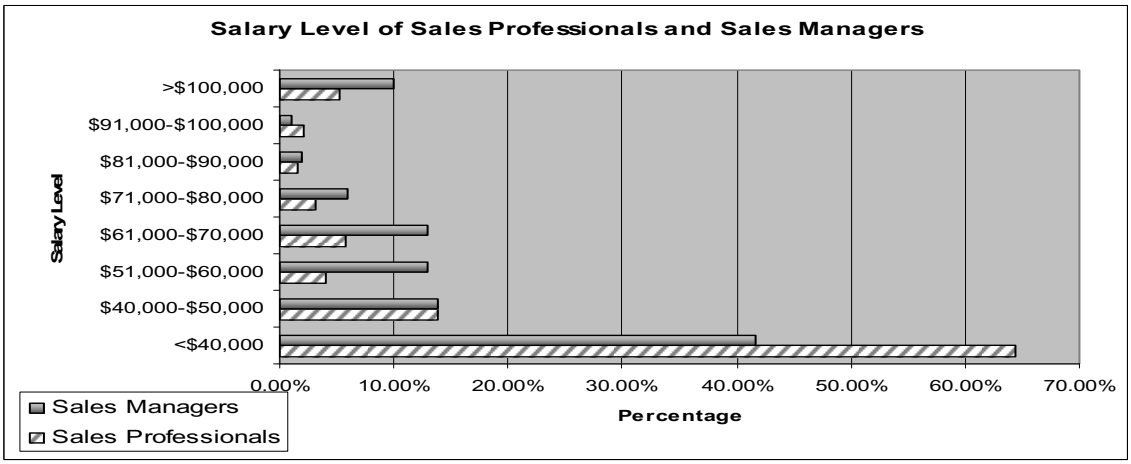

Figure 10. Graphic Depiction of Base Salary Level for Frontline Sales Professionals and Sales Managers.

Frontline sales professionals reported that they demonstrated the five exemplary behaviors of transformational leadership in the following order: Enabling Others to Act, Modeling the Way, Encouraging the Heart, Challenging the Process, and Inspiring a Shared Vision. This concurs with Kouzes and Posner's data (2008) in their study of 8,500 individuals using means and standard deviations, they determined that Enabling Others to Act and Modeling the way were the transformational leadership behaviors most often demonstrated regardless of the research respondents in the study. These two transformational leadership behaviors were followed by Challenging the Process, Encouraging the Heart, and Inspiring a Shared Vision (see Table 16). Additionally, sales managers self-reported themselves as demonstrating transformational leadership behaviors at a higher level than the frontline sales professionals did (see Table 61).

Table 61. *Means for Total Transformational Leadership and Transformational Leadership Subscales for Frontline Sales Professionals and Sales Managers*

		Sales Professionals (N = 197)	Sales Managers (N = 104)
Kouzes' and Posner's Leadership Practices Subscales	Questions for each Subscale of the LPI (as used in this Survey) – *NOTE.* Question #1 on the survey was consent).	Means for each LPI Subscales (ranked by behavior reported to be demonstrated most frequently)	Means for each Subscale (ranked by behavior reported to be demonstrated most frequently)
Total Transformational Leadership Score	Sum of all Questions	219.39	239.95
Modeling the Way	4, 9, 14, 19, 24, 29	45.44 (2)	49.38 (3)
Challenging the Process	2, 7, 12, 17, 22, 27	40.41 (4)	44.78 (5)
Inspiring a Shared Vision	3, 8, 13, 18, 23, 28	40.37 (5)	45.33 (4)
Enabling Others to Act	5, 10, 15, 20, 25, 30	47.86 (1)	50.81 (1)
Encouraging the Heart	6, 11, 16, 21, 26, 31	45.31 (3)	50.07 (2)

Although there are a variety of research instruments capable of assessing transformational leadership behaviors and resilience, the instruments selected for this research study had solid, well-documented reliability and validity data associated with the instrument which is a requirement for academic research and therefore, after comprehensive and careful evaluation, the LPI and the PRQ were selected to be used for this research study. The psychometric properties of both instruments were confirmed with the reliability of both the LPI and the PRQ well established and high at 0.955 and 0.945 respectively. These reliability scores provide further documentation that supports the use of both of these instruments in assessing or evaluating transformational leadership behaviors and the level of resilience demonstrated by frontline sales professionals.

Sales professionals and sales managers had different responses and frequency of responses for the questions on both the LPI and the PRQ. It appears that sales managers self-reported that they demonstrated transformational leadership behaviors more frequently and reported themselves as being more resilient (See Table F2, and Table 19). As can be seen in Table 62, sales managers had higher resilience scores but both frontlines sales professionals and sales managers demonstrated the dimensions of resilience in the same rank order (Focused (1), Positive-Yourself (2), Flexible-Social (3), Organized (4), Proactive (5), Flexible-Thoughts (6), and Positive-the World (7).

Table 62. *Means for Dimensions of Resilience for Frontline Sales Professionals and Sales Managers*

Conner's PRQ	Questions on Survey for each Dimension of Resilience	Sales Professionals ($N = 197$) Means for each Subscale (ranked by behavior reported to be demonstrated most frequently)	Sales Managers ($N = 104$) Means for each Subscale (ranked by behavior reported to be demonstrated most frequently)
Positive-the World	3, 39, 42, 44, 48, 52, 56, 75, 88, 99	66.21 (2)	73.29 (2)
Positive-Yourself	33, 47, 49, 54, 70, 78, 84, 86, 90, 93	70.25 (1)	77.29 (1)
Focused	35, 58, 65, 68, 74, 76, 79, 83, 85, 101	65.26 (3)	73.17 (3)
Flexible-Thoughts	32, 34, 38, 53, 62, 67, 71, 81, 97, 100	54.81 (7)	61.60 (7)
Flexible-Social	37, 40, 43, 50, 57, 59, 60, 63, 69, 82	63.68 (4)	69.47 (4)
Organized	51, 61, 66, 72, 73, 89, 91, 94, 96, 98	61.97 (5)	63.78 (5)
Proactive	41, 45, 46, 55, 64, 77, 80, 87, 92, 95	56.79 (6)	62.05 (6)

Note. Underlined numbers indicate that the higher scores for the dimensions of resilience were observed in sales managers versus frontline sales professionals. The underlined item represents the item most frequently reported.

This research study attempted to extend the documented research on resilience and transformational leadership behaviors demonstrated by frontline sales professionals by utilizing previously documented instruments or tools. Overall, the issue of transformational leadership and resilience appears to have been worthy of study since the results of this independent research study suggests that frontline sales professionals exhibit a reasonable level of transformational leadership effectiveness and are quite resilient. According to leading organizational leaders, transformational leadership and resilience are two attributes that are key to thriving in the twenty-first century. This study was able to confirm that both resilience and transformational leadership behaviors are

significantly and positively correlated and research shows that both transformational leadership and resilience can be used to produce positive outcomes during trying times (Bass, 1997; Luthans & Youssef, 2007). Additionally, the correlation between transformational leadership behaviors and resilience was significantly greater than formerly presented in the literature.

Summary

Chapter 4 presented the data obtained in this independent research study and any and all analyses of the data. There were 197 sales professionals that participated in this research study (minus outliers). A brief descriptive account of each of the three hypotheses and the ancillary analyses is summarized in Table 63.

Table 63. *Summary of the Hypotheses*

Hypothesis Number	Leadership Component	Descriptive Hypotheses
1	Resilience Transformational leadership behaviors	Measured whether or not there is a significant relationship between the dimensions of resilience and the transformational leadership behaviors of frontline sales professionals.
2	Transformational leadership behaviors Demographics	Measured whether or not the transformational leadership behaviors demonstrated by frontline sales professionals differed relative to their gender, age, level of education, job tenure, and salary level.
3	Dimensions of Resilience Demographics Transformational leadership behaviors	Measured which of the dimensions of resilience and key demographics are most predictive of the transformational leadership behaviors demonstrated by frontline sales professionals.

Table 63. *Summary of the Hypotheses (continued)*

Ancillary Analyses	Resilience Component	
1	Dimensions of Resilience Demographics	Measured whether or not the dimensions of resilience demonstrated by frontline sales professionals differed relative to their gender, age, level of education, job tenure, and salary level.

The probability level was set at $p < .05$ for all statistical tests to reject the null hypotheses. The summary of the hypotheses can be reviewed in Table 64.

Table 64. *Summary of the Results of this Study*

Hypothesis Number	Leadership Component	Descriptive Hypotheses
1	Resilience Transformational leadership behaviors	*Null Rejected.* There is a significant relationship between a sales professional's dimensions of resilience and their demonstration of overall transformational leadership behaviors.
2	Transformational leadership behaviors Demographics	*Hypotheses 2-1 to 2-5 were not supported.* There was no statistically significant impact of demographics on the transformational leadership behaviors demonstrated by frontline sales professionals.
3	Dimensions of Resilience Demographics Transformational leadership behaviors	*Null Rejected.* Results of the regression analyses demonstrated a significant relationship between three of the dimensions of resilience (Focused, Organized, and Proactive) on the transformational leadership behaviors demonstrated by frontline sales professionals.

Table 64. *Summary of the Results of this Study (continued)*

Ancillary Analyses	Resilience Component	
1	Dimensions of Resilience Demographics	*Ancillary Hypotheses 1-2, 1-3, and 1-5 were not supported.* There was no statistically significant impact of demographics of age, education, and income level on the dimensions of resilience self-reported by frontline sales professionals. *Ancillary Hypothesis 1-1 and 1-4 were supported.* The level of resilience did differ based on gender and the Proactive dimension of resilience and job tenure were statistically significant.

This study demonstrated that there was a significant correlation between resilience and the transformational leadership behaviors of frontline sales professionals. Additionally, the sociodemographic variables were measured to decide whether or not transformational leadership effectiveness and resilience varied by these individual elements. No significant differences were found among the degree of transformational leadership behaviors demonstrated nor the dimensions of resilience (in the ancillary analyses) among the demographic variables measured (gender, age, level of education, job tenure, and salary level except with the Proactive dimension of resilience and job tenure). The results of the regression analysis demonstrated a significant relationship between the dimensions of resilience and transformational leadership behaviors of frontline sales professionals although the degree of correlation was considered to have a low to moderate impact (22.7%).

In the final chapter, chapter 5, additional discussion and evaluation on the findings in this research study are presented including suggestions for future research studies.

CHAPTER 5. DISCUSSIONS, RECOMMENDATIONS, AND CONCLUSIONS

The primary objective of this independent research study was to assess the impact of resilience and key demographics on the transformational leadership behaviors demonstrated by frontline sales professionals. Findings from this study were intended to provide relevant and novel information to add to the empirical literature on the topic of resilience and transformational leadership. Additionally, if the data found that resilience and transformational leadership were correlated, which was the case, the next step would be to identify possible organizational changes that could be recommended and implemented to maximize both transformational leadership effectiveness and resilience of sales professionals working in organizations facing an environment with dynamic and unrelenting change. This final chapter provides a discussion of the research results as reported in chapter 4 and offers conclusions from the research. This chapter also presents the limitations of the study and research suggestions for future study.

Methodology Summary and Instruments

First, although the response rate (15.8%) was lower than documented in the literature, the response rate was sufficient to conduct all needed analyses. There was enough data on frontline sales professionals ($N = 197$) and sales managers ($N = 104$) to conduct separate analyses on both groups (data on sales managers can be provided by researcher upon request). The gender distribution for males and females was 55% and 45% respectively so the desire of the researcher to have adequate data to analyze on both genders was achieved. The age distribution ranged from 19-85 for frontline sales

professionals (See Figure 7). There was significant representation by all age groups. One concern raised in the literature review of online survey panels was that senior decision makers are often not well represented due to the use of computer technology. This was not an issue in this research study. Both sales professionals (and sales managers) indicated relative stability in their current positions with an average tenure of almost 7 years and industry experience in sales for an average of 13 years which was somewhat unanticipated given the current business environment. The questions from the LPI and the PRQ were psychometrically sound and approximately similar to the normative data obtained previously with these instruments in other research populations. Several industries were represented. The only suggestion from the researcher for future study of sales professionals is to work to include a broader distribution of sales industries since the individuals responding to this survey were drawn heavily from retail, food and beverage, and real estate sales. The objective of have research respondents representative of a broader distribution of industries could be easily accomplished by prespecifying that the online panel be over 18, evenly split by gender and any key demographic features of interest, and include an even distribution of prespecified sales industries.

Review of the Research Results

In a review of the data, this independent research study resulted in the following findings

1. The dimensions of resilience and overall transformational leadership behaviors were statistically significant and positively correlated for frontline sales professionals (Hypothesis 1).

2. There was no difference in level of transformational leadership demonstrated by frontline sales professionals based on gender (Hypothesis 2-1).

3. There was no statistically significant relationship between transformational leadership behaviors demonstrated and the age of the sales professionals operating on the frontlines of their respective organizations (Hypothesis 2-2).

4. There was insufficient evidence to link the level of education attained and the transformational leadership behaviors demonstrated by frontline sales professionals (Hypothesis 2-3).

5. There was no statistically significant relationship between the transformational leadership behaviors demonstrated and the job tenure or years of work experience in their current position for frontline sales professionals (Hypothesis 2-4).

6. There was no statistically significant difference in transformational leadership behaviors demonstrated by frontline sales professionals possessing varying income levels (base salary levels; Hypothesis 2-5).

7. The results of the regression analysis demonstrated a significant and positive relationship between three of the dimensions of resilience (Focused, Organized, and Proactive) and the transformational leadership behaviors demonstrated by frontline sales professionals although the degree of correlation should be considered to have a relatively low to moderate impact (explaining 22.7% of the variance of transformational leadership behaviors demonstrated by sales professionals; Hypothesis 3).

Ancillary Analyses and other miscellaneous findings included the following

1. There was a statistically significant difference in the level of resilience demonstrated by frontline sales professionals based on gender with females demonstrating statistical significance for Focused, Organized, and Proactive dimensions of resilience (Ancillary Hypothesis 1-1).

2. There was no statistically significant relationship between the dimensions of resilience demonstrated and the age of the sales professionals operating on the frontlines of their respective organizations (Ancillary Hypothesis 1-2).

3. There was insufficient evidence to link the level of education attained and the dimensions of resilience demonstrated by frontline sales professionals (Ancillary Hypothesis 1-3).

4. There was a statistically significant relationship between the Proactive dimensions of resilience demonstrated and the job tenure or years of work experience in their current position for frontline sales professionals (Hypothesis 1-4).

5. There was no statistically significant difference in the dimensions of resilience demonstrated by frontline sales professionals possessing various income levels (base salary levels; Hypothesis 1-5).

6. Sales managers tended to self-report that they demonstrated greater transformational leadership and great resilience than sales professionals which justifies the decision to remove sales managers from all analyses.

Implications for Organizations and Sales Professionals

Sales professionals are often involved in consultative selling that requires significant knowledge of their respective products, technology, the competition, the ability to allocate resources strategically, ability to use good judgment, make quick decisions, be entrepreneurial, conduct strategic analyses, be mentally alert, able to process information quickly (collect, organize, and disseminate as appropriate), possess strong administrative skills, and engage in long-term relationships with customers through strong account management with the desire of encouraging repeat buying behaviors or patterns from customers. The traditional model of the chief executive officer (CEO) as the leader at the helm is no longer effective in the current business environment where the competitors as well as the business rules change as quickly as they are written down (Weidenbaum, 1999; Worley & Lawler, 2006). Today, strategic and tactical moves of a competitor are more apparent to the local environment than to those sitting in the executive suites of the corporate home office (Weidenbaum, 1999). If an urgent leadership response and reaction is needed, it is best managed by the local sales professional and their sales manager (Ward et al., 2007). To manage the sales process in the new global environment, the frontlines of every organization, in this case, sales

professionals, needs to demonstrate a level of leadership that allows them to be able to respond to new and unique situations effectively as they arise, to be able change, and to lead and transform their respective organizations now and in the future.

It appears fair to say that in the current business environment, sales professionals operating on the frontlines of organizations are being confronted with change that is frequently disruptive. Therefore, it is important for organizations to develop leaders at this level and to encourage these individuals to read and assess their environment quickly, decide on the appropriate action or solution, execute on the plan or implement the solution, while assessing or measuring the success or failure of the actions taken, and then quickly move on to the next opportunity or issue (Bennis, 1999). Since change often occurs without adequate warning or the necessary training or preparation, individuals need to learn to be transformational leaders and resilient in the face of change in order to implement positive adaptive behaviors that are matched to the situations encountered allowing them to endure a minimal level of stress. A resilient attitude aids individuals in managing stress, capitalizing on opportunities, and avoiding catastrophes by acting quickly and decisively during crises as stated by a variety of organizational leaders (Maddi & Khoshaba, 2005; Brooks & Goldstein, 2003; Reinvich & Shatte, 2002).

It is for the reasons highlighted above, that organizations can benefit from the data obtained in this research study which determined that frontline sales professionals demonstrated both a medium level of transformational leadership behaviors and resilience and that these two variables were moderately and positively correlated. Based on the results of this study and the supporting evidence in the literature, the research findings (listed under section entitled Review of the Research Findings) should serve as

an impetus for organizations to further implement transformational leadership and resilience training throughout their entire organizations. The results of this study can serve as a suggestion for the development of high performance organizations that focuses all individuals within the organization on becoming transformational leaders and building resilience to change as it occurs.

An understanding of both transformational leadership behaviors and the dimensions of resilience as outlined in this study can offer a potential competitive advantage for organizations during times of significant change. According to Worley and Lawler (2006), senior company officials are seeking greater nimbleness, adaptability, and innovation from the entire organization. By nature of the definitions outlined earlier in chapter 2, individuals who are transformational leaders and individuals who are resilient can assist their respective organizations in achieving nimbleness, innovation, and improve the flexibility and adaptability of the organization to change as it arises in chaotic and tumultuous times. Transformational leaders are able to initiate and lead change, facilitate the conversion and renewal of the organization, and can be the catalyst for becoming more competitive, adaptable, flexible, and resilient (Ulrich & Wiersema, 1989). At organizations comprised of transformational leaders, this type of leadership is able to sense change or discern the need to change, get energized about the change, be resilient to changing from the status quo, and implement change quicker than the competition hence leading to a competitive advantage for the organization (Cohen & Tichy, 1997).

According to the literature, when resilient individuals become leaders, they remain in the role of a leader because their success will not lull them into complacency.

"Their belief in change and its value, expressed in every pore of their culture, structure, climate, and personnel, will keep them anticipating the future and developing the products and services to turn it to advantage" (Maddi et al., 1999, p. 121). Organizations and the individuals that make up these corporations must accept and expect continuous change and discover ways to turn responding and reacting to change into a competitive benefit for the organization instead of an incapacitating and paralyzing issue. The response from organizations may result in their making a concerted effort to develop transformational leaders throughout the entire organization who are also resilient to change and chaos.

The objective of this independent investigation was to assess the impact of resilience and key demographics on the transformational leadership behaviors demonstrated by frontline sales professionals. The data obtained in this study confirms that the level of resilience of frontline sales professionals can be used to predict a portion of the level of transformational leadership behaviors demonstrated throughout organizations of varying size. The results of this independent research study can have a potential impact on performance management systems of organizations by further including an assessment of transformational leadership skills possessed by not only individuals in traditional hierarchical leadership positions such as upper- and mid-level management but throughout the entire organization. Additionally, this investigation provides further evidence to suggest there might be some benefit in training individuals to build transformational leadership behaviors and skills as well as in learning to possess a resilient capacity to change. Therefore, these findings have several implications for organizations and individuals alike.

Key Points from the Research Literature and the Results/Findings of this Research Study:

1. Front line sales professionals demonstrate transformational leadership behaviors similar to the leadership behaviors found in other professional areas.

2. Transformational leadership is important in the current business environment and it makes senses for transformational leadership behaviors to exist and be emphasized at all levels of an organization.

3. If transformational leadership needs to exist at all levels of an organization, and transformational leadership can be learned, then transformational leadership development and training should be implemented at all levels within an organization.

4. Resilience allows individuals to make positive adaptations as change occurs.

5. Resilience is correlated and predicts a low to moderate portion of the transformational leadership behaviors demonstrated by sales professionals operating on the frontline of organizations.

6. Since resilience, like transformational leadership, can be learned, then resilience should be part of corporate developmental training programs if organizations want to create a competitive advantage in the twenty-first century.

Limitations of the Study

Although the sales professionals' response rate was powered appropriately to allow all of the analyses to be completed for this research study, some sales professionals may not have completed the surveys for varied reasons. Unfortunately, there is no manner or approach available to evaluate or determine if there were any possible differences in the attitude, beliefs, or behaviors of those research participants who elected not to participate or failed to participate versus those who did elect to participate in this research study and complete the survey questions.

Finally, this research study relied on self-reported responses. The self-report methodology is subject to biases that may result from the research participants' capacity

to recall or remember events and/or characteristics routinely demonstrated as they occurred with under- or over-reporting being an ever-present bias and there is often a desire to answer with socially appropriate answers (Spector, 1994). Consequently, the data obtained from this exploratory independent research study should be interpreted with a level of caution keeping these biases in mind. Nevertheless, given the response rate of 15.8%, the research sample was of large enough size to evaluate all of the research questions outlined in this study.

Recommendations for Future Studies

While this independent research study has contributed to the empirical literature available on the impact of the dimensions of resilience and key demographics on the transformational leadership behaviors demonstrated by frontline sales professionals there are still many unanswered questions. Additional research is recommended in the following areas

1. Expand the study to include a larger group of sales professionals (possibility sales professionals of an entire company or organization and include the global business environment of that Company).
2. Expand the study to include a full 360 feedback among managers, direct reports, peers, etc. Since both questionnaires used self-reported ratings which have been documented to possess certain limitations (Harris & Schaubroeck, 1988; Mabe & West, 1982; Spector, 1994), the LPI could incorporate an evaluation by the research participants' manager assessing their transformational leadership behaviors using an Observer Form. According to Spector (1994) and as noted

above, it is valid and appropriate to consider the risk of pursuing an entirely self-reported research project and it is important to recognize the limitations of an entirely self-reported research methodology in an objective environment. It has been documented that scores provided by supervisors utilizing 360 feedback systems tended to be lower or to rate individuals (their direct reports) more severely than did either the peers or the individual themselves through self-reported feedback scores (Van Hooft, Van der Flier, and Minne, 2006; Atwater & Yammarino, 1993; Harris & Schaubroeck, 1988). The benefits of multiple raters in survey research has been documented to provide an improved defensibility, greater reliability, greater acceptance by the individual being rated, enhanced fairness, and additional opportunities to use direct observations to provide feedback and provide more accurate measurement of behaviors, it is suggested that for future research, that peers and managers could be asked to complete the LPI – Peer and Observer form respectively in order to establish if there is congruence between self-reported ratings of transformational leadership behaviors, manager ratings, and peer evaluation of observed transformation leadership behaviors (Harris & Schaubroeck; Mabe & West, 1982; Bernardin, Cooke, & Villanova, 2000).

3. As the development of the field of leadership continues, it may be beneficial to use several of the other tools developed to measure transformational leadership effectiveness (See chapter 2, Literature Review, for a review of all available models) and reproduce this independent research project.

4. Resilience is important on three separate levels: the individual, the team, and the organization as a whole. Research should investigate an organization that is aligned to allow for the individual assessment, team assessment, and organizational assessment of resilience and this data would add to the academic literature. The concept here is that resilience should be developed in individuals who can create and serve on resilient teams, and these teams need to provide an organization with the flexibility to adapt to change as it arises creating a resilient organization.
5. Develop a psychometrically sound survey in which the questions directly measure other antecedents of transformational leadership effectiveness that is specific to a group of sales professionals regardless of industry.
6. Explore the feasibility of distributing a follow-up survey that may evaluate this same research design but at two different periods of time (i.e., six months or twelve months later) to the same group of sales professionals.
7. Examine other implications of resilience on sales professionals such as in their job performance ratings.
8. Research could be conducted to test the valid nature of the assumption that the LPI instrument could be utilized as an aid to identify possible professional development topics for sales professionals to undergo supplemental training in transformational leadership behaviors.
9. Since both resilience and transformational leadership can be learned, incorporate training on resilience and transformational leadership as part of a corporate training program and assess the change over time in sales professionals'

transformational leadership behaviors and level of resilience. Assess whether studying resilience and the transformational leadership behaviors improves the level of resilience and the leadership practices demonstrated by individuals, teams, and organizations.

10. Consider incorporating additional dependent psychological capacities such as self-efficacy, hope, optimism, and resilience using the PsyCap Questionnaire developed by Luthans, Youssef, & Avolio, 2007, p.237-238) and the role of these other variables as well as resilience on transformational leadership behaviors demonstrated.

The list of research possibilities suggested above is not an all inclusive or an exhaustive list. This list, however, suggests that there is a great deal of research in the area of resilience and transformational leadership that is warranted and needs to be conducted and could be of great benefit to organizational leaders and academicians alike.

Conclusions

As change continues to be a constant in the twenty-first century, organizations, that are slow to react or with out-dated values or missions, organizational structures, undefined corporate cultures, and with personnel unaware of their leadership style and level of resilience, will be propelled into this change and will be exceedingly vulnerable to being outpaced by the competition making profitability and long-term survival difficult. As stated by Maddi, Khoshaba, & Pammenter (1999), “They will be too large, too hierarchically structured, too committed to current products and services, too lulled by signs of status and wealth, and too uninvested in personnel development to become

and remain successful in our turbulent times" (p. 121). Indeed, based on the rapid pace of change that is occurring, the frame of mind that is required at all levels of an organization, is that everyone, including revenue-generating sales professionals operating on the frontlines of organizations, should be prepared to expect the unexpected that often accompanies the dynamic and turbulent changing environment and frontline sales professionals should be prepared to lead into the future.

Solid and effective leaders are what is necessary today more than ever before and the features or characteristics of effective transformational leadership are the very skills and competencies that are needed by all individuals working within organizations today in order to be successful in the current century (Kotter, 1999). Some of the characteristics essential or vital to being an effective and resilient leader are subtle; others take years to practice in order to master. It is in times of significant change, organizational turmoil, and/or economic upheaval that leaders throughout an organization are needed most (Schein, 1992; Yukl, 1999). Since not all leadership positions are filled externally, organizations must learn to develop leaders internally (Schein, 1992; Bennis, 2007; Conger & Kanungo, 1994). While some business leaders question the value or the positive return on investment for conducting leadership training, still, a number of researchers suggest that leadership is a timeless skill that can be trained, learned, and applied (Kouzes & Posner, 1995; Drucker 1999; Conger & Kanungo, 1994). It is not enough for "companies to merely get better. They have to become different – not just at their periphery through extensions of existing businesses, but in their core, through a commitment to disruptive growth" (Denning, 2005, p. 11). Transformational leadership and resilience residing throughout an organization could provide the skills necessary to

adapt to disruptive change. The business world is transforming itself and therefore requires leaders that are resilient and that continuously look for new ways of successfully guiding and transforming their organization into the future (Denning, 2005, p. 11).

As companies merge, downsize, rightsize, or otherwise reorganize, companies are continually defining the organization anew (Maddi et al., 1999). Consistent with statements made by Maddi et al. (1999), job security and predictability have gone by the wayside compared to a few decades ago. These researchers further suggest that individuals working in organizations today are working harder, dealing with more stress combined with the need to continually develop new and applicable skills as rapidly as possible and advancing technology continues to wreak havoc on organizations fueled by increasing competition (Maddi et al., 1999). For many, as stated by Maddi et al., (1999), the workplace has almost become an antagonistic, unsympathetic environment in which individuals do not feel valued, appreciated, nor secure in their job roles. Maddi et al. (1999) further remarked that what is needed to counteract this unfortunate trend is to develop a workplace that is a healthy learning environment where individuals want to come and perform and then stay to make a difference. In creating this environment, individuals would feel respected, valued, appreciated, and would respond with a solid commitment and execution to the job at hand regardless of how long they work at the organization rather than distancing themselves from work, struggling to gain control rather than sinking into powerlessness, and accepting their work experiences as developmental challenges rather than a threat to the stability that they once knew and valued (Maddi et al., 1999).

As mentioned already, transformational leadership can be learned and so can resilience (Stogdill, 1948; Maddi, Kahn, & Maddi, 1998; Maddi et al., 1999; Masten, 2001). Any effort to develop transformational leadership skills should maintain awareness that there are other leadership skills and styles that individuals are likely to use in addition to transformational leadership and that individuals will also use the dimensions of resilience at varying times (Kirkbride, 2006). What is required is that individuals get committed to making subtle changes towards a transformational leadership style and a resilient nature in order to be prepared for the rapid change that is continuing to occur throughout the global environment (Kirkbride, 2006). As the numbers of leaders who are resilient grow in an organization, they would in effect, transform the organization's culture, its climate, and allow the organization to more effectively address change as it occurs (Maddi et al., 1999; Schein, 1990; 1992).

Leadership that resides throughout an organization could facilitate the organization to spread knowledge and power across the organization and to allow the organization to respond to information quickly and respond to competitive situations as they arise (Bergmann et al., 1999). A shared sense of leadership throughout the organization also allows the development of a deep vein of leadership talent to run throughout the organization which most researchers, academicians, and leaders of top organizations believe is a very good thing. Leaders working and operating on the frontlines or at all levels of organizations may learn to read or comprehend the external landscape as well as know the internal abilities of the organization and, thus, be able to identify important opportunities as they arise before senior management and the cadre of committees in the home office determine that appropriate action needs to be taken

(Worley & Lawler, 2006). Transformational leadership and resilience throughout an organization should encourage more effective acceptance of change as it occurs.

Business leaders and academic scholars seem to agree that resilience and transformational leadership are both crucial for success in the twenty-first century (Harland et al., 2005, Luthans, 2002; Luthans & Avolio, 2003). This study indicates that in frontline sales professionals, three of the dimensions of resilience explain 22.7% of the variance of the transformational leadership behaviors demonstrated by frontline sales professionals. Given the frenetic pace of change and the difficulty of leading while continuing to thrive in today's organizations, the capacity of developing a transformative style of leadership throughout an organization while continuously building skills at being resilient is a very promising area for continued academic and organizational research (Conger, 2004).

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APPENDIX A. LEADERSHIP PRACTICES INVENTORY (LPI)

Item #	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT	Almost Never Rarely Seldom			Once in a While	Occasionally	Sometimes	Fairly Often Usually		Very Frequently	Almost Always
1.	I set a personal example of what I expect of others.	1	2	3	4	5	6	7	8	9	10
2.	I talk about future trends that will influence how our work gets done.	1	2	3	4	5	6	7	8	9	10
3.	I seek out challenging opportunities that test my own skills and abilities.	1	2	3	4	5	6	7	8	9	10
4.	I develop cooperative relationships among the people I work with.	1	2	3	4	5	6	7	8	9	10
5.	I praise people for a job well done.	1	2	3	4	5	6	7	8	9	10
6.	I spend time and energy making certain that the people I work with adhere to the principles and standards we have agreed on.	1	2	3	4	5	6	7	8	9	10
7.	I describe a compelling image of what our future could be like.	1	2	3	4	5	6	7	8	9	10

APPENDIX B. PERSONAL RESILIENCE QUESTIONNAIRE (PRQ)

Strongly Disagree=1
Disagree=2
Slightly Disagree=3
Slightly agree=4
Agree=5
Strongly Agree=6

Item #	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
	POSITIVE: THE WORLD If the day starts out badly, things will probably be bad all day.	1	2	3	4	5	6
	POSITIVE: YOURSELF I feel good about things I have done with my life so far.	1	2	3	4	5	6
	FOCUSED I maintain my focus on achieving my goals even when there are obstacles in my path.	1	2	3	4	5	6
	FLEXIBLE: THOUGHTS Questions that don't have a right answer are really frustrating.	1	2	3	4	5	6
	FLEXIBLE: SOCIAL I feel at ease with most people fairly quickly.	1	2	3	4	5	6
	Organized I hate to make schedules and then have to stick to them.	1	2	3	4	5	6
	PROACTIVE I prefer to try new restaurants and unusual dishes when I eat out.	1	2	3	4	5	6

Note. The entire scale may be obtained by contacting Conner Partners, Inc., 1230 Peachtree Street, Suite 1000, Atlanta, GA 30309, at 404.564.4800. Source: Provided by L.L. Hoopes, Resilience Alliance, 315 W. Ponce de Leon Ave. Suite 433, Decatur, GA 30030.

APPENDIX C. DEMOGRAPHIC QUESTIONNAIRE

Questions marked with an asterisk are mandatory (*).

Dear Research Participant:

My name is Mary Sylvester and I am a Ph.D. student pursuing a Ph.D. in Organizational Behavior and Management in the School of Business at Capella University in Minneapolis, MN. I am conducting a research study entitled *An Investigation of the Impact of Resilience and Key Demographics on the Transformational Leadership Behaviors of Sales Professionals.*

I would like to thank you for volunteering to participate in this study. You were referred to me and as a consequence of participating and completing the surveys; you have consented to participate in this study. Your participation in this independent research study will involve you completing three online surveys – one demographic survey, one survey on transformational leadership, and one survey on resilience – for a total of 126 questions and should not take more than 20 minutes to complete. As a reminder, the criteria for participating in this research study is that you identify yourself as an individual involved in the sales profession (selling whatever service you market to others) and that you are employed currently in sales in a corporate environment in the United States and that you are at least 18 years of age.

The purpose of this research project is to add to the academic body of knowledge on the topic of leadership and resilience in sales professionals while simultaneously answering questions proffered by organizational leaders. The information provided will add insight into the relationship between resilience and key demographics on the transformational leadership behaviors of sales professionals, individuals who are working on the frontlines of organizations both large and small. This research study will also provide organizations with information on two key elements critical to organizations operating while facing twenty-first century change.

There are two benefits to your agreeing to participate in this research study: (1) you will have the opportunity to contribute to the body of knowledge that exists today on the topic of leadership and resilience, and (2) for everyone who completes all of the survey, I will provide you with a copy of the study results if you provide your email address at the end of the demographic survey (optional). The knowledge obtained will help organizations better understand the relationship between transformational leadership and resilience for individuals involved in driving the revenue of organizations both large and small.

The names of research participant's will remain confidential and I will not need the name of your company. The results of this study may be published but all study participants will remain anonymous. There are no foreseeable risks associated to your involvement in this research study. All information gained will be used by me for the purpose of completing a doctoral degree, and to add to the available literature on these two important topics – leadership and resilience. The information collected will be stored in my office for at least 7 years and may be the basis for future investigational research.

If you agree to participate in this study, please select 'yes' below to begin completing the surveys. If you choose not to participate, please select 'no.' Your participation in this independent research study is completely voluntary and you may withdraw at any time. If you would like to receive a copy of the results of this survey, once it is completed, please enter your email address at the end of the survey (*Note*. THIS IS NOT REQUIRED).

Thank you for your time and for your contribution to research,

Mary H. Sylvester, Ph.D. Candidate

Questions marked with an * are mandatory.

1. *Are you willing to participate in this independent research study?

□ Yes □ No

102. * What is your gender?

□ Male □ Female

103. * In what year were you born?

104. * Please select the ethnic category that you identify with or that best describes you.

□ White/Caucasian
□ Black/African American
□ Asian
□ Hispanic or Latin American
□ Native American/Alaskan Native
□ Middle Eastern
□ Other, please specify: _____

105. * Select the highest level of education that you have obtained/completed.

□ High School Diploma
□ Community College or Technical Training Degree (Associates Degree)
□ 4-year College Degree (Bachelors Degree)
□ Masters Degree
□ Doctoral Degree
□ Other, please specify: _____

106. * Select the occupation that best depicts your employment.

□ Frontline Sales (no direct reports) □ Sales Management (has direct reports)

107. * What industry best describes the area of sales that you are employed in?

□ Advertising
□ Automotive Sales
□ Bio/Pharmaceuticals Sales
□ Business Services Sales
□ Communication Sales
□ Computer/Software Sales
□ Construction Sales
□ Engineering Sales
□ Entertainment
□ Financial Services Sales
□ Food and Beverage Sales
□ Healthcare
□ Manufacturing
□ Media
□ Medical Equipment Sales
□ Merchandise
□ Office Automation
□ Other Specify: _____
□ Printing Services
□ Publications
□ Real Estate Sales
□ Retail Sales
□ Training
□ Security Services

□ Industrial Sales
□ Information Management
□ Insurance Sales
□ Internet/Web Sales
□ Staffing/Recruiting
□ Technical
□ Travel Services
□ Utilities/Energy Sales

108. * How many years have you worked in your current sales position?

109. * Enter the total number of years that you have been a sales professional (total years of all jobs in sales).

110. * Select the range that reflects your BASE salary (do not include your bonus).

□ < $30,000
□ $40,000-$60,000
□ $61,000-$80,000
□ $81,000-$100,000
□ $101,000-$120,000
□ $121,000-$140,000
□ $141,000-$160,000
□ $161,000-180,000
□ $181,000-200,000
□ >$200,000

111. If you would like a copy of the results of this independent research study, please provide the information below:

Email [Optional]

Thank you again!
Mary H. Sylvester, Ph.D. Candidate

APPENDIX D. LPI: VALIDITY AND RELIABILITY

Means (and Standard Deviations) of Leadership Behaviors (Self). The means and standard deviations for the LPI-Self are presented below. Based upon mean scores, enabling and modeling are the leadership behavior that are most frequently reported as being used, followed by challenging and encouraging, with inspiring being the least used leadership behavior (Kouzes & Posner, 2008).

Leadership Practice	Statement Number	*M*	*SD*
EOA	14	9.23	1.05
MTW	11	8.81	1.17
EOA	4	8.68	1.26
MTW	1	8.45	1.24
ETH	5	8.15	1.52
EOA	24	8.12	1.60
EOA	9	8.00	1.44
EOA	19	7.94	1.31
ETH	30	7.80	1.64
CTP	3	7.66	1.62
ETH	10	7.55	1.67
ISV	27	7.51	2.05
CTP	23	7.47	1.78
EOA	29	7.47	1.85
MTW	26	7.38	2.05
ISV	22	7.40	1.88
MTW	6	7.40	1.70
CTP	18	7.33	1.88
ISV	2	7.27	1.75
ETH	20	7.16	2.08
MTW	21	7.17	1.93
CTP	8	6.98	1.85
CTP	28	6.87	1.91
ETH	25	6.76	2.04
ETH	15	6.81	2.10
CTP	13	6.71	2.06
ISV	12	6.49	2.11
ISV	7	6.44	2.05
MTW	16	5.95	2.18
ISV	17	6.0	2.16

N = 8,500

Reliability (June 2000)

Internal reliability. Internal reliability refers to the way in which a survey tool has measurement errors that result in scores that are different for reasons unrelated to the individual's responses. Each of the items is strongly correlated or consistent within the scale meaning that each item is strongly correlated with each other. Reliabilities above .60 are considered good. The internal reliability as measured by Cronbach's alpha, is strong, with all scales on the LPI-Self above .75 and are reliably consistent over time (Kouzes & Posner, 2008, p. 18).

Leadership Practices	Self
Model the Way	.74
Challenge the Process	.79
Inspire a Share Vision	.88
Enable Others to Act	.73
Encourage the Heart	.86

Additionally, the data obtained using the LPI is consistent across gender, cultural factors, and organizational factors.

Test-Retest Reliability. The test-retest reliability for the LPI and the five separate leadership behaviors has been documented to be solid, generally above .90 which means that the tool provides the same outcome over two separate measures conducted in close proximity and without any new intervening event. Additionally, the scores on the LPI

have been stable over time and the results of the survey are assessed and reviewed every two years for consistency (Kouzes & Posner, 2008).

Validity. Validation addresses whether the instrument addresses what it was designed to measure and whether or not the survey tool has value or meaning to the respondent. A five-factor analysis was generated using factor analyses. The results support leadership behaviors being conceptualized by the five behaviors (modeling, challenging, inspiring, enabling, and encouraging; Kouzes & Posner, 2008).

Face Validity. Face validity refers to whether the survey tool measures what it intends to be measuring. Respondents respond favorably to the results that they receive after completing the survey and, therefore, the face validity of the LPI is high. (Kouzes & Posner, 2008).

Concurrent Validity. The LPI has well-established concurrent validity and the scores obtained for the leadership behaviors are routinely associated with important aspect of managerial and organizational measures of effectiveness such as group performance, job satisfaction, cohesiveness, work commitment, and credibility (Kouzes & Posner, 2008, p. 15).

Predictive Validity. The LPI has strong predictive validity which indicates that the outcome of the survey is correlated with several performance metrics and can be used to predict leadership behaviors and effectiveness (Kouzes & Posner, 2008, p. 15)

Discriminant Validity. A way the discriminant validity of the LPI was assessed was to determine how well the transformational leadership behaviors aligned with high-performers versus low-performers. The data indicated that the LPI had strong discriminant validity indicating that the relationship between measures from the different behaviors was very low (Kouzes & Posner, 2008, p. 15).

In conclusion, the LPI has a strong, well-validated psychometric supporting data.

APPENDIX E. PRQ: VALIDITY AND RELIABILITY

Scale Intercorrelations. The following intercorrelations are based on 50,000 respondents (ODR, 1996).

	Positive-the World	Positive-Yourself	Focused	Flexible-Thoughts	Flexible-Social	Organized	Proactive
Positive-the World	-						
Positive-Yourself	.64	-					
Focused	.63	.74	-				
Flexible-Thoughts	.42	.46	.37	-			
Flexible-Social	.54	.49	.47	.41	-		
Organized	.28	.35	.42	.07	.17	-	
Proactive	.45	.46	.42	.61	.46	.06	-

Reliability. The following is the Cronbach's alpha for each sub-scale is listed below. Each of the items is strongly correlated or consistent within the scale meaning that each item is strongly correlated with each other. Reliabilities above .60 are considered good (ODR, 1996).

Dimensions of Resilience	Cronbach's Alpha
Positive-the World	.83
Positive:-Yourself	.81
Focused	.82
Flexible-Thoughts	.71
Flexible-Social	.74
Organized	.68
Proactive	.65

The Cronbach alpha indicates that each of the dimensions have a high level of covariance which means that respondents' tended to answer questions in each scale in a similar fashion (ODR, 1996).

Stability (Test-Retest). A score of 1.00 would indicate no variability over time while values less than 1.00 indicate some level of fluctuation. In a study of long-term stability, the PRQ was administered to the same group of respondents seven months apart. The test-retest reliabilities were very consistent (ODR, 1996):

Positive: the World	.79
Positive: Yourself	.66

Focused	.60
Flexible: Thoughts	.73
Flexible: Social	.69
Organized	.70
Proactive	.68

Face Validity. The face validity, or the manner in which individuals believe that their scores on the PRQ describe them adequately has been documented to be relatively high and thereby provides some internal validity for the tool (ODR, 1996).

Construct Validity. Construct validity addresses whether or not the survey tool answers what was intended to answer, in this case, resilience. The PRQ measures seven different dimensions of resilience. The PRQ was compared with other validated tools designed to address the concept of resilience. Colgate (1995) confirmed that the seven dimensions measure the dimensions of resilience that they were intended to measure.

Convergent Validity. Convergent validity indicates that the seven dimensions are significantly correlated with other measures of the same constructs (Colgate, 1993; ODR, 1996).

Discriminant Validity. If discriminant validity exists in this scale, each of the seven dimensions should have low correlation with measures of unrelated constructs. This is a little difficult to demonstrate since each of the dimensions is not completely

independent of each other as demonstrated by the correlation table. Instead, many of the dimensions are supportive of the other. An example of this is that and individual with a positive view of themselves are often positive about their environment or the world in which they live. Therefore, one could say that the discriminant validity of the PRQ is not particularly high (ODR, 1996).

Social Desirability. The desire to present one's self in a favorable light is a potential bias factor presented in the assumptions/limitations of this independent study and has been documented to exist to a certain extent within this survey tool as well (ODR, 1996).

Predictive Validity. The PRQ has been administered to individuals and organizations during significant change. In assessing predictive validity, the survey tool has predictive validity, high scores on it should correspond with high performance scores as opposed to low performance scores. The results on two separate studies indicate that the PRQ can be used to predict job performance in organizations experiencing transformation or change (ODR, 1996).

APPENDIX F. ADDITIONAL DATA ANALYSES

Table F1. *Means for Total Transformational Leadership and Transformational Leadership Subscales for Frontline Sales Professionals and Sales Managers*

Kouzes' and Posner's Leadership Practices Subscales	Questions for each Subscales on the LPI for this Survey – *NOTE.* Question #1 on the survey was consent).	Sales Professionals (N = 197) Means for each Subscale (ranked by behavior reported to be demonstrated most frequently)	Sales Managers (N = 104) Means for each Subscale (ranked by behavior reported to be demonstrated most frequently)
Total Transformational Leadership Score	Sum of all Questions	219.39	239.95
Modeling the Way	4, 9, 14, 19, 24, 29	40.41 (4)	44.78 (5)
Challenging the Process	2, 7, 12, 17, 22, 27	45.44 (2)	49.38 (3)
Inspiring a Shared Vision	3, 8, 13, 18, 23, 28	40.37 (5)	45.33 (4)
Enabling Others to Act	5, 10, 15, 20, 25, 30	47.86 (1)	50.81 (1)
Encouraging the Heart	6, 11, 16, 21, 26, 31	45.31 (3)	50.07 (2)

Sales professionals and sales managers had different responses and frequency of responses for the questions on both the LPI and the PRQ. It appears that sales managers self-reported that they demonstrated transformational leadership behaviors more frequently and reported themselves as being more resilient. As can be seen in Table F2, sales managers had a higher resilience score but both frontline sales professionals and sales managers demonstrated the dimensions of resilience in the same rank order.

Table F2. *Means for Dimensions of Resilience for Frontline Sales Professionals and Sales Managers*

Conner's PRQ	Questions for each Dimension of Resilience	Sales Professionals ($N = 197$) Means for each Dimension (ranked by behavior reported to be demonstrated most frequently)	Sales Managers ($N = 104$) Means for each Dimension (ranked by behavior reported to be demonstrated most frequently)
Positive–the World	3, 39, 42, 44, 48, 52, 56, 75, 88, 99	66.21 (2)	73.29 (2)
Positive–Yourself	33, 47, 49, 54, 70, 78, 84, 86, 90, 93	70.25 (1)	77.29 (1)
Focused	35, 58, 65, 68, 74, 76, 79, 83, 85, 101	65.26 (3)	73.17 (3)
Flexible–Thoughts	32, 34, 38, 53, 62, 67, 71, 81, 97, 100	54.81 (7)	61.60 (7)
Flexible–Social	37, 40, 43, 50, 57, 59, 60, 63, 69, 82	63.68 (4)	69.47 (4)
Organized	51, 61, 66, 72, 73, 89, 91, 94, 96, 98	61.97 (5)	63.78 (5)
Proactive	41, 45, 46, 55, 64, 77, 80, 87, 92, 95	56.79 (6)	62.05 (6)

Table F3. *Resilience of Sales Professionals (N = 197)*

Frontline Sales Professionals	Above the 90th Percentile	Above the 75th Percentile	Above the 50th Percentile	Above the 25th Percentile	Below the 25th Percentile	
Positive-The World	16 (8.1%)	36 (18.3%)	74 (37.6%)	112 (56.9%)	85 (43.1%)	37.6% scored above the 50th percentile
Positive–Yourself	21 (10.7%)	43 (21.8%)	107 (54.3%)	135 (68.5%)	62 (31.5%)	54.3% scored above the 50th percentile
Focused	8 (4.1%)	17 (8.6%)	62 (31.5%)	96 (48.7%)	101 (51.3%)	31.5% scored above the 50th percentile
Flexible–Thoughts	8 (4.1%)	17 (8.6%)	47 (23.9%)	98 (49.7%)	99 (50.3%)	23.9% scored above the 50th percentile
Flexible–Social	9 (4.6%)	31 (15.7%)	61 (30.9%)	105 (53.3%)	92 (46.7%)	30.9% scored above the 50th percentile
Organized	9 (4.6%)	28 (14.2%)	61 (30.9%)	105 (53.3%)	92 (46.7%)	30.9% scored above the 50th percentile
Proactive	8 (4.1%)	22 (11.2%)	65 (33%)	115 (58.4%)	82 (41.6%)	33% scored above the 50th percentile