

AN EXAMINATION OF THE PREFERENCES FOR LEADERSHIP STYLE OF
FIREFIGHTERS OF DIFFERENT RANK AND GENERATIONAL COHORT

A Dissertation

by

SUMMER RACHELLE FELTON ODOM

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2011

Major Subject: Educational Human Resource Development

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ABSTRACT

An Examination of the Preferences for Leadership Style of Firefighters of Different Rank and Generational Cohort. (May 2011)

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Chair of Advisory Committee: Dr. Larry Dooley

Though management and leadership styles have been investigated somewhat in terms of generations' views on important leader attributes and their own leadership behaviors, little research has been reported on the perspectives of followers and their perceptions of the importance of leadership behaviors. A need exists to quantify for practitioners and other professionals in HRD whether any differences exist among generations with regard to their leadership style preference.

Firefighters have recognized generational differences in their profession and the need to account for these differences in their training. There is also a concern for building and training their future leaders. This study is an examination of firefighters and differences that may exist with regard to leadership style preferences in an effort to explain further generational differences in the workplace to gain a better understanding of this phenomenon.

Respondents were asked to read scenarios of different fire chiefs with characteristics of each leadership style and respond to questions regarding perceptions of each leader and finally choose the chief for whom they would most like to work. An instrument was pilot tested with 80 firefighters in leadership ranks. The instrument was

web-based with a Likert-type scale. In this quantitative, non-experimental, descriptive study, there was a total of 330 firefighters in the final sample. A three-way mixed model ANOVA was conducted to determine whether differences existed in perceptions of a leader's style across scenarios based on a firefighter's generational category and rank. The within-subjects factor was the score for leadership style across scenarios with the levels being the three leadership styles of transformational, laissez-faire, and transactional. The between-subjects factors were generational cohort and rank of firefighter. Frequencies and percentages were reported to determine the leader for whom most firefighters would most like to work.

When firefighters were presented with three leadership style scenarios, there was a significant difference ($p < .05$) in the leadership style score for each scenario. There were no significant differences between generation or rank of firefighter with regard to their leadership style score for each scenario. Transformational leadership was the most preferred leadership style of all firefighters, regardless of rank or generational cohort.

DEDICATION

This dissertation is dedicated to everyone who believed in me.

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CHAPTER I

INTRODUCTION

Background and Setting

Today, people are living longer and are better educated than those of previous years which is affecting the age diversity of employees in the workforce (Judy & D'Amico, 1997). Though it is predicted the workplace will be predominantly ages 47-64 until the year 2015 (Zemke, Raines, & Filipczak, 2000), the workforce also contains people of other ages. The workforce today in the U.S. is comprised of four different generations. These are the Veterans or Silents (born 1925 -1940) who are 1.8 percent of the workforce, Baby Boomers (born 1941-1960), who comprise 27.9 percent of the workforce, Generation X (born 1961-1980) who are 45.9 percent of the workforce, and the Millennials (born 1981-2000) who are 24.3 percent of the workforce, but growing at the fastest pace (U.S. Bureau of Labor Statistics, 2008; Smola & Sutton, 2002).

In an annotated bibliography by Deal, Peterson, and Gailor-Loflin (2001), it is pointed out that in the business and popular press literature, there is much interest in the impact generational differences are having on employee interactions at work. There are numerous articles and books (Deal et al., 2001) that focus on the clash among generations because of their perceived differences in values, cognitions, and behaviors. A belief also exists that a lack of understanding of these differences leads to a profound negative effect on communication and working relationships. These differences may

This dissertation follows the style of *Human Resource Development Quarterly*.

also keep progress from moving forward in an organization (Sessa, Kabacoff, Deal & Brown, 2007). Though many characteristics have been shown to separate and distinguish generations including emotions, attitudes, preferences, values, religion, gender roles, and lifestyle (Strauss & Howe, 1997; Schewe & Evans, 2000; Zemke et al., 2000; Barnes, 2003; Gursoy, Maier, Chi, 2008); little empirical evidence exists that validates these differences and how they are impacting the workplace (Deal et al., 2001; Sessa et al., 2007).

The Society for Human Resource Management believes generational issues are affecting the workplace as evidenced in the fact that they have devoted an entire toolkit to “Generations.” The Federal Executive Institute, which is part of the Office for Personnel Management’s Center for Leadership Capacity Services, has even created a course specific to multigenerational leadership. The course is titled “From Vets to Nets” and is provided to senior-level civil servants in their leadership development training (Salopek, 2006). Another example of how generational issues are affecting the workplace involves the United Parcel Service (UPS). UPS experienced such a serious decline in performance indicators among its Millennial employees that they invested \$34 million into a training center for new employees. After a thorough literature review and focus groups with UPS employees, UPS designed their training program to meet the needs of their future employees by combining hands-on and technology-enhanced training (Hira, 2007).

There have been different names given to the multiple generations and age ranges vary slightly throughout the literature (see Smola & Sutton, 2002). For purposes

of this study, these generational titles and age ranges: (a) Veteran Generation (born 1925-1940), (b) Boom Generation (born 1941-1960), (c) Generation X (born 1961-1980), and (d) Millennials (born 1981-2000) were used.

Leadership issues are also affecting organizations today. This is evidenced by researchers such as Kouzes and Posner (1995), Bass (2008), Kotter (1996), and Howell and Costley (2001) who have found the style of leadership has a direct impact on the performance and production of the employee. Transformational leadership has been the most researched leadership style since its infancy in the 1990's. It has been linked to many positive outcomes such as higher productivity, less turnover, and less stress of employees. Most research has been conducted based on the leader's characteristics and not what the follower prefers. Shamir, Pillai, Bligh, and Uhl-Bien (2007) called for the need to look at followers as a major contributor to leadership effectiveness. Most leadership research positions the follower as an output of the leadership equation, but more research is needed into follower characteristics and the way this impacts leadership effectiveness.

According to Conger and Benjamin (1999), leadership inadequacies of employees are a concern of many organizations and they are interested in educating and training managers to help them develop the skills, perspectives, and competencies needed for leadership. For trainings to positively impact organizations, needs assessments should be completed prior to leadership training interventions. Best practices in leadership development programs indicate that needs assessments are key. If needs assessments are not conducted, training programs may incorporate leadership

dimensions that are not appropriate for the organization (Collins & Holton, 2004). There is a need to look at the concept of generational differences in regards to leadership in order to evaluate whether or not this concept should be incorporated into leadership development programs in organizations.

Firefighters are concerned with differences among generations in their workforce and with the need to train their firefighters who desire to enter into leadership roles. According to recent publications on firefighters, firefighters are concerned with the different generations in their profession and how they build their future leaders (Wilmoth, 2008; Alter, 2007; Rielage, 2010). There is concern with chiefs being promoted simply due to longevity with little to no regard for standard qualifications in education, training, or experience (Rielage, 2010). The Houston Firefighters organization is in a state of change in regard to leadership training. Currently, there is no real development of leaders, but classes are being introduced to train leaders in the firefighter organization to help them be effective in their leadership roles. According to one of the leaders in the organization, there is a beginning shift to more education of leaders and an interest in making the leaders in the fire department more effective (J. Caynon, personal communication, April 2009).

Assisting chief officers in getting three generations to work as a team to meet the core mission of a fire-rescue department is also a concern for firefighters (Alter, 2007). According to Alter (2007), “officers must understand their work force and support their training officers with staffing, facilities and other resources and facilities to do their job.” “There are three very distinct generations of firefighters who work together yet approach

everything differently” (p. 1). Because of the different generations in the fire service organization, the training officer has to ensure his/her teaching techniques are appropriate for today’s firefighter while still teaching them how to do their jobs safely and efficiently.

Because there are different generations in the workforce today and differences have been found among the generations, it is important to study the perspective of followers from different generations of firefighters and their preference for leadership style. Even though charismatic leaders have been shown to produce more effective employees (Avolio, 1999; Bass, 1985, Conger & Kanungo, 1998); if followers are not open to this style of leader, the leader may not be effective. Management and leadership styles of generations have been investigated somewhat in terms of generations’ views on important leader attributes and their own leadership behaviors (Sessa et al., 2007) However, little research has been reported on the perspective of followers and their perception of the importance of leadership behaviors. In this study, the aim was to expand the current literature on generations in the workplace. An examination of the Houston firefighters and differences that may exist in regard to leadership preferences was investigated in an effort to further explain generational differences in the workplace to gain a better understanding of this phenomenon.

The discipline of human resource development (HRD) should be concerned with generational diversity in regard to the preference for leadership styles among the different generations and the impact on employee performance. HRD is concerned with helping individuals and organizations improve their performance through learning

interventions (Swanson & Holton, 2001; Ruona, 2000; Weinberger, 1998). One mission of HRD, as defined by Gilley, Egglund, and Gilley (2002), is “organizational development that results in both optimal utilization of human potential and improved human performance” (p. 13). Knowing the different generations’ preferred leadership styles and the importance of leadership behaviors for positive follower outcomes can assist HRD practitioners in designing training programs for supervisors and assist these supervisors in understanding the followers they are leading which ultimately improves human performance.

The way leaders in different generations lead, leader values, and characteristics that define good leaders have been shown to differ among the generations (Sessa et al., 2007). Though management and leadership styles have been investigated somewhat in terms of generations’ views on important leader attributes and their own leadership behaviors (Sessa et al., 2007), little research has been reported on the perspective of followers and their perception of the importance of leadership behaviors. Managing a workforce that is diverse in terms of values, attitudes, goals, reward systems, and communication issues is an organizational challenge for leaders today. According to Arsenault (2004), “generational differences are a legitimate diversity issue that organizations need to recognize and understand and an issue that needs to be addressed in developing current and future leaders” (p. 124). According to the Center for Creative Leadership’s *The CCL Guide to Leadership Action: How Managers and Organizations can Improve the Practice of Leadership*, “the ranks of leadership are changing. They are getting younger, more varied in terms of gender, race, and ethnicity; and harder to get a

fix on with respect to attitudes about what organizations and leaders should do” (Wilcox & Rush, 2004, p. 205). Differences that exist among the generations in regard to leadership include retention of employees, work values, perception of what determines a good leader, and motivation issues (Aresenault, 2004; Zemke, et al., 1999).

Leadership behaviors have been linked to having a direct impact on commitment of followers, their satisfaction with their supervisor, overall job satisfaction, and role clarity (Howell & Costley, 2001). Marcus Buckingham and Curt Coffman, two Gallup researchers who wrote a book entitled *First, Break all the Rules*, contend that employees do not leave companies; they leave managers. If organizations want employees to stay with their company, they need to be able to ensure a fit in the employees preferred management/leadership style and the actual style of the leader or manager. In the case of firefighters, the appropriate leadership style could be a matter of saving one’s life. The cost of losing an employee is high; it is estimated to cost a company 50 to 300 percent of that person’s salary. This, along with the fact that there are 70 million baby boomers in the workforce and only 55 million Generation X employees to replace them, signify the need to retain older workers and attract younger workers that want to stay at the company (Salopek, 2006).

Because generations have been found to have differences in regard to emotions, attitudes, preferences, values, religion, gender roles, and lifestyle (Strauss & Howe, 1997; Schewe & Evans, 2000; Zemke et al., 2000; Barnes, 2003; Gursoy, Maier & Chi, 2008), their preferred leadership style and the perceived effect on their performance could also be different. Furthermore, Collins, Hair, and Rocco (2009) found that older

workers rate their younger supervisors' leadership behavior lower than younger workers with older supervisors. Investigating what each generation prefers in their leader's style, regardless of age, may help training professionals to stress the behaviors of what each generation prefers in their leader. Understanding the different generations' perspective on the leadership styles of their supervisor and which styles they perceive to lead to their high performance and satisfaction may strengthen the relationship of the leader and follower and make organizations more productive and competitive in the global economy.

Statement of Problem

The labor force today consists of people across multiple generations (U.S. Bureau of Labor Statistics, 2008). These multiple generations have differing characteristics which make it a challenge for organizations to lead, communicate, and train (Lancaster & Stillman, 2002). Identifying differences that may exist among the various generations could help HRD practitioners in designing training interventions for leaders and implementing programs for the different generations. This is important because researchers have determined there are differences between the generations, but there has not been reported research on how it truly impacts organizations (Sessa et al., 2007). According to Ware, Craft, and Kerschenbaum (2007, p. 9), "only by accepting and preparing for these generational needs and preferences can organizations hope to retain both their institutional knowledge and human capital, attract and grow new staff, and ultimately maintain or exceed their success at the organizational level."

The concept of generations was first conceptualized by Karl Mannheim in 1928. Mannheim did not specifically categorize any generation, but simply referred to the fact of generation being a social phenomenon and not having much to do with biological differences. Eyerman and Turner (1998) have defined a generation as: “[...people] passing through time who come to share a common habitus, hexis, and culture, a function of which is to provide them with a collective memory that serves to integrate the generation over a finite period of time” (p. 93). Strauss and Howe (1991) also define a generation as “a cohort-group whose length approximates the span of a phase of life and whose boundaries are fixed by peer personality” (p. 60).

Since the studies by Mannheim (1928), Eyerman and Turner (1998), and Strauss and Howe (1991), the concept of generations has been popularized and other characteristics have been shown to separate and distinguish generations including emotions, attitudes, preferences, values, religion, gender roles, and lifestyle (Strauss & Howe, 1997; Schewe & Evans, 2000; Zemke et al., 2000; Barnes, 2003). Though generational differences are often addressed in the popular press written by practitioners in organizations, there is little empirical research to substantiate claims made about these differences. Moreover, trainers and practitioners have made anecdotal judgments about differences that exist among generations. Research on this issue could substantiate claims about generational differences to practitioners and the leaders of organizations. A need exists to quantify for practitioners, and other professionals in HRD, if any differences exist among generations in regards to their leadership style preference. This

information could help determine best HRD practices to be used in the fire service for training future leaders.

Through this study, an assessment of Houston firefighters in regard to their preference for leadership style was conducted. This study can benefit the organization by providing them with some information about their firefighters and differences that may exist in regards to their preference for leadership style. This is a good start to helping the organization begin its process for training and educating leaders.

Firefighters have recognized generational differences in their profession and the need to account for these differences in their training (Alter, 2007). There is also a concern for building and training their future leaders (Wilmoth, 2008; Rielage, 2010).

Purpose of the Study and Research Questions

In this study, differences in preference for leadership style among generational cohorts and ranks of firefighters in the Houston Fire Department were examined. Firefighters' preference for leadership style was measured through the use of a web-based instrument, *The Leadership Preference Instrument*, adapted by the researcher from a study completed in 2001 by Ehrhart and Klein. This non-experimental descriptive research study should increase understanding and add to the knowledge base of generational characteristics and leadership preferences of firefighters. The following research questions will be addressed in this study:

Question 1: Are there significant differences in leadership style score between levels of generational cohort of firefighters when presented with a sequence of leadership style scenarios?

- Question 2: Are there significant differences in leadership style score between rank of firefighters when presented with a sequence of leadership style scenarios?
- Question 3: Is there significant interaction on leadership style score between generational cohort and rank of firefighters when presented with a sequence of leadership style scenarios?
- Question 4: Are there significant differences in leadership style score between firefighters when presented with a sequence of leadership style scenarios?
- Question 5: Which leadership style is most preferred by firefighters who differ by rank and generational cohort?

Definitions

1. Generation- [...people passing through time who come to share a common habitus, hexis, and culture, a function of which is to provide them with a collective memory that serves to integrate the generation over a finite period of time (Eyerman & Turner, 1998, p. 93).
2. Veterans- generation that was born between 1925 and 1940 and comprise about 1.8 percent of the total U.S. workforce (Smola & Sutton, 2002; U.S. Bureau of Labor Statistics, 2008).
3. Baby Boomers-generation that was born between 1941 and 1960 and comprise about 27.9 percent of the total U.S. workforce (Smola & Sutton, 2002; U.S. Bureau of Labor Statistics, 2008).

4. Generation X-generation that was born between 1961 and 1980 and comprise 45.9 percent of the total U.S. workforce (Smola & Sutton, 2002; U.S. Bureau of Labor Statistics, 2008).
5. Millennials-generation born between 1981 and 2000 and comprise 24.3 percent of the total U.S. workforce (Smola & Sutton, 2002; U.S. Bureau of Labor Statistics, 2008).
6. Leadership- “a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2004, p. 3).
7. Leadership style-behaviors used by the leader including what they do and how they act in various contexts (Northouse, 2004).
8. Transformational leadership- style of leadership where leaders use individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence to transform an organization or situation into something different (Bass, 1985; Northouse, 2004; Bass & Riggio, 2006).
9. Transactional leadership- style of leadership where leaders emphasize a transaction or exchange among followers. The leader specifies the conditions and rewards associated with fulfilling requirements for the task at hand (Bass & Riggio, 2006).
10. Laissez-faire leadership- style of leadership where leaders are very hands off when it comes to making decisions, they avoid leadership and use no authority; followers are basically left to do things on their own (Bass & Riggio, 2006).

Assumptions

1. The firefighters who responded objectively answered the questions presented to them in regard to this study.
2. The firefighters themselves filled out the questionnaire.
3. The researcher conducted the study and made every effort to present the findings without bias.

Limitations

1. Internal and external influences cannot totally be controlled.
2. The firefighter may not be the person filling out the questionnaire as the questionnaire will be accessed through the firefighter's email address.
3. Data will be collected in one fire department and conclusions and implications will be limited to fire departments with similar characteristics.

Significance of the Study

The purpose of this study was to investigate firefighters' differences in preference for leadership style among generations and rank and examine perceptions of a leader's style from each generation and rank. Because the leader in an organization can have such an impact on their followers' performance and whether or not they will stay in the organization, it is important to study followers' preference for their leader's behaviors (Howell & Costley, 2001; Buckingham & Coffman, 1999). This study should provide insights into best practices for companies to use with different generations that might affect leadership effectiveness. Information from this study can be used by HRD practitioners in developing leadership training and development interventions to enhance

the effectiveness of leaders in their organization. This study is needed due to the limited empirical research on generations. Due to the amount of popular press articles and the plethora of anecdotal information about generations, this study is needed to investigate these claims. It will benefit the field of HRD in taking a lead in research about this phenomenon. This study addresses one of the missions of HRD which is organizational development resulting in utilizing human potential and improved human performance (Gilley, et al., 2002). Because individuals in HRD are concerned about improving human performance and unleashing human potential (Gilley, et al., 2002; Swanson & Holton, 2001), learning more about characteristics of people who work in organizations, benefits the field of HRD. Increasing HRD's ability to address generational issues in regards to leadership in the workplace is critical to improving an organization's performance.

Additionally, this study has significance for the firefighter's organization. There is an expressed concern with differences among generations of firefighters as well as the need to train future leaders (Alter, 2007; Wilmoth, 2008; Rielage, 2010). This study addressed these two specific areas of concern for firefighters and could provide the organization with tools to assist them in educating their future leaders. Given that Houston firefighters have identified and recognized the need to more purposely train and educate their future chiefs, this study comes at an optimum time in assisting the organization in this endeavor.

CHAPTER II

REVIEW OF THE LITERATURE

Chapter II contains a discussion of literature related to the study of generations, characteristics and research about generational differences in the workplace, a review of generational and leadership issues in regard to firefighters, and the theory of transformational leadership. This is followed by a summary of the literature reviewed and the need for the specific phenomenon being examined in this study.

Review of the Literature on Generations

Eyerman and Turner (1998) have defined a generation as: “[...people] passing through time who come to share a common habitus, hexis, and culture, a function of which is to provide them with a collective memory that serves to integrate the generation over a finite period of time” (p. 93). Strauss and Howe (1991) also define a generation as “a cohort-group whose length approximates the span of a phase of life and whose boundaries are fixed by peer personality (p. 60). The concept of generations was first conceptualized by Karl Mannheim in 1928. Mannheim did not specifically categorize any generation, but simply referred to the fact of generation being a social phenomena and not having much to do with biological differences. Schuman and Scott (1989) looked at a random sample of Americans and determined that recollection of national events and changes and reasons for remembering these events were attributable to generational effects. In their study (Schuman & Scott, 1989) education, gender, and race were controlled which enabled them to conclude that age was the strongest predictor for remembering national events.

Strauss and Howe (1991) developed a concept of generations which was based on the premise that people react differently to major events in history according to their age at the time of the event. Their concept is based on cohort groups, which consists of all people born within an approximate twenty-two year span. Strauss and Howe defined four life phases which are based on central social roles: Elderhood (age 66-87), central role-stewardship; Midlife (age 44-65), central role-leadership; Rising Adulthood (age 22-43), central role-activity; and Youth (age 0-21), central role-dependence. These cohorts age together over time and a recurring cycle of four cohorts is called a generational constellation. A constellation era lasts approximately ninety years and each of the four cohorts display distinct types of “peer personalities” that occur in the same order for each constellation. The recurring cohort cycle consists of Idealist, Reactive, Civic, and Adaptive. The cohort groups experience what are called “social moments.” These “social moments” occur approximately every forty to forty-five years and alternate between a crisis which focuses on reordering the outer world or awakenings that focus on changing the inner world of private behavior and values. The social moment is separated by two phases where each cohort alternates between being a dominant cohort or recessive cohort.

Starting with the Idealist cohort, this group experiences an awakening and is a dominant generation. The Reactive cohort grows up being protected and criticized during an event called an awakening, but this cohort is part of the recessive phase of the lifecycle. The Civic cohort experiences a crisis and is part of the dominant phase of the

lifecycle. And, finally the Adaptive cohort also experiences a crisis, but at a different part of their lifecycle and is part of the recessive phase.

Because people experience crisis or awakenings at different stages of their life, they have different personalities and view and act in the world differently. Their reactions to and perceptions of leaders who were a part of an awakening or crisis will be a result of their generational cohort (Strauss & Howe, 1991).

The concept of generations has been popularized and other characteristics have been shown to separate and distinguish generations including emotions, attitudes, preferences, values, religion, gender roles, and lifestyle (Strauss & Howe, 1997; Schewe & Evans, 2000; Zemke et al., 2000; Howe & Strauss, 2000).

Arsenault (2004) contended that generational differences do exist and suggested that “each generation has created their own culture, traditions, and mentors through their attitudes, preferences, and dispositions” (p. 135). A generation is often defined by their attitudes, experiences, and common tastes (Zemke et al., 2000). Defining moments of generations are events that occur during a person’s life that really capture the emotion and attention of millions of individuals. A defining moment may have been the Great Depression, the Korean War, John F. Kennedy’s assassination, the Civil Rights movement, the Challenger explosion, 9/11, or even the Clinton scandals (Zemke et al., 2000). Music that is popular during a certain generation and the heroes that are exploited in the media can also be defining moments of that generation. The time at which these events occur in people’s lives may help shape their attitudes, values, tastes, and even their belief system. The economic, social, demographic, and sociological

circumstances that are present during an individual's development will manifest differently in people depending on their stage of life. The events that shape a generation and therefore provide commonality among individuals in a generational cohort have been found to not differ in regards to race, ethnicity, or economic characteristics of individuals (Zemke et al., 2000; Schuman & Scott, 1989). A review of life events and implications of these events on generations follows in the next section.

Veteran Generation

Though the number of Veterans in the workforce today is slowly declining due to age of members in this generation, there are still some in the workplace today who affect the dynamics in the workplace and thus has training implications. The Veterans, also coined the Silent generation, consists of those individuals born between 1925 and 1940. Though this number is changing every year due to the retirement of this age group, the U.S. Bureau of Labor Statistics reports this generation accounts for 1.8 percent of the workforce (2008). This generation is credited with landing a man on the moon and eliminating polio, tetanus, tuberculosis, and whooping cough, yet they also experienced the Great Depression where 9 million Americans actually "lost their life savings" (Zemke et al., 2000, p. 31). They grew up in hard times where many workers lost their jobs due to the Great Depression and one report indicates that one out of every four workers was unemployed. This generation also experienced the start of World War II with the Japanese bombing of Pearl Harbor. The Veterans lost confidence in the government and in their banks and were likely to take their money out of banks and keep cash on hand for purchases. They witnessed the worst drought in history putting a huge

damper on the farming industry and stopping a way of life for most people. Core values that the Veterans have been said to possess are “dedication/sacrifice, hard work, conformity, law and order, respect for authority, patience, delayed reward, duty before pleasure, adherence to rules, and honor (Zemke et al., 2000, p. 30).

Veterans are typically known for being loyal, hard working employees who are stable, thorough, and very detail oriented. On the other hand, they tend to not like conflict, find it hard to handle change, and are not comfortable with pointing out flaws with the current system. Because the Veteran generation experienced hard times and little extravagant lifestyles, they value consistency and loyalty to an organization. Messages that may motivate the Veteran generation are: “Your experience is respected here” and “Your perseverance is valued and will be rewarded (Zemke et al., 2000, p. 49).” One thing to note about this cohort is that it is likely that they will not have great computer skills because they did not learn about the computer in school and work and only one in ten actually owns a computer at home. In motivating this group of workers, write them personal notes and give traditional awards such as plaques and ribbons for them to put on their wall (Zemke et al., 2000).

Boomer Generation

The Boom Generation, often called the “Baby Boomers,” were born between 1941 and 1960 (Zemke, et al., 2000). Some defining moments of this generation include the passing of the Civil Rights Act, the Vietnam War, the introduction of birth control pills, John F. Kennedy was elected and assassinated, and Martin Luther King led a march on Washington, D.C. and was also assassinated during the era of the Boomer

generation. The reason this generation is often called the “Baby Boomers” is because before 1946, the American population was actually declining in size. This was in part because of the depression and low birth rates due to disease of infants and low survival during birth. The parents of these “boomers” had fought hard in a war so they could have these babies. Having children was no longer seen as a necessity, but a pleasure and so many boomers were brought up in a home being loved, cherished, and adored by their parents. Values often thought to characterize this generation include personal growth, involvement, health and wellness, optimism, and a high team orientation (Zemke et al., 2000).

The Vietnam War was perhaps the greatest defining moment for the Boomers. The war divided families and caused many young Americans during this time to actually question the leadership of the country. This was different from the Veteran generation who respected authority and was very loyal to their leaders. The veterans who fought in Vietnam returned home only to find a country that did not support them and would actually ridicule them as they arrived back in the United States (Zemke et al., 2000).

This generation makes up approximately one-third of all Americans and 27.9 percent of all workers (U.S. Bureau of Labor Statistics, 2008). They bring to the workplace a very driven personality, they are good at relationships, they want to please others, and they are service-oriented individuals. Like the Veteran generation, Boomers are still uncomfortable with conflict, but unlike the Veterans, the Boomers are very self-centered and will not usually go against their peers (Zemke et al., 2000). According to Zemke, et al. (2000), the Boomer generation will dominate the workplace until 2015. It

is important to get to know the Boomers on a personal level and give them opportunities for personal development where they can develop their skills (Zemke, et al., 2000).

Generation X

Generation X now comprises 45.9% of the total workforce in the U.S. making it the biggest generational cohort in the workforce (U.S. Bureau of Labor Statistics, 2008). Individuals from Generation X were born between 1961 and 1980 (Zemke et al., 2000). This generation has often been overlooked as not having many signifying events in their lifetime. They are even sometimes called “Slackers,” “Twentysomethings,” and “Baby Busters” in the popular media. Zemke et al. (2000) pointed out that these labels are unfair to the members of this generation. Some defining moments of this generation include the Nixon Watergate scandal, John Lennon was shot and killed, the Challenger exploded, the Berlin wall fell, and Operation Desert Storm occurred. This generation witnessed America fail “militarily, politically, diplomatically, and economically” (Zemke et al., 2000, p. 96). The people who grew up in this generation had to learn how to survive and did not know if things would be okay for them the rest of their lives. There were massive corporate layoffs and this generation knew it had to work hard in order to have a successful life.

Some core values of this generation include the ability to think globally, a reliance on themselves to get things done, diversity, pragmatism, and balance. Another factor of this generation is that one-half of their parents were divorced. On the flip side, this generation was really the first to experience both parents working and this created the concept of latchkey kids. This likely prompted their value for a reliance on self to be

responsible for success. According to the Gallup Organization, for Generation X, training and development was found to be a major factor in determining employment for a company, in fact 80 percent said this was a significant factor (Zemke et al., 2000). Zemke et al. (2000) stated that to motivate individuals from Generation X, they need freedom in their work, constructive feedback on their performance, and the ability to have fun on the job. In regard to leadership, Zemke et al. (2000) suggested to use the phrase “hands-off supervision” multiple times in an interview to stress that Generation X would be managing many of their own projects (p. 119).

Millennial Generation

The Nexter or “Millennial” generation was born between 1981 and 2000 (Zemke, et al., 2000)). This generation seems to be the one that will be studied most carefully of all the cohorts. The parents of this generation are mostly from the Boomer generation, which means they patiently waited to have children until the right time in their lives and they can now devote all their time making sure their children have everything they need in their lives. This would lead to the individual in the Nexter generation feeling confident about themselves in many aspects of their lives including the job market and in college. These kids have always been busy; their parents kept them involved in many activities. This could be due to the fact that the Boomer parents saw many opportunities for their children, but also because this kept kids off the dangerous streets parents worried about. Some defining moments for this generation include the Oklahoma City bombing, the Columbine High School shooting, 9/11, rapid pace of technology innovations, and the Clinton/Monica Lewinsky scandal (Zemke et al., 2000).

Core values of the Nexter generation include achievement, optimism, confidence, morality, street smarts, and diversity. Many believe the Nexters are most like the Veteran generation in that they trust those in leadership positions, are optimistic about their future, and have a spirit of overcoming adversity. Since this generation is still young in the workforce, many of their work characteristics have not been completely observed. Zemke et al. (2000) asserted that they will be the best-educated of all the generations, and it appears that they will be hardworking and dedicated to their job roles. However, they may also have a need for supervision and structure and will likely need experience in working with difficult people (Zemke et al., 2000).

In the workforce, training and education seem to still be very important to the Nexters so training should be available to them in the workplace. Nexters also appear to do well with mentors in a work environment so mentoring may be a good idea for some training in a work environment (Zemke et al., 2000).

Generational Differences in the Workplace

Though few empirical studies have been conducted concerning generational differences in the workplace, there are some that have surfaced. Smola and Sutton (2002) studied differences in work values among the different generations. They specifically looked at the comparison of a survey in 1999 on work values to a similar study performed in 1974 to see if differences are due to values changing as workers age or if differences are due to a generational cohort effect. This quantitative study (Smola & Sutton, 2002) examining the research done in 1974 included data from 53 U.S. companies, mostly in manufacturing, but also 17 service organizations. The survey

given to participants in 1974 was then reviewed and some items were either changed or deleted to reflect current issues and addressed gender-specific terms. This final survey was 176 items. The sample for this study (Smola & Sutton, 2002) was distance learners enrolled in MBA or Executive MBA programs at major universities in the Southeastern United States. Response rate was only 8 percent with the final sample size being 335.

Millennials were not surveyed in the study by Smola and Sutton (2002) due to the lack of this generation in the workforce at that time. Smola and Sutton (2002) found that the values of Generation X are significantly different than the Boomers. Generation X employees were less loyal to the company and wanted to be promoted more quickly and were more likely to quit work if they won a large amount of money. Generation X also had a more idealistic attitude toward work than other generations. They saw hard work as an indication of self worth and felt they should work hard even in the absence of a supervisor. The study (Smola & Sutton, 2002) also found that work values were more influenced by generational experiences than by a maturational effect. Smola and Sutton's (2002) study was performed on an American corporation. American corporations have been found to fall behind in adjusting and accommodating to changing values. European and Scandinavian countries had already instituted high values on family time and helping employees balance their work and personal lives (Smola & Sutton, 2002). This could contribute to some of the differences in work values across generations as well.

Smola and Sutton's (2002) study is very significant because the researchers took anecdotal information on generational differences and empirically showed that

differences exist. More studies are needed that look at differences among generations. This study (Smola & Sutton, 2002) suggests that other differences may exist among generations and lends support to further studying this phenomenon. Because generations differ in what they value in their work, differences in what generations prefer in their leader may also exist.

Though the literature on generations is primarily limited to populations in the United States, Lyons, Duxbury, and Higgins (2005) examined generational differences in work-related values of Canadian knowledge workers. The population for Lyons et al. (2005) study was Canadian knowledge workers employed full-time in private, public, and not-for-profit sector organizations with 500 employees or more. Lyons et al. (2005) used the definition of Drucker in 1999 for knowledge work as “work that is performed by highly skilled workers, which is complex, cyclical in nature and involves processing and using information to make decisions” (p. 65). Because many members of the Millennial generation had not yet entered the workforce, a group of university students was selected to represent knowledge workers of the future. To obtain this sample, undergraduate students enrolled in a second-year human resources management course completed the survey. The response rate for the student sample was 86 percent (n=123) and for the knowledge worker sample was 33 percent (n=1071).

To measure work values, a work value survey developed by Lyons in 2003 was given to participants. Through a factor analysis of items, there were 22 items identified as loading on five factors including intrinsic work values, extrinsic work values, prestige work values, altruism work values, and social work values. Reliability coefficients for

each of the work value factors consisted of intrinsic being .84, extrinsic .76, social .78, altruistic .62, and prestige .72. In Lyons et al. (2005) study, there was no indication of variance explained or factor loadings.

Lyons et al. (2005) found significant differences between generational work values. Millennials placed their highest value on social work values, which is work that allows for social interaction with people. The most important values to Generation X were intrinsic work values, meaning work that provides mental stimulation and is psychologically rewarding. For the Boomers and Silents, there was little difference observed in their work values. These generations did; however place greater values on altruistic work values, meaning work that benefits people and society, than the younger generations. An interesting conclusion the researchers drew from their study was in relation to motivation. All generations ranked extrinsic work values (salary, benefits, job security) as second. Lyons et al. (2005) discussed the relationship of their study to Herzberg's theory of motivation that without these extrinsic work factors, employees will not be motivated. Lyons et al. (2005) further concluded that organizations should make sure they are taking care of these extrinsic values at a minimum or they "risk demotivating all four generations of employees" (p. 69). A key limitation to the study by Lyons, et al. (2005) was the fact that Millennials were surveyed while they were still in college, because of the small number in the workforce at the time of this study (Lyons, et al., 2005).

Though the studies by Smola and Sutton (2002) and Lyons et al. (2005) differed in how they studied work values, both studies had reported differences among

generations in regards to their work values. This signifies a need to further examine other differences that may exist among generations. This also lends credibility to the fact that generations are not simply a phenomenon talked about in the popular press, but a subject that needs to be empirically validated further through research.

Generational Differences with Specific Regard to Leadership

Leadership issues have been linked to sources of conflict in the workplace (Kennedy, 1998; Watkins, 1999). Sources of conflict in regard to leadership include retention of employees, work values and style preferences, perception of what determines a good leader, and motivation issues (Arsenault, 2004; Zemke, et al., 1999). Leadership behaviors have been linked to having a direct impact on commitment of followers, their satisfaction with their supervisor, overall job satisfaction, and role clarity (Howell & Costley, 2001).

Arsenault (2004) concluded in his research that generational differences are a true diversity issue and one that should be addressed in developing current and future leaders. In his study, Arsenault (2004) addressed the following research questions: (a) do generations form a different persona by recalling different national or world events, cultural events and leaders? and (b) do generations view admired leadership characteristics differently? To answer the first question, a survey with open-ended questions was given to respondents to gain a more accurate and wholistic picture of attitudes, emotions, preferences, and practices of generations. To address the second question, an instrument was developed based on Kouzes and Posner's Checklist of Admired Leaders where respondents were asked to rank-order characteristics they most

admire in leaders. The population for Arsenault's study was gathered through the use of students in undergraduate business classes in a mid-sized state university in the Northeast. Total sample for study by Arsenault (2004) was 790 respondents with 190 Veterans, 203 Boomers, 243 Generation Xers, and 154 Nexters/Millennials.

Results from the study by Arsenault indicate there are very distinctive memories for each generational cohort. Each of the cohorts has unique collective responses to recalling national or world events, cultural events, and leaders. He also found that in respondents who were within three years of the cut-off date for a generation, there was a cusp effect. There were approximately 23 percent of respondents who responded to three of the five questions stated by their appropriate generation. People on the cusp of a generational cohort may sometimes possess characteristics resembling their actual generation or they may possess characteristics similar to the generations who fall before or after them in time. The results from Arsenault's study supports the study by Schuman and Scott (1989) who found that each generation had different attitudes, preferences and dispositions.

Results from the second part of Arsenault's study addressing whether generations view admired leadership characteristics differently were analyzed using a MANOVA to determine the effect of generation on rankings of admired leadership characteristics. There was a multivariate main effect for generation (Wilk's Lambda of .045; $p < .000$). Based on the univariate F-tests performed, Arsenault concluded eight of the ten characteristics were significant meaning that generations had significant differences in how they view admired leaders. Due to unequal sample sizes, a Tukey HSD test was

used to determine where the mean scores for each ranking were significantly different ($p < .05$). Significant differences were found between Veterans and Baby Boomers and the Gen Xers and Nexters in the characteristics of honesty, caring, determination, and ambition.

The mean ranking scores for honesty for Veterans and Baby Boomers were significantly different than for GenXers and Nexters/Millennials ($p < .05$). The characteristic of caring was also significantly different between the mean rankings for Veterans and Baby Boomers and the GenXers and Nexters/Millennials ($p < .05$). For the characteristic of determination, the mean scores for GenXers and Nexters/Millennials were significantly different than the Veterans and Baby Boomers ($p < .05$). And, for the characteristic of ambitious, the mean scores for GenXers and Nexters/Millennials were also significantly different than the Veterans and Baby Boomers ($p < .05$). The characteristics of competence and loyalty were ranked as either second, third, or fourth in importance by each generation.

Arsenault's study supports the concept of generational differences in regards to leadership preferences. He concluded that leadership development programs need to recognize generational differences and be sensitive to this issue. Arsenault posited that most traditional leadership development programs focus on leadership styles from the Veteran and Baby Boomer generation, but more emphasis should be placed on other styles that may relate more to the Generation Xers and Millennial generations. Arsenault's study also supports the need to investigate further the leadership styles preferred by the different generations. What generations admire about leaders is an

important step in examining this phenomenon and can provide insight into preferred leadership styles, but more research is needed to get at a more conceptual view of generations and what they prefer in their leader's style.

Sessa et al. (2007) examined differences occurring in managers from the generational cohorts specifically in regards to attributes they value in leaders and how they actually behave as leaders. There were two sample groups used in their study to test their hypotheses. For the first study in which the hypothesis concerning generational differences in today's U.S. managers and professionals was tested in terms of attributes they value in leaders, a sample was drawn from a database from the Center for Creative Leadership. There were 4,810 individuals in this database who had filled out the Leadership Descriptives Sort. Using a subset of this database, participants were limited to those who were born and were working in the United States. The final sample size was 447 with 34 Veterans, 95 Early Baby Boomers, 114 Late Baby Boomers, 138 Early Gen-Xers, 15 Late Gen-Xers, and 51 Millennials.

Starting with the Silent generation, they value the following characteristics in leaders: dedication, big-picture orientation, and shares in decision-making through listening, teaching, delegation, and honesty. Sessa et al. (2007) concluded that delegating was the attribute that distinguished this generational cohort from others.

Due to sample size, Sessa et al. (2007) divided up the Boomers into Early Boomers and Late Boomers for purposes of their study. They found that Early Boomers perceived leaders who are persuasive and diplomatic along with having a big-picture orientation, trustworthy, and share in the decision-making make the best leaders. Late

Boomers seemed to value leaders who have a global leadership image, are dedicated, trustworthy, have a big-picture orientation, clear focus, listen, and want feedback.

Gen-Xers valued leaders who are optimistic and persuasive and have experience. This generation also valued trustworthiness along with having a big-picture orientation and a clear focus. Unlike the Silents and Boomers, the Gen-Xers preferred perceptive leaders who recognize their talents and can give them feedback over sharing leadership. Gen-Xers focused more on leadership characteristics of the short term including being focused and “numerically astute.” Listening was also seen as a very important characteristic of good leaders in the Gen-Xer’s view (Sessa et al. (2007).

Millennials valued leaders who were dedicated and creative and cared about them personally. What differentiated Millennials from the other cohorts was that the big-picture orientation was not in their top rankings; clear focus was. Trustworthiness was not placed as high as other cohorts and they had higher values on dedication and optimism.

Sessa et al. (2007) also examined how today’s managers differed in their leadership behaviors as perceived by themselves and others. For this part of the study, participants consisted of managers in a database of the Management Research Group, an international human resource development firm. Participants completed a 360-degree evaluation, which is a “descriptive, behaviorally oriented instrument, providing scores on 22 dimensions of leadership behavior in six functional areas” (Sessa et al., 2007, p. 62). In large sample sizes, the 360-degree instrument has established high reliabilities, low interscale correlations, and excellent construct and criterion-related validity.

Though the researchers did not indicate the final sample size, their sample from the database consisted of participants who worked in the United States, were a member of the Silent, Boom, or Gen-X generation, were in a management function within their organization, and worked in a business organization as opposed to a government organization. Millennials were not included in the study due to a very small number in the database.

Sessa et al. (2007) found that managers in the different cohorts did differ in their behaviors as perceived by themselves and others in the organization. Behaviors in the generations accumulated along a continuum of individually focused leadership styles and behaviors to a more consensual leadership style. Leaders in the older generations tended to use a more consensual leadership style meaning they tend to create conditions that encourage others to participate and contribute to the leadership process. Leaders in the younger generations were found to use more of an individual style meaning they used their power, assertiveness, and authority to get their jobs done. Sessa et al. (2007) concluded that although there were some differences in how managers from different generational cohorts differed in their leadership behaviors as perceived by themselves and others, most of the differences were more likely due to a maturational effect than a generational cohort effect.

Based on the study by Sessa et al. (2007), differences exist among generations in what they value about leaders, which could indicate that their preference for leadership style could also differ. Behaviors of leaders differ, but it appears to be more of a maturational effect than a generation cohort effect. Though a significant generational

difference did not exist in how leaders behave, there is still an implication that leadership styles do differ among leaders. Sessa et al. (2007) did find differences in what generations value in their leader and because the relationship a leader has with their subordinates is important in determining if the subordinate stays at that job (Howell & Costley, 2001; Buckingham & Coffman, 1999), a need exists to further investigate what generations prefer in their leader's style.

Davis (2002) studied the perceptions of employees from four generational age groups in a housing and food services industry to see if there were differences in their views of leader behavior, older employees, and job satisfaction. Using the Leader Behavior Descriptive Questionnaire (LBDQ), she surveyed employers and employees about the perceptions of leadership styles as perceived by the subordinates of the leader and the leader themselves. The population for this study was managers and union workers employed in the Housing and Food Services department within an organization in Pennsylvania. Purposive sampling was used and the final sample was 441 employees including 47 managers and 394 union employees. The LBDQ was used to measure leadership behaviors of initiating structure and consideration. Initiating structure behaviors include behavior of the leader in which the leader strives to establish definite routines, patterns, communications, and tasks for accomplishing the task at hand. Consideration behaviors include behavior of the leader in which the leader strives to create friendship, trust, and respect among members of the group (Davis, 2002). Reliability for the LBDQ was estimated using Cronbach's alpha which was reported as .95 for the initiating structure variable and .94 for the consideration variable (Davis,

2002). Factor analysis of the LBDQ resulted in the factor of initiating structure accounting for 34% of the variance and the consideration factor accounting for 54% of the variance.

Davis (2002) concluded that there was a significant ($p < .05$) relationship between overall job satisfaction and the behaviors of the leader, but, she found there were only minor differences in perceived leader behaviors. All generations ranked structuring work, consideration, and overall leader behaviors as “sometimes” in the context of the response scale. There was no significant difference among age groups regarding structure, consideration, or leader behavior variables. Though the conclusions from Davis indicated only minor differences in how generations perceive leader behavior, she recommended further investigating this concept on other populations.

DeClerk (2007), in his dissertation, examined the relationship of leadership styles and employee generational cohort, performance, and satisfaction. The population was all retail chain store sales associates in the workforce in the United States at the time of the study. There were a total of 600 participants in the final sample who were chosen from a sample pool using a sequential cluster and stratified sample method. The four generational cohorts were all represented in the final sample. The instrument used in this study was Bass and Avolio’s Multifactor Leadership Quotient (MLQ), which has been widely used and has been established as a valid and reliable instrument to measure leadership attributes of transformational leadership theory (Dubinsky et al., 1995; Duckett & Macfarlane, 2003; DeClerk, 2007).

In DeClerk's (2007) study, he found that leaders who used transformational styles could predict positive outcomes of employee extra effort, employee satisfaction, and seeing their manager as effective. There was a significant difference ($p < .05$) among managers who exhibited transformational leadership styles. Managers with passive/avoidance leadership use were negatively related to employee extra effort, perceived manager effectiveness, and satisfaction of employees. The predictive outcomes with transactional leadership styles were mixed in that all generations except the Millennials or Generation Y, as they were termed in DeClerk's study, had some positive relationships with this style. There was a significant difference ($p < .05$) among store managers who exhibited transactional leadership styles for the Silent Generation in regard to the positive outcome of employee sales per-hour productivity. However; there were no significant positive relationships ($p < .05$) or outcomes associated with Generation Y (Millennials) for transactional leadership which might indicate transactional leadership is not effective with this generation. DeClerk (2007) concluded that transformational leadership styles should be encouraged with each generation in order to predict outcomes in employee extra effort, satisfaction, and productivity. In DeClerk's study, transformational/charismatic leadership may be preferred by all generations, but more investigation is needed to determine if this is supported by further research.

Generational and Leadership Issues with Regard to Firefighters

Firefighters are concerned with generational issues in their organization. Alter (2007) reported there are "three distinct generations of firefighters who work together

yet approach everything differently” (p. 1). Training officers need to be able to identify participants on their roster not necessarily by name but by their birthdate. He commented that a fire service instructor now has to train “300 firefighters to do one thing 300 different ways” (p. 1). Alter also addressed certain characteristics of each generation and ways fire instructors can adapt their training style to meet the needs of the different generations. He wrote “if firefighters realize that there is a difference between learning and life experiences, they may become more tolerant of one another, eventually making life at the station more tolerable” (p. 2). His conclusion is that training officers in the fire service must be flexible in their teaching techniques to account for the differences in today’s firefighter.

The firefighters’ organization is also concerned with the training of their future leaders. Robert Rielage (2010), chief of Wyoming Fire-EMS and who has previously served as the fire marshal of the state of Ohio, is astounded that individuals are continuing to be elevated to the rank of chief because of longevity and without any standard or qualification for training, education, or experience. He believed that “earned” leadership occurs when individuals prepare over time to become officers or chiefs and “they keep themselves refreshed, current and constantly aware of issues and new trends in the fire service” (p. 14). He believes many firefighters wish to emulate these types of chiefs in their careers. According to Janet Wilmoth (2008), editor of the *Fire Chief* magazine, many readers wrote in regarding their own incompetent or outdated chiefs and how they have learned to work around them. In response to the need for training better chiefs, there is a book written on leading and managing today’s fire

service organization titled *Fire Administration I* by Fire Chief Randy Bruegman who is considered by many a chief's chief. There is also one course offered by the U.S. Fire Administration on effective leadership skills. To take one of the courses offered by the National Fire Academy, firefighters must apply to the program. There is also an Executive Fire Office Program for which those intending to go into leadership roles can apply for and be selected into at the national level.

While some opportunities exist for firefighters to receive training on leadership issues, there is no mandatory certification program firefighters obtain to become a leader in the fire service. According to Jeff Caynon (Personal Communication, April 2009), currently there is no real development of leaders for the Houston Firefighters organization. Houston Firefighters are beginning to see the need for such training and are starting to develop ways for those aspiring to be chiefs to receive this training.

Understanding the needs of firefighters from different generations in regards to their preferences for leadership style could impact the training firefighters receive in regards to their leadership development. According to recent publications on firefighters, firefighters are concerned with the different generations in their profession and how they build their future leaders (Wilmoth, 2008; Alter, 2007; Rielage, 2010).

Transformational Leadership

Leadership has been defined in many ways over the years and throughout the literature. Though many definitions of leadership exist, there are some common components found in each of these definitions. Leadership is a process, it involves influence, it occurs within a group setting, and involves goal attainment. Therefore,

“leadership is a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2004, p. 3).

Implied in this definition of leadership is that leaders and followers are involved in the leadership process. Without followers, there would be no leadership and without leadership, followers would not be able to achieve their goals (Northouse, 2004).

Because leadership is a process and not simply a trait or characteristic of a leader, everyone has an opportunity to experience and exercise leadership. Leadership is found when a group of individuals are working together and they are moving toward a goal (Northouse, 2004).

The process of leadership involves leaders and depending on their style or leadership behaviors, different outcomes may occur. Three studies have framed the research on leadership styles. These studies include the Ohio State Studies and University of Michigan in the 1940’s and then Blake and Mouton’s work in the 1960’s (Northouse, 2004).

All three of the models under the style approach to leadership point to leadership style being composed of two general behaviors, which are task behaviors and relationship behaviors. All three models illustrate and conceptualize these two behaviors in different ways, but these two behaviors make up the basis for the style approach to leadership (Northouse, 2004). The style approach to studying leadership has been well substantiated by researchers from the University of Michigan, Ohio State, and by Blake and Mouton (Northouse, 2004). This approach to leadership provides a way for researchers to understand and conceptualize the complexities of leadership. Some

criticisms to the style approach to leadership include the fact that there are inconsistencies in how leadership styles are associated with performance outcomes. According to Yukl (1994), the only consistent finding about leadership styles is that leaders who are more relationship-oriented have more satisfied followers.

Transformational leadership or charismatic leadership, as it is often referred to in the literature, is part of the “New Leadership” Paradigm. This type of leadership was studied first in the 1980’s, but was the topic of one-third of the articles in the *Leadership Quarterly* (Lowe & Gardner, 2001) since then. Transformational and charismatic leadership have been the most frequently researched theories over the past 20 years (Avolio, 2005). Transformational leadership brings in a whole new dimension of leadership beyond a leader who is task or relationship-oriented. A transformational leader is one who engages with their followers and creates a connection with them and raises their level of motivation and morality. This leader is attuned to the followers’ needs and strives to help them reach their full potential (Northouse, 2004; Bass, 1985).

The concept of transformational leadership is said to have been a “seminal shift in the field of leadership” (Bass, 2008, p. 619). Leadership research had been criticized for only accounting for a small percentage of variance in performance outcomes until transformational leadership (Bass, 2008). Transformational leadership was different than traditional leadership models which described leadership behavior in terms of setting goals, providing direction and support, and leader-follower relationships. The new leadership model or the transformational leadership model emphasized “symbolic” leadership behavior like vision, emotions, inspiration, and intellectual stimulation (Bass,

2008). Burns (1978) was considered the first to really open up the exploration of transformational leadership and transactional leadership as opposite phenomenon.

Burns first defined a transforming leader as one who (a) raises followers' level of consciousness about how to achieve the desired outcome and the value of achieving the desired outcome, (b) gets followers to put the interests of the team or organization before their own, and (c) raises followers' need level on Maslow's hierarchy from lower level needs to higher level needs like self-actualization (1978). To explore this concept further, Bass conducted a study on seventy senior South African executives (all male, one black). They were asked to describe how a leader influenced them. These descriptions were sorted into transformational and transactional behaviors. Bass later factor analyzed a list of the 73 items characterized as transformational behaviors which resulted in three main constructs: 1) idealized influence, 2) inspirational motivation, 3) and intellectual stimulation. There were two factors associated with transactional leadership behaviors, which were contingent reward and management by exception. Avolio and Bass (1991) conceptualized transformational and transactional factors as a continuum in leadership activity and effectiveness. They also added laissez-faire or non leadership to the continuum at the bottom creating the full range of leadership model. Transformational was more involved than transactional and transactional was more involved than laissez-faire (Bass, 2008). Predictors of transformational and transactional leadership include age, education, and experience of both the leaders and the followers (Bass, 2008).

The transformational leadership model currently consists of the following components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006). Idealized influence refers to a leader who has high moral and ethical standards. The leader behaves in ways that make the followers want to emulate them. There are two parts of idealized influence including the leader's actual behaviors and the characteristics that are attributed to the leader by the follower (Bass & Riggio, 2006).

Inspirational motivation is the component of transformational leadership in which the leaders inspire and motivate their followers by providing them with meaning and challenge in their work. Leaders with inspirational motivation get their followers involved in a shared vision and clearly communicate expectations to their followers (Bass & Riggio, 2006).

Leaders who have intellectual stimulation provide mental stimulation to their followers by questioning assumptions, looking at new ways to approach old problems, and reframing problems. Leaders encourage new ideas and creativity in their followers; mistakes are not publicly criticized (Bass & Riggio, 2006).

The final component of transformational leadership is individualized consideration. In this role, leaders act as a coach or mentor to their followers and pay attention to their needs for achievement and growth. A leader who practices individualized consideration is an effective listener, delegates tasks to develop followers, demonstrates acceptance of individual differences, and encourages two-way communication (Bass & Riggio, 2006).

Researchers have found that there is a positive relationship between transformational leadership and transactional leadership and productivity, satisfaction, and tenure (Bass, 1997; Dubinsky, Yammarino, Jolson, & Spanler, 1995; Duckett & Macfarlane, 2003)). Because younger generations have put a higher value on relationships (Martin, 2003) and transformational leadership is dependent on the relationship between the leader and follower (Bass, 1990), it seems likely to expect that younger generations will have greater productivity, higher job satisfaction, and length of employment in the company with a leader who is more transformational in nature.

Summary

In this chapter, a review of the literature on generations, generational differences in the workplace, generational differences in specific regard to leadership, generational and leadership differences in regard to firefighters, and the theory of transformational leadership is discussed. Based on the review of this information, a need exists to examine if differences exist in what generational cohorts prefer in their leaders and which leadership styles lead to positive outcomes.

From the conception of the phenomenon of generations by Strauss and Howe (1991), the concept of generational differences has been exploited by others such as Schewe and Evans (2000), Zemke, et al. (2000), Howe and Strauss, 2000, and Arsenault (2004). This phenomenon has been popularized using anecdotal information but has also become the subject of empirical research in a growing number of studies. Generational differences in the workplace have been researched by Smola and Sutton

(2002) and Lyons, et al. (2005) who found differences in work values among generations.

Research has also been conducted specifically on generational differences in regard to leadership. Arsenault (2004) concluded in his studies that generational differences are a true diversity issue and one that should be addressed in developing current and future leaders. He also contends that current leadership development programs focus on leadership styles from the Veteran and Boom generation while not giving consideration to the needs of the newest generations in the workforce, Generation X and the Millennials. Sessa et al. (2007) examined differences occurring in managers from the generational cohorts specifically in regard to attributes these managers value in leaders and how these managers actually behave as leaders. Sessa et al. (2007) concluded in their study that differences exist among generations in what these generations value about leaders and the actual behaviors of leaders differ, but this difference was found to be more of a maturational effect than a generational cohort effect. Davis (2002) studied the perceptions of employees from four generational cohorts in regard to their different views of leader behavior, older employees, and job satisfaction. She concluded there was a significant ($p < .05$) relationship between overall job satisfaction and the behaviors of the leader, but very few differences among generations in perceived leadership behaviors. DeClerk (2007) found that leaders who used transformational styles could predict positive outcomes of employee extra effort, employee satisfaction, and manager effectiveness. Managers who used the laissez-faire leadership style resulted in a negative relationship to the same outcomes. In regard to

transactional leadership style, all generations had some positive relationship with this style except the Millennial generation. He concluded that more investigation is needed to determine if transformational leadership is preferred by all generations.

The transformational leadership model was the first leadership model to account for variance in performance outcomes (Bass, 2008). Transformational leadership is considered to be part of a continuum of leadership activity and effectiveness. On this continuum, there are three leadership behaviors which are transformational leadership, transactional leadership, and laissez-faire or non-leadership. Leaders fall somewhere on this continuum in their behavioral style. Though positive outcomes have been associated with a leader who is transformational (Bass, 2008; Bass, 1997; Dubinsky, et al., 1995; Duckett & Macfarlane, 2003), there is a need to examine if all followers from different generations prefer a leader who is transformational.

CHAPTER III

METHODOLOGY

Information about the methodology used when conducting the research study is discussed in Chapter III. The content includes selection of the methodology used, the population studied, procedures used in the development of the instrument, the pilot study and the data collection and analysis procedures. An explanation of the methods and procedures used to answer the following research questions is also addressed in this chapter:

- Question 1: Are there significant differences in leadership style score between levels of generational cohorts of firefighters when presented with a sequence of leadership style scenarios?
- Question 2: Are there significant differences in leadership style score between ranks of firefighters when presented with a sequence of leadership style scenarios?
- Question 3: Is there significant interaction on leadership style score between generational cohort and rank of firefighters when presented with a sequence of leadership style scenarios?
- Question 4: Are there significant differences in leadership style score between firefighters when presented with a sequence of leadership style scenarios?
- Question 5: Which leadership style is most preferred by firefighters who differ by rank and generational cohort?

This chapter is divided into five sections. The first section includes the rationale for the selection of descriptive research methodology. In the second section, the research study population is described. The measurement instrument including the pilot study instrument is discussed in the third section. Procedures for data collection are included in the fourth section followed by a discussion of the data analysis in the final section.

Selection of Methodology

Non-experimental, descriptive research was chosen for the methodology in this study. One purpose of non-experimental design studies, which are descriptive in nature is, “to study phenomena as they exist at one point in time” (Gall, Gall, & Borg, 2003, p. 289). Since the purpose of this study was to investigate differences in preference for leadership style among different generational cohorts, this study was descriptive in nature. By determining the preferred leadership style of each generation and examining perceptions of a leader’s style from each generation, a descriptive study could increase understanding and add to the knowledge base of generational characteristics and leadership research.

Two methods of data collection associated with conducting descriptive research include observation or interviews and survey method (Gall et al., 2003). The survey method was chosen as the appropriate measure for collecting data on selected members of protective service occupations in three generational cohorts. Advantages to the survey method include that it is generally less expensive to administer and less time consuming to analyze the data than qualitative methods; and questions are consistent among all

individuals. Respondents also control the data collection timeframe by being able to complete the instrument at their convenience and can use more than one sitting to complete the instrument if needed. By utilizing the survey method, information can be obtained from respondents in a cost-effective and timely manner (Gall, et al., 2003).

Research Study Population

Cohorts of three generations in the workforce in protective service occupations in the United States are the population for this study. According to the 2008 U.S. Bureau of Labor Statistics, there were a total of 3,047,000 people in protective service occupations who were in the workforce.

Protective service occupations include occupations such as policeman, firefighters, private detectives, and first-line managers and supervisors of police and firefighters. In 2008, there were approximately 3 times as many men than women in the protective service occupations. Men comprised 2,352,000 of the protective service occupations' population and women comprised only 695,000 (U.S. Bureau of Labor Statistics, 2008).

Firefighters in the Houston, Texas region were selected as a convenience sample of the three generational cohorts in protective service occupations. The reasons for choosing this convenience sample included accessibility to the participants and adequate sample size to incorporate all three generations. The population of firefighters in the Houston, Texas area is large enough to achieve the desired sample size for this study. To use a convenience sample, a researcher must identify a selected sample that is similar to the population (Gall et al., 2003). The Houston firefighters have a generational

distribution and gender distribution similar to the population of people in the U.S. who work in protective service occupations (J. Caynon, personal communication, 2009).

Approximately 3500 firefighters work in the Houston, Texas region (J. Caynon, personal communication, 2009). The data found in the U.S. Bureau of Labor Statistics (2008) did not categorize workers by specific ages and occupation but general population estimates for percentages of generations in the total U.S. workforce were as follows: Boomer generation comprises 27.9%, Generation X, 45.9%, and the Millennials comprise 24.3%.

According to the Houston Firefighters organization, firefighters are classified into three categories:

Firefighter- individual employed in the firefighter profession who is not in a leadership position.

Engineer Operator-rank of a firefighter acquired through being a firefighter for two years and who has passed the promotional exam to Engineer Operator with a 70% or greater.

Captain- rank of a firefighter acquired through being an Engineer Operator for two years and who has passed the promotional exam to Captain with a 70% or greater.

Seniors Captain-rank of a firefighter acquired through being a Captain for two years and who has passed the promotional exam to Senior Captain with a 70% or greater.

There were approximately 3000 firefighters and engineer operators and 500 Captains and Senior Captains in the Houston Firefighters organization (J. Caynon, personal communication, April 2009).

The instrument used in this study needed to be pilot tested and the pilot test should include individuals from the population in which a researcher plans to get their respondents (Gall, Gall, & Borg, 2003). Due to logistical reasons, the researcher could not obtain a sample from the entire population so Captains and Senior Captains in the Houston Firefighters organization were chosen to receive the pilot test. The firefighters and engineer operators in the Houston Firefighters organization were chosen to be the population for the actual study. The pilot test survey instrument was determined to be valid and reliable and no changes were needed with the exception of changing firemen to firefighter. The pilot study respondents (Captains and Senior Captains) and respondents in the actual study population (firefighters and engineer operators) did not differ as determined by a One-way ANOVA (transformational construct; $p = .953$, laissez-faire construct; $p = .824$, transactional construct; $p = .611$). Because the pilot test survey instrument was valid and reliable with only one minor change needed and respondents did not differ, the researcher combined the data from the pilot and the final respondent sample population for further analysis.

The list of firefighters was obtained through an email listserv managed by the Houston Firefighters organization. All firefighters (approximately 3500) were invited to complete the questionnaire because there was not a way to sample from this listserv.

Pilot Test Instrument

A questionnaire was developed by the researcher to measure the three generations' preference for leadership style. A review of the literature revealed some anecdotal research has been conducted on leadership styles among the different

generations, but there is little reported empirical research on this topic. Also, there were few reported surveys developed to assess preference for leadership style. The researcher adapted a survey from Ehrhardt and Klein (2001) that was used to measure preference for leadership style. The questionnaire was web-based with results downloaded into a database. In this survey, respondents were informed that there were three new fire stations in their area and each of the district chiefs at these fire stations has a distinct leadership style. The respondents were given the opportunity to choose their fire station based on the description of the district chief at each station. Firefighters were asked to give their preference for each of the district chiefs (based on their leadership style description) assuming all other factors about choosing a chief were neutral. Respondents were asked to read descriptions of the three district chiefs. The three leadership styles depicted in the descriptions of the district chiefs were transformational, laissez-faire, and transactional. After each description of the district chief's leadership style, the respondent was asked to answer six questions that related to the working relationship with this district chief. The Likert-type scale for each of the six questions consisted of the following: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree; 5 = Strongly Agree. After reading all descriptions and answering the six questions about each of the district chiefs, respondents were asked to report the district chief for whom they would most prefer to work (see Appendix B).

The population for the pilot test was firefighters in leadership positions in the Houston area, specifically Captains and Senior Captains. Of the 500 emails sent to all Captains/Senior Captains, there were a total of 80 individuals (n=80; 16%) who

responded to the pilot test. To complete a factor analysis of the pilot test instrument, it is suggested that a researcher have at least 10-15 participants per variable (Field, 2005). Because there were six items (six questions were repeated three times) on the pilot test instrument and 80 respondents to the pilot test, this resulted in 13 participants per variable. With a KMO of .5 or greater and at least 10-15 participants per variable, a sample is adequate to complete a factor analysis that yields a reliable solution (Field, 2005).

Design and Format

The principles by Dillman (2007) served as a guide for the design and format of the instrument for the pilot test. According to Dillman's Tailored Design, people are more likely to respond to self-administered questionnaires when they trust that the rewards of responding outweigh the costs they expect to incur (Dillman, 2007). Dillman suggested that "knowledge of survey population, sponsorship, and survey content must be considered in order to develop the most effective means for increasing rewards, reducing costs, and establishing trust" (2007, p. 27). The researcher met with a member of the Houston Firefighters organization multiple times to ensure the content in the instrument was reflective of the organization and used his name in the letter asking for firefighters to respond. This was conducted to establish credibility and trust with members of the Houston Firefighters organization.

Dillman (2007) also suggested the goal of writing survey questions for self-administered questionnaires was to develop a "query that every potential respondent will

interpret in the same way, be able to respond to accurately, and be willing to answer” (p. 32). This principle guided the construction of questions and layout of the instrument.

Dillman’s principles for questionnaire design were followed to reduce or avoid measurement error (2007). Effort was made to make the instrument respondent-friendly, attractive and that encouraged respondents to “read words in the same order as other respondents read them” (p. 81).

The instrument for the pilot test was sent as an electronic, web-based questionnaire. It was determined that this would be the best method for sending out the survey given the number of firefighters in the Houston area and was also the method preferred by the Houston Firefighters organization. The questionnaire was developed and administered using web-based software provided by Qualtrics™. After reviewing several online survey programs, Qualtrics™ appeared to be the most convenient, maneuverable, and cost effective.

Participants for the pilot test were sent an email that included a letter from the researcher establishing the importance of the survey, why they were selected, and the benefit to the Houston Firefighters organization. The initial letter served as the prenotice letter due to the request of the Houston Firefighters organization. The initial letter via email was kept to one page as suggested by Dillman (2007). In this letter, the researcher stated that an individual’s responses would be kept confidential and that only a summary of the data would be compiled; there would be no identifying information linking the individual to the results of the study. Also, it was indicated in the letter that participation was voluntary and their actions would in no way affect their relationship

with the Houston Firefighters organization. This letter included a link to the survey instrument online so that respondents could simply click on the link and take the survey.

Measurement Error

Steps were taken to estimate measurement error of the instrument. The instrument developed by Ehrhardt and Klein (2001) had no reported reliability or validity estimates and was given to college students. Therefore, reliability and validity needed to be established in order to minimize measurement error. Procedures concerning initial face validity, content validity, construct validity, and lastly reliability are addressed in the following sections.

Validity

According to Ary, Jacobs, Razavieh, and Sorensen (2006), “validity is the most important consideration in developing and evaluating measuring instruments” (p. 243). The validity of an instrument is the extent to which an instrument measures what it is intended to measure. The instrument is valid only for the populations it is intended to measure. Therefore, the measure of validity is not simply for the instrument, but of the interpretations and inferences made from the scores on the instrument (Ary, et al., 2006). Three types of validity were addressed and established for the instrument used in the pilot test: face validity, content validity, and construct validity.

Face Validity

Face validity of the instrument was determined by a panel of three leadership experts who serve as faculty members in a Research 1 institution and are considered experts in the content area of leadership; two are also considered experts in instrument

development and research methods. Each expert was asked to review the instrument and determine if the instrument was measuring what it intended to measure. Three Houston firefighters were also sent the instrument to review for face validity and make sure terms were appropriate for firefighters.

Content Validity

Evidence based on content relates to the instrument's content and the construct it is intending to measure. To provide evidence based on content, qualified experts reviewed the instrument content for the appropriateness and representativeness of the items on the instrument (Ary, et al., 2006). For the pilot study, three leadership experts reviewed the content of the adapted instrument to provide evidence that the instrument's content contains information for each of the leadership style constructs of transactional, transformational, and laissez-faire. The leadership experts consisted of faculty members who teach and research leadership at a Research I institution in a leadership department. Leadership style descriptions were modified until a content score of 10 (on a scale of 1 to 10 and 10 being the best) was achieved by the panel of leadership experts.

Construct Validity

Evidence for construct validity refers to those items that are not directly measurable but do account for observable behaviors (Ary, et al., 2006). One example of this type of evidence is the reading comprehension of the respondents. If an instrument is designed that is above the reading comprehension of the respondents, this would affect the validity of the interpretations of the scores (Ary, et al., 2006). To estimate the reading comprehension level of a document, the Flesch-Kincaid readability grade-level

score can be used. The Flesch-Kincaid readability grade-level score was assessed through a Microsoft software program which scans the instrument for the average number of words in a sentence and the average number of syllables in words to calculate the grade level for which the instrument is written. For this instrument, the estimated readability level is the 7th grade. This is below the grade level of the sample population and should not pose a threat to validity.

Construct validity was also established through an exploratory factor analysis of the leadership preference instrument. An exploratory factor analysis was determined to be the appropriate analysis because factors had not already been established for this instrument through a factor analysis (Field, 2005).

The 18 scale items from the Leadership Preference Instrument were included in the principal component analysis; coefficients with an absolute value less than .4 were suppressed. The sample size was adequate with 11 observations per variable. According to Field (2005), a researcher needs at least 10-15 participants per variable. The KMO statistic was .841 indicating that a factor analysis should yield factors that are distinct and reliable (Field, 2005). According to Field (2005, p. 640), “a value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors.” A value between .8 and .9 is considered to be great in regards to sampling adequacy (Field, 2005). The factor analysis yielded 3 constructs: transformational leadership style (items 1-6), laissez-faire leadership style (items 7-12), and transactional leadership style (items 13-18). Eigenvalues, percentages of variance, and cumulative percentages for scales of the Leadership Preference

Instrument are reported in Table 1. Factor loadings from the principal component analysis of the items of the Leadership Preference Instrument are reported in Table 2.

Table 1. *Eigenvalues, Percentages of Variance, and Cumulative Percentages for Scales of the Leadership Preference Instrument*

Construct	Eigenvalue	% of variance	Cumulative %
1. Transformational Leadership	6.212	34.514	34.514
2. Transactional Leadership	5.096	28.312	54.428
3. Laissez-faire Leadership	3.030	16.833	79.659

The exploratory factor analysis also confirmed common method variance was not present in this study. Common method variance (CMV) can occur when data are collected from a single source which produces inflated correlations among the research variables (Podsakoff, et al., 2003). Harmon's single factor test is one method of assessment reported to be effective in controlling for CVM (Podsakoff, et al., 2003). Using principal component analysis, the unrotated factor solution of all variables is interpreted and if a single factor emerges then a substantial amount of common method variance is present. Because three factors emerged and not one, there is no reason to conclude that common method variance is present in this study. Table 2 contains the loadings from the principal component analysis of the rotated solution (varimax rotation). Appendice A contains the factor loadings of the unrotated solution used to interpret Harmon's single factor test for CVM.

Table 2. *Construct Loadings from the Principal Component Analysis of the Items of the Leadership Preference Instrument Using Varimax Rotation*

Item	Scale loading
Construct 1: Transformational Leadership Style	
I would work at a high level of performance with this District Chief.	.832
I would enjoy working with this District Chief.	.909
I would admire this District Chief.	.891
I would do more than is expected for this District Chief.	.888
I would find this District Chief's leadership style compatible with my own.	.910
I would find this District Chief's leadership style similar to my ideal District Chief.	.876
Construct 2: Transactional Leadership Style	
I would work at a high level of performance with this District Chief.	.828
I would enjoy working with this District Chief.	.943
I would admire this District Chief.	.918
I would do more than is expected for this District Chief.	.890
I would find this District Chief's leadership style compatible with my own.	.917
I would find this District Chief's leadership style similar to my ideal District Chief.	.908
Construct 3: Laissez-faire Leadership Style	
I would work at a high level of performance with this District Chief.	.814
I would enjoy working with this District Chief.	.897
I would admire this District Chief.	.898
I would do more than is expected for this District Chief.	.824
I would find this District Chief's leadership style compatible with my own.	.850
I would find this District Chief's leadership style similar to my ideal District Chief.	.855

Reliability

Because no estimates of reliability were available in the literature for the data collection instrument, a pilot test was needed to estimate the reliability of this leadership preference instrument.

The reliability of an instrument is how much measurement error is present in the scores from respondents. Measurement error is the difference between an individual's true score and what they actually obtain under a variety of conditions. The true score and measurement error are constructs which can be estimated through various procedures. Specifically, internal-consistency measures of reliability are used to determine whether all items in an instrument are measuring the same thing. To estimate internal-consistency measures of reliability, the researcher computes a reliability coefficient. This is a value between .00 and 1.00. Instruments with a reliability coefficient of .80 or higher are reliable for most research purposes (Field, 2009). There are several methods to obtain a reliability coefficient. These include the Spearman-Brown procedure, homogeneity measures, Kuder-Richardson procedures, and the Cronbach Alpha. Because it is a widely used method for computing test score reliability and is appropriate for measuring items that are scored using a Likert type scale, Cronbach's alpha was used to establish reliability of the instrument in the pilot test (Ary, et al., 2006).

To estimate the instrument's reliability, a Cronbach's α coefficient was calculated for each construct of leadership style: transformational, transactional, and laissez-faire. This yielded coefficient estimates of reliability of .947, .934, and .952

respectively. Alpha coefficients of .80 or greater are considered good estimates of reliability. This instrument was determined to be reliable. The reliability results for each construct are noted in Table 3.

Table 3. *Initial Reliability Estimates for the Leadership Preference Instrument Constructs of the Pilot Test Questionnaire (n=80)*

Leadership Style Constructs	A
Transformational Leadership	.947
Transactional Leadership	.934
Laissez-faire Leadership	.952

Leadership Preference Instrument

Instrumentation

A leadership preference instrument to measure the three generations' preference for leadership style was established by the researcher based on the results of the pilot study, which was described in the previous sections. The only minor correction to the pilot test instrument was that the term "firemen" was changed to "firefighter" based on a recommendation from a firefighter who responded to the pilot test instrument.

Though some anecdotal research has been conducted on leadership styles among the different generations, there is no reported empirical research on this topic. Also, there are few reported surveys developed to assess preference for leadership style. The researcher adapted a survey from Ehrhardt and Klein (2001) that was used to measure preference for leadership style. The survey was web-based with results downloaded into PASW® version 18.0 for Windows™ computers. This survey was pilot tested and determined to be valid and reliable (see previous section for more information on pilot study including the design of the instrument).

The population for the study was firefighters not in leadership positions in the Houston area. An email was sent through the Houston Firefighters organization to all firefighters who were not Captains or Senior Captains. There were approximately 3000 firefighters who were sent the invitation to complete the survey instrument with a total of 250 who responded. After combining the pilot test data and the final survey data, there were a total of 330 respondents in the data set.

Post Hoc Reliability

PASW® version 18.0 for Windows™ computers was used to determine the Cronbach's α coefficient for the three constructs. The results for each construct of the Leadership Preference Instrument are noted in Table 4.

Table 4. *Reliability Estimates for the Leadership Preference Instrument Constructs (n=330)*

Leadership Style Constructs	A
Transformational Leadership	.953
Transactional Leadership	.938
Laissez-faire Leadership	.955

Cronbach's alpha coefficients were calculated for the three constructs of the Leadership Preference Instrument: transformational leadership, transactional leadership, and laissez-faire leadership style yielding estimates of reliability of .953, .938, and .955 respectively. Alpha coefficients of .80 or greater are considered good estimates of reliability (Field, 2009).

Institutional Approval

The researcher submitted a proposal outlining the data collection process and other documents relating to the study to the Texas A&M University, Office of Research Compliance, Human Subjects' Protection Program and Institutional Review Board prior to the data collection process. Approval was received from the Institutional Review Board; protocol number 2010-0259.

Data Collection

The data collection methods suggested by Dillman (2007) were followed with the exception of only three points of contact, rather than five. Because the researcher was working through the Houston Firefighters to send out this survey, an effort was made to not bombard the contacts in the organization; therefore, the researcher determined that three points of contact would suffice for collecting the needed data.

Description of the Population

In addition to age (to classify according to generational cohort), each respondent was asked to indicate their gender, race/ethnicity, years worked as a firefighter, and level of education. The demographic results are summarized in Table 5. Because not all respondents answered all demographic questions, the n varies in each category.

Most respondents were male (n=294; 95.5%). In regard to race/ethnicity, a majority of respondents were white (n=222; 72.5%) followed by Spanish/Hispanic/Latino (n=45; 14.7%) and Black or African American or Negro (n=20; 6.5%). Fifteen respondents indicated they were some other race (n=15; 4.9%) by writing in the blank space given on the survey. Categories for race/ethnicity were determined

based on categories used in the U.S. Census in 2008. In the category of years worked as a firefighter, most firefighters worked 5 years or more (n=275; 89.9%) followed by 2 years to less than 5 years (n=23; 7.5%). Only 1 respondent had worked less than one year (n=1; .3%). Finally, for education level, most respondents had some college coursework but no degree (n=137; 44.77%) followed by a technical or associate's degree (n=83; 27.12%) and then a bachelor's degree (n=59; 19.28%).

Table 5. *Demographics of Respondent Population (n=308)*

Demographic	<i>f</i>	%
Gender		
Male	294	95.5
Female	14	4.5
Race/Ethnicity ^a		
White	222	72.5
Black or African American or Negro	20	6.5
American Indian or Alaskan Native	1	.3
Spanish/Hispanic/Latino	45	14.7
Asian Indian	1	.3
Filipino	1	.3
Vietnamese	1	.3
Some other race	15	4.9
Years Worked as a Firefighter ^a		
6 months to less than 1 year	1	.3
1 year to less than 2 years	7	2.3
2 years to less than 5 years	23	7.5
5 years or more	275	89.9
Level of Education ^a		
High school diploma or equivalent	13	4.2
Some college coursework but no degree	137	44.8
Technical or Associate's degree	83	27.1
Bachelor's degree	59	19.3
Graduate degree or coursework	13	4.2
Professional degree	1	.3

Note: ^adata based on n=306 respondents because 2 respondents did not report this information

Data Analyses

Data from the study were downloaded from the Qualtrics™ program into the PASW® version 18.0 for Windows™ statistical software program. Data was also analyzed using the computer program PASW® version 18.0 for Windows™. Because respondents were asked to answer the same set of six questions for each leadership style, a three-way repeated-measures ANOVA was conducted for the data. The within subjects factor was leadership style score on a sequence of scenarios with the three levels consisting of transformational, laissez-faire, and transactional leadership styles. The between subjects factors consisted of generational cohort with the three levels consisting of Millennials, Generation X, and the Boomer generations and rank with the two levels consisting of Captains/Senior Captains and Firefighter. Tests for interaction were interpreted for all three factors of generational cohort, rank, and leadership style score across scenarios. The alpha level was set *a priori* at .05. The Sidak *post hoc* test was chosen to determine where significant differences exist. Because of missing information from respondents throughout the data collection instrument, the n varies for each analysis run.

Research Objective One

The purpose of research objective one was to determine if there is significant interaction between levels of generational cohort and rank of firefighters when presented with a sequence of leadership style scenarios. The test for interaction indicates whether the leadership style score was affected by the generation and rank of firefighter. Interaction is determined by interpreting the results of the Three-Way Mixed Model ANOVA.

Research Objective Two

The purpose of research objective two was to determine if significant differences exist in leadership style score between levels of generational cohort of firefighter when presented with a sequence of leadership style scenarios. The Tests of Between-Subjects Effects table for the Three-Way Mixed Model ANOVA was used to interpret the Main effect of generational cohort. Mean, standard deviations, and standard error were reported for leadership style score between three generational cohorts.

Research Objective Three

The purpose of research objective three was to determine if significant differences exist in leadership style score between rank of firefighters when presented with a sequence of leadership style scenarios. The Tests of Between-Subjects Effects table for the Three-Way Mixed Model ANOVA was used to interpret the Main effect of rank. Mean, standard deviations, and standard error were reported for leadership style score between rank of firefighters.

Research Objective Four

The purpose of research objective four was to determine if there were significant differences in leadership style score between all firefighters when presented with a sequence of leadership style scenarios. The Tests of Within-Subjects Effects table for the Three-Way Mixed Model ANOVA was used to interpret the main effect of leadership style score for all firefighters. Mean, standard deviations, and standard error were reported for the effect of leadership style score.

Research Objective Five

The purpose of research objective five was to determine which leadership style is most preferred by firefighters who differ by rank and generational cohort. All respondents indicated the district chief they would most prefer based on the sequence of leadership style scenarios presented. Therefore, frequencies and percentages were reported by generational cohort and rank for each leadership style.

Effect Size

Effect size was interpreted using partial eta squared. Tabachnick and Fidell (2007) noted guidelines for effect size as follows: small effect ($\eta^2 = .0099$), medium effect ($\eta^2 = .0588$), and a large effect ($\eta^2 = .1379$). These guidelines are used to indicate effect size in this study.

CHAPTER IV

FINDINGS

In this chapter, results and findings are discussed for each research objective.

Research Objective One

The purpose of research objective one was to determine if there is significant interaction between levels of generational cohort and rank of firefighters when presented with a sequence of leadership style scenarios. Based on the results of Mauchly's test of sphericity, variances of the differences between each condition are not equal ($\chi^2=8.26, p < .05$). When $p < .05$, there are significant differences between tests and the assumption of sphericity is not met. When sphericity is not met, the effect is a loss of power (Field, 2005). Therefore, degrees of freedom were corrected using the Lower Bound test estimates of sphericity.

A three-way repeated-measures ANOVA was conducted with the within-subjects factor of leadership style score across scenarios (transformational, laissez-faire, and transactional) and the between-subjects factors of generational cohort (Boomers, Generation X, and Millennials) and rank (Captains/Senior Captains, Firefighters/Engineer Operators).

The ANOVA results for the interaction of leadership style score across scenario and generational cohort and rank are indicated in Table 6. No significant interactions were found at any level between a) leadership style score across scenarios and generational cohort and rank ($p = .363$), b) leadership style score across scenarios and generational cohort ($p = .947$), or c) leadership style score across scenarios and rank

($p = .816$). The results indicate that leadership style score across scenarios is not affected by generational cohort or rank of firefighter.

Table 6. *Summary of Tests for Interaction of Three-Way Repeated Measures ANOVA for Generation, Rank and Leadership Style Score (LS Score)*

Effect	SS	Df	MS	F	<i>p</i>	η^2	1- β
LS Score	145.271	1	145.271	67.196	.000*	.183	1.000
LS Score x Rank	.117	1	.117	.054	.947	.000	.056
LS Score x Generation	.235	1	.117	.054	.816	.000	.058
LS Score x Generation x Rank	.464	1	1.794	.830	.363	.003	.148
Error	648.565	300	2.162				

*Note: *significant at the $p < 0.05$ level using the lower bound estimates.*

Research Objective Two

The purpose of research objective two was to determine if significant differences exist in leadership style score between levels of generational cohort of firefighter when presented with a sequence of leadership style scenarios. The Tests of Between-Subjects Effects table for the Three-Way Mixed Model ANOVA was used to interpret the main effect of generational cohort. Mean, standard deviations, and standard error were reported for leadership style score between three generational cohorts. The between-subjects factor consisted of generations with the three levels being Millennials, Generation X, and the Boomer generational cohorts.

Mean scores and standard deviations were calculated and reported for each leadership style score at each level of generation as presented in Table 7. In the total

population, transformational leadership style score had the highest construct mean ($M=4.05$; $SD=.85$); whereas laissez-fair leadership style score was the construct with the lowest mean ($M=2.6$; $SD=1.01$) and transactional leadership style score was in the middle of the calculated means ($M=3.08$; $SD=.99$).

Table 7. *Means and Standard Deviations by Generational Cohort of Firefighter and Leadership Style Score (n=305)*

Leadership Style Score	n	M	SD
Transformational			
Boomer	63	3.97	.96
Generation X	224	4.08	.81
Millennial	18	3.97	1.02
Total	305	4.05	.86
Laissez-faire			
Boomer	63	2.57	1.11
Generation X	224	2.62	.97
Millennial	18	2.51	1.23
Total	305	2.61	1.02
Transactional			
Boomer	63	2.94	.98
Generation X	224	3.13	1.02
Millennial	18	3.04	.84
Total	305	3.08	1.00

All generations had the highest reported means for transformational leadership style as well. For the Boomer generation, $M=3.97$ and $SD=.96$. Generation X had a reported mean of $M=4.07$ and $SD=.81$. Millennials had a reported mean of $M=3.97$ and $SD=1.02$.

Transactional leadership style had the second highest reported means. For Boomers, the mean was $M=3.08$ and $SD=.99$. For Generation X, the reported mean was

M=3.13 and SD=1.02. And, for the Millennials, the reported mean was M=3.04 and SD=.84.

In regards to laissez-faire leadership style, the reported means were also consistently the lowest in each of the generations. The Boomer generation reported mean was M=2.57 and SD=1.11. For Generation X, the reported mean was M=2.62 and SD=.97. And, for the Millennials, the reported mean was M=2.50 and SD=1.23.

The ANOVA results for the comparison of leadership style score and generational cohort are indicated in Table 8. No significant differences were found in leadership style score between generational cohort of firefighter ($p = .176$). Based on scenario, leadership style score was not significantly different between generational cohort of firefighter.

Table 8. *Summary of Tests of Between-Subjects Effects of Three-Way Mixed Model ANOVA for Generation*

Effect	SS	Df	MS	F	<i>p</i>	η^2	1- β
Generation	2.344	2	1.172	1.884	.176	.012	.391
Error	186.614	300	.622				

Research Objective Three

The purpose of research objective three was to determine if there were significant differences in leadership style score between rank of firefighters when presented with a sequence of leadership style scenarios. The Tests of Between-Subjects Effects table for the Three-Way Mixed Model ANOVA was used to interpret the Main effect of rank.

Mean, standard deviations, and standard error were reported for leadership style score by rank of firefighters (Table 9).

Table 9. *Means and Standard Deviations by Rank of Firefighter and Leadership Style Score (n=305)*

Leadership Style Score	n	M	SD
Transformational			
Firefighters/Engineer Operators	230	4.05	.87
Captains/Senior Captains	75	4.05	.84
Total	305	4.05	.86
Laissez-faire			
Firefighters/Engineer Operators	230	2.59	1.01
Captains/Senior Captains	75	2.65	1.02
Total	305	2.60	1.01
Transactional			
Firefighters/Engineer Operators	230	3.09	1.02
Captains/Senior Captains	75	3.06	.93
Total	305	3.08	1.00

All firefighter ranks had the highest reported means for transformational leadership style score as well. For firefighters/engineer operators, the reported mean was $M=4.05$ and $SD=.87$. Captains/Senior Captains had a reported mean of $M=4.05$ and $SD=.84$.

In regards to laissez-faire leadership style, the reported means were also consistently the lowest in each of the firefighter ranks. The firefighter/engineer operator reported mean was $M=2.59$ and $SD=1.01$. For Captains/Senior Captains, the reported mean was $M=2.65$ and $SD=1.02$.

Transactional leadership style had the second highest reported means. For firefighters, the mean was $M=3.09$ and $SD=1.02$. For Captains/Senior Captains, the reported mean was $M=3.06$ and $SD=.93$.

A Three-Way Mixed Model ANOVA was conducted with the within-subjects factor of leadership style score (transformational, transactional, and laissez-faire) and between-subjects factor of firefighter rank (firefighters/engineer operators and Captains/Senior Captains).

The ANOVA results for the comparison of leadership style and firefighter rank are indicated in Table 10. No significant differences were found in leadership style score between rank of firefighter ($p = .629$). Based on scenario, leadership style score was not significantly different between rank of firefighter.

Table 10. *Summary of Tests of Between-Subjects Effects of the Three-Way Mixed Model ANOVA by Rank*

Effect	SS	df	MS	F	<i>p</i>	η^2	$1-\beta$
Rank	.146	1	.146	.234	.629	.001	.077
Error	186.614	300	.622				

Research Objective Four

The purpose of research objective four was to determine if there were significant differences in leadership style score between all firefighters when presented with a sequence of leadership style scenarios. The Tests of Within-Subjects Effects table for the Three-Way Mixed Model ANOVA was used to interpret the main effect of leadership style score for all firefighters. Based on the results of Mauchly's test of

sphericity, variances of the differences between each condition are not equal ($\chi^2=8.26$, $p < .05$). When $p < .05$, there are significant differences between tests and the assumption of sphericity is not met. When sphericity is not met, the effect is a loss of power (Field, 2005). Therefore, degrees of freedom were corrected using the Lower Bound test estimates of sphericity. The ANOVA results for leadership style scores across three scenarios are indicated in Table 11.

Table 11. *Summary of Tests of Within-Subjects Effects of the Three-Way Mixed Model ANOVA for Leadership Style Score (LS Score)*

Effect	SS	Df	MS	F	<i>p</i>	η^2	1- β
LS Score	145.271	1	145.271	67.196	.000*	.183	1.00
Error	648.565	300	2.162				

*Note: * significant at the $p < .05$ level using the lower bound estimates.*

There was a significant difference found when examining the main effect of leadership style score across scenarios. The minimum observed power of .8 or greater was met ($1-\beta=1.0$); therefore significant differences were not due to chance or error. Effect size should be considered when significant differences are found. A large effect size was detected ($\eta^2=.183$). The significant difference found in the leadership style score indicates there is a difference in leadership style score across scenarios. A Sidak post hoc test was used to determine where the differences exist among the leadership style scores. There were significant differences in all levels of the leadership style score across scenarios ($p < .05$). The transformational leadership style scenario score differed from the laissez-faire leadership style scenario score. The transformational leadership

style scenario score differed from the transactional leadership style scenario score. And, the transactional leadership style scenario score differed from the laissez-faire leadership style scenario score.

Research Objective Five

The purpose of research objective five was to determine which leadership style is most preferred by firefighters who differ by rank and generational cohort. All respondents indicated the district chief they would most prefer based on the sequence of leadership style scenarios presented. Therefore, frequencies and percentages were reported by generational cohort and rank for each leadership style preferred.

There were a total of 330 respondents. Twenty-three respondents had missing information so therefore their responses were not included in all data sets. Due to missing information from respondents, the n differs according to the specific data analysis being discussed.

Most respondents were from Generation X (n=225); then Boomers (n=64), and finally Millennials had the fewest respondents (n=18). There were a total of 324 respondents who chose the leader they would most prefer. Of the total respondents, most of them preferred the transformational leader (n=225; 69%). The transactional leader was the second most preferred (n=63; 11%) and the laissez-faire leader was least preferred (n=36; 20%). This information is reported in Table 12.

Table 12. *Frequencies and Percentages of Preferred Leadership Style From the Total Respondents (n=324)*

Leadership Style	<i>f</i>	%
Transformational	225	69.4
Transactional	63	19.4
Laissez-faire	36	11.2

Of the total number of firefighters/engineer operators from the Boomer generation (n=64) who responded to the survey, most preferred the transformational leadership style (n= 42; 65.6 %). The transactional leader was the second most preferred (n=12; 18.8 %) and laissez-faire leadership style was least preferred (n=10; 15.6 %). This information is reported in Table 13.

Of the total number of firefighters/engineer operators from Generation X (n=224) who responded to the survey, most preferred transformational leadership (n= 159; 71%). The transactional leader was the second most preferred (n=43; 19%) and laissez-faire was least preferred (n=22; 10%). See Table 7 for reported information.

Of the total number of firefighters/engineer operators from the Millennial generation (n=18) who responded to the survey, most preferred transformational leadership (n=13; 72.2%). The transactional leader was the second most preferred (n=3; 16.7%) and laissez-faire was least preferred (n=2; 11.1%). These results are indicated in Table 13.

Table 13. *Frequencies and Percentages of the Preferred Leadership Style of Firefighters/Engineer Operators From Generational Cohorts*

Generation	Leadership Style	<i>f</i>	%
Boomer	Transformational	42	65.6
	Laissez-faire	10	15.6
	Transactional	12	18.8
Generation X	Transformational	159	71.0
	Laissez-faire	22	10.0
	Transactional	43	19.0
Millennial	Transformational	13	72.2
	Laissez-faire	2	11.1
	Transactional	3	16.7

Of the total number of Captains/Senior Captains ($n=76$) who responded to the survey, most preferred transformational leadership ($n=54$; 71%). The transactional leader was the second most preferred ($n=15$; 20%) and laissez-faire was least preferred ($n=7$; 9%). Results are indicated in Table 14.

Table 14. *Frequencies and Percentages of the Preferred Leadership Style of Firefighters of Different Rank ($n = 324$)*

Rank of Firefighter	Leadership Style	<i>f</i>	%
Firefighter/ Operator	Transformational	171	69.0
	Laissez-faire	29	12.0
	Transactional	48	19.0
Captain/Senior Captain	Transformational	54	71.0
	Laissez-faire	7	9.0
	Transactional	15	20.0

Of the total number of firefighters/engineer operators in the Millennial generational cohort population ($n=18$) who responded to the survey, most preferred

transformational leadership (n=13; 72%). The transactional leader was the second most preferred (n=3; 17%) and laissez-faire was least preferred (n=2; 11%).

Of the total number of firefighters/engineer operators in the Generation X generational cohort population (n=180), most preferred transformational leadership (n=127; 70.5%). The transactional leader was the second most preferred (n=34; 19%) and laissez-faire was least preferred (n=19; 10.5%).

Of the total number of firefighters/engineer operators in the Boomer generational cohort population (n=32), most preferred transformational leadership (n=20; 62.5%). The transactional leader and laissez-faire were both equal in level of preference by the Boomer generation (transactional, n=6; 18.8%; laissez-faire, n=6; 18.8%). Results are also indicated in Table 15.

Table 15. *Frequencies and Percentages of the Preferred Leadership Style of Firefighters/Engineer Operators (non-leadership rank; n= 230) From Generational Cohorts*

Generation	Leadership Style	<i>f</i>	%
Boomer	Transformational	20	62.5
	Laissez-faire	6	18.8
	Transactional	6	18.8
Generation X	Transformational	127	70.5
	Laissez-faire	19	10.5
	Transactional	34	19.0
Millennial	Transformational	13	72.2
	Laissez-faire	2	11.1
	Transactional	3	16.7

Of the total number of Captains/Senior Captains in the Generation X generational cohort population (n=44, most preferred transformational leadership (n=32; 72%). The

transactional leader was the second most preferred (n=9; 20%) and laissez-faire was least preferred (n=3; 6%).

Of the total number of Captains/Senior Captains in the Boomer generational cohort population (n=32), most preferred transformational leadership (n=22; 19.0%). The transactional leader was the second most preferred (n=6; 19.0%) and laissez-faire was least preferred (n=4; 12.0%).

There were no Millennials at the rank of Captain/Senior Captain; therefore, there is no data to report for this group. Results are indicated in Table 16.

Table 16. *Frequencies and Percentages of the Preferred Leadership Style of Captains/Senior Captains; n= 76) From Generational Cohorts*

Generation	Leadership Style	<i>f</i>	%
Boomer	Transformational	22	68.8
	Laissez-faire	4	18.8
	Transactional	6	18.8
Generation X	Transformational	32	69.0
	Laissez-faire	3	12.0
	Transactional	9	19.0

Note: There were no Millennials at the rank of Captain/Senior Captain who responded to this study.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

In this chapter, a summary of findings from the implementation of the study and data analysis as well as conclusions and recommendations are discussed. A review of the purpose statement followed by a detailed look at the findings and conclusions from each research objective is included in this section. Finally, recommendations for future initiatives based on the current study and recommendations for further research conclude the chapter.

The purpose of this study was to examine the preferences for leadership style of firefighters of different rank and generational cohort. Understanding what firefighters prefer in the leadership style of their district chief can provide information regarding whether or not differences exist and how to best train leaders in the firefighter profession to be most effective with certain groups of followers. The Houston Firefighters organization had expressed an interest in the education and training of their leaders. Currently, there is no training for those firefighters going into leadership positions (J. Caynon, personal communication, April 2010). The researcher received much feedback from firefighters who responded to the survey requesting a summary of the findings. One firefighter indicated he is always looking for ways to improve his leadership and wants to know the results of the study. This could be an indication that firefighters are seeking to know more about leadership. This study could foster a training initiative among the Houston Firefighters organization in an effort to make them more effective in their leadership roles.

Summary of Findings

Research Objective One

The purpose of research objective one was to determine if there is a significant interaction between levels of generational cohort and rank of firefighters when presented with a sequence of leadership style scenarios. A Three-Way Mixed Model ANOVA was conducted to examine this interaction. There is no interaction for variables of leadership style score, generational cohort, and rank. Based on scenario, leadership style score is not affected by generational cohort or rank.

Research Objective Two

The purpose of research objective two was to determine if significant differences exist in leadership style score between levels of generational cohort of firefighter when presented with a sequence of leadership style scenarios. Mean scores were calculated for each generational cohort for each leadership style scenario. A Three-Way Mixed Model ANOVA was conducted on the data to determine if differences exist. All generational cohorts had the highest reported means for transformational leadership style. No significant differences were found between generational cohorts at any level of leadership style score. All generational cohorts of firefighters perceived the transformational leadership style the most positive.

Research Objective Three

The purpose of research objective three was to determine if significant differences exist in leadership style score between ranks of firefighter when presented with a sequence of leadership style scenarios. Mean scores were calculated for each rank

of firefighter for each leadership style scenario. A Three-Way Mixed Model ANOVA was conducted on the data to determine if differences exist. All ranks of firefighters had the highest reported means for transformational leadership style. No significant differences were found between ranks of firefighters at any level of leadership style score. All ranks of firefighters perceived the transformational leadership style the most positive.

Research Objective Four

The purpose of research objective four was to determine if there were significant differences in leadership style score between all firefighters when presented with a sequence of leadership style scenarios. A Three-Way Mixed Model ANOVA was conducted on the data to determine if differences exist. There was a significant difference across scenario for leadership style score. There were differences in all levels of leadership style scores across scenarios.

Research Objective Five

The purpose of research objective five was to determine which leadership style is most preferred by firefighters who differ by rank and generational cohort. All respondents indicated the district chief they would most prefer based on the sequence of leadership style scenarios presented. There were a total of 306 respondents. Frequencies were reported by generational cohort and rank for each leadership style preferred. Data for preferred leadership style is indicated in Figures 1-3 for each generational cohort.

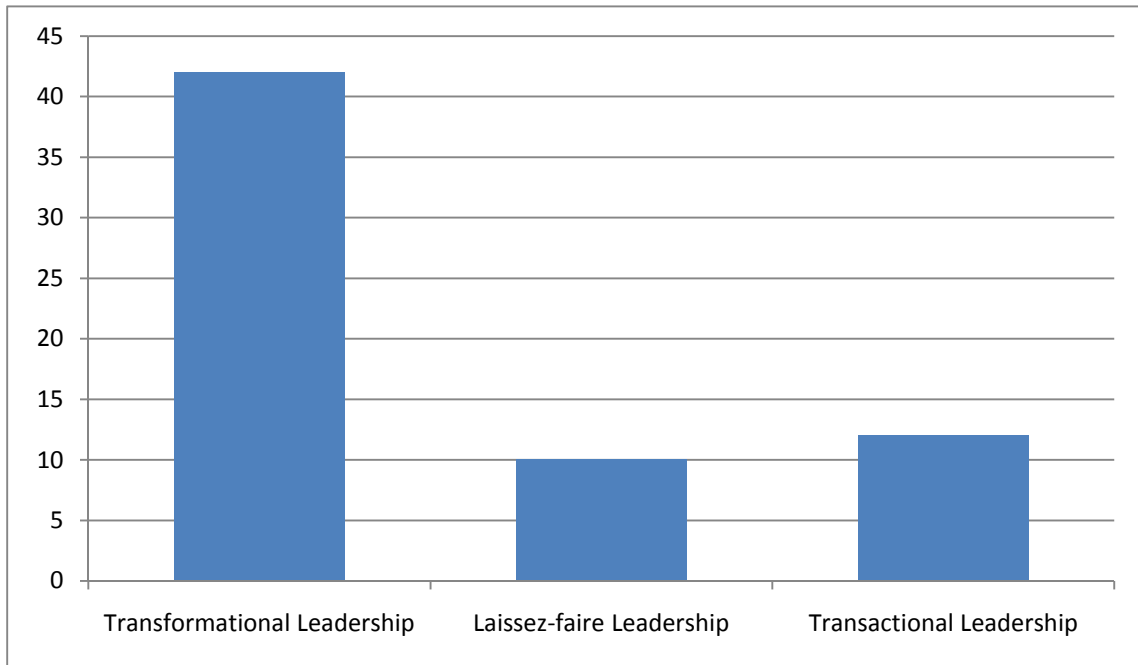


Figure 1. *A Visual Representation of the Number of Firefighters in the Boomer Generation Who Preferred a Particular Leadership Style (n=64)*

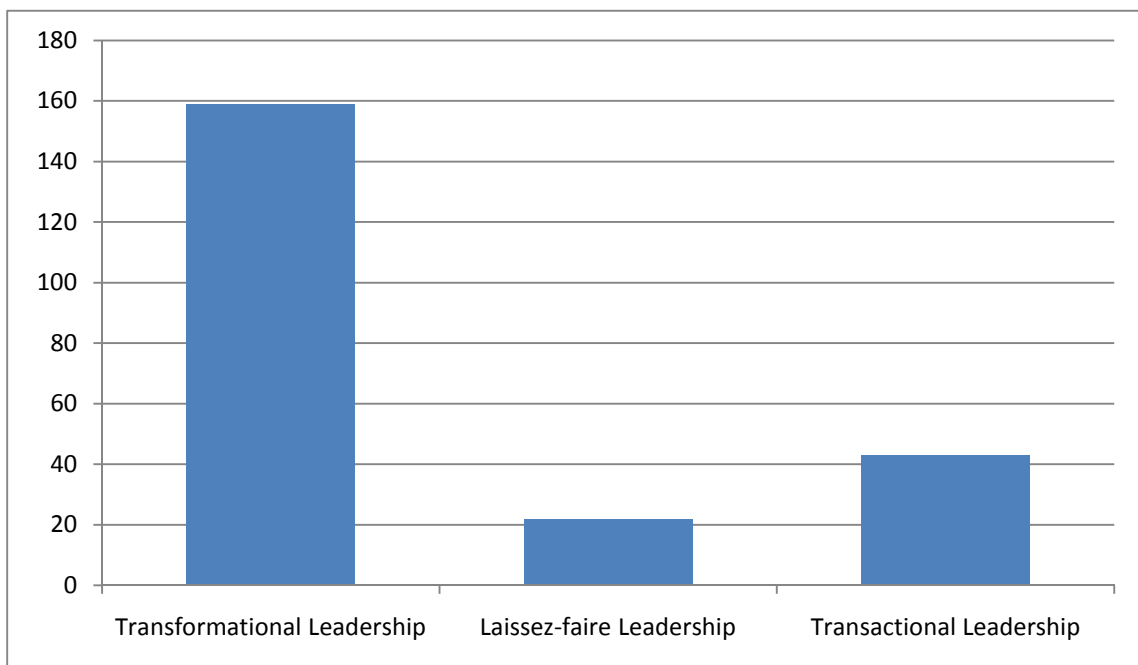


Figure 2. *A Visual Representation of the Number of Firefighters in Generation X Who Preferred a Particular Leadership Style (n=224)*

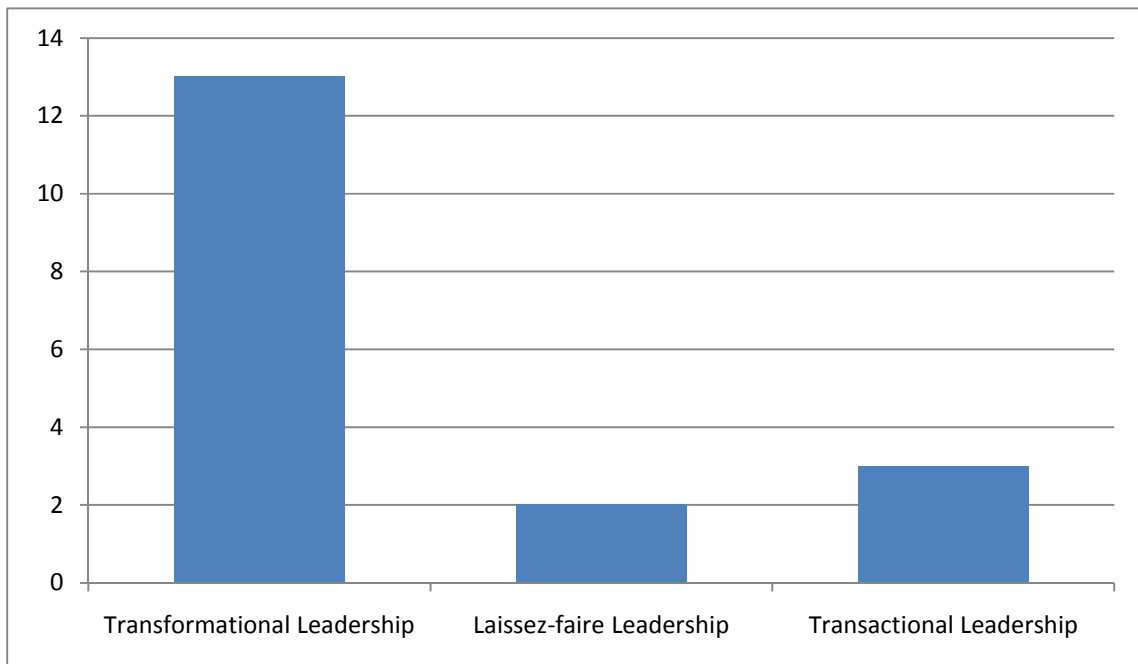


Figure 3. *Number of Firefighters From the Millennial Generation Who Preferred a Particular Leadership Style (n=18)*

As you can see from the previous figures, transformational leadership was the most preferred leadership style of any generation. Laissez-faire leadership was the least preferred among all generations. A transactional leader was the second most preferred. Data for preferred leadership style by rank is indicated in Figures 4-5.

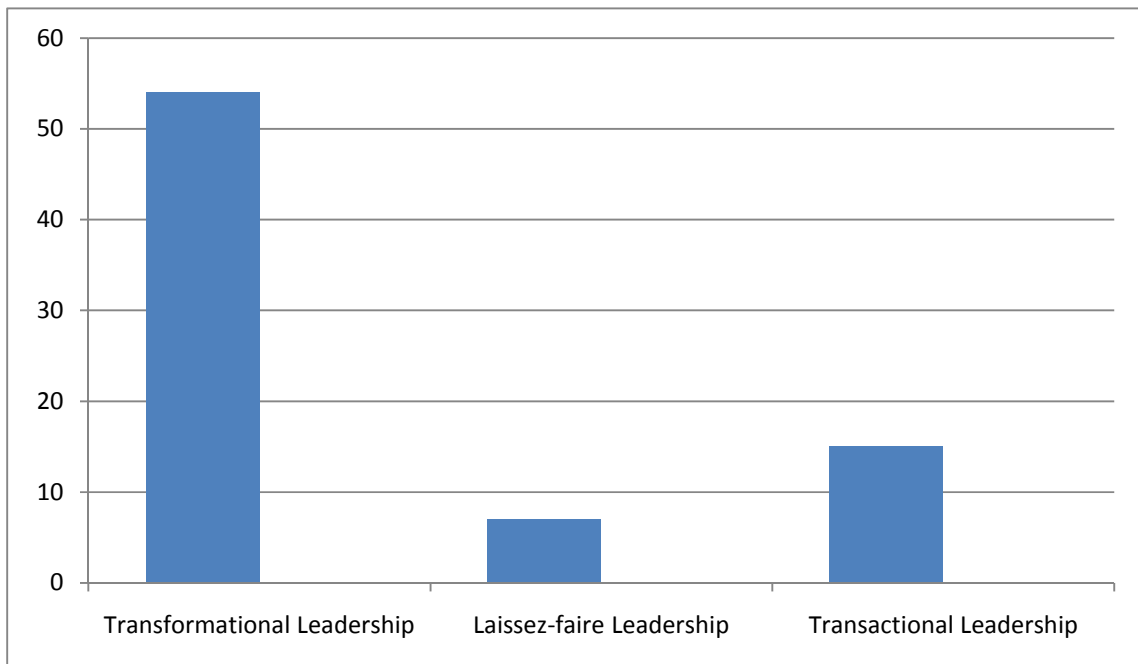


Figure 4. *A Visual Representation of the Number of Firefighters at the Rank of Captain/Senior Captain Who Preferred a Particular Leadership Style (n=76)*

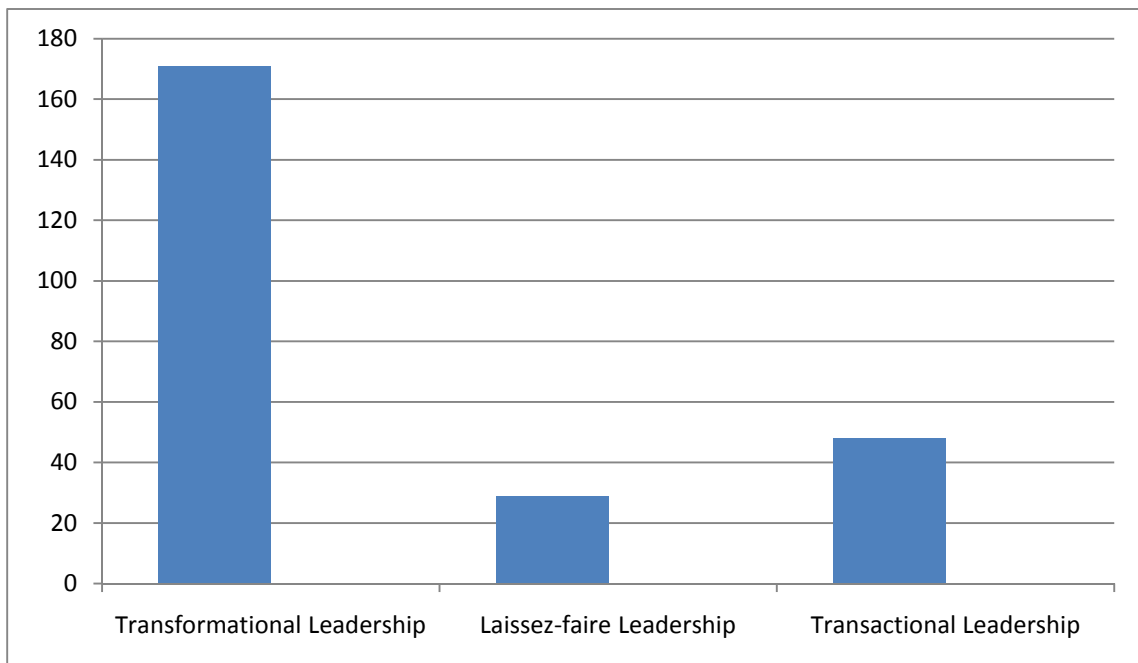


Figure 5. *A Visual Representation of the Number of Firefighters/Engineer Operators (non-leadership rank) Who Preferred a Particular Leadership Style (n=248)*

Firefighters from all ranks and all generational cohorts preferred the district chief with a transformational leadership style. Information reported in Figures 6-10 reflects the preferred leadership style of firefighters by each level of rank and generational cohort.

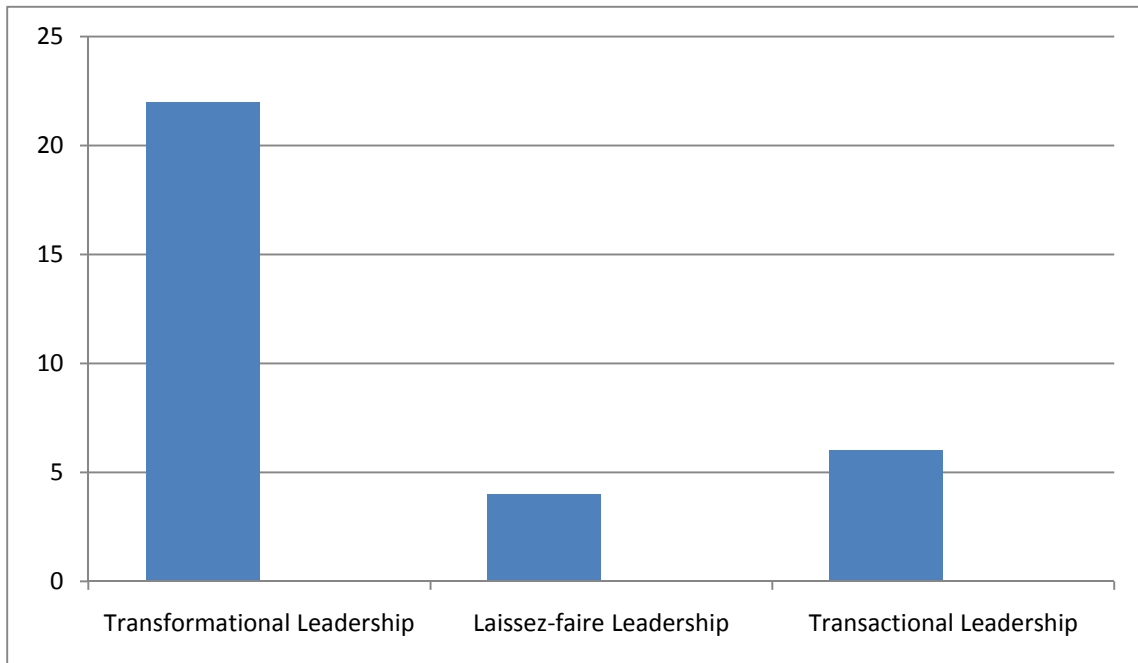


Figure 6. *A Visual Representation of the Number of Firefighters at the Rank of Captain/Senior Captain in the Boomer Generational Cohort Who Preferred a Particular Leadership Style (n=32)*

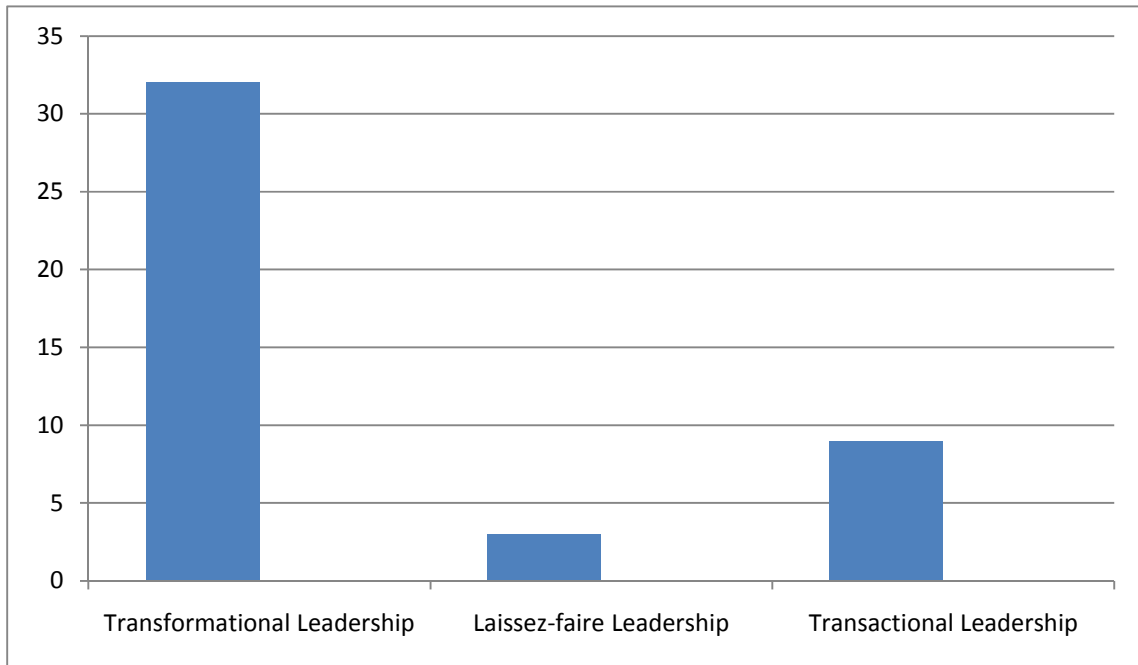


Figure 7. *A Visual Representation of the Number of Firefighters at the Rank of Captain/Senior Captain in the Generation X Generational Cohort Who Preferred a Particular Leadership Style (n= 32)*

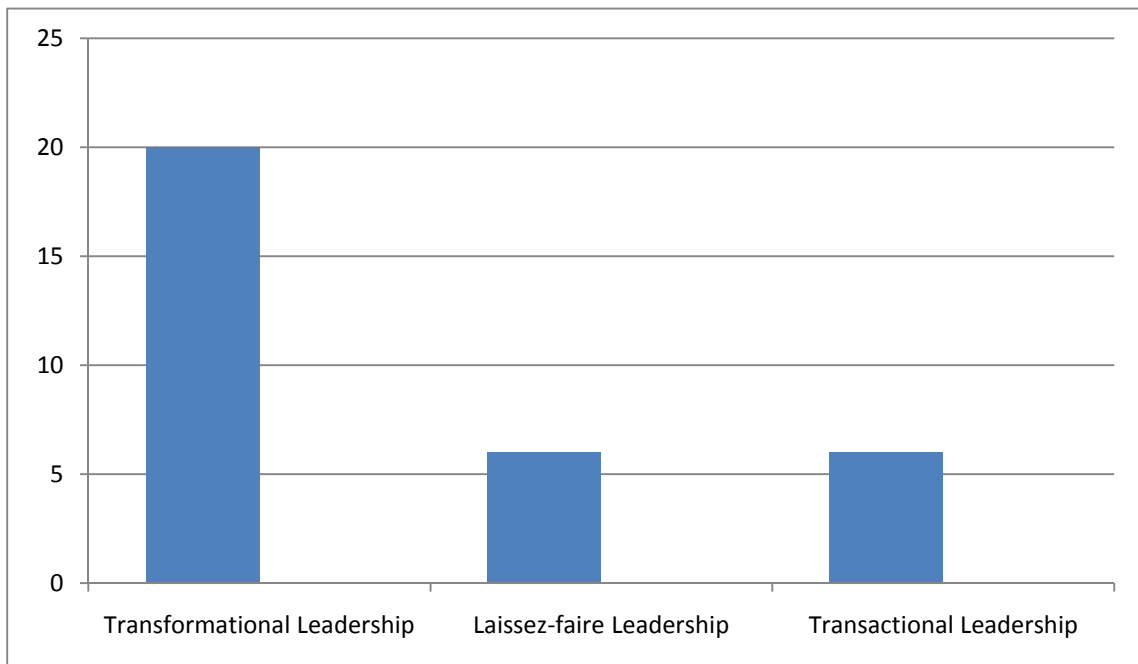


Figure 8. *A Visual Representation of the Number of Firefighters (non-leadership rank) in the Boomer Generational Cohort Who Preferred a Particular Leadership Style (n=32)*

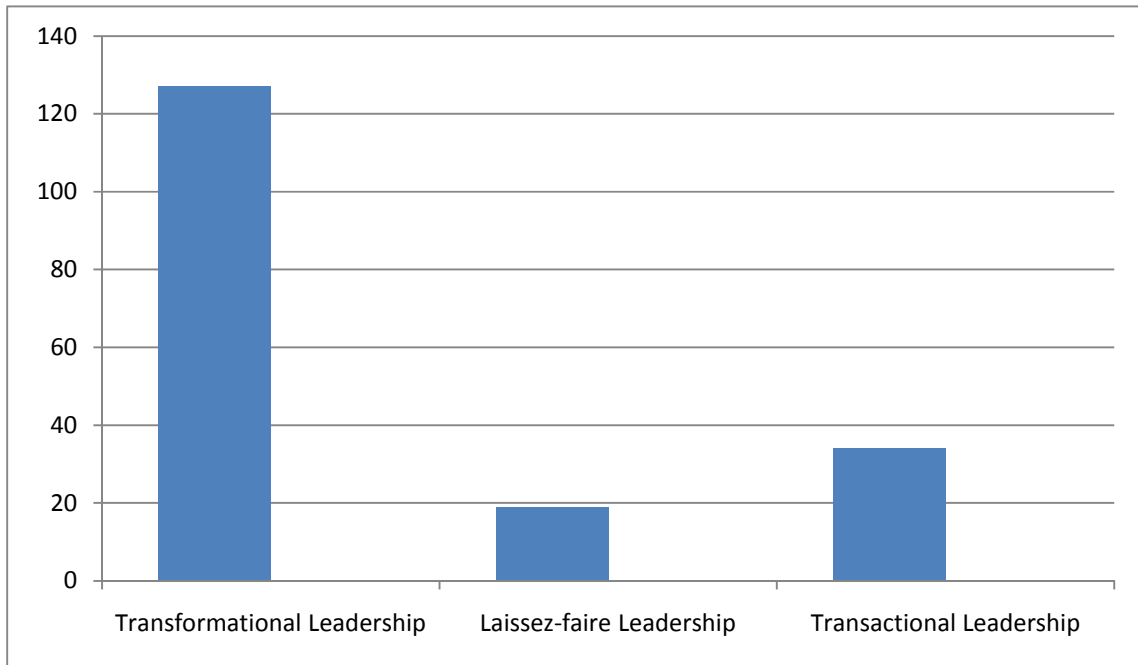


Figure 9. A Visual Representation of the Number of Firefighters (non-leadership rank) in the Generation X Generational Cohort Who Preferred a Particular Leadership Style (n=180)

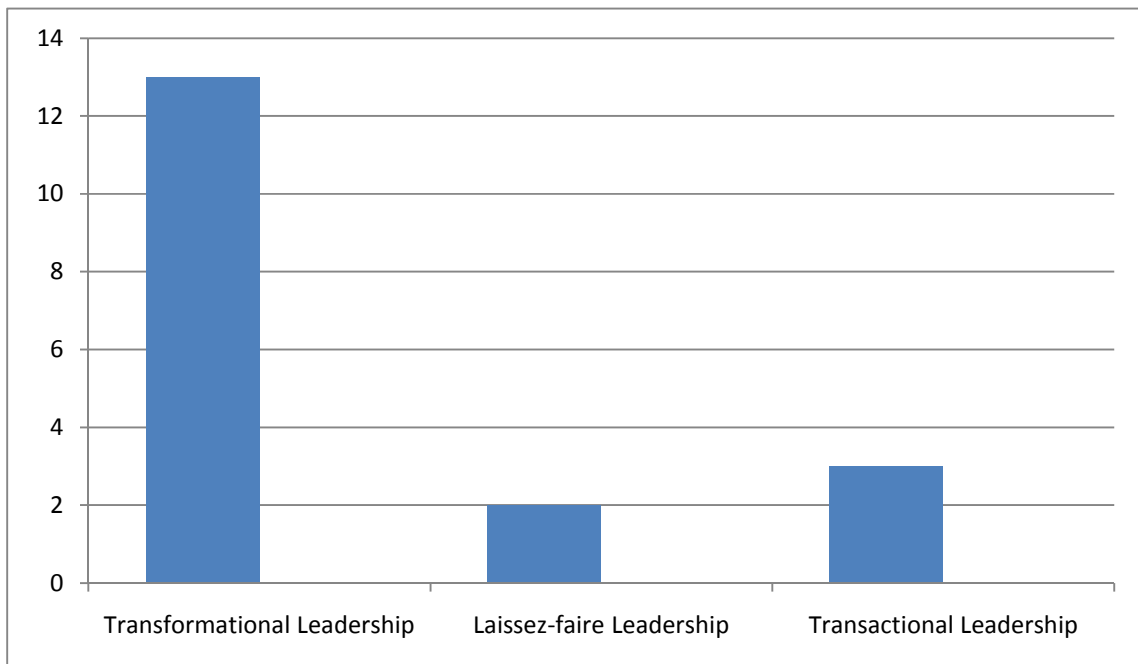


Figure 10. A Visual Representation of the Number of Firefighters (non-leadership rank) in the Millennial Generational Cohort who Preferred a Particular Leadership Style (n=18)

Conclusions

A transformational leader is one who engages with their followers and creates a connection with them and raises their level of motivation and morality. This leader is attuned to the followers' needs and strives to help them reach their full potential. Transformational leaders use individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence to transform an organization or situation into something different (Avolio & Bass, 2004; Bass, 1985; Northouse, 2004; Bass & Riggio, 2006). Consistent with prior studies (DeClerk, 2007; Bass, 1997; Duckett & Macfarlane, 2003; Yammarino, Dubinsky, Comer, & Jolson, 1997), transformational leadership was positively related to positive outcomes in this study. Transformational leadership was preferred by firefighters from all generations (42/64 Boomers, 159/224 Generation X, and 13/18 Millennials).

Transactional leadership was the second most preferred leadership style among firefighters. A total of 63 firefighters out of a total 324 preferred the transactional leadership style in their firefighters. Transactional leadership emphasizes a transaction or exchange among leaders and followers. The leader outlines the requirements of followers and specifies the conditions and rewards associated with fulfilling the requirements for the job (Bass & Riggio, 2006). Transactional leadership can be quite effective. "Transactional leadership, particularly contingent reward, provides a broad basis for effective leadership, but a greater amount of effort, effectiveness, and satisfaction is possible from transactional leadership if augmented by transformational leadership (Bass & Riggio, 2006, p. 11). DeClerk (2007) found that positive outcomes

with transactional leadership were not significant for the Millennial generation. He concluded that this style may not be effective with younger generations. In the current study, 3 out of a total of 18 Millennial firefighters preferred a leader with transactional leadership characteristics. There were a total of 12 Boomers (n=64) and 43 Generation X (n=224) who also preferred a transactional leader.

Laissez-faire was the least preferred leadership style of firefighters from all generations. A total of 36 (n=324) preferred a leader who was laissez-faire. A laissez-faire leader is one who is very hands-off when it comes to making decisions. This type of leadership style is the avoidance or absence of leadership, no authority is used in making decisions, and followers are left to do things on their own (Bass & Riggio, 2006). In prior research, this style of leadership correlates negatively to positive outcomes such as employee extra effort, perceived manager effectiveness, and employee satisfaction (Bass, 1997, Dubinsky et al., 1995, DeClerk, 2007). This is consistent with the finding from this study with laissez-faire leadership being the least preferred by all generations.

Recommendations for Practice

Preference for a leader/chief who exhibits transformational leadership style qualities appears to transcend generational and rank differences in firefighters. While generational differences may exist in regard to emotions, values, attitudes, etc., in this study all generations and ranks of firefighters preferred a transformational leader. Even though a few firefighters preferred a laissez-faire or transactional leader, a majority of firefighters preferred a chief who was transformational. Firefighters prefer a leader who

is committed to their organization's future and works to communicate a vision to their firefighters. This leader also challenges their firefighters to set high standards and pushes them to reach their potential. They rely on their firefighters to be creative in finding new ways to get the job done while also making sure they feel like they are making a difference. This transformational leader also sets high standards of moral and ethical conduct and works to gain the trust of their firefighters through their actions. The Houston firefighters should implement leadership training for their current and future chiefs with a focus on helping them understand how to be a transformational leader.

This training should encompass the four I's of transformational leadership: intellectual stimulation, inspirational motivation, idealized influence, and individualized consideration. The Houston Firefighters should look for previous chiefs who demonstrate these behaviors and qualities to draw on their experiences and can relate to what future chiefs should be doing to be transformational.

The Houston Firefighters organization should work with a leadership training consultant to apply characteristics of transformational leadership to their actual job duties to make this information applicable to their work. It may be unrealistic to ask a chief to drastically change their style of leadership to that of being transformational. However, it may be realistic to ask a chief to incorporate a few concepts of being transformational into their daily routine. A leadership training consultant could work with other Houston firefighters to determine what "transformational leadership" translates to in their everyday routines.

Recommendations for Further Research

Transformational leadership was the most preferred leadership style among all three generational cohorts of firefighters. A total of 214 of a possible 306 firefighters preferred a district chief who exhibited transformational leadership qualities. The second most preferred leadership style of a district chief was a transactional leader. Laissez-faire was the least preferred leadership style by firefighters of their district chief. All generations equally preferred transformational leadership followed by transactional and laissez-faire leadership styles. Transformational leadership seems to be the most preferred by firefighters. It was not preferred by all firefighters which mean there are factors that cause firefighters to prefer a different leadership style.

This research should be replicated with other populations to investigate whether there are differences among other populations in regard to leadership style preference. In this study, a difference was found among firefighters. However, there was a small effect size meaning this cannot really be inferred to other populations.

Generational cohort or rank did not explain why firefighters preferred the leadership style they selected. Other factors should be explored in regard to why firefighters preferred the leadership style they selected. While transformational leadership was most preferred, not all firefighters preferred this style. Perhaps there are factors more important than others about a leadership style. A follow-up study might consist of ranking the factors for each leadership style to gain an understanding of which factors are most important to followers about a leader. This information could then be used to design training programs with the most important factors to be taught.

Though transformational leadership was the most preferred by all firefighters, are there situations where this style of leadership is not always the best? Should transformational leadership be tested against situations that leaders face? In a time of crisis, transactional leadership may produce the best outcomes. But, other circumstances may warrant a different leadership style. More research should be conducted to include the factor of situations when looking at whether or not transformational leadership produces the best outcomes in a situation.

Though an attempt was made to survey all generational cohorts in this study, the Millennial population was still very small in the number who responded. More research should be targeted specifically at capturing the responses of the Millennials in order to gain a more accurate picture of the phenomenon of generations and implications of the differences which may exist among all generational cohorts.

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APPENDIX A

Construct Loadings from the Principal Component Analysis of the Items of the Leadership Preference Instrument (Unrotated Solution)

Item	Scale loading
Construct 1: Transformational Leadership Style	
I would work at a high level of performance with this District Chief.	.791
I would enjoy working with this District Chief.	.867
I would admire this District Chief.	.743
I would do more than is expected of me for this District Chief.	.773
I would find this District Chief's leadership style compatible with my own	.870
I would find this District Chief's leadership style similar to my ideal District Chief.	.825
Construct 2: Transactional Leadership Style	
I would work at a high level of performance with this District Chief.	.673
I would enjoy working with this District Chief.	.845
I would admire this District Chief.	.594
I would do more than is expected of me for this District Chief.	.796
I would find this District Chief's leadership style compatible with my own	.857
I would find this District Chief's leadership style similar to my ideal District Chief.	.813
Construct 3: Laissez-faire Leadership Style	
I would work at a high level of performance with this District Chief.	.696
I would enjoy working with this District Chief.	.874
I would admire this District Chief.	.741
I would do more than is expected of me for this District Chief.	.859
I would find this District Chief's leadership style compatible with my own	.871
I would find this District Chief's leadership style similar to my ideal District Chief.	.853

APPENDIX B

Leadership Preference Instrument

You have been asked by upper level management to relocate to one of the three new fire stations that have been built in the area. The district chiefs at each station have different leadership styles. The upper level management has decided to allow for your input into where you will locate and would like to know which district chief for whom you would most like to work. The district chiefs have provided descriptions of their leadership styles and they are listed below. After reading each description, you will be asked to rate your perceptions of the leader through a series of questions. After reading all of the statements, you will then be asked to make a choice of the district chief for whom you would most like to work. The last few questions are demographic questions.

District Chief #1

I have been a successful leader because I am committed to my organization's future and I work hard to communicate my vision for this organization to my firefighters. I challenge my firefighters to set high standards and I expect them to work as hard as they can to reach those standards. However, I don't push them only for the sake of productivity; rather, I want them to reach their potential and do the best job they can. My goal is to do things differently than this organization has done them in the past, and I'm willing to take some chances to show them how things can be improved. I rely on my firefighters to be creative in finding new ways to get the job done. I don't want my firefighters to think of this as just another job. Instead, I try hard to make them feel like they are a part of something special here, something big, something that is going to make a difference in this organization. I try to attain very high standards of moral and ethical conduct and want to gain the trust of my firefighters through my actions.

In the following statements, please indicate how you perceive District Chief 1.

Strongly Disagree Disagree Neither disagree Agree Strongly Agree
Or agree

1. I would work at a high level of performance with this District Chief.
2. I would enjoy working with this

District Chief.

3. I would admire this District Chief.
4. I would do more than is expected of me for this District Chief.
5. I would find this District Chief's leadership style compatible with my own.
6. I would find this District Chief's leadership style similar to my ideal District Chief.

District Chief #2

I attribute my success as a leader to allowing my firefighters to handle things on their own. I take a very "hands-off" approach to leading. I do not pressure my firefighters to do any more than what is required of them for their job. I am content letting others take control of their own work and I do not criticize firefighters on their work. I have little contact with my firefighters and do not see a need to call meetings in regards to work-related issues. I turn over all responsibility to firefighters and allow them to make decisions without asking me.

In the following statements, please indicate how you perceive District Chief 2.

Strongly Disagree Disagree Neither disagree Agree Strongly Agree
Or agree

1. I would work at a high level of performance with this District Chief.
2. I would enjoy working with this District Chief.
3. I would admire this District Chief.
4. I would do more than is expected of me for this District Chief.
5. I would find this District Chief's leadership style compatible with my own.
6. I would find this District Chief's leadership style similar to my ideal District Chief.

District Chief #3

I'm successful as a leader because I develop clear goals and well designed strategies for my firefighters. I begin by working with my station leaders to set goals for their work. I ensure firefighters understand what they are getting in exchange for their work. I am very careful and detailed in laying out what I expect from them. I don't want there to be any ambiguity; they need to know exactly what to do and when it needs to get done. Once they know what needs to get done, I make sure they have everything they will need to do it. I provide critical feedback for my firefighters when work is not being carried out correctly. Finally, I recognize the accomplishments of my firefighters only when they meet certain standards.

In the following statements, please indicate how you perceive District Chief 3.

Strongly Disagree Disagree Neither disagree Agree Strongly Agree
Or agree

1. I would work at a high level of performance with this District Chief.
2. I would enjoy working with this District Chief.
3. I would admire this District Chief.
4. I would do more than is expected of me for this District Chief.
5. I would find this District Chief's leadership style compatible with my own.
6. I would find this District Chief's leadership style similar to my ideal District Chief.

Please select the District Chief for whom you would most like to work.

- District Chief #1
- District Chief #2
- District Chief #3

What year were you born?

What is your gender?

- Male
- Female

What is your race/ethnicity?

- White
- Black or African American or Negro
- American Indian or Alaskan Native
- Spanish/Hispanic/Latino
- Asian Indian
- Chinese
- Filipino
- Japanese
- Korean
- Vietnamese
- Native Hawaiian
- Guamanian or Chamorro
- Samoan
- Other Pacific Islander
- Some other race (Please write in space below)

How many years have you worked as a firefighter?

- Less than 6 months
- 6 months to less than 1 year
- 1 year to less than 2 years
- 2 years to less than 5 years

- 5 years or more

What is your education level?

- Graduate degree or coursework toward a graduate degree
- Degree from a 4-year institution
- Degree from a 2-year technical or community college
- Some college coursework, but no college degree
- High school diploma or equivalent
- No high school diploma

APPENDIX C

Dear Houston Firefighter,

As part of my requirements for completing a doctoral degree, I am conducting a study to examine employees' preference for leadership style and whether or not there are differences among generations.

In the process of my research, I have been working with Bear Wilson, who is a Houston firefighter at Fire Station #99-A, on tailoring the instrument so that it would relate to firefighters. Understanding firefighters' preferences in regard to leadership style of their district chief can inform those in leadership positions in the organization how to better lead their firefighters. This feedback could be useful in advancing the knowledge base of characteristics of firefighters in the leadership process. If you would like to contact Bear about this study, his email is bear_wilson91@yahoo.com.

Participation in this study is completely voluntary. However, you can help me very much by taking a few minutes to share your preferences in regard to leadership style of your district chief. Rest assured that your refusal to participate in this study will not affect your relationship with the Houston Firefighters.

This survey consists of three descriptions of district chiefs. After each description, you will be asked to give your perception of the district chief through six statements. Once you have read all of the descriptions and given your perceptions about each of the district chiefs, you will then be asked to indicate which chief for whom you would most like to work. The final questions are demographic questions. This survey should take less than 15 minutes of your time to complete and is available by going to this link: http://tamucehd.qualtrics.com//SE?SID=SV_ahIf2AWfGobbrx2

All responses will be anonymous. Your responses will not identify your district chief or your fire station. All data will be reported as group data; individual responses will not be reported.

This research has been approved by the Institutional Review Board, protocol #2010-0259. You may contact the Texas A&M University Office of Research Compliance at (979) 458-1467 for further information concerning human participation in research studies.

Thank you for your time in completing this survey. If you would like to see a summary of the results of this study, feel free to email me at summerodom@tamu.edu. If you have questions, do not hesitate to contact me.

Sincerely,

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