

The Impact of Resilience to Change on the Transformational Leadership Behaviors Demonstrated by Frontline Sales Professionals

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Abstract

This study explores the impact of resilience and key demographics on the transformational leadership behaviors demonstrated by frontline sales professionals. Data were collected from a sample 356 frontline sales professionals (55% male, 45% female, and covering both large and small industries). The sample responded to two pre-validated surveys about their transformational leadership, resilience to change, and socio-demographic profile. The analysis indicates that resilience was a positive, low to moderate predictor of transformational leadership behavior explaining 23% of the variance in the transformational leadership behaviors. This study relied on self-reported responses, which are subject to biases that may result from the research participants' capacity to recall or remember events and/or routinely demonstrated characteristics.

The data obtained in this study confirms that the level of resilience to change in frontline sales professionals predicts a portion of the level of transformational leadership behaviors demonstrated by individuals and throughout organizations of varying sizes. The current literature lacks an exploratory analysis of the relationship between resilience to change and the demonstration of transformational leadership behaviors. This study adds to the empirical literature on both topics.

Keywords: Transformational Leadership, Leadership, Resilience, Change, Frontline Sales Professionals

1. Introduction

The concept of leadership has long been the focus of scientific management, academic research, and organizational application. Despite the thousands of studies, academic and organizational leaders alike continue to work to understand what leadership is and how it can be achieved and applied. Leadership in the last century focused on its different theoretical aspects leading to widespread interest and research on the associations between the behaviors of transformational leadership and higher individual, group, and organizational performance (Bass, 1996).

Transformational leadership theory evolved from the preceding leadership styles, trait and behavior theories, and charismatic, situational, and transactional leadership (Burns, 1978). Transformational leadership is the ability to get people to want to change, to improve, and to be led (Bass, 1985), creating positive change in followers whereby they take care of each other's interests and act in the interests of the group as a whole. With the transformational leadership style, the leader enhances the motivation, morale, and performance of the follower group.

This study explores whether transformational leadership behaviors are grounded in moderate to high levels of resilience to change. The five components of transformational leadership, (Challenging the Process, Modeling the Way, Inspiring a Shared Vision, Encouraging the Heart, and Enabling Others to Act) (Kouzes & Posner, 1987) have been compared with attributes of resilience to change to assess whether the two variables are correlated. The literature, although limited, seems to point to a connection between these two concepts, though there is a lack of empirical evidence outlining this relationship present in the literature today.

An organization's ability to cultivate transformational leaders within its ranks who can rapidly and effectively adapt to change may mean the difference between the firm's survival and failure over time (Norman, Luthans & Luthans, 2005). Individuals, organizations, and leaders must develop the skills to identify possible challenges and work disruptions, to be flexible and adaptable in a variety of situations, to focus on creatively and innovatively solving problems in evolving situations, and to stand prepared to implement solutions as rapidly as possible (Conner, 2000). To accompany turbulent changes, organizations need a new paradigm of leadership that involves everyone within an organization possessing leadership capabilities by developing a culture where everyone serves as leader collectively rather than sequentially (Raelin, 2006, p. xi). Therefore, developing transformational leaders on the front lines of an organization is vital to managing business in this century.

Leaders frequently encounter obstacles, setbacks, and challenges while dealing with the volatile, uncertain, complex, and ambiguous changes that occur in business (Harland, Harrison, Jones & Reiter-Palmon, 2005). Resistance to change, rather than embracing and preparing for change, can result in an organization paying for both the efforts to maintain the status quo and the costs of reacting to unanticipated situations and challenges (Werther, 2003). Whether leaders encounter challenges and setbacks personally or professionally, organizations as a whole face challenging times and the way individuals, organizations, and leaders react to change is a feature of resiliency (Seeger, Ulmer, Novak & Sellnow, 2005). Resilience is one attribute that allows an individual and an organization to maintain its original purpose, structure, and identity regardless of the constant chaos taking place in the business

environment (Chaharbaghi, Adcroft & Willis, 2005). In a sense, resilience allows adaptability and elasticity when responding to change, the ability to bounce back or spring forward to harness new opportunities. As a result, resilience can be thought of as a building block of transformational change for individuals, leaders, and organizations (Chaharbaghi et al., 2005). This capacity or ability to change while moving forward progressively requires both strong transformational leadership and resilient behaviors to help drive organizations into the future (Harland et al., 2005; Raelin, 2006, Bennis, 2007).

2. Theoretical Review and Hypotheses

The trait, behavioral, charismatic, situational, and contingency theories provided the foundation for the relational theories with each contributing toward the development of the transactional and transformational leadership theories.

2.1 Transformational Leadership

The relationship theories, including transactional and transformational theories of the 1980s, concentrated on management-type activities such as organization, supervision, and attainment of group performance goals (Burns, 1978). Transactional theories based successful leadership on a system of rewards and punishment (Bass, 1985), wherein employees were rewarded for performance, and reprimanded or punished when they missed the mark (Bass, 1990; Chakraborty & Chakraborty, 2004). Transactional leadership techniques are effective during stable times but are less useful in times of turbulent change (Kirkbride, 2006).

Downton first introduced the term *transformational leadership* in 1979 to describe the connection, relationship, or influence between leaders and their direct reports (Bass, 1985). Transformational leaders incorporate inspiration, enthusiasm, and motivational support to encourage their teams to see the importance of the higher goal or the meaningful work being done and to rise up to meet these demands (Tucker & Russell, 2004). Transformational leaders are aware of the performance of the team overall, but are also focused on encouraging each person to fulfill his or her full potential (Bass, 1985). According to Bass (1985), transformational leaders usually have high ethical and moral values. Therefore, transformational leadership goes beyond meeting the basic needs of the leader's direct reports (Kouzes & Posner, 1987), taking the relationship between the leader and the followers to the next level (Burns, 1978, p.20). This results in a joint purpose or common goal, and therefore, transformational leaders create, change, and improve the culture within the organization, which ultimately heightens the performance of all participants – from the leader to the followers (Burns, 1978, p.20; Kouzes & Posner, 1987).

Bass (1996) further suggested that transformational leadership could have an impact on overall organizational performance. According to the current literature, transformational leadership is strongly associated with positive job characteristics, including employee job satisfaction, organizational commitment, organizational effectiveness, and employee productivity (Dunham-Taylor, 2000; Duckett & Macfarlane, 2003; Avolio & Koh, 2004). This level of positive impact on organizational goals led to research into whether transformational leadership has a positive financial impact. Barrick, Day, Lord, and Alexander (1991) found

that transformational leadership positively impacts an organization financially, estimating this impact at approximately “25 million dollars (after taxes) throughout an executive’s average career span” (p. 19). Maister (2001) and Kotter and Heskett (1992) also found that leadership from individuals working within organizations has a positive impact on the organization’s financial performance.

This positive return on investment for organizations with strong transformational leadership led Bass (1996) to propose that training on transformational leadership should be made accessible to all ranks or levels within an organization. As confirmed by Bass (1996), Kouzes and Posner (2002, p. 383), and Judge and Piccolo (2004), the core concepts of transformational leadership can be learned and applied by everyone. This study develops hypotheses based on an examination of previous research into transformational leadership and leadership effectiveness.

2.2 Resilience to Change

As the world is changes constantly, organizations and individuals alike are under pressure to keep up. Organizations require resilience in the current business environment (Luthans, Youssef, & Avolio, 2006; Norman et al., 2005). Resilience to change develops as people grow in experience, learn skills of self-awareness, and increase their general knowledge of the world. Resilience to change is an attribute or capacity that involves action, thoughts, characteristics, and behaviors. A resilient individual taps into their resources, such as their family and friends, as a support system, and leverages their personal strengths. Personal development comes not through the experience of facing adversity, but rather the process of struggling, learning, and tenaciously moving forward through the challenge. The current research suggests a common denominator and defines resilience to change as a human capacity, strength, or ability (Conner, 2000).

While it would appear logical that transformational-type leaders would want to possess resiliency, at least as illustrated in this study, a comprehensive literature review reveals rather modest experimental research associating 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; it would seem that more resilient leaders may possess the ability to handle the routine failures, setbacks, and change common in business. Leaders invoking resilience to change, especially during turbulent times, may help encourage others toward greater effort and higher performance during challenging times.

2.3 Transformational Leadership and Resilience to Change

It is these concepts of transformational leadership and resilience to change that are the focus of this study, establishing the following research questions and their associated hypotheses:

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

Hypothesis 1: Higher resilience scores for sales professionals are related to a higher

aggregate transformational leadership behavior score.

2. Does the transformational leadership behavior of sales professionals differ relative to gender, age, level of education, years of experience in the 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 aggregate transformational leadership behavior score and the age of sales professionals.

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 aggregate transformational leadership behavior score and the job tenure of sales professionals.

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

3. Which of the dimensions of resilience and key socio-demographic variables 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 socio-demographic variables can be used to predict a change in the respondents' aggregate transformational leadership behavior score.

3. Method

3.1 Sample and Procedure

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 with a recruited database of 2.4 million volunteer consumers. The participants were identified based on current employment in a sales profession as specified on their MarketTools profile, representing both genders over the age of 18 and both large and small industries. The profile of prospective panelists was cross-validated with third party consumer financial institutions to confirm the panelists' identities and locations. Once the key attributes to ensure representation of the general population were identified, a list of prospective research participants was randomized multiple times per minute until the final panel was pulled. The respondents, totaling 356, belonged to a diverse set of industries located in the United States (M. Wilner, MarketTools, Personal Communication, January 9, 2009).

The research participants for this independent study included 197 frontline sales professionals (104 Managers), of which 55% were male, and the modal response category for age was between 19 and 80 years. Roughly 85.3% of the sample indicated that they are Caucasian. The average industry experience for the research participants was 12.93 years (with a range of 45 years) across approximately 26 different industries, while the average tenure in their current

employment was 6.86 years (with a range of 45 years). The education level was distributed as follows: 37% of the research respondents indicated that they possessed a high school diploma, 22% indicated that they possessed an associate and/or technical degree, and 30% possessed a 4-year college degree.

3.2 Instruments

The study used two pre-validated instruments: The Leadership Practices Inventory (LPI) and the Personal Resilience Questionnaire (PRQ), along with a socio-demographic questionnaire.

3.2.1 The Leadership Practices Inventory (LPI)

The LPI-Self Form was selected to assess transformational leadership because it has strong academic research supporting its sound psychometric properties. Kouzes and Posner (1987) developed the LPI based on transformational leadership theory. By triangulating qualitative and quantitative research methods, combined with in-depth interviews regarding individuals' best practice leadership experiences, Kouzes and Posner generated the five practices regularly exhibited by exemplary leaders: challenging the process, modeling the way, inspiring a shared vision, enabling others to act, and encouraging the heart. The LPI-Self Form is a 30-item questionnaire measuring behaviors on a scale of 1 to 10, with 1 representing *never* and 10 representing *almost always*, grouped under the five behaviors of exemplary leadership with each including six practices. The LPI questionnaire scores each practice separately with an average total ranging from six to sixty points for each of the five separate behaviors or sub-scales (Kouzes & Posner, 2002, p. 88). A perfect score on each of the transformational leadership behaviors is sixty, for a total overall perfect score of 300. Both the Self and the Observer LPI forms were developed and exposed to the same psychometric analyses used to determine reliability and to validate the initial LPI research instrument.

The LPI has good internal reliability, test-retest reliability, concurrent validity, and discriminate validity (Kouzes & Posner 1995; Zagorsek, Stough & Jaklic, 2004). A review of academic and organizational studies using the LPI suggests that the LPI is a well-documented, reliable, and validated framework compared to other leadership instruments (Cangelosi & Whitt, 2005). Additionally, Kouzes and Posner (2002) have consistently evaluated the LPI survey every two years since its initial development in 1987. The LPI has been well researched and documented in the literature, and demonstrates strong consistency over time (Lewis, 1995, p. 557). Permission to use the LPI-Self questionnaire was obtained from Dr. Barry Posner.

Table 1 presents the reliability of the 36-item LPI-Selfform for this research study. Cronbach's alpha coefficients for the transformational leadership behaviors ranged from 0.756 to 0.868, indicating strong internal reliability for all subscales. Overall, the Cronbach's alpha coefficient for the entire LPI survey was 0.955. Consequently, there was sufficient evidence to support the internal consistency of the LPI and each of the individual practices or subscales for this study, indicating that all transformational leadership subscales and the total transformational leadership scores were appropriate for the various analyses outlined in this research.

Table 1. Internal Consistency and Reliability for the LPI Questionnaire

Scale(number of Items)	<i>N</i>	<i>M</i>	<i>SD</i>	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

3.2.2 The Personal Resilience Questionnaire (PRQ)

The PRQ was used to assess *personal resilience*. Daryl Conner and his associates at ODR, Inc. (now Conner Partners) developed the instrument in 1990 (PRQ, 1993) 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, and each is simple enough for most individuals assessed within an organizational environment to read and understand the survey questions/statements as written (Conner, 1993). The PRQ uses a 6-point Likert scale with items ranging from Strongly Disagree to Strongly Agree, though without the option of 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). Permission to use the PRQ questionnaire was granted by Dr. Linda Hoopes through a non-disclosure agreement, though the PRQ coding scheme is held confidential at Dr. Hoopes' request. It is available only if additional backup documentation is needed to highlight how the data was derived.

The PRQ was selected for this research study because, like the LPI, it is a reliable and well-validated comparative instrument that has been used and documented in other research projects. Additionally, the PRQ has been tested with more than 50,000 participants, and most of the seven subscales are moderately to highly correlated. Measurements of reliability, internal consistency, and stability are 0.65, 0.83, and 0.85, respectively, as measured by Cronbach α for the entire measure. The PRQ instrument has also been tested and proven to demonstrate convergent, discriminant, and predictive validity (Conner Partners, 2004).

Table 2 provides the internal consistency scores for the PRQs confirmed for this study. While two of the dimensions, Flexible-Thoughts and Proactive, possessed somewhat lower alpha

levels with the overall reliability of the 70-item PRQ being 0.945, and Cronbach's alpha coefficients for the resilience dimensions ranging from 0.678 to 0.846. Once again, there was sufficient evidence to support the internal consistency of the PRQ and, therefore, it was appropriate to include all dimensions of resilience in the analyses.

Table 2. Internal Consistency and Reliability for the Personal Resilience Questionnaire

Scale(number of items)	<i>N</i>	<i>M</i>	<i>SD</i>	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

3.2.3 Descriptive Statistics

LPI. Since this study combined questions from two pre-validated surveys, Table 3 shows the number of questions that comprised each leadership sub-scale and the associated means and standard deviations.

Table 3. Means and Standard Deviations for Transformational Leadership Behaviors (Outliers Removed)

Kouzes' and Posner's Leadership Practices Subscales	Questions comprising the subscales in this Survey	Mean (<i>SD</i>)
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)

Table 4 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 4. Descriptive Statistics of Survey Responses for the Dependent Variable, Transformational Leadership: LPI (N = 197)

LPI	Minimum-Maximum	<i>M</i>	<i>SD</i>
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

Table 5 provides a comparison of the data from this assessment of the transformational leadership behaviors of frontline sales professionals with normative data provided by Kouzes and Posner (2008), which shows that the data trends in a similar fashion as the published normative data.

Table 5. Study data compared with Normative Data Provided by Kouzes and Posner Self-Reported Form

Five Exemplary Leadership Behaviors	Kouzes&Posner’sNorms– Self-reported Questionnaire (<i>N</i> = 74,294) <i>M</i> (<i>SD</i>)	Frontline Sales Professionals – Self-reported Questionnaire (<i>N</i> = 197) <i>M</i> (<i>SD</i>)
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)

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, and then multiplied by 20, creating a scale of 1 to 100 for each individual question. All of the resilience dimensions were calculated in the same manner. While individuals’ responses containing 5 or less completed answers out of the 10 questions could be less likely to be accurate due to missing data and could skew the results, this was not an issue so no question or response had to be eliminated for this reason alone.

Table 6. Means for Dimensions of Resilience for Frontline Sales Professionals

		Sales Professionals (<i>N</i> = 197)
Conner's PRQ	Questions on Survey for each Dimension of Resilience	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)
Positive-Yourself	33, 47, 49, 54, 70, 78, 84, 86, 90, 93	70.25 (1)
Focused	35, 58, 65, 68, 74, 76, 79, 83, 85, 101	65.26 (3)
Flexible-Thoughts	32, 34, 38, 53, 62, 67, 71, 81, 97, 100	54.81 (7)
Flexible-Social	37, 40, 43, 50, 57, 59, 60, 63, 69, 82	63.68 (4)
Organized	51, 61, 66, 72, 73, 89, 91, 94, 96, 98	61.97 (5)
Proactive	41, 45, 46, 55, 64, 77, 80, 87, 92, 95	56.79 (6)

3.3 Analysis and Results

This study adopted several analytical methods to provide descriptive data on the research participants, test the hypothesized impact of the dimensions of resilience and key demographics on the transformational leadership behaviors of sales professionals, and ensure the reliability and validity of each of the measures incorporated in the study.

An analysis of Pearson's correlation between the individual resilience scores for each of the dimensions and the overall transformational leadership was conducted to determine the answer for research question 1. 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. There would then be no reason to test the hypothesis for research question 3. Table 7 shows the analytical results and that all dimensions of resilience have statistically significant correlations with the overall transformational leadership score ($p < 0.01$).

Table 7. 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.

A *t* test of equality of means was used to assess whether transformational leadership varied by gender by determining if there was a significant difference between the group means for the aggregate (total) transformational leadership behaviors score of frontline sales professionals by gender. Table 8 shows the results of the *t* test analysis. 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. Hypothesis 2-1 was not supported since there was no significant difference (*p*-value was greater than 0.05).

This data agrees with the normative data provided by Kouzes and Posner (2009). Generally, transformational leadership behaviors are not significantly different for males and females on the LPI Self-form, as both genders report engaging in all associated behaviors with about the same frequency. Other researchers have reported similar results in regards to gender and leadership practices within a variety of sample populations.

Table 8. *t*Test for Differences in Transformational Leadership Behaviors by Gender

	<i>N</i>		<i>M</i>		<i>SD</i>		<i>t</i>	<i>P</i>
	Male	Female	Male	Female	Male	Female		
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

Research Question 2 further addressed the association between the socio-demographic variables 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 variables with the dependent variable, total transformational leadership behaviors, was initially tested using Pearson's Product-Moment Correlation and then Kendall Tau-b statistics, with the results shown in Table 9. 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 a data ranking when all of the data are ordinal (Gall, Gall & Borg, 2005).

These measures did not identify any of the demographic characteristics with a significant relationship at the 0.05 level or better ($p < 0.01$) to the dependent variable. There was a significant Kendall tau-b correlation of 0.552 between tenure and age. Additionally, income was significantly correlated with three demographic variables: age, education, and tenure (age, Kendall tau-b = 0.295, $p < 0.001$; education, Kendall tau-b = 0.143, $p = 0.029$; tenure, Kendall tau-b = 0.279, $p < 0.001$).

Table 9. 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
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).						

A one-way analysis of variance (ANOVA) was calculated to test whether the transformational leadership behavior demonstrated by frontline sales professionals varied by age. The

independent demographic variable, age, was operationalized into 10 categories as listed in Table 10. If there were significant differences, a Scheffe post hoc analysis was used to clarify which age groups were significantly different in the level of total transformational leadership if the mean differences were statistically significant. Table 10 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.

Kouzes and Posner's normative data (2009) used different age categories than those in this study, and demonstrated that as research respondents' age increased, so did the frequency with which they demonstrated transformational leadership behaviors.

Table 10. One-way ANOVA on Total Transformational Leadership by Age

Years	<i>N</i>	<i>M</i>		<i>SD</i>	
<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	<i>P</i>

An ANOVA analysis 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 11, which also shows the results of the ANOVA and

Scheffe analyses. Once again, however, there were no significant results since the p -value for the ANOVA test was 0.072 and greater than .05, so no Scheffe tests were conducted. Consequently, the results in Table 11 provide insufficient evidence to support Hypothesis 2-3. In general, the LPI scores have been found to be unrelated with demographic characteristics (e.g., marital status, years of experience, and education level).

Table 11. One-way ANOVA on Total Transformational Leadership by Education

Education Level	<i>N</i>	<i>M</i>		<i>SD</i>	
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	
13-15	3	183.0000		91.92932	
Transformational Leadership Behavior	SS	Df	MS	F	<i>P</i>
Between Groups	13918.573	4	3479.643	2.188	.072
Within Groups	284671.467	179	1590.343		
Total	298590.040	183			

An ANOVA analysis was performed to determine if a significant difference exists between the transformational leadership behaviors of frontline sales professionals based on job tenure in their current position. The independent demographic variable, job tenure, was operationalized into 11 categories as listed in Table 12. The average tenure was 6.86 years, with a range of 45 years, which seems to be relatively significant in the current economy. However, Table 12 indicates that no significant differences existed for sales professionals with varying years of experience (p -value = 0.087); therefore, no Scheffe analysis was conducted. Hence, Hypothesis 2-4 is not supported.

Table 12. One-way ANOVA on Total Transformational Leadership by Job Tenure

Years	<i>N</i>	<i>M</i>	<i>SD</i>		
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		
28-30	6	221.5000	38.44346		
>30	14	215.4286	31.84509		
Transformational Leadership Behavior	SS	Df	MS	F	<i>P</i>
Between Groups	27003.399	10	2700.340	1.684	.087
Within Groups	298171.835	186	1603.074		
Total	325175.235	196			

An ANOVA analysis was conducted to evaluate if any significant differences exist between total transformational leadership behaviors by salary level. The independent socio-demographic variable, salary level, was operationalized into eight categories as depicted Table 13. Table 13 suggests there was no significant difference in transformational leadership behaviors demonstrated by frontline sales professionals with varying income levels (p -value = 0.777), therefore, no Scheffe post hoc analyses were required, and Hypothesis 2-5 was not supported.

Table 13. *One-way ANOVA on Transformational Leadership by Salary Level*

Salary Level	<i>N</i>	<i>M</i>		<i>SD</i>	
<\$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	<i>P</i>
Between Groups	6855.430	7	979.347	.573	.777
Within Groups	317847.551	186	1708.858		
Total	324702.981	196			

The analysis indicates that the socio-demographic variables accounted for very little of the variance or impact on the transformational leadership behaviors demonstrated by frontline sales professionals. In research conducted previously by Kouzes and Posner (2008) and others, 10 separate socio-demographic variables were evaluated for their ability to predict transformational leadership, and these 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 previous research into the impact of socio-demographic variables on the total transformational leadership accounted for no more than 0.02 percent of the variance in demonstrations of this behavior (Kouzes & Posner, 2008). This means that little to no explained variance in transformational leadership behaviors are learned by knowing more of the demographic features about the individuals responding to the LPI survey questions. Consequently, this study corroborates the existing literature on the

impact assessed by a regression analysis of key demographics on the transformational leadership behaviors of various research respondents/participants. Therefore, standard socio-demographic characteristics did not explain the frequency with which transformational leaders invoked the five transformational leadership behaviors.

Based on the data provided in research question 1, several dimensions of resilience are strongly correlated with transformational leadership behaviors and that the socio-demographic variables from research question 2 do not explain the transformational leadership behaviors. Hypothesis 3 assesses which of the dimensions of resilience and socio-demographic variables are most predictive of the transformational leadership behaviors of frontline sales professionals.

To test the hypothesis associated with research question 3, a backward elimination multiple regression analysis was used to examine the impact of resilience and key demographics on the transformational leadership behaviors. 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 9, 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 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. As stated by Cohen and Cohen (1983) and Hair (1995), incorporating backward elimination permitted an analysis allowing for a calculation of a regression equation with all independent variables (gender, age, level of education, job tenure, salary level, positive (the World), positive (Yourself), focused, flexible (Thoughts), flexible (Social), organized, and proactive), and then go back and delete the independent variables that did not contribute significantly to the equation. Using backward elimination also allowed for a determination of whether resilience adds any significant explanatory power to the model after controlling for the respondents' demographics.

4. Results and Discussion

This study demonstrated that there was a moderate but significant correlation between resilience to change and the transformational leadership behaviors of frontline sales professionals. No significant differences were found among the socio-demographic variables and the demonstrated transformational leadership behaviors or the dimensions of resilience. The results of the regression analysis demonstrated a significant relationship between the dimensions of resilience and transformational leadership behaviors, although the degree of correlation has a low to moderate impact (22.7%).

4.1 Key Findings

In this study, frontline sales professionals demonstrated transformational leadership behaviors similar to the leadership behaviors found in other professional areas including general business, banking, nursing, and education (Kouzes & Posner, 2014). Transformational leadership is

important in academic and organization environments. It makes sense that transformational leadership behaviors are emphasized at all levels of the organization, even down to the frontlines of sales organizations, thus further confirming Bass and Burn's theories. If transformational leadership can be learned, then transformational leadership development and training should be implemented at all levels within an organization and not reserved only for the middle management and above.

Resilience to change allows individuals to make positive adaptations as change occurs and therefore warrants additional academic and organizational research given the pace of change of the Twenty-first Century. It is correlated with and predicts a positive low to moderate portion of the transformational leadership behaviors demonstrated by frontline sales professionals. Since resilience to change, like transformational leadership, can be learned, then resilience to change should also be part of corporate training programs if organizations want to create a competitive advantage within their respective organizations related to managing change in turbulent times.

As mentioned previously, the socio-demographic variables (gender, age, level of education, job tenure, and salary level) accounted for very little of the variance in the impact of transformational leadership behaviors demonstrated by frontline sales professionals which is in line with existing literature on the topic (Kouzes & Posner, 2003).

5. Limitations and Conclusions

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

Finally, although 360-degree evaluations are believed to yield the most comprehensive results, this is often not practical in a research context (Van Hooft, Van der Flier, and Minne, 2006). Therefore, this 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 routine characteristics as they occur. Additionally, under- or over-reporting is an ever-present bias, and participants may often desire to provide socially appropriate answers (Spector, 1994). Consequently, the data obtained from this exploratory independent 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.

Overall, this study found resilience to change is a positive, 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. The importance of transformational leadership and resilience to change throughout an organization cannot be emphasized enough and could encourage more effective acceptance of change as it occurs. Organizations need to stress resilience to change to enhance positive

transformational leadership behaviors. However, there may be other contributing characteristics besides resilience that explains the transformational leadership behaviors of frontline sales professionals. Continued research should focus on understanding the transformational nature of leadership, a behavioral variable, and its relationship with the learned attitudinal variable, resilience to change.

References

- Avolio, B. J., Zhu, W., & Koh, W. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structure distance. *Journal of Organizational Behavior*, 25(8), 951-968. <http://dx.doi.org/10.1002/job.283>
- Barrick, M. R., Day, D. V., Lord, R. G., & Alexander, R. A. (1991). Assessing the utility of executive leadership. *Leadership Quarterly*, 2(1), 9-22.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: FreePress.
- Bass, B. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(1), 19-31.
- Bass, B. M. (1996). *A new paradigm of leadership: An inquiry into transformational leadership*. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance progress and prospects. *Academy of Management Journal*, 39(4), 779-801.
- Bennis, W. (2007). The challenges of leadership in the modern world: introduction to the special issue. *American Psychologist*, 62(1), 2-5. <http://dx.doi.org/10.1037/0003-066X.62.1.2>
- Burns, J. M. (1978). *Leadership*. New York: Harper and Row.
- Cangelosi, P.R. & Whitt, K.J. (2005). Accelerated Nursing Programs what do we know?. *Nursing Education Perspectives*, 26(2), 113-116.
- Chakraborty, S., & Chakraborty, D. (2004). The transformed leader and spiritual psychology: A few insights. *Journal of Organizational Change Management*, 17(2), 194-210. <http://dx.doi.org/10.1108/09534810410530610>
- Chaharbaghi, K., Adcroft, A., & Willis, R. (2005). Organizations, transformability, and the dynamics of strategy. *Management Decision*, 43(1), 6-12. <http://dx.doi.org/10.1108/00251740510572443>
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral science*. Hillsdale, NJ: Erlbaum.
- Conner, D. R. (1993). *Managing at the speed of change: How resilient managers succeed and prosper where others fail*. New York: Villard Books.
- Conner, D. R. (2000). Nimble organizations. *Executive Excellence*, 17(2), 18-19.

- Duckett, H., & Macfarlane, E. (2003). Emotional intelligence and transformational leadership in retailing. *Leadership & Organization Development Journal*, 24(6), 309-317. <http://dx.doi.org/10.1108/01437730310494284>
- Dunham-Taylor, J. (2000). Nurse executive transformational leadership found in participative organizations. *The Journal of Nursing Administration*, 30(5), 241-250. <http://dx.doi.org/10.1097/00005110-200005000-00005>
- Gall, J. P., Gall, M. D., & Borg, W. R. (2005). *Applying educational research: A practical guide* (5th ed.). Boston: Pearson Education.
- Hair, J. (1995). *Multivariate data analysis* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Harland, L., Harrison, W., Jones, J. R., & Reiter-Palmon, R. (2005). Leadership behaviors and subordinate resilience. *Journal of Leadership & Organizational Studies*, 11(2), 2-14. <http://dx.doi.org/10.1177/107179190501100202>
- Judd, C., Smith, E., & Kidder, L. (1991). *Research methods in social relations*. Orlando, FL: Holt, Rinehart, and Winston.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755-768. <http://dx.doi.org/10.1037/0021-9010.89.5.755>
- Kirkbride, P. (2006). Developing transformational leaders: The full range leadership model in action. *Industrial and Commercial Training*, 38(1), 23-32. <http://dx.doi.org/10.1108/00197850610646016>
- Kotter, J. P., & Heskett, J. I. (1992). *Corporate cultures and performance*. New York, NY: The Free Press.
- Kouzes, J. M., & Posner, B. Z. (1987). *The leadership challenge: How to get extraordinary things done in organizations*. San Francisco, CA: Jossey-Bass.
- Kouzes, J. M., & Posner, B. Z. (2002). *The leadership challenge: How to get extraordinary things done in organizations* (3rd Ed.). San Francisco, CA: Jossey-Bass.
- Kouzes, J. M., & Posner, B. Z. (2008). *The leadership challenge: How to get extraordinary things done in organizations* (4th ed.). San Francisco, CA: Jossey-Bass.
- Kouzes, J. M. & Posner, B. Z. (2014). Others' Research. Retrieved from <http://www.leadershipchallenge.com/Research-section-Others-Research.aspx>.
- Lewis, M. (1995). Leadership practices inventory [213]. In J.C. Conoley & J.C. Impara (Eds.), *The twelfth mental yearbook* (p. 557). Lincoln, NE: Buros Institute of Mental Measurements.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2006). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.
- Maister, D. (2001). *Practice what you preach: What managers must do to create a high achievement culture*. New York: Free Press.

- Norman, S., Luthans, B., & Luthans, K. (2005). The proposed contagion effect of hopeful leaders on the resiliency of employees and organizations. *Journal of Leadership & Organizational Studies*, 12(2), 55-64. <http://dx.doi.org/10.1177/107179190501200205>
- Polit, D., & Hungler, B. (1987). *Nursing research: Principles and methods* (3rd ed.). Lippincott, PA.
- Raelin, J. (2006). Does action learning promote collaborative leadership? *Academy of Management Learning & Education*, 5(2), 152-158. <http://dx.doi.org/10.5465/AMLE.2006.21253780>
- Resilience Alliance. (2004). *Personal Resilience Profile Handbook*. Atlanta, GA: Resilience Alliance.
- Seeger, M. W., Ulmer, R. R., Novak, J. M., & Sellnow, T. (2005). Post-crisis discourse and organizational change, failure, and renewal. *Journal of Organizational Change Management*, 18(1), 78-95. <http://dx.doi.org/10.5465/AMLE.2006.21253780>
- Spector, P. E. (1994). Using self-reported questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavior*, 15(5), 385-392.
- Tucker, B. A., & Russell, R. F. (2004). The influence of the transformational leader. *Journal of Leadership and Organizational Studies*, 10(4), 103-111. <http://dx.doi.org/10.1177/107179190401000408>
- vanHooft, E., van der Flier, J., & Minne, M. (2006). Construct validity of multi-source performance ratings: An examination of the relationship of self-, supervisor-, and peer-ratings with cognitive and personality measures. *International Journal of Selection and Assessment*, 14(1), 67-81. <http://dx.doi.org/10.1111/j.1468-2389.2006.00334.x>
- Werther, Jr., W. B. (2003). Strategic change and leader-follower alignment. *Organizational Dynamics*, 32(1), 32-45. [http://dx.doi.org/10.1016/S0090-2616\(02\)00136-5](http://dx.doi.org/10.1016/S0090-2616(02)00136-5)
- Zagorsek, H., Stough, S.J., & Jaklic, M. (2004). Analysis of the Reliability of the Leadership Practices Inventory in the Item Response Theory Framework. *International Journal of Selection and Assessment*, 14(2), 180-191. <http://dx.doi.org/10.1111/j.1468-2389.2006.00343.x>