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The Difference in the Social Styles of Career and Volunteer Fire Chiefs

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THE DIFFERENCE IN THE SOCIAL STYLES OF CAREER AND VOLUNTEER FIRE CHIEFS

by

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Table of Contents

List of Tables

List of Figures

Abstract

THE DIFFERENCE IN THE SOCIAL STYLES OF
CAREER AND VOLUNTEER FIRE CHIEFS

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The purpose of this study was to determine whether a difference exists in the Social Style of a career fire chief (paid) and a volunteer fire chief. This study evaluated the Social Style of 211 fire chiefs in the State of Texas, to determine whether a difference existed between the Social Style of volunteer fire chiefs and the Social Style of career (paid) fire chiefs. Fire chiefs were surveyed and their Social Style determined by use of Wilson Learning Corporation's Social Style Profile Social Impression Survey. The results were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The analysis showed that there is no statistically significant difference in the Social Style of a career fire chief and a volunteer fire chief. Volunteer fire chiefs are no more or less likely to take risk than their paid counterparts based upon their Social Style.

Chapter 1

Background to the Problem

Since the first settlers arrived in the new world, fire has plagued America (Cote, 2004). The first recorded fire death happened in Boston, Massachusetts, in the year 1653, and took the lives of three children (Cote, 2004). The first volunteer fire protection efforts were organized by Peter Stuyvesant in New Amsterdam, later renamed New York when the English took control of the land from the Dutch (Burrows & Wallace, 1999) in 1648, and the first paid fire department was formed in Cincinnati, Ohio, more than 200 years later in 1853 (Cote, 2004).

The American fire service has evolved into a dynamic culture consisting of full time employees and managers, part time employees and managers, as well as volunteer employees and managers (Rubin, 2013). Multiple types and combinations of fire departments can be found throughout the American fire service (Cote, 2004). The most common, however, are career departments (paid employees), volunteer departments (volunteer employees), and combination (part career and part volunteer) departments (Cote, 2004).

Leadership is a leading factor in the success of an organization (Bass, 1990). Social Style influences an individual's impact on the organizational leadership, team dynamics, and overall organizational effectiveness (McKenna, Shelton, & Darling, 2002).

Career fire departments traditionally hire and promote individuals based upon established criteria and needs of the department and community (Hyden, 2012). However, volunteer firefighters, and subsequently volunteer managers, volunteer and participate without compensation for a variety of reasons, including the need to contribute to society, altruism, or self-gratification (Carpenter & Myers, 2010).

Social Style "is a pervasive and enduring pattern of interpersonal behaviors" (Bolton & Bolton, 1984, p. 3). Social Style and behaviors have been studied by psychologists for years (Ulrich & Belzer, 2013). Skinner and Freud both observed behaviors of individuals and attempted to explain the relationships (Feist & Feist, 2008). However, it was not until the theory and practice of human resource development that these theories grew more sophisticated, "as psychologists and sociologists became interested in social interaction and human resource development" (Merrill & Reid, 1981, p. 40).

The Social Style analysis developed by Merrill and Reid analyzes an individual's style by categorizing the individual's behavior onto a scale measuring the individual's assertiveness and responsiveness (Gross, 2002). The scale is divided into four quadrants, based on the individual's score on the assertiveness scale and the score on the responsiveness scale. The four quadrants are Analytical, Driver, Expressive, and Amiable (Merrill & Reid, 1981).

On April 17, 2013, in the small town of West, Texas, an explosion at the West Fertilizer Company killed 14 people and injured hundreds (SFFMA, 2013). Among the dead, were six volunteer firefighters (Weber, 2013). Reports from various news outlets

indicated that the volunteer fire department was engaged in suppressing a structure fire at the West Fertilizer Company when the explosion occurred (Weber, 2013).

Several questions are posed by this unfortunate incident; would a career fire department have executed similar firefighting tactics as the West Volunteer Fire Department did? Would a career fire chief possess personality traits that would have caused him or her to react differently, or take less risk, than the volunteer fire chief in West, Texas? Is there a difference in the Social Style of a volunteer fire chief, that is elected or appointed by the volunteer members of the volunteer fire department, compared to the Social Style of a career fire chief that is promoted based upon education, merit, and accomplishments? Are firefighters more or less safe depending on the Social Style of the fire chief?

Statement of the Problem

While some evidence has been found to support the theory and practice of Social Style (Merrill & Reid, 1981), limited, if any, empirical research has been conducted to determine if the Social Style of fire chiefs varies with the type of fire department. Does a career fire chief of a large metropolitan fire department (for instance Houston, Texas) rate similarly on the assertive/ responsive Social Style scale as a fire chief of a rural volunteer fire department (for instance West, Texas)? Furthermore, little, if any, empirical research has been located that addresses the Social Style of executive managers and leaders of successful organizations and businesses compared with the Social Style of executive managers and leaders of volunteer, non-profit, or similar organizations.

Purpose

The purpose of this study is to examine the Social Style of chiefs of career (paid) fire departments with the Social Style of volunteer fire chiefs within the state of Texas. The study will determine if a difference exists between the chiefs of the two types of fire departments.

Significance of the Study

An individual who possesses the ability to know his personality profile or Social Style – and more importantly, the details of why he or she acts the way they do – and the ability to identify the Social Style of those that he or she interacts with, may be better enabled to build relationships and achieve better success than one who fails to notice why his or her behavior affects people differently (Patton, 2010). The theory of Social Style categorizes an individual's personality type into one of four types: driver, analytical, amiable, or expressive (Gilley & Gilley, 2003).

The difference in Social Style affects the individual's action and reaction pertaining to risk taking. Pierce (2005) identifies drivers as "risk-takers and deep thinkers"; analyticals as "risk-avoiders and deep thinkers"; amiables as "risk-avoiders and feeling-reactors"; and expressives as "risk-takers and feeling-reactors" (2005, p. 45). The understanding of an individual's Social Style leads to an understanding of their probability to take risk (Pierce, 2005). The safety of the firefighters may be directly linked to the aggressiveness, or the elevated potential to take risk, of the fire chief.

> Two of the associated behavioral opposites identified within the Social Style grid are: risk-taking versus risk avoiding, and thinking versus feeling…. [t]hese two

> behavior extremes provide an ideal approach for use in this study because they help identify individuals who are both risk-takers and feeler decision-makers. Individuals with these two traits are personalities who would be most likely to choose to hang glide off El Capitan, drive fast, play chicken with real knives or be more accepting to higher-risk situations. (Pierce, 2005, p. 44).

Pierce (2005) also showed that risk-takers are more likely to be injured on the job or in the workplace than risk-avoiders. Therefore, the question still lingers, are employees (fire fighters) more or less safe depending on the risk-taking/ risk-avoidance of their fire chief on the fire ground?

This study will determine whether career fire chiefs in the state of Texas share the same Social Style as volunteer fire chiefs in the state of Texas. Social Style affects perceptions of trust and credibility of leaders (Gross, 2002). Therefore, the trust an individual has in his or her manager is influenced by the Social Style of the leader and that of the subordinate. Additionally, the power, credibility, and influence of the leader are affected by the Social Style. Social life is not "so chaotic as to defy prediction and explanation…. social behavior falls into patterns" (Babbie, 2007, p. 43).

The implications of this research study are not narrowly defined. Beginning with the research question, the reader will know if there is a difference between the Social Style of career fire chiefs and volunteer fire chiefs. Assuming that the hypotheses are supported and this study finds that there is a difference in the Social Style of the different types of fire chiefs, the implications can be predicted.

From a research perspective, the concepts of a career fire chief and that of a volunteer fire chief can be expanded. The conceptual setting of a fire department can be removed. The analysis can be applied to chief executive officers or presidents of businesses or organizations who receive a salary or compensation (are paid to run the business) and compared to executive officers of organizations who do not receive a salary or compensation to run the organization. The potential research question in this context could be, "Is there a difference in the Social Style of career chief executive officers of businesses or organizations and the Social Style of executive managers or officers of non-profit or volunteer organizations?" This research concept could be applied to a multi-billion dollar company or a local grocery store and compared to a local LIONS club or a Masonic Grand Lodge.

Another potential research implication is the expansion of the study to include another variable. Leadership styles, in particular, could apply to the outcomes of this study. Several leadership styles have been identified, including but not limited to authoritarian leader, transactional leader, transformational leader, and Laissez-faire leader (Politis, 2001). The potential research implication here is to further expand the study to include leadership styles along with Social Style and determine if the leadership styles of the career fire chiefs were different from the leadership styles of the volunteer fire chiefs. This could be expanded even further to determine if there was a relationship between the Social Style of the fire chief and the leadership style of the fire chief.

The researcher could then examine the findings and determine if a particular combination of leadership style and Social Style was prevalent. In other words, is there a particular leadership style and Social Style combination that a career fire chief tends to

have? Is there a particular leadership style and Social Style combination that a volunteer fire chief tends to have? Is there a difference between the leadership style and Social Style combination of a career fire chief and that of a volunteer fire chief?

This concept of leadership styles and Social Style is not limited to the American fire service. Similarly, it could be applied to the chief executive officers of businesses and/ or organizations, and compared to the executive officers (or managers) of non-profit or volunteer organizations.

Similar to adding the variable of leadership styles, future research might include the addition of the measure of the variable or trustworthiness of the individual in the eyes of his or her subordinates. The potential research implication here would be to determine the trustworthiness of the fire chief, and determine if there was a difference between the perceived trustworthiness of a career fire chief and the perceived trustworthiness of a volunteer fire chief. This could also be expanded to include combinations of Social Style and trustworthiness. Is there a difference between the Social Style and trustworthiness combination of a career fire chief and that of a volunteer fire chief?

Again, the concept of trustworthiness and Social Style is not limited to the American fire service and could be applied to business and organizations across many spectrums of specialty, regardless of the type of executive manager or officer overseeing the organization or entity (compensated or volunteer).

Another area for expansion of the research of this study would be to determine the ability of each fire chief to flex from his or her own Social Style into another quadrant when conditions or circumstances required it. Ulrich and Belzer (2013) identified the

ability of hospital chief executives to flex. This potential research area could determine if career fire chiefs had a higher or lower potential to flex than volunteer fire chiefs. Additionally, this concept could be studied to determine if the fire chiefs had the ability to flex only when dealing with personnel issues or other circumstances which would require the interaction of others. It could also be studied to determine if the fire chief had the ability to flex from a risk taking style to a risk averse style, thus providing an avenue to determine if a theoretical risk taker could flex into a risk averse manager.

Theory Contributions

This study is theoretically underpinned by the theory of Social Style. This study does little to directly expand the Social Style theory. The theory of Social Style has been applied to employees and correlated the individual's Social Style with industry injury rates, but little, if any, research has been conducted that applies the theory of Social Style to the American fire service. There is ample research that applies the theory of Social Style to management and leadership. Human capital theory has been posed as a theoretical underpinning of Social Style and how the Social Style profile can be used to increase productivity, effectiveness, efficiency, and the overall contributions of a workforce to a business or company (Belzer & Rumsey, 2014). However, little, if any research has been conducted that applies the theory of Social Style to the management of volunteers or to the management by volunteers and compared it to the management of employees in a business or professional setting. This study has bridged the theoretical gap in the use and application of the theory of Social Style to compare professionals and volunteers.

This study will provide for additional research in the application of Social Style to the management of or the management by volunteers. In a professional business environment, people feel the need to be there (the need to have a job and provide for one's family). However, with volunteers, individuals volunteer for personal reasons and generally have a desire or want to be there. This study opens the door for the application of the theory of Social Style to volunteers and volunteer organizations.

The fire service in the United States of America is quite a unique and dynamic culture (Moran & Roth, 2013). It is, nonetheless, a professional culture which relies on human capital. Human resources are often the largest capital investment in which a business has (Gilley, Eggland, & Gilley, 2002) . The purpose of this study was to determine if there was a difference between the Social Style of career fire chiefs and volunteer fire chiefs. The chief officers of the fire departments were the focus of this study. The theory of Social Style was used to provide the theoretical foundation for the study; however, with the focus on human capital applied to the American fire service, a theoretical concept for future research or development might be the application of human capital theory to provide a theoretical foundation to the theory of Social Style or vice versa.

Practical Contributions

The practical contributions of this study can be applied directly to the American fire service, but also to industry in general. As previously stated, the theory of Social Style has been applied to industry injury rates, and it was proven that theoretical risk takers, according to the theory of Social Style, are more prone to be injured on the job or in the workplace (Pierce, 2005). However, the study was limited to employees and their

predisposition to take risks. The study did not address the risks taken by management when it comes to personnel or employee safety. Depending on the outcomes of this study, it may be proven that career fire chiefs are more risk averse than volunteer fire chiefs, thereby indicating that career fire chiefs will take fewer, or less severe risks on the fire ground, thus promoting firefighter, or employee safety by the means of their personality alone. Conversely, if the study shows that volunteer fire chiefs are more apt to take risks than career fire chiefs, then it could be argued that volunteer fire fighters are more likely to be placed in precarious or dangerous situations on the fire ground due to the personality of the fire chief.

The practical findings of this study, much like the potential for additional research, can be expanded beyond the American fire service. The United States Department of Labor publishes injury and illness data categorized by industry type (United States Department of Labor, Bureau of Labor Statistics, 2011). The same practical findings of this study as they relate to the theoretical risk takers in the fire service can be applied to any industry and to the potential safety of any employee.

This study also has practical applications to business. The theory of Social Style can be used to identify the theoretical risk takers according to their respective Social Style. The previous statements have articulated that taking risk may be interpreted negatively when the subject is personnel safety. In the corporate world, however, the concept of taking risk is viewed differently. "The importance of risk to decision making is attested by its position in decision theory, by its standing in managerial ideology, and by the burgeoning interest in risk assessment and management" (March & Shapira, 1987, p. 1404). Risk is generally recognized as a personal incentive to achieve a goal or an

objective, rather than an organizational approach. Managers often view risk taking as an essential component of running a successful business and draw a distinct difference between taking risk and gambling (March & Shapira, 1987).

Using the theory of Social Style to identify the theoretical risk takers, could prove beneficial to corporate boards or executives when searching for attributes or qualities to apply to a job search for an executive officer or manager. Additionally, as shown herein, the concept applies to volunteer organizations when selecting an executive officer as well. The bottom line is that the organization has to determine whether or not risk taking is an attribute.

This brief review of the potential contributions of this study is dependent upon the outcomes of the study, which are currently unknown. The potential for additional research included combining Social Style with leadership style, trustworthiness, and the ability to flex. These are but a few of the possibilities that could be combined with Social Style.

The theoretical contributions are limited by the scope of the study. While underpinned by established theory, this study does not attempt to refine an existing theory or to offer a new theory to the field.

The practical applications are applied to the fire service, particularly to the safety of the firefighters. These applications, however, can be applied to blue-collar industries, corporations, or volunteer organizations. Each entity will have a different perspective on risk taking. Social Style has been shown to identify risk takers (Gilley & Gilley, 2003).

This study directly applies to risk taking personalities on a fire ground, but can be applied across a broad spectrum of business and industry.

Scope

This study will be limited to chief executive officers (fire chiefs) of fire departments in the state of Texas.

Definitions

A common, yet definitive understanding of terms is essential for all readers and researchers to be able to draw the necessary conclusions (Rumsey, 2013). For the purpose of this study, the following definitions will apply:

Amiable(s) – Amiable style is perceived as ask-assertive/ emote responsive. Amiables are people oriented, friendly, accepting, cooperative, and like to be liked. Amiables are motivated to help others in a team effort (Gilley & Gilley, 2003, p. 127).

Analytical(s) – Analytical style is perceived as ask-assertive/ control-responsive. Analyticals are task oriented, precise, and thorough. Analyticals like to deal in facts, work methodically, and use standard operating procedures (Gilley & Gilley, 2003, p. 126).

Ask (Assertive) – an individual who scores low on the assertive scale on the Social Style Analysis.

Career Fire Chief – the executive manager of a career fire department who receives compensation and is a full time employee of the career fire department of which he or she is the executive manager.

Career Fire Department – those fire departments that rely mostly or entirely on career fire fighters (Cote, 2004, p. 41).

Control (Responsive) – an individual who scores high on the responsiveness scale on the Social Style Analysis.

Driver(s) – Driver style is perceived as tell-assertive/ control-responsive. Drivers are goal oriented, disciplined, determined bottom-line thinkers who push for results and accomplishments. Drivers like control (Gilley & Gilley, 2003, p. 127).

Emote (Responsive) – an individual who scores low on the responsiveness scale on the Social Style Analysis.

Expressive(s) – Expressive style is perceived as tell-assertive/ emote responsive. Expressives are idea oriented, vigorous, enthusiastic, and spontaneous. They like to initiate relationships and motivate others toward goals (Gilley & Gilley, 2003, p. 127).

Fire Chief – The senior management official in most fire departments. The fire chief usually reports to a city manager, mayor, or a special district board of directors. This position has ultimate responsibility for the management of the fire department and in that role supervises whatever management officers are in place (Cote, 2004, p. 421).

Social Style – A person's level of assertiveness and responsiveness. A person's Social Style is measured by the Social Style Analysis. The analysis divides people into four major categories (driver, amiable, expressive, and analytical) (Gross, 2002, p. 6).

Tell (Assertive) – an individual who scores high on the assertiveness scale on the Social Style Analysis.

Volunteer Fire Chief – the executive manager of a volunteer fire department who does not receive a salary and is not a full time employee of the volunteer fire department of which he or she is the executive manager.

Volunteer Fire Department – those fire departments that rely on volunteer or paid on call fire fighters (Cote, 2004, p. 433).

Research Question and Hypothesis

Research Question.

The purpose of this study will be to examine whether the Social Style of career fire chiefs differs from the Social Style of volunteer fire chiefs.

Hypotheses:

Hypothesis 0 (null): There will be no relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief.

Hypothesis 1: There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief.

Hypothesis 2: Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs.

Hypothesis 3: Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale.

Chapter 2

Review of Literature

The American fire service is a dynamic culture that is composed of both volunteer and career fire departments (Cote, 2004). The executive managers of these fire departments, fire chiefs, assume a unique managerial role. Some fire chiefs manage rural fire departments composed of individuals (some trained and some not trained) who volunteer their time and energy without compensation; while some fire chiefs manage urban fire departments composed of professional firefighters. Each fire chief shares the same responsibilities to their respective communities but the different fire chiefs vary considerably in their respective expertise, and in the resources available to them. The ability of the fire chief to have the trust of his or her subordinates and the ability to engage in effective communication is a trait shared by both the volunteer fire chief and the career fire chief. Therefore, it is important to understand if the Social Style of the fire chief varies with the fire chief's status as a volunteer fire chief or a career fire chief.

Chapter 1 of this study presented the background of the research problem, the purpose and significance of the study, and identified the hypotheses to be tested. Chapter 2 will present the review of the related literature. This review of related literature is divided into four sections. The first section will address the American fire service and the dynamics associated with it including historical perspectives and types of fire

departments. The second section will address volunteerism and discuss why people volunteer. The third section will discuss leadership and team building and will touch on the relationships with Social Style. The fourth section will address the concepts and theory of Social Style. No empirical evidence was discovered while researching this topic to indicate any empirical research into the relationships of a fire chief's status as a career fire chief or a volunteer fire chief and their Social Style. Therefore, a gap in the literature has been discovered that this study will fill.

The American Fire Service

The fire service in America formally began prior to the Declaration of American Independence. The first fire service organization was begun in Boston, Massachusetts, in 1648, when Peter Stuyvesant organized a volunteer fire watch in New Amsterdam (Cote, 2004). Since then, the fire service has expanded to more than 30,000 fire departments, virtually one in every community (Cote, 2004), with 73 percent of them being volunteer fire departments (Stocker, 2004). With so many fire departments, how does a community choose whether to have a volunteer fire department or a career fire department? Brunet, DeBoer, and McNamara (2001) identified the variables that would have to be considered by a community (taxpayers and voters) when deciding what type of fire department to employ.

Communities need protection from fire. Many cities and communities in America are protected by "one of the oldest voluntary institutions in America, volunteer fire departments" (Brunet, DeBoer, & McNamara, 2001, p. 26). Community leaders have to make decisions for their respective communities. One of these decisions is to employ a professional (career) fire department or rely on a volunteer force. "Apart from staffing,

each of these types of departments is a unique organization in terms of cost, quality of service, and other characteristics" (Brunet, DeBoer, & McNamara, 2001, p. 26). The community leaders are driven to make decisions based on the needs and desires of the tax payers and the local voters. "Public managers routinely administer public law and distinguish between rules, laws, and actual behavior" (Haraway III. & Kunselman, 2006, p. 2). Volunteer fire departments are often embedded in their local communities, much like local churches. The volunteers are committed and are a "cultural resource which contributes to community integration" (Brunet, DeBoer, & McNamara, 2001, p. 27). However, the face of America is changing and what was once a rural community is now transforming into an urban interface.

> As local incomes rise and higher income people move in, the demand for fire protection increases. New residents may demand more fire protection services as well as quicker response times and a broader array of emergency services. … Greater population density often means taller buildings placed closer together. Traffic becomes more congested. Industrial development also brings larger buildings and may introduce hazardous materials that increase the danger of fighting fires. … All of these trends imply that volunteer departments must provide more protection with fewer volunteers per capita. … Switching from the use of a volunteer fire department to a professional fire department is a phenomenon that does not occur overnight but over time. (Brunet, DeBoer, & McNamara, 2001, p. 27)

The above trends aside, what causes some rural communities to employ career fire departments while some continue to utilize volunteers? The answer, according to

Brunet, DeBoer, and McNamara (2001) comes down to cost. Once a community has decided on the level of fire protection it wants or needs, it will "choose the lowest cost means of providing it" (Brunet, DeBoer, & McNamara, 2001, p. 29). Fire departments are community funded, and thereby are oftentimes funded by local taxes. "The tax price of the supply of volunteer fire protection is assumed to be relatively low for lower levels of protection …. The tax price of professional protection is relatively high at low levels of protection" (Brunet, DeBoer, & McNamara, 2001, p. 32). The cost difference is attributed to a variety of variables including but not limited to salary, administrative cost, training, and equipment. Additionally, career fire departments deal with the costs associated with recruitment and retention. In rural areas and small towns "where longer response times, fewer emergency services, and lower insurance ratings are acceptable … volunteer fire departments are likely to cost less than professional departments" (Brunet, DeBoer, & McNamara, 2001, p. 47).

Perkins (1990) reinforces the notions of Brunet, DeBoer, and McNamara (2001) regarding the community ties to rural, small town fire departments. Volunteer fire departments are part of Americana. Many fire departments date back hundreds of years. There is a high degree of cooperation and admiration for volunteer firemen in small towns where the fire department is "grassroots in origin, small, decentralized, and fraternal in nature. Organizational culture is founded on commitment" (Perkins, 1990, p. 363).

Whereas Brunet, DeBoer, and McNamara (2001) compared local volunteer fire departments to local churches, and Perkins (1990) likened them to fraternal organizations, Goetz (1997) compares career fire departments to government run welfare.

He agrees that fire departments, whether career or volunteer, have the general welfare of its citizens as its primary concern, and states, “Fire departments are called upon to step in and restore order to our world when emergencies occur, and firefighters are idolized in the collective conscience as heroic and selfless figures, exalted in urban culture” (Goetz, 1997, p. 38). He continues, however, by stating, “to a large degree, fire departments are also symbolic of the myth of the benevolent state” (Goetz, 1997, p. 38). Goetz explains that regardless of all the smoke alarms, fire prevention strategies, and paid firefighters in urban areas, fires happen, and are “disproportionately distributed among poor and working class urban neighborhoods” (Goetz, 1997, p. 38). The argument that urban fire departments are an extension of government welfare is reinforced:

> Like other welfare state agencies, the fire department is most vital to the preservation of life, liberty and property. Like other aspects of the welfare state, fire departments have potentially contradictory goals. While they provide benevolent state functions, they also socialize private costs, underwrite investment, and protect property. … As a result, cities organized fire control around extinguishment (suppression), with scant attention paid to prevention or fire causation. (Goetz, 1997, p. 40)

Like other extensions of the government, the services fire departments are called upon to provide, and the disproportionately distributed incidents in low income areas have transformed the fire service in urban areas from the once traditional and heroic life savers, to a government run welfare system for low income, inner-city residents, and has become reactive instead of proactive in the realm of fire prevention (Goetz, 1997).

Similar to Goetz (1997), Stocker places blame on the government, but not for transforming the fire service into a welfare state. Instead Stocker (2004) blames the government, specifically government regulation, for the decline of volunteer fire departments. In 1983, three years after the federal government issued safety mandates for the fire service, the number of volunteer firefighters reached an all-time high. Since then, there has been a steady decline (11%) in the number of volunteer firefighters in America. "The biggest factor contributing to the decline is increased time demands on the volunteer. This results from increased training hours to comply with more rigorous training requirements, and increased fund raising demands to purchase mandated equipment" (Stocker, 2004, p. 13).

Donahue (2004) also discusses the reduced number of volunteer firefighters, but unlike Stocker (2004), she argues that the traditional fire service managerial model is an authoritarian management structure that is unable to "accommodate the needs of the contemporary volunteer workforce, a workforce that must be gratified by its contribution to the community, else it will allocate its scarce leisure time to other activities" (Donahue, 2004, p. 89). The traditional managerial model worked well when the fire departments suppressed fires. However, with the increased diversity of the services rendered by modern fire departments and the dynamic roles they play in the communities, the paramilitary culture of the fire service needs to be modernized in order to attract and retain volunteers (Donahue, 2004).

Lee and Olshfski (2002) take a look at the fire service through the eyes of a firefighter. Their research identified four variables of organizational commitment among employees. The four variables are commitment to the supervisor, the group, the

organization, and the job. They then conducted an experiment on public sector and private sector employees. The firefighters stood out as having an overwhelming score in commitment to job. "We found that commitment to job is a distinctive motivational basis for firefighters and is a major factor for determining their extraordinary efforts" (Lee & Olshfski, 2002, p. 112). This research indicates that regardless of the politics or management styles prevalent in the fire service, the firefighters are driven by a commitment to the job.

Fire Chief.

The final portion of this section of the literature review will discuss the position of fire chief. In the United States of America, a fire department responds to a fire alarm every 22 seconds (Fleming, 2010). "A primary determinant of a fire department's capabilities to effectively, efficiently, and safely serve the community is the availability of highly trained and motivated personnel. … The fire chief plays an instrumental role in determining the department's success" (Fleming, 2010, p. 134). Professional organizations experience change and uncertainty (Brock, 2006). Since the unprecedented events of September 11, 2001, the culture of the American fire service has changed, and with it, the roles that fire departments play in our communities as well as the responsibilities of the fire department (Fleming, 2010). In the wake of the events of September 11, 2001, "an increasing number of fire departments have utilized strategic planning processes to ensure that a realistic and appropriate organizational mission has been formulated, approved, and communicated to and understood by all of the department's relevant stakeholders" (Fleming, 2010, p. 135). This maturation of the fire

service has placed a new set of challenges on the fire chief. The position of fire chief is that of chief executive, or senior management official of a fire department.

The position is often both administrative and operational in nature, requiring the fire chief to be a chief executive officer and a fire ground commander. Fleming (2010) identified ten managerial roles of the fire chief. The fire chief is the symbolic figurehead of the fire department in the eyes of the community, but also has to assume the interpersonal role of figurehead in the eyes of the firefighters and officers. There are two additional interpersonal roles the fire chief has to assume; leader and that of liaison. He/she has to lead the firefighters and officers on and off the fire ground. Additionally, the fire chief has to be the liaison between the fire department and other entities, including but not limited to other fire departments, emergency service agencies, the media, and the public.

In addition to the interpersonal roles, Fleming (2010) identified three informational roles of the fire chief; the informational roles of monitor, disseminator, and spokesperson. The chief has to monitor the avenues of information into, out of, and within the fire department. He/she is responsible for the dissemination of information from outside the department to the individuals within it. Finally, the fire chief is the official spokesperson for the fire department (information from the fire department to the community).

Four additional managerial roles were identified by Fleming (2010) that round out the ten managerial roles; that of entrepreneur, negotiator, resource allocator, and disturbance handler. The fire chief should run the fire department like a business. This is

particularly true in volunteer departments whose revenue is not generated by tax dollars, but rely on community contributions and fund raisers (Cote, 2004). The role of negotiator is closely tied to the role of entrepreneur, as the chief has to negotiate business decisions. The role is also closely associated with the interpersonal roles previously identified when negotiating with personnel. The role of resource allocator is simply that. The fire chief is the chief executive officer of the fire department and is responsible for the allocation of necessary resources to the firefighters to effectively execute their respective jobs. Finally, the fire chief assumes the managerial role of disturbance handler. He/she is responsible for handling and settling disturbances on the fire ground as well as interpersonal disturbances among personnel.

Along with these managerial roles, Fleming (2010) identified two conflicting sets of roles as they relate to fire service personnel and the public. The fire chief must be constantly aware of his roles within the fire department as well as his perceived roles outside the department.

In addition to serving as the executive officer and figurehead of the fire department, the fire chief "has the crucial responsibility of ensuring that at all times the fire department is in a state of readiness to effectively, efficiently, and safely respond to the call for emergency assistance regardless of the nature of the incident" (Fleming & Zhu, 2009, p. 57). Fire departments are now assuming responsibility for the response and mitigation of an array of calls that once fell beyond that scope of the fire service. These include emergency medical services, hazardous materials responses, technical rescue operations, acts of terrorism (domestic and international) and just about any other incident that could happen in America. America's firefighters have become first

responders to all hazards and incidents. The fire chief must be able to provide these services to the public (Fleming & Zhu, 2009).

The public must have trust in the fire chief to perform the duties of his or her office with dignity, ethics, and effectiveness (Perry, 2007). Likewise, the fire chief must also have the trust of both his employer (Ewen, 2008) and his employees (Perry, 2004). The fire department, its officers, and employees must trust the fire chief to perform his duties with dignity, ethics, and effectiveness (Perry, 2004).

Volunteerism

As previously discussed, volunteer firefighters make up 73% of the American fire service (Stocker, 2004). Individuals volunteer for a variety of reasons and motivators. Before we can truly understand the fire service, we must have an understanding of why individuals volunteer (Handy & Hustinx, 2009).

McLennan and Birch (2008) conducted a survey of volunteer firefighters in Australia to determine why people decided to volunteer their time to the fire service. They found, "those who volunteer do so because of a mix of community-safety, community-contribution, and self-oriented motivations" (McLennan & Birch, 2008, p. 7). Their study also found that age was a contributing factor in volunteering for self-oriented motivations, as younger individuals were more likely to indicate self-serving motivators than older individuals. However, age was not a contributing factor in volunteers who identified community-safety or community-contribution.

Additionally, McLennan and Birch (2008) identified a list of attributes and commitments that are required of volunteer fire fighters that are not necessarily required for volunteers in general. These include:

> A high degree of altruism; compliance with the disciplines of emergency command and control and requirements of standard operating procedures imposed by the organization; willingness to face danger and to sustain personal trauma and injury, and sometimes death; toleration of appalling working conditions including, for example physical exertion; extreme heat, dehydration and thirst, smoke, uncertainty, and etc.; the requirements of extensive ongoing training and assessment and maintenance of skills and particular competencies, with the occasional requirement to make significant decisions without adequate information; the carrying of a range of direct costs associated with service delivery on behalf of the agency; exposure to the risk of litigation over allegations of negligence; preparedness to be on call 24 hours a day, especially during summer months with unpredictable disruption to family and personal life. (McLennan & Birch, 2008, p. 8)

Their study found no difference in the willingness to volunteer between men and women (McLennan & Birch, 2008).

Bussell and Forbs (2002) set out to discover the what, where, who, and why of volunteering. Their study identified each of these categories. For the purpose of this review, the why category will be examined. Why individuals volunteer is defined by the individual's motivation. Bussell and Forbs (2002) identified several motivators that

influence individuals to volunteer. These motivators include: altruism, the sense of helping, "a sense of belonging, the need for affiliation, gaining prestige or self-esteem, or a way of making friends," and "the need to feel useful or productive" (Bussell & Forbes, 2002, p. 249), along with the benefits associated with the volunteering process, including friend and family involvement and the perceived image of volunteering.

Corporate volunteering motivators include benefits (perceived and actual) to the organization, the potential for increased profitability or improved productivity, improved employee morale, networking opportunities, perceived social responsibility and ethical responsibilities. Community benefit motivators include maintaining a community service. Affiliation motivators include the need for social contact, shared values, and an activity to occupy spare time. Skills development motivators to volunteering include confidence building, employment opportunities or career advancement, the ability to obtain academic credits, and travel opportunities. Prestige motivators include the possibility to meet a celebrity, or other perceived benefits. Other motivators include religious beliefs, altruism, and the perceived benefit to the volunteer entity or organization (Bussell & Forbes, 2002).

Murray (2013) identifies ten reasons why people should volunteer. "Although there are many reasons to volunteer, it's important to note that our best leaders are motivated by an altruistic desire to help out" (Murray, 2013, p. 19). The ten reasons to volunteer include to learn a new skill or to teach others. Networking and resume building are also among the ten reasons to volunteer. Some volunteer to rise above the crowd, to gain work experience, or to give back to the community. The desire to build something

bigger than yourself, strengthening your health, and having fun round out the ten reasons to volunteer (Murray, 2013).

The final aspect of this section of the literature review will address the desire of individuals to volunteer in the wake of a natural disaster or traumatic event. Chamlee-Wright and Storr (2011), while researching social capital in post-disaster community recovery in the wake of Hurricane Katrina, found that "if community members believe themselves to be powerless, their circumstances to be grim and their prospects to be hopeless then community recovery is likely to be retarded" (Chamlee-Wright & Storr, 2011, p. 267). However, "if community members believe themselves to be resilient, their circumstances to be difficult but manageable, and their prospects to be hopeful then community recovery is likely to progress" (Chamlee-Wright & Storr, 2011, p. 267). Community members in areas of the community that experienced high social capital, were more likely to volunteer with community organizations to aid in the post-disaster recovery. In areas that experienced low social capital, the community members were less likely to volunteer.

Major disasters give us a sense of cohesiveness, a sense of wanting to help. Disasters, whether man-made or natural, "almost always lead to an influx of people into the affected area. This phenomenon, referred to as convergence, brings to the disaster scene individuals ranging from professional technical responders to untrained, albeit well-meaning volunteers" (Barsky, Trainor, Torres, & Aguirre, 2007, p. 495). Volunteer activity not only increases in the wake of the disaster, but also remains high throughout the recovery period (Barsky, Trainor, Torres, & Aguirre, 2007).

Leadership and Team Building

A single individual operating alone or in the absence of others may be the only scenario where an individual's Social Style would have no bearing. This is rarely the case. The fire service is composed of teams of firefighters that live and work together at the firehouse (Cote, 2004). Teams are smarter than individuals are, and often accomplish tasks in a more effective and efficient manner (Hensey, 1999). This section will examine the relationships of Social Style on teams, groups, and leadership.

The theory of Social Style describes how a group of people perceives the behaviors and interactions of another. "The theory has been used in a variety of skill training programs related to communication, sales, and team dynamics" (May & Gueldenzoph, 2006, p. 7).

"Concerning team dynamics, Social Style theory is often used to help facilitate conflicts because team members with opposite Social Styles tend to have behavior patterns that are annoying to the opposite style" (May & Gueldenzoph, 2006, p. 7). May (2006) continues and explains that opposite Social Styles are diagonally related on the Cartesian coordinate system. Quadrants I and III are opposites, and Quadrants II and IV are opposites. Therefore, a driver may find the behavior patterns of an amiable annoying and vice versa. Likewise, an analytical may find the behavior patterns of an expressive annoying and vice versa. Therefore, when working in a team setting, it would prove beneficial to understand both your own Social Style and the Social Style of the other team members in order to maintain the dynamic of the team.

Darling and Heller (2012) discuss the assertive/ responsive scale as described by Merrill and Reid, but call it "the framework of the leadership styles paradigm" (Darling & Heller, 2012, p. 54). Instead of the quadrants previously identified, Driver, Analytical, Amiable, and Expressive, they substitute the following: Achiever, Analyzer, Relater, and Creator.

> The Analyzer leadership style is low assertiveness and low responsiveness.
>
> Analyzer types tend to take precise, deliberate and systematic approaches to their leadership responsibilities, and usually gather and evaluate a great deal of data before taking action. Analyzers are generally industrious, objective and well organized, particularly in team-building endeavors, and are self-controlled and generally cautious leaders who prefer analysis over emotion (Darling & Heller, 2012, p. 60).
>
> The Achiever leadership style is high assertiveness and low responsiveness.
>
> Such leaders tend to be task-oriented, know where they want the organization to go and what they personally want to achieve in the process. They express themselves succinctly, and get to the point quickly in the communication milieu. Achievers are typically pragmatic, results-oriented and objective, usually quite independent, willing to take risks, and are valued for their ability to get things done (Darling & Heller, 2012, p. 60).
>
> The Creator leadership style is high assertiveness and high responsiveness.

> Creator types tend to look at the big picture, often take fresh, novel and innovative approaches to leadership issues, and are willing to take risks in order to seize opportunities, particularly in interactive leadership situations. A Creator's ability to charm, persuade, excite and inspire people with visions of the future can be a strong motivating force (Darling & Heller, 2012, p. 60).
>
> The Relater leadership style is low assertiveness and high responsiveness.
>
> Leaders reflecting this style tend to be sympathetic to the needs of others and are quite sensitive to what lies below someone's surface behavior. Of the various leadership styles, Relater types are the most likely to use empathy and understanding in leadership problem-solving situations. In addition, the Relater's trust in others often brings out the best in their colleagues (Darling & Heller, 2012, p. 61).

Gilley, Morris, Waite, Coates, and Veliquette (2010) discuss temperament theory as it applies to team building, and state "Several researchers believed temperament theories require extensive analysis to determine one temperament (personal) type, which significantly limits their practical application and usefulness in building effective teams" (p. 15). They continue, "People may communicate, handle emotions, manage stress, and deal with conflicting opinions differently …. these differences can lead to negative interpersonal interactions, which can be sources of conflict during any team activity" (2010, p. 15).

Gilley, Morris, Waite, Coates, and Veliquette (2010) specifically discuss Social Styles as they relate to teams. Having an understanding of Social Style allows team members to understand each other in a relatively short amount of time.

The Concepts and Theory of Social Style

Typologies of behavior have been an interest of behavioral scientists since Carl Jung began to classify personalities identified by Freud (Pierce, 2005), and formulated a "psychic scale" (Brooks, 2011, p. 502). Freud's work focused on the development of personalities in childhood. Jung's work of identifying and typing personalities based on genetics, experiences (developmental and post developmental), and the unconscious mind allowed an individual to be viewed in a broader aspect than was previously understood (Adamski, 2011). Behavior typologies include Jung's personality theory, Kolb's learning styles, Rowe's and Mason's decision making styles, and Social Styles (Bokoros, Goldstein, & Sweeney, 1992).

> Identifying differences in people is as old as mankind. Aristotle (384-322 BC) wrote about the different kinds of people who attended the Olympic Games…. Nicolo Machiavelli (1469-1527) also dissected different personalities, dividing people by the way they thought. Arthur Schopenhauer (1788-1860) explored the metaphysical aspects of personality. (Pierce, 2005, p. 42)

The theory of Social Style was introduced by Merrill and Reid (1981). The concept of Social Style is that an individual's personality can be identified based upon observable characteristics (Peterson & Short, 2001). The concept of observable characteristics as opposed to psychological traits to identify personality is also

attributable to Jung's work. Jung concluded "that the psyche was first of all and most of the time a place of images, and that vision was the most crucial of the senses" (Hogenson, 2009, p. 326). Observation is the most natural way of seeing and understanding (Hogenson, 2009). Stockton (2012), however, opposes the idea of observation and opines that a discontinuity exists between the surface (observable traits) and the unconscious. He argues that rational thought is the level of consciousness exhibited by individuals to create impressions, as is witnessed in "science, politics, commerce, history, philosophy, conversation and in so many areas" (Stockton, 2012, p. 34).

The Social Style profile is developed by examining the observable characteristics of an individual's assertiveness and responsiveness. The compiled Social Style profile can be plotted within a Cartesian coordinate system. The X-axis indicates the individual's assertiveness, while the Y-axis indicates the individual's responsiveness. The origin is neutral. A positive X value indicates high assertiveness, while a negative X value indicates low assertiveness. A positive Y value indicates low responsiveness while a negative Y value indicates high responsiveness. The higher the X value the more assertive the individual. An individual with high assertiveness is more likely to tell someone to perform a task than is an individual with low assertiveness, which is more likely to ask an individual to perform a task. However, the lower the Y value the more responsive the individual. An individual with high responsiveness is more likely to be influenced by emotion, while an individual with low responsiveness is more likely to control their responsiveness (Merrill & Reid, 1981).

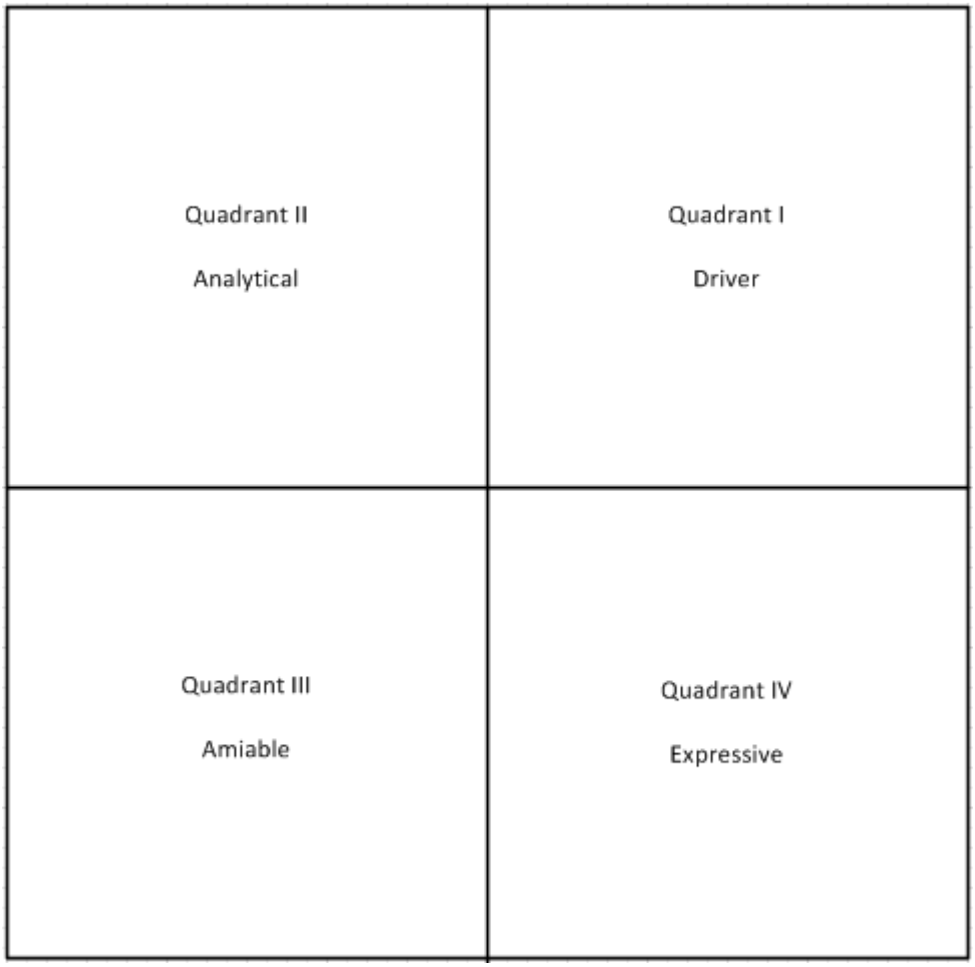

Figure 2.1

Cartesian Plane Identifying Social Style Quadrants

The Cartesian coordinate system is divided into four equal quadrants. The quadrants are identified as I (+,+), II (-,+), III (-,-), and IV (+,-). Quadrant I is identified as Driver. Quadrant II is identified as Analytical. Quadrant III is identified as Amiable. Quadrant IV is identified as Expressive (Gilley & Gilley, 2003).

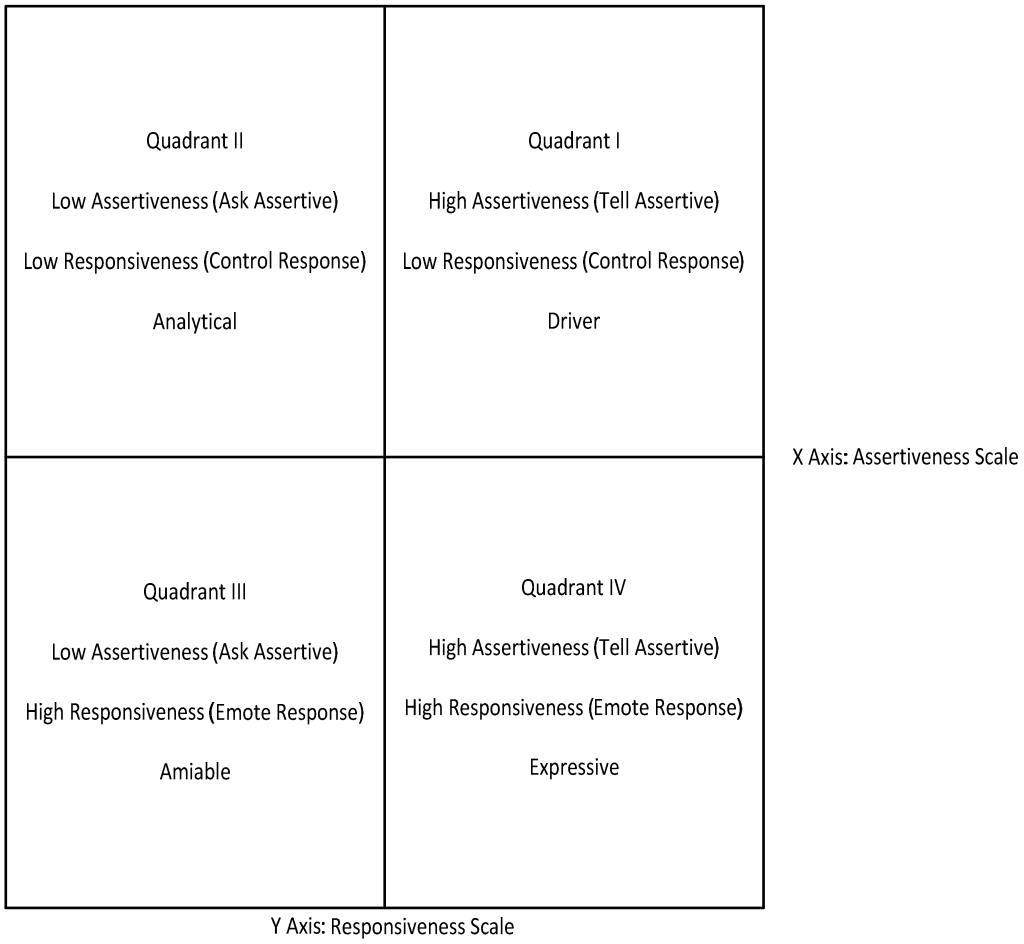

Figure 2.2

Cartesian Plane Indicating Assertiveness and Responsiveness

The Driver style is identified as Quadrant I. A Driver "is perceived as tell-assertive/ control-responsive. Drivers are goal oriented, disciplined, determined bottom-line thinkers who push for results and accomplishments. Drivers like control" (Gilley & Gilley, 2003, p. 127). Their "motivation is power. Drivers like to know they are in charge. They need information that allows them to make decisions quickly and get tangible results. Their specialty is control" (Gilley & Gilley, 2003, p. 131).

The Analytical style is identified as Quadrant II. An Analytical "is perceived as ask-assertive/ control-responsive. Analyticals are task oriented, precise, and thorough. Analyticals like to deal in facts, work methodically, and use standard operating procedures" (Gilley & Gilley, 2003, p. 126). "Analyticals are motivated by a need for respect. They value hard work and attention to detail. Things for them must be logical and carefully worked out. Their specialty is technical" (Gilley & Gilley, 2003, p. 128).

The Amiable style is identified as Quadrant III. An Amiable "is perceived as ask-assertive/ emote responsive. Amiables are people oriented, friendly, accepting, cooperative, and like to be liked. Amiables are motivated to help others in a team effort" (Gilley & Gilley, 2003, p. 127). "The payoff for Amiables is approval. Amiables deal in building personal relationships. They want warmth, understanding, friendship, and trust in their communications. Their specialty is supportive" (Gilley & Gilley, 2003, p. 130).

The Expressive style is identified as Quadrant IV. An Expressive "is perceived as tell-assertive/ emote responsive. Expressives are idea oriented, vigorous, enthusiastic, and spontaneous. They like to initiate relationships and motivate others toward goals" (Gilley & Gilley, 2003, p. 127). "Expressives thrive on recognition. They need to know you are with them in spirit. They appreciate information that allows them to move, create, or take action. Their specialty is social" (Gilley & Gilley, 2003, p. 131).

Regarding Social Style of individuals and their usefulness, Merrill and Reid (1981) stated:

> People are uniquely different, each person merely responds individually to the behaviors of others…. Everyone has had the experience of saying or doing

> something that was perfectly acceptable to a friend or coworker and then being surprised when the same behavior irritated someone else. But aside from admitting that this happens, most of us are unable to draw meaningful conclusions from these experiences to help us perform more effectively with people in the future" (p. 1).

However, had we an understanding of the Social Style of the individual with whom we were speaking, we would be better equipped to cater our statements and actions to their style.

Merrill and Reid continue:

> All people exhibit patterns of behavior that can be identified and responded to, and if we can describe and adjust to these behaviors, we can achieve more satisfactory relationships. We can, in fact, increase our chances of success in any area of endeavor where the 'people factor' is involved without needing a deep understanding of people's inner selves (Merrill & Reid, 1981, p. 2).

An individual who has the ability to recognize his or her own behavior as well as the behavior patterns of those in which he or she interacts could benefit by achieving a "more satisfactory relationship" (Merrill & Reid, 1981, p. 2).

The theory of Social Style identifies certain observable behaviors that an individual possesses and categorizes the individual by their behavior (Peterson & Short, 2001). The Meyers Briggs Type Indicator is a similar model. However, when applying the theory to leadership qualities and traits, it was inconclusive whether certain factors (or the lack thereof) were indicative of a good leader.

> [I]t doesn't make sense … to look at a person's leadership style in a vacuum and not consider the circumstances of leadership – or the environment… we cannot talk about 'good' or 'bad' leadership styles. A leader who is effective in one situation may or may not be effective in a different situation… both relationship – oriented leadership styles and task – oriented styles could be successful (Merrill & Reid, 1981, p. 42).

Therefore, any of the Social Styles identified by Merrill and Reid have the potential to be successful.

Social Style can be used in a variety of circumstances including personal relationships pertaining to parenting and marriage (Bolton & Bolton, 1984). Recalling the discussions in this chapter regarding the roles and duties of the fire chief, relationships have been addressed between an individual's Social Style and trust (Baum & James, 1984). Gross (2002) cites Snavely & Clatterbuck (1980) and states:

> William Snavely and Glen Clatterbuck (1980) also conducted a study that examined trust and Social Style. This particular study looked at the impact of Social Style on personal perceptions. His hypotheses that differences in Social Style would result in different perceptions of versatility, trust, power and credibility were all supported by his research. (Gross, 2002, p. 31)

Sigler, Burnett, and Child (2008) argue that assertiveness, as a measure of an individual's Social Style is not an accurate assessment. They make the argument that assertiveness is regionally defined, not personally defined. An individual from particular geographic regions have different levels of assertiveness (Sigler, Burnett, & Child, 2008).

Darling and Cuff (1987) discuss Social Style and the ability of an individual to flex into another quadrant, as a "way to be accommodating without compromising integrity or naturalness of expression" (Darling & Cluff, 1987, p. 354). Flexing is not only flexing toward or into the style of the ones with whom you are interacting, but also a way of flexing away from your normal style. Flexing is accomplished by increasing or decreasing assertiveness or by increasing or decreasing responsiveness. "At its best style flex involves sensing others' preferred ways of relating, getting in congruence with some of them, monitoring the interaction and responding to feedback one receives from others' behavior" (Darling & Cluff, 1987, p. 355).

This review of the literature has discussed the American fire service, the roles and responsibilities of the fire chief, volunteerism, leadership and teams, and the theory of Social Style. No empirical evidence was discovered that indicates that any research has been conducted that compares a fire chief's status as a volunteer or career fire chief and the Social Style of the chief.

Chapter 3

Method

Chapter 1 of this study presented the research problem and the historic background to the problem. The purpose and the significance of the study as well as the theoretical and practical contributions were also presented along with the hypotheses to be tested. Chapter 2 presented a review of related literature including the American fire service, the role and responsibilities of the fire chief, volunteers and volunteerism, leadership and teams, and the concept and theory of Social Style. Chapter 2 demonstrated that there has been no empirical research regarding whether the Social Style of career fire chiefs differ from the Social Style of volunteer fire chiefs, thus identifying the research gap this study will address. Chapter 3 presents the design of the study, characterizes the population and the sample for the study, identifies the study's limitations, and outlines the methods for the collection and analysis of the data associated with the study to test the hypotheses.

Hypotheses

Hypothesis 0 (null): There will be no relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief.

Hypothesis 1: There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief.

Hypothesis 2: Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs.

Hypothesis 3: Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale.

Design of the Study

This study has collected data from fire chiefs from both career fire departments and volunteer fire departments in the state of Texas as identified in the sample. The data that was collected identifies the respective Social Style of the fire chiefs, as well as the fire chief's status as a career fire chief or a volunteer fire chief.

The strategy for this study is a quantitative research strategy. The quantitative strategy is the most appropriate strategy for this study because it "emphasizes quantification in the collection and analysis of the data that: entails a deductive approach to the relationship between theory and research… and embodies a view of social reality as an external, objective reality" (Bryman & Bell, 2011, p. 26). In other words, the study has scientifically collected and analyzed data to determine if a relationship exists between the independent and dependent variables using statistical methods. This study has determined the Social Styles of a sample of fire chiefs and has made generalizations about fire chief Social Styles throughout the fire service. Quantitative methods are appropriate for studying groups of people and generating generalizations about a larger group than the selected sample (Holton & Burnett, 2005).

Sample

The population for this study is fire chiefs of fire departments in the American fire service. The United States Fire Administration identifies more than 30,000 fire departments in the United States (USFA, 2013), and more than 1,400 fire departments in the state of Texas (or approximately 5%) (USFA, 2013). It is, however, unrealistic to conduct a Social Style analysis on every fire chief in the United States of America. "One of the real advantages of quantitative methods is their ability to use smaller groups of people to make inferences about larger groups" (Holton & Burnett, 2005, p. 33). For the purpose of this study, the scope will be limited to fire chiefs in Texas.

According to the United States Fire Administration, of the more than 30,000 fire departments in the United States of America, 71% are volunteer fire departments and 8% are career fire departments. The remaining 21% are combination fire departments (USFA, 2013). In Texas, of the more than 1,400 fire departments located in the state of Texas, approximately 71% are volunteer fire departments and approximately 9% are career fire departments. The remaining 20% are combination career/volunteer fire departments (USFA, 2013). The appearance is that the national trend in the ratio of career fire departments to volunteer fire departments is reflected in Texas.

The state government of Texas regulates the fire service in the state. The Texas Commission on Fire Protection is the regulating entity of fire service in the state of Texas (TCFP, 2013). The Texas Commission on Fire Protection issues firefighter certifications, licenses, and fire department certifications. However, the Texas Commission on Fire Protection only has the authority (by statue) to regulate government funded (state or local county or city government) fire departments and career fire departments. Texas state law

does not authorize the Texas Commission on Fire Protection to regulate volunteer fire departments, but does allow for volunteer fire departments to submit to the regulation of the Texas Commission on Fire Protection (TCFP, 2013).

The State Firemen's and Fire Marshals' Association of Texas is the oldest and largest fire service association in the state of Texas (SFFMA, 2014). The State Firemen's and Fire Marshals' Association of Texas issues volunteer firefighter certifications and licenses as well as volunteer fire department certifications. However, there is no law in Texas that requires a volunteer fire department to be certified by any certifying entity or subject to any regulation. Nor does the law prohibit a career fire department or other fire service agency from joining the State Firemen's and Fire Marshals' Association of Texas. Therefore, to choose the sample for this study, the databases of both the Texas Commission on Fire Protection and the State Firemen's and Fire Marshals' Association of Texas were utilized.

The Texas Commission on Fire Protection publishes on its website a listing of all fire departments in the state of Texas that are registered with the Texas Commission on Fire Protection. The database contains over 700 fire departments and fire service agencies. This number includes career fire departments and volunteer fire departments, as well as fire service investigative agencies. The Texas Commission on Fire Protection's web site, in addition to the list of fire service agencies, includes the fire chief's name and contact information – including electronic mail address (TCFP, 2014). The sample of career fire chiefs for this study was selected from the fire departments listed on the Texas Commission on Fire Protection's online database.

The more than 700 fire service agencies listed in the Texas Commission on Fire Protection's online directory was reviewed. All fire investigation agencies, law enforcement agencies, emergency management agencies, special fire agencies, industrial or private fire brigades, military and government fire departments, volunteer fire departments, and combination fire departments were stricken from the list. The list was shortened from over 700 fire service agencies to 264 fire departments. All 264 career fire departments were selected for the sample.

The State Firemen's and Fire Marshals' Association of Texas publishes the Fire Department Directory of the State of Texas on its website (SFFMA, 2014). The Fire Department Directory lists more than 1900 fire service agencies and entities within the state of Texas (both career fire departments and volunteer departments who are members of the State Firemen's and Fire Marshals' Association of Texas), and categorizes them by volunteer, paid, and combination fire departments. The database also includes contact information for the fire chief, including name, address, telephone number, and electronic mail address. The sample of volunteer fire chiefs for this study was selected from the State Firemen's and Fire Marshals' Association of Texas' online database.

In order for generalizations to be made from the sample that adequately reflect the population, the sample should be selected randomly. Random samples yield greater confidence as the findings are representative of the population as a whole, and not attributed to a particular characteristic or circumstance (Holton & Burnett, 2005). Additionally, random sampling enhances the representativeness of the sample, and also enhances the external validity of the research findings (Bryman & Bell, 2011). The sample of volunteer fire chiefs for this study was randomly selected from the volunteer

fire departments listed on the State Firemen's and Fire Marshals' Association of Texas' online database.

The more than 1900 fire service agencies listed in the State Firemen's and Fire Marshals' Association of Texas online directory was reviewed. All fire investigation agencies, law enforcement agencies, emergency management agencies, special fire agencies, industrial or private fire brigades, military and government fire departments, career fire departments, and combination fire departments were stricken from the list. Additionally, to avoid confusion, agencies that were listed as volunteer, but whose name did not reflect their volunteer nature were stricken. Only volunteer fire departments whose name included the following: Volunteer Fire Department, Volunteer F. D., Volunteer Fire Dept., Vol. Fire Department, Vol. Fire Dept. Vol. F. D., or V.F.D., were included. Fire departments that failed to publish contact information for the chief were also excluded. The list of fire departments and fire service agencies was shortened from more than 1900 fire service agencies to 877 volunteer fire departments. A random sample of 300 volunteer fire chiefs was selected.

The statistical method that was used to test hypotheses 2 and 3 is logistic regression. Hart and Clark (1999) showed that sample size (n) for logistic regression analyses involving one independent variable, statistical inference "only appeared in very small samples ($n<30$)" (Hart & Clark, 1999, p. 6), and recommend for scholastic research that a sample of 30-50 is sufficient. Additionally, Vittinghoff and McCulloch (2006) also found that logistic regression analyses with a sample size of less than 30 were biased, and that bias increased as the sample size decreased below 30.

Limitations

The sample of this study is fire chiefs and volunteer fire chiefs in the state of Texas. While the trends in Texas are similar to the national fire trends (USFA, 2013), the scope of the study was limited by the sample.

The Social Style instrument measures and categorizes profiles into one of four quadrants (Leimbach, 2014). However, the focus of this study was not the quadrant of the fire chief's profile, but the measures of the responsiveness scale of the profile and the assertiveness scale of the profile individually. The results are limited to high or low assertiveness and responsiveness, not plotted on the Cartesian Plane.

While potential applications of the results of this study may be found to be applicable to other volunteer entities, this study was limited to volunteer fire departments.

Common method bias is a potential limitation of this study, particularly consistency motif. The respondents may have biased the study by inadvertently looking for similarities or patterns in the questions. To address this potential issue, the electronic survey instrument did not allow the respondent to review previously answered questions.

Data Collection

The sample for this study (career fire chiefs in the state of Texas, and volunteer fire chiefs of volunteer fire departments selected randomly from the online database maintained by The State Firemen's and Fire Marshals' Association of Texas) were emailed an invitation to participate in the study. The email included a cover statement that articulated the purpose and that the study was being conducted as a dissertation study of a doctoral candidate at The University of Texas at Tyler's College of Business and

Technology, and that the study had received approval from the Institutional Review Board of The University of Texas at Tyler. Additionally, the cover statement included contact information for both the student researcher and the faculty advisor. Regarding consent, the cover statement included the following:

> The purpose of this study is to examine the Social Styles of chiefs of career (paid) fire departments with the Social Styles of volunteer fire chiefs in the state of Texas. The study will determine if a difference exists between the chiefs of the two types of fire departments. Your participation is completely voluntary, and all responses are completely anonymous. If you begin participation and choose to not complete it, you are free to not continue without any adverse consequences.
>
> We know of no known risks to this study, other than becoming a little tired of answering questions, or you may even become a little stressed or distressed when answering some of the questions. If this happens, you are free to take a break and return to the survey to finish it, or, you can discontinue participation without any problems.

Additionally, for those who chose to participate in the study and followed the link embedded within the invitational electronic mail message and opened the Qualtrics survey, the issue of consent was again addressed with the first question of the survey, which stated:

> You have been invited to participate in this study, titled, *The Difference in the Social Style of Career and Volunteer Fire Chiefs.* The purpose of this study is to examine the Social Style of chiefs of career fire departments and the Social Style

> of volunteer fire chiefs in the state of Texas. The study will determine if a difference exists between the chiefs of the two types of fire departments. Your participation is completely voluntarily, and if you begin participation and choose not to complete it, you are free to not continue without any adverse consequences.

The respondents had to choose to participate in the study or choose not to participate in the study. Those who chose to participate were directed to the survey. Those who chose not to participate were thanked for their time.

Survey research, as defined by Bartlett (2005) includes:

> a method for gathering information from a sample of individuals … method used to gather … descriptive information about the attitudes, behaviors, or other characteristics of some population … and relatively systematic, standardized approaches to the collection of information … through the questioning of systematically identified samples of individuals. (2005, p. 98)

Surveys may be used for descriptive, exploratory, and explanatory purposes. "Survey research is probably the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly" (Babbie, 2007, p. 244).

This study utilized the survey method of data collection to capture relevant data from the sample. The purpose of the survey was to collect data from the sample in order to adequately describe the fire chief's status, career fire chief or volunteer fire chief, and then to identify the fire chief's Social Style.

The data collected from the electronic survey included the data collected from the instrument to determine the Social Style of the sample, as well as the individual's status as a volunteer fire chief or a career fire chief. In the case where an individual may be employed as a career fire chief in a municipal fire department, but may reside in a rural community and also serve as the volunteer fire chief, the individual will be omitted from this study. In addition to the chief status of the individual, the survey collected descriptive demographic information from the respondents including gender, race, age range, marital status, and education. No personal identifying information was collected from the participants in the sample. The sample remained anonymous and no personal identifying information (including that which was collected from the online database maintained by The State Firemen's' and Fire Marshal's Association of Texas) will be published.

Those fire chiefs identified in the sample who elected to participate in the study received a link, via electronic mail, to an electronic survey instrument. The survey instrument was used to measure the individual's Social Style by a variety of factors, including but not limited to the individual's assertiveness, the individual's responsiveness, and the individual's versatility, as well as personal perceptions and self-describing objectives of the individual. The survey was administered through Qualtrics Online Survey Solutions, and was titled Fire Chief Social Style Profile.

The instrument that was utilized for the collection of the data associated with this research project was Wilson Learning Research and Development Corporation's Social Style Profile. "The Social Style Profile is designed to provide an assessment of an individual's social or interactive style" (Leimbach, 2014, p. 1).

> Social Styles were first identified and correlated with behavior by Merrill and Reid. Through the work of two primary sources, the Tracom Group and Wilson Learning Corporation, an extensive amount of validation research on Social Styles has been accomplished over the past 20 years – much of it focused on the practical business applications. This scientific yet business focused approach provides a personality typing approach that easily passes the "so what" test because personality is tied to behavior and decision-making patterns. Additionally, several sources have developed highly validated tests that will determine both the primary and secondary Social Styles of individuals with great accuracy. (Pierce, 2005, p. 44)

Wilson Learning Research and Development Corporation's Social Style Profile has undergone a validation process to determine the validity of the instrument to ensure that the instrument has construct validity (Salkind, 2011). The Buros Center for Testing at the University of Nebraska published test reviews, which include validation studies of evaluation instruments. The Social Style Profile has been reviewed by the Buros Center for Testing and the reviews published.

The Social Style Profile Social Impression Survey is 34 questions in which the participant answered about his or her own behavior. The answers to each question are scaled from one to seven. Of the 34 questions, eight are specifically designed to determine the level of assertiveness of the individual; eight are specifically designed to determine the level of responsiveness of the individual; four are specifically designed to determine the versatility of the individual; while four are designed to determine if the individual possesses specific versatility skills (Leimbach, 2014).

The eight questions specifically designed to determine the level of assertiveness of the individual are scored from one to seven, with one being low assertiveness and seven being high assertiveness. Once the survey was completed and each of the questions had been answered, then the scores were summed. The possible outcomes on the assertiveness questions are 8 to 56, with 8 being the least assertive score and 56 being the most assertive score (Leimbach, 2014). The breakdown for scoring the level of assertiveness is noted in Table 3.1.

Table 3.1

Assertiveness Scoring

	Low	Moderate-Low	Moderate-High	High
Assertiveness	8-33.8	33.85-38	38.05-42.2	42.25-56

The eight questions specifically designed to determine the level of responsiveness of the individual are scored from one to seven, with one being low responsiveness and seven being high responsiveness. Once the survey was completed and each of the questions had been answered, then the scores were summed. The possible outcomes on the responsiveness questions are 8 to 56, with 8 being the least responsive score and 56 being the most responsive score (Leimbach, 2014). The breakdown for scoring the level of responsiveness is noted in Table 3.2.

Table 3.2

Responsiveness Scoring

	Low	Moderate-Low	Moderate-High	High
Responsiveness	8-38	38.05-42.2	42.25-45.5	45.55-56

The four questions specifically designed to determine the level of versatility of the individual are scored from one to seven, with one being low versatility and seven being high versatility. Once the survey was completed and each of the questions had been answered, then the scores were summed. The possible outcomes on the versatility questions are 4 to 28, with 4 being the least versatile score and 28 being the most versatile score (Leimbach, 2014). The breakdown for scoring the level of versatility is noted in Table 3.3.

Table 3.3

Versatility Scoring from the Social Style Profile Social Impression Survey

	Low	Moderate-Low	Moderate-High	High
Versatility	4-18.8	18.85-20.5	20.55-22	22.02-28

The four questions designed to determine if the individual possesses a specific versatility skill are scored from one to five, with one being the lowest scaled value and five being the highest scaled value. These skills are individualized skills and are calculated by a linear conversion from the one to five values to a scale of 0 to 100. The mean is then taken to generate a participant value. These values are individual scores only and were included in the survey, but were not calculated for the purpose of this research project.

Once the dimensions of assertiveness and responsiveness had been scored, the individual Social Style was calculated. The dimensions of versatility and the versatility skills are not utilized to determine the Social Style of the individual. "An individual's Social Style is based upon the assertiveness and responsiveness classifications. Primary styles are Analytical, Amiable, Driver, and Expressive" (Leimbach, 2014, p. 3). Table

3.4 shows how the four primary styles (Analytical, Amiable, Driver, and Expressive) are identified by the assertiveness and responsiveness scores.

Table 3.4

Social Style Profiles

	Analytical	Amiable	Driver	Expressive
Assertiveness	Low Moderate-Low	Low Moderate-Low	High Moderate-High	High Moderate-High
Responsiveness	Low Moderate-Low	High Moderate-High	Low Moderate-Low	High Moderate-High

Analysis

The intent of this study is to describe and to compare the variables. The descriptive nature of the study was to identify the fire chief's status as a career or volunteer fire chief, as well as relevant descriptive demographic data. Therefore, by definition, this study, like most surveys, can be partially classified as a descriptive study (Holton & Burnett, 2005). However descriptive the study appears, the purpose was to identify the Social Styles of the sample and compare them between the two categories described – career fire chief and volunteer fire chief.

The quantitative data collected from the survey was analyzed using SPSS software. To test Hypothesis 1 (There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief), the status of the fire chief (either career fire chief or volunteer fire chief) is the independent variable for this study. The variable is categorical and dichotomous and the value will be either career fire chief or volunteer fire chief. The fire chief's Social Style is the

dependent variable. The variable will also be categorical and the value will be either driver, expressive, amiable, or expressive.

The categorical variables Fire Chief Status and Social Style were analyzed and compared using the t-test to determine if a significant relationship exists between the two. The t-test is an appropriate statistical method to determine the statistical significance of a relationship between two categorical variables (Cohen, Cohen, West, & Aiken, 2003). The t-test statistically determined whether there is a difference in the Social Styles of career fire chiefs compared with the Social Styles of volunteer fire chiefs. Furthermore, the t-test determined the significance of the difference and whether the difference (if any) is a real difference (Holton & Burnett, 2005). In this study, each of the variables is categorical. Therefore, Hypothesis 1 was tested using the t-test.

Should a statistically significant relationship exist between the fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief, Hypothesis 1 will be supported. Should a statistically significant relationship not exist between the fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief, then the null hypothesis (There will be no relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief) will be supported.

To test Hypothesis 2 (Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs), the categorical dichotomous variable Fire Chief (career or volunteer) is the independent variable. The dependent variable is a dichotomous categorical variable of Control or Emote, and was

determined by the Social Style Analysis. The dependent variable was determined by the Social Style of the fire chief, and how it ranks on the responsiveness scale. Those fire chiefs that scored high on the responsiveness scale were categorized as Emote, and those fire chiefs who scored low on the responsiveness scale were categorized as Control (See Table 3.4). Analyticals and drivers were labeled as Control, while amiables and expressives were labeled as Emote.

Hypothesis 2 was also analyzed using SPSS software. The categorical independent variable was compared with the categorical dichotomous dependent variable using logistic regression to test whether the responsiveness is Emote or Control. The logistic regression was used to determine the skewness of the data along the responsiveness axis (Y axis).

"Logistic regression is used in the study of binary dependent variables and can be used with independent variables that are continuous, ordinal, dichotomous, or some combination thereof" (Bates, 2005, p. 128). To analyze Hypothesis 2, the independent variable is dichotomous and categorical, and so is the dependent variable. Logistic regression is used to predict the probability of the relationship between the independent and dependent variables (Cohen et al., 2003). Logistic regression is "specifically designed to predict and explain dichotomous dependent variables" (Bates, 2005, p. 124) and the increased or decreased probability of an event occurring (Bates, 2005).

To test Hypothesis 3 (Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale), the categorical

dichotomous variable Fire Chief (career fire chief or volunteer fire chief) is the independent variable. The dependent variable is a dichotomous categorical variable of Ask or Tell. The dependent variable was determined by the Social Style of the fire chief, and how it ranks on the assertiveness scale. Those fire chiefs that scored high on the assertiveness scale were categorized as Tell, and those fire chiefs who scored low on the assertiveness scale were categorized as Ask (See Table 3.4). Analyticals and amiables were labeled as Ask, while drivers and expressives were labeled as Tell.

Hypothesis 3 was also analyzed using SPSS software. Similar to the analyses of Hypothesis 2, the categorical independent variable was compared with the categorical dichotomous dependent variable using logistic regression to test whether the assertiveness is Ask or Tell. The logistic regression determined the skewness of the data along the assertiveness axis (X axis).

The premise of common method bias, or method variance, was addressed. "Measurement error threatens the validity of the conclusions about the relationships between measures" (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 879) . Simply said, method variance is a measurement error where the respondent's (person taking the survey or participating in the study) responses are biased (often unintentionally) because of the nature or make of up of the instrument. Of the types of method bias identified by Podsakoff et al. (2003), two have been identified that could have impacted the responses of the respondents of this study: consistency motif, and social desirability.

Consistency motif suggests that people "try to maintain consistency in their cognitions and attitudes" (Podsakoff et al., 2003, P. 881). Therefore, a respondent to a

survey may inadvertently look for similarities or patterns in the questions and attempt to answer them consistently rather than objectively. This effect is "particularly problematic in those situations in which respondents are asked to provide retrospective accounts of their attitudes, perceptions, and/or behaviors" (Podsakoff et al., 2003, p. 881).

Social desirability "refers to the need for social approval and acceptance and the belief that it can be attained by means of culturally acceptable and appropriate behavior" (Podsakoff et al., 2003, p. 881). Therefore, a respondent may want to appear favorable or acceptable regardless of his or her true belief or stance on an issue or topic. For the purpose of this study, a respondent may have an understanding or may have researched the theory of Social Style before taking the assessment and decided that it is socially acceptable to be in one particular quadrant, therefore biasing the research.

Harmon's single factor analysis is "one of the most widely used techniques … to address the issue of common method variance" (Podsakoff et al., 2003, p. 889). This technique uses exploratory factor analysis to identify variance among the variables associated with method variance. The exploratory factor analysis was used on the data to identify potential variance that could attribute to method bias.

Chapter 4

Results

Fire has plagued mankind throughout recorded history. The ancient Greeks, Romans, Egyptian, Babylonians, and Persians used fire as a weapon against their enemies (Cote, 2004). History has been lost to fire, as demonstrated in the burning of Rome during the time of Nero and the burning of the great library at Alexandria, Egypt (Cote, 2004). Untold human lives have been lost to fire, and, as noted in Chapter 1, The United States of America is not immune.

Chapter 1 of this study outlined the research project, identified and presented the purpose and the significance of the study, the research problem and the historic background to the problem. The theoretical and practical contributions were also presented along with the hypotheses to be tested. Chapter 2 supported the research project, identified the research gap, and demonstrated that no empirical research had been published to answer the research question that was presented in Chapter 1; whether the Social Style of career fire chiefs differs from the Social Style of volunteer fire chiefs. A review of related literature was presented, which included the American fire service, the role and responsibilities of the fire chief, volunteers and volunteerism, leadership and teams, and the concept and theory of Social Style. Chapter 3 presented the design of the study, characterized the population and identified the sample for the study, identified the

study's limitations, and outlined the methods for the collection and analysis of the data associated with the study to test the hypotheses. Chapter 4 presents the results of the data collection process, the analyses of the collected data, responses to the tested hypotheses, and answers to the research question; whether the Social Style of career fire chiefs differs from the Social Style of volunteer fire chiefs.

As discussed in Chapter 3, the identified population for this study was fire chiefs of the American fire service. The sample of the population was divided into two categories; career fire chiefs (those fire chiefs who receive a salary or compensation and are full-time employees of a career fire department) and volunteer fire chiefs (those fire chiefs who do not receive a salary or compensation and are not full-time members of a career fire department but who volunteer their time and are the chief of a volunteer fire department). The sample for the career fire chiefs was selected from the published online directory of the Texas Commission on Fire Protection. Each of the 264 fire chiefs was emailed an invitation to participate in the study. The sample for the volunteer fire chiefs was randomly selected from the published online directory of the State Firemen's and Fire Marshal's Association of Texas. A random selection of 300 was chosen, and each of the 300 volunteer fire chiefs who were selected from the random sample was emailed an invitation to participate in the study.

Survey Responses

There were 564 survey invitations sent to the sample population via electronic mail. Of the 564 invitations, 211 respondents completed the survey. Overall, the response rate was 36.69%. Of the 264 invitations sent to career fire chiefs, 119 respondents completed the survey. The response rate of career fire chiefs was 45.08%.

Of the 300 invitations sent to volunteer fire chiefs, 92 respondents completed the survey. The response rate of volunteer fire chiefs was 30.67%. Of the 211 respondents who completed the survey, 119 (56%) indicated that they were career fire chiefs, while 92 (44%) indicated that they were volunteer fire chiefs. Table 4.1 shows the response rates.

Table 4.1

Sample Responses

Fire Chief	Invitations Sent	Surveys Completed	Response Rate	Percent of Total
Career	264	119	45.08%	56%
Volunteer	300	92	30.67%	44%
Total	564	211	36.69%	100%

Descriptive Demographics.

The survey collected descriptive demographic data from each of the participants. The descriptive demographic data that was collected included gender, age, race, marital status, and education. Of the 211 respondents who completed the survey, 210 indicated that their gender was male, while one indicated that her gender was female. The responses were then cross-tabulated by the respondents' status as a career fire chief or a volunteer fire chief. Regarding the 210 respondents who reported their gender to be male, 119 of them indicated that they were career fire chiefs, while 91 of them indicated that they were volunteer fire chiefs. The single respondent who indicated that her gender was female reported that she was a volunteer fire chief. Tables 4.2 and 4.3 show the descriptive demographic data that was collected relating to gender.

Table 4.2

Gender (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Male	119	91	210
Female	0	1	1
Total	119	92	210

Table 4.3

Gender (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Male	56.4%	43.13%	99.53%
Female	0.0%	0.47%	0.47%
Total	56.4%	43.6%	100%

The next set of descriptive demographic data that was collected from the respondents on the survey was that of age. Each of the respondents was asked to select the age range that most accurately described his or her age. The options that were presented to the respondents were less than 25 years, 25-35 years, 36-45 years, 46-55 years, 56-65 years, or greater than 65 years. None of the respondents indicated an age range of less than 25 years. Seven respondents indicated that their age was between 25 years and 35 years. Forty-seven respondents indicated that their age was between 36 years and 45 years. Ninety-two respondents indicated that their age was between 46 years and 55 years. Fifty-one respondents indicated that their age was between 56 years and 65 years. Fourteen respondents indicated that their age was greater than 65 years.

The responses were then cross-tabulated by the respondents' status as a career fire chief or a volunteer fire chief. The age range of 46 years to 55 years was the most

selected age range by both the respondents who identified their status as career fire chiefs and those respondents who identified their status as volunteer fire chiefs. Respondents who identified their status as a volunteer fire chief outnumbered the respondents who identified their status as a career fire chief in both the youngest age range identified by a respondent (25 years to 35 years) and the oldest age range (greater than 65 years). Only two individuals who indicated that their age range was between 25 years and 35 years identified themselves as career fire chiefs. Tables 4.4 and 4.5 show the descriptive demographic data that was collected regarding age.

Table 4.4

Age (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
< 25 Years	0	0	0
25-35 Years	2	5	7
36-45 Years	21	26	47
46-55 Years	57	35	92
56-65 Years	34	17	51
> 65 Years	5	9	14
Total	119	92	211

Table 4.5

Age (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
< 25 Years	0.00%	0.00%	0.00%
25-35 Years	0.95%	2.37%	3.32%
36-45 Years	9.95%	12.32%	22.27%
46-55 Years	27.01%	16.59%	43.6%
56-65 Years	16.11%	8.06%	24.17%
> 65 Years	2.37%	4.27%	6.64%
Total	56.39%	43.61%	100%

Race was the next set of descriptive demographic data that was collected by the survey. Each of the respondents was asked to select that which most accurately described their race. The options that were presented to the respondents were White, Non-Hispanic; Black, African American; Hispanic; Asian, Pacific Islander; Native American; Other. Three of the 211 respondents elected not to answer the descriptive demographic question pertaining to race. One hundred ninety-one of the respondents indicated that their race was White, Non-Hispanic. Three of the respondents indicated that their race was Black, African American. Ten of the respondents indicated that their race was Hispanic. None of the respondents indicated that their race was Asian, Pacific Islander. Three of the respondents indicated that their race was Native American. One respondent indicated that his race was Other.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. One hundred six of the 191 respondents who indicated that their race was White, Non-Hispanic indicated that they were career fire chiefs, while the remaining 85 indicated that they were volunteer fire chiefs. The single respondent who indicated that his race was Other indicated that he was a volunteer fire chief. Tables 4.6 and 4.7 show the descriptive demographic data that was collected regarding race.

Table 4.6

Race (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
White, Non-Hispanic	106	85	191
Black, African American	1	2	3
Hispanic	7	3	10
Asian, Pacific Islander	0	0	0
Native American	2	1	3
Other	0	1	1
Preferred Not to Answer	3	0	3
Total	119	92	211

Table 4.7

Race (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
White, Non-Hispanic	50.24%	40.28%	90.52%
Black, African American	0.47%	0.95%	1.42%
Hispanic	3.32%	1.42%	4.74%
Asian, Pacific Islander	0.00%	0.00%	0.00%
Native American	0.95%	0.47%	1.42%
Other	0.00%	0.47%	0.47%
Preferred Not to Answer	1.42%	0.00%	1.42%
Total	56.4%	43.59	99.99%

The next set of descriptive demographic data that was collected from the respondents in the survey was marital status. Each of the respondents was asked to select that which most accurately described their marital status. The options that were presented to the respondents were Married, Divorced, Separated, Single (Never Married), Widowed, Other. One of the 211 respondents elected not to answer the question pertaining to marital status. One hundred eighty-three of the respondents indicated that

their marital status was Married. Twenty-two of the respondents indicated that their marital status was Divorced. Two of the respondents indicated that their marital status was Separated. Three of the respondents indicated that their marital status was Single (Never Married). None of the respondents indicated that their marital status was Widowed or Other.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. One hundred eleven of the 183 individuals who indicated that their marital status was Married indicated that they were career fire chiefs, while the remaining 72 indicated that they were volunteer fire chiefs. The two respondents who indicated that their marital status was Separated both indicated that they were volunteer fire chiefs. Tables 4.8 and 4.9 show the descriptive demographic data that was collected regarding marital status.

Table 4.8

Marital Status (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Married	111	72	183
Divorced	6	16	22
Separated	0	2	2
Single (Never Married)	1	2	3
Widowed	0	0	0
Other	0	0	0
Preferred Not to Answer	1	0	1
Total	119	92	211

Table 4.9

Marital Status (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Married	52.61%	34.12%	86.73%
Divorced	2.84%	7.58%	10.42%
Separated	0.00%	0.95%	0.95%
Single (Never Married)	0.47%	0.95%	1.42%
Widowed	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%
Preferred Not to Answer	0.47%	0.00%	0.47%
Total	56.39%	43.6%	99.99%

The final set of descriptive demographic data that was collected by the survey was the highest level education achieved by the respondents. Each of the respondents was asked to select that which most accurately described the highest level of education that they had received. The options that were presented to the respondents were Did Not Finish High School, GED, High School Diploma, Associate Degree, Bachelor Degree, Master Degree, Doctorate Degree, and Other. One of the 211 respondents elected not to answer the descriptive demographic question pertaining to education level. Five of the respondents indicated that their education level was Did Not Finish High School. Two of the respondents indicated that their education level was GED. Fifty-four of the respondents indicated that their education level was High School Diploma. Sixty-four of the respondents indicated that their education level was Associate Degree. Fifty-six of the respondents indicated that their education level was Bachelor Degree. Twenty-three of the respondents indicated that their education level was Master Degree. Two of the respondents indicated that their education level was Doctorate Degree. Four of the respondents indicated that their education level was Other.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief selected the education level Associate Degree more frequently than any other category, while those respondents who identified their status as a volunteer fire chief selected the education level High School Diploma most frequently. All five of the respondents who indicated that their education level was Did Not Finish High School indicated that they were volunteer fire chiefs. Both of the respondents who indicated that their education level was GED indicated that they were volunteer fire chiefs. Table 4.10 and 4.11 show the descriptive demographic data that was collected regarding education level.

Table 4.10

Education Level (Numbers)

	Career Fire Chief	Volunteer Fire Chief	Total
Did Not Finish School	0	5	5
GED	0	2	2
High School Diploma	15	39	54
Associate Degree	44	20	64
Bachelor Degree	39	17	56
Master Degree	17	6	23
Doctorate Degree	1	1	2
Other	2	2	4
Preferred Not to Answer	1	0	1
Total	119	92	211

Table 4.11

Education Level (Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Did Not Finish School	0.00%	2.37%	2.37%
GED	0.00%	0.95%	0.95%
High School Diploma	7.11%	18.48%	25.59%
Associate Degree	20.85%	9.52%	30.37%
Bachelor Degree	18.48%	8.05%	26.53%
Master Degree	8.05%	2.84%	10.89%
Doctorate Degree	0.47%	0.47%	0.94%
Other	0.95%	0.95%	1.90%
Preferred Not to Answer	0.47%	0.00%	0.47%
Total	56.38%	43.63%	100.01%

Assertiveness Responses.

Each of the respondents who consented to participate in the study by taking the survey was presented with an electronic version of the Social Style Profile Social Impression Survey. The Social Style Profile Social Impression Survey was composed of thirty-four (34) questions. The survey questions, as discussed in Chapter 3, measured the respondents' assertiveness, responsiveness, and versatility. Eight of the questions target the respondents' assertiveness. Eight of the questions target the respondents' responsiveness. Four of the questions target the respondents' versatility. Four of the questions target specific versatility skills of the respondents. The remaining ten questions are not scored to determine the Social Style of the respondents. The Qualtrics Survey Software utilized for disseminating and administrating the survey was set to require an answer to each question before the respondent was allowed to proceed to the next question, and prohibited the respondent from reviewing previously answered questions. Each of the questions that were used to capture the respondents' assertiveness required

the respondents to rate themselves using a seven point Likert scale; with one being the lowest score and seven being the highest score. The respondents were reminded that there were no absolutes, right answers, or wrong answers.

The first question that was used to score the respondents' assertiveness asked the respondents to rate themselves on their desire to control. One of the respondents rated his desire for control as a 1 (low). Thirteen of the respondents rated their desire for control as a 2. Thirty-two of the respondents rated their desire for control as a 3. Fifty-two of the respondents rated their desire for control as a 4. Fifty-nine of the respondents rated their desire for control as a 5. Thirty-four of the respondents rated their desire for control as a 6. Twenty of the respondents rated their desire for control as a 7 (high). The mean score of this question was 4.60.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their desire for control as a 5 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their desire for control as a 4 and 6 (20 responses each) the most frequently. The one respondent who rated his desire for control as a 1 indicated that he was a volunteer fire chief. Seven of the 20 respondents who rated their desire for control as a 7 indicated that they were career fire chiefs, while the remaining 13 indicated that they were volunteer fire chiefs. Tables 4.12 and 4.13 show the responses to the question pertaining to the respondents' desire for control.

Table 4.12

Desire for Control (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	1	1
2	9	4	13
3	17	15	32
4	32	20	52
5	40	19	59
6	14	20	34
7 – High	7	13	20
Total	119	92	211

Table 4.13

Desire for Control (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.47%	0.47%
2	4.27%	1.90%	6.17%
3	8.06%	7.10%	15.16%
4	15.17%	9.48%	24.65%
5	18.96%	9.00%	27.96%
6	6.64%	9.48%	16.12%
7 – High	3.32%	6.16%	9.48%
Total	56.42%	43.59%	100.01%

The second question used to determine the respondents' assertiveness asked the respondents to rate their need to compete. Six of the respondents rated their need to compete as a 1 (low). Twenty of the respondents rated their need to compete as a 2. Thirty-two of the respondents rated their need to compete as a 3. Fifty-six of the respondents rated their need to compete as a 4. Forty of the respondents rated their need to compete as a 5. Forty of the respondents rated their need to compete as a 6. Seventeen

of the respondents rated their need to compete as a 7 (high). The mean score of this question was 4.38.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The need to compete rating of 4 was the most frequently selected rating among both the respondents who identified their status as a career fire chief and those respondents who identified their status as a volunteer fire chief. Three of the six respondents who rated their need to compete as a 1 indicated that they were career fire chiefs, while the remaining three indicated that they were volunteer fire chiefs. Ten of the 17 respondents who rated their need to compete as a 7 indicated that they were career fire chiefs, while the remaining seven indicated that they were volunteer fire chiefs. Tables 4.14 and 4.15 show the responses to the questions pertaining to the respondents' need to compete.

Table 4.14

Need to Compete (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	3	3	6
2	13	7	20
3	14	18	32
4	32	24	56
5	27	13	40
6	20	20	40
7 – High	10	7	17
Total	119	92	211

Table 4.15

Need to Compete (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	1.42%	1.42%	2.84%
2	6.16%	3.32%	9.48%
3	6.64%	8.53%	15.17%
4	15.17%	11.37%	26.54%
5	12.78%	6.16%	18.94%
6	9.48%	9.48%	18.96%
7 – High	4.74%	3.32%	8.06%
Total	56.39%	43.6%	99.99%

The next question that was used to determine the respondents' assertiveness rated the respondents' risk taking, or being a risk taker. Three of the respondents rated their risk taking as a 1 (low). Thirteen of the respondents rated their risk taking as a 2. Twenty of the respondents rated their risk taking as a 3. Fifty-one of the respondents rated their risk taking as a 4. Forty-six of the respondents rated their risk taking as a 5. Fifty-nine of the respondents rated their risk taking as a 6. Nineteen of the respondents rated their risk taking as a 7 (high). The mean score of this question was 4.79.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their risk taking as a 5 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their risk taking as a 6 most frequently. One of the three respondents who rated his risk taking as a 1 indicated that he was a career fire chief, while the remaining two indicated that they were volunteer fire chiefs. Fourteen of the 19 respondents who rated their risk taking as a 7 indicated that they were career fire chiefs, while the remaining five indicated that they

were volunteer fire chiefs. Tables 4.16 and 4.17 show the responses to the question pertaining to the respondent being a risk taker.

Table 4.16

Risk Taker (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	1	2	3
2	1	12	13
3	9	11	20
4	29	22	51
5	36	10	46
6	29	30	59
7 – High	14	5	19
Total	119	92	211

Table 4.17

Risk Taker (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.47%	0.95%	1.42%
2	0.47%	5.69%	6.16%
3	4.27%	5.21%	9.48%
4	13.74%	10.43%	24.17%
5	17.06%	4.74%	21.8%
6	13.74%	14.22%	27.96%
7 – High	6.64%	2.37%	9.01%
Total	56.39%	43.61%	100%

The fourth of the eight survey questions that was used to determine the respondents' assertiveness asked the respondent to rate their aggressiveness. Two respondents rated their aggressiveness as a 1 (low). Seventeen respondents rated their aggressiveness as a 2. Thirty of the respondents rated their aggressiveness as a 3. Thirty-nine of the respondents rated their aggressiveness as a 4. Fifty-three of the respondents

rated their aggressiveness as a 5. Forty-eight of the respondents rated their aggressiveness as a 6. Twenty-two of the respondents rated their aggressiveness as a 7 (high). The mean score of this question was 4.69.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their aggressiveness as a 5 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their aggressiveness as a 4 and as a 6 (20 responses each) most frequently. One of the two respondents who rated their aggressiveness as a 1 indicated that he was a career fire chief, while the remaining one indicated that he was a volunteer fire chief. Eleven of the 22 respondents who rated their aggressiveness as a 7 indicated that they were career fire chiefs, while the remaining 11 indicated that they were volunteer fire chiefs. Tables 4.18 and 4.19 show the responses to the question pertaining to aggressiveness.

Table 4.18

Aggressiveness (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	1	1	2
2	6	11	17
3	16	14	30
4	19	20	39
5	38	15	53
6	28	20	48
7 – High	11	11	22
Total	119	92	211

Table 4.19

Aggressiveness (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.47%	0.47%	0.95%
2	2.84%	5.21%	8.05%
3	7.58%	6.64%	14.22%
4	9.01%	9.48%	18.49%
5	18.01%	7.11%	25.12%
6	13.27%	9.48%	22.75%
7 – High	5.21%	5.21%	10.42%
Total	56.38%	43.6%	100%

The next question that was used to determine the assertiveness of the respondents determined how the respondents rate themselves as dynamic, or their dynamism. Two of the respondents rated their dynamism as a 1 (low). Nine of the respondents rated their dynamism as a 2. Twenty-four of the respondents rated their dynamism as a 3. Forty-five of the respondents rated their dynamism as a 4. Fifty-seven of the respondents rated their dynamism as a 5. Fifty-six of the respondents rated their dynamism as a 6. Eighteen of the respondents rated their dynamism as a 7 (high). The mean score of the question was 4.83.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their dynamism as a 6 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their dynamism as a 4 most frequently. The two respondents who rated their dynamism as a 1 both indicated that they were volunteer fire chiefs. Six of the 18 respondents who rated their dynamism as a 7 indicated that they were career fire chiefs, while the remaining 12

indicated that they were volunteer fire chiefs. Tables 4.20 and 4.21 show the responses to the question pertaining to dynamism.

Table 4.20

Dynamism (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	2	2
2	3	6	9
3	9	15	24
4	15	30	45
5	42	15	57
6	44	12	56
7 – High	6	12	18
Total	119	92	211

Table 4.21

Dynamism (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.94%	0.94%
2	1.42%	2.84%	4.26%
3	4.27%	7.11%	11.38%
4	7.11%	14.22%	21.33%
5	19.91%	7.11%	27.02%
6	20.85%	5.69%	26.54%
7 – High	2.84%	5.69%	8.53%
Total	56.4%	43.6%	100%

The next question of the survey that was used to determine the respondents' assertiveness asked the respondent to rate their ability and willingness to take charge. None of the respondents rated their ability and willingness to take charge as a 1 (low). Five of the respondents rated their ability and willingness to take charge as a 2. Seven of the respondents rated their ability and willingness to take charge as a 3. Twenty-three of

the respondents rated their ability and willingness to take charge as a 4. Forty of the respondents rated their ability and willingness to take charge as a 5. Sixty-seven of the respondents rated their ability and willingness to take charge as a 6. Sixty-nine of the respondents rated their ability and willingness to take charge as a 7 (high). The mean score of this question was 5.73.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their ability and willingness to take charge as a 6 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their ability and willingness to take charge as a 7 most frequently. All five of the respondents who rated their ability and willingness to take charge as a 2 indicated that they were volunteer fire chiefs. Only one of the seven respondents who rated their ability and willingness to take charge as a 3 indicated that he was a career fire chief, while the remaining six indicated that they were volunteer fire chiefs. Thirty-four of the 69 respondents who rated their ability and willingness to take charge as a 7 indicated that they were career fire chiefs, while the remaining 35 indicated that they were volunteer fire chiefs. Tables 4.22 and 4.23 show the responses to the question regarding taking charge.

Table 4.22

Take Charge (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	0	5	5
3	1	6	7
4	8	15	23
5	23	17	40
6	53	14	67
7 – High	34	35	69
Total	119	92	211

Table 4.23

Take Charge (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.00%	2.37%	2.37%
3	0.47%	2.84%	3.31%
4	3.79%	7.11%	10.9%
5	10.9%	8.06%	18.96%
6	25.12%	6.64%	31.76%
7 – High	16.11%	16.59%	32.7%
Total	56.39%	43.61%	100%

The next question on the survey that was used to determine the respondents' assertiveness asked the respondents to rate their assertiveness. One of the respondents rated his assertiveness as a 1 (low). Three of the respondents rated their assertiveness as a 2. Sixteen of the respondents rated their assertiveness as a 3. Thirty-two of the respondents rated their assertiveness as a 4. Sixty-two of the respondents rated their assertiveness as a 5. Sixty-five of the respondents rated their assertiveness as a 6. Thirty-two respondents rated their assertiveness as a 7 (high). The mean score of this question was 5.25.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their assertiveness as a 6 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their assertiveness as a 5 most frequently. The one respondent who rated his assertiveness as a 1 indicated that he was a volunteer fire chief. All three of the respondents who rated their assertiveness as a 2 indicated that they were volunteer fire chiefs. Fourteen of the 32 respondents who rated their assertiveness as a 7 indicated that they were career fire chiefs, while the remaining 18 indicated that they were volunteer fire chiefs. Tables 4.24 and 4.25 show the results of the question pertaining to assertiveness.

Table 4.24

Assertiveness (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	1	1
2	0	3	3
3	3	13	16
4	16	16	32
5	41	21	62
6	45	20	65
7 – High	14	18	32
Total	119	92	211

Table 4.25

Assertiveness (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00	0.47	0.47
2	0.00	1.42	1.42
3	1.42	6.16	7.58
4	7.58	7.58	15.16
5	19.43	9.95	29.38
6	21.33	9.48	30.81
7 – High	6.64	8.53	15.17
Total	56.4	43.59	99.99

The final question on the survey that was used to determine the assertiveness of the respondents rated the respondents' tough mindedness. Two of the respondents rated their tough mindedness as a 1 (low). Fifteen of the respondents rated their tough mindedness as a 2. Thirty-two of the respondents rated their tough mindedness as a 3. Thirty-nine of the respondents rated their tough mindedness as a 4. Sixty of the respondents rated their tough mindedness as a 5. Forty-four of the respondents rated their tough mindedness as a 6. Nineteen of the respondents rated their tough mindedness as a 7 (high). The mean score of this question was 4.65.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their tough mindedness as a 5 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated their tough mindedness as a 6 most frequently. The two respondents who rated their tough mindedness as a 1 both indicated that they were volunteer fire chiefs. Nine of the 19 respondents who rated their tough mindedness as a 7 indicated that they were career fire

chiefs, while the remaining 10 indicated that they were volunteer fire chiefs. Tables 4.26 and 4.27 show the responses to the question relating to tough mindedness.

Table 4.26

Tough Mindedness (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	2	2
2	5	10	15
3	16	16	32
4	24	15	39
5	41	19	60
6	24	20	44
7 – High	9	10	19
Total	119	92	211

Table 4.27

Tough Mindedness (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.95%	0.95%
2	2.37%	4.74%	7.11%
3	7.58%	7.58%	15.16%
4	11.37%	7.11%	18.48%
5	19.43%	9.01%	28.44%
6	11.37%	9.48%	20.85%
7 – High	4.27%	4.74%	9.01%
Total	56.39%	43.61%	100%

The mean score of each of the eight questions used to determine the assertiveness of the respondent was captured, and are displayed in Table 4.28.

Table 4.28

Means of Assertiveness Scores

Assertiveness Dimension Questions	Mean Score
Desire Control	4.60
Need to Compete	4.38
Risk Taker	4.79
Aggressive	4.69
Dynamic	4.83
Takes Charge	5.73
Assertive	5.25
Tough Minded	4.65

The responses to the eight questions, when tallied, yield a possible outcome range from eight to fifty-six. Table 4.29 outlines the scoring for the Assertiveness dimension of the study.

Table 4.29

Assertiveness Scoring from the Social Style Profile Social Impression Survey

	Low	Moderate-Low	Moderate-High	High
Assertiveness	8-33.8	33.85-38	38.05-42.2	42.25-56

Each of the 211 responses to the survey were scored in accordance with Table 4.29. The answers to the eight questions pertaining to assertiveness were tallied and the score was categorized as Low, Moderate-Low, Moderate-High, and High depending upon the sum of the scores. Forty-nine of the respondents' scores were categorized as Low on the assertiveness index. Fifty- three of the respondents' scores were categorized as Moderate-Low on the assertiveness index. Forty-two of the respondents' scores were categorized as Moderate-High on the assertiveness index. Sixty-seven of the respondents' scores were categorized as High.

The categorized scores were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Nineteen of the 49 respondents who scored Low on the assertiveness index indicated that they were career fire chiefs, while the remaining 30 respondents indicated that they were volunteer fire chiefs. Thirty-four of the 53 respondents who scored Moderate-Low on the assertiveness index indicated that they were career fire chiefs, while the remaining 19 respondents indicated that they were volunteer fire chiefs. Twenty-six of the 42 respondents who scored Moderate-High on the assertiveness index indicated that they were career fire chiefs, while the remaining 16 respondents indicated that they were volunteer fire chiefs. Forty of the 67 respondents who scored High on the assertiveness index indicated that they were career fire chiefs, while the remaining 27 respondents indicated that they were volunteer fire chiefs. Table 4.30 shows the assertiveness index.

Table 4.30

Assertiveness Index (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Low	19	30	49
Moderate-Low	34	19	53
Moderate-High	26	16	42
High	40	27	67
Total	119	92	211

Table 4.31 shows the response percentages of the entire sample on the assertive index.

Table 4.31

Assertiveness Index (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Low	9.00%	14.22%	23.22%
Moderate-Low	16.11%	9.00%	25.11%
Moderate-High	12.32%	7.58%	19.9%
High	18.96%	12.80%	31.76%
Total	56.39%	43.6%	99.99%

The responses were then examined with respect to the respondents' status as a career fire chief or a volunteer fire chief. Nearly 16% of the respondents who identified their status as a career fire chef scored Low on the assertiveness index, while more than 32% of the respondents who identified their status as a volunteer fire chief scored low on the assertiveness index. Table 4.32 shows the response percentages of the assertive index respective to the respondents' status as a career fire chief or a volunteer fire chief.

Table 4.32

Assertiveness Index (Response Percentages Respective to Fire Chief Status)

	Career Fire Chief	Volunteer Fire Chief
Low	15.97%	32.61%
Moderate-Low	28.57%	20.65%
Moderate-High	21.85%	17.39%
High	33.61%	29.35%
Total	100%	100%

The Social Style Profile is composed of four quadrants. Quadrant I is the Driver profile and is scored as Moderate-High to High on the assertiveness index, and Moderate-Low to Low on the responsiveness index. Quadrant IV is the Expressive profile and is

scored as Moderate-High to High on the assertiveness index, and Moderate-High to High on the responsiveness index. Quadrant II is the Analytical profile and is scored as Moderate-Low to Low on the assertiveness index, and Moderate-Low to Low on the responsiveness index. Quadrant III is the Amiable profile and is scored as Moderate-Low to Low on the assertiveness index, and Moderate-High to High on the responsiveness index (Gilley & Gilley, 2003; Leimbach, 2014). Table 4.33 shows the four Social Styles respective of the assertiveness index.

Table 4.33

Social Style Profiles

	Analytical	Amiable	Driver	Expressive
Assertiveness	Low Moderate-Low	Low Moderate-Low	High Moderate-High	High Moderate-High

Quadrants I and IV, or Drivers and Expressives, both score Moderate-High to High on the Assertiveness index, and are more assertive than individuals in Quadrants II and III, or Analyticals and Amiables. The assertiveness index is displayed as the X axis on the Cartesian Coordinate System. Plots on the positive side of the axis are considered to be more assertive than plots on the negative side of the axis. Quadrants I and IV are on the positive side of the axis, while Quadrants II and III are on the negative side. Quadrants I and IV, or Drivers and Expressives, are considered to be Tell Assertive, whereas Quadrants II and III, or Analyticals and Amiables, are considered to be Ask Assertive (Merrill & Reid, 1981). Figure 2.2 (originally shown in Chapter 2) is reproduced here as Figure 4.1, and illustrates the four quadrants and their relation to the assertiveness and responsiveness scales (X and Y axes).

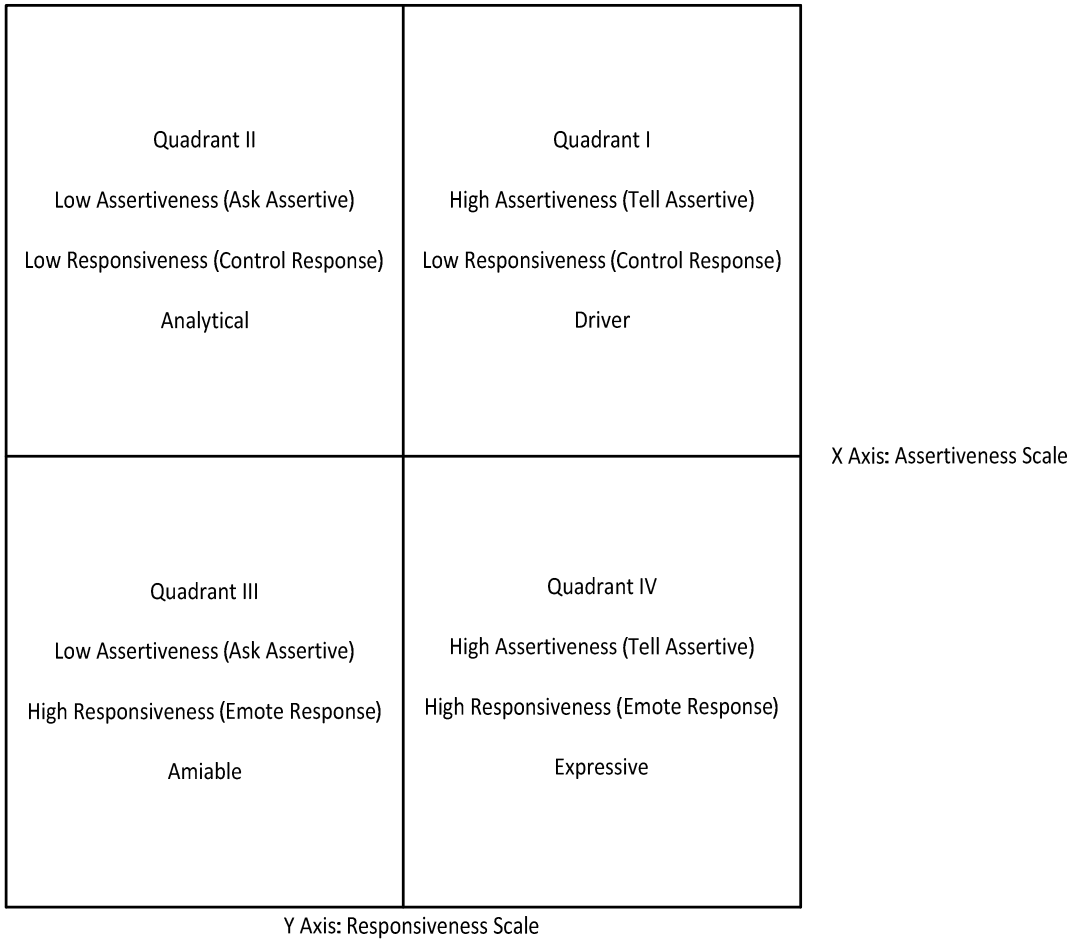

Figure 4.1

Cartesian Plane Indicating Assertiveness and Responsiveness

The responses to the survey were then divided between those respondents who scored Low to Moderate-Low on the assertiveness index and those respondents who scored High to Moderate High on the assertiveness index. In accordance with Table 4.33 and Figure 4.1, the respondents who scored Low to Moderate-Low on the assertiveness index were labeled as Ask Assertive, and the respondents who scored High to Moderate-High on the assertiveness index were labeled as Tell Assertive. One hundred nine of the

211 respondents scored High to Moderate-High on the assertiveness index and were labeled as Tell Assertive. One hundred two of the 211 respondents scored Low to Moderate-Low on the assertiveness index and were labeled as Ask Assertive.

The labeling of the respondents as Ask Assertive or Tell Assertive depending on their scores on the assertiveness index was then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Sixty-six of the 109 respondents who were labeled as Tell Assertive indicated that they were career fire chiefs, while the remaining 43 respondents indicated that they were volunteer fire chiefs. Fifty-three of the 102 respondents who labeled as Ask Assertive indicated that they were career fire chiefs, while the remaining 49 respondents indicated that they were volunteer fire chiefs. Table 4.34 shows the assertiveness rankings of the respondents. Table 4.35 shows the assertiveness ranking percentages for the entire sample. Table 4.36 shows the assertiveness rankings respective to the fire chief's status as a career fire chief or a volunteer fire chief.

Table 4.34

Assertiveness Rankings (Respondents)

	Career Fire Chief	Volunteer Fire Chief	Total
Tell Assertive	66	43	109
Ask Assertive	53	49	102
Total	119	92	211

Table 4.35

Assertiveness Rankings (Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Tell Assertive	31.28%	20.38%	51.66%
Ask Assertive	25.12%	23.22%	48.34%
Total	56.4%	43.6%	100%

Table 4.36

Assertiveness Rankings (Percentages Respective to Fire Chief Status)

	Career Fire Chief	Volunteer Fire Chief
Tell Assertive	55.46%	46.74%
Ask Assertive	44.54%	53.26%
Total	100%	100%

Responsiveness Responses.

As previously stated, the Social Style Profile Social Impression Survey was composed of thirty-four (34) questions. The survey questions, as discussed in Chapter 3, measured the respondents' assertiveness, responsiveness, and versatility. Eight of the questions target the respondents' assertiveness. Eight of the questions target the respondents' responsiveness. Four of the questions target the respondents' versatility. Four of the questions target specific versatility skills of the respondents. The remaining ten questions are not scored to determine the Social Style of the respondents. The Qualtrics Survey Software utilized for disseminating and administrating the survey was set to require an answer to each question before the respondent was allowed to proceed to the next question, and prohibited the respondent from reviewing previously answered questions. Each of the questions that was used to capture the respondents' responsiveness required the respondents to rate themselves using a seven point Likert

scale; with one being the lowest score and seven being the highest score. The respondents were reminded that there were no absolutes, right answers, or wrong answers.

The first question that was used to score the respondents' responsiveness asked the respondents to rate how socially interactive, or social, they are. None of the respondents rated their social interactivity as a 1 (low). Four of the respondents rated their social interactivity as a 2. Twenty-two of the respondents rated their social interactivity as a 3. Thirty-one of the respondents rated their social interactivity as a 4. Seventy-five of the respondents rated their social interactivity as a 5. Fifty-one of the respondents rated their social interactivity as a 6. Twenty-eight of the respondents rated their interactivity as a 7 (high). The mean score of this question was 5.09.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief as well as the respondents who identified their status as a volunteer fire chief both rated their social interactivity as a 5 more frequently than any other rating. One of the four respondents who rated his social interactivity as a 2 indicated that he was a career fire chief, while the remaining three respondents indicated that they were volunteer fire chiefs. Fifteen of the 28 respondents who rated their social interactivity as a 7 indicated that they were career fire chiefs, while the remaining 13 respondents indicated that they were volunteer fire chiefs. Tables 4.37 and 4.38 show the responses pertaining to social interactivity.

Table 4.37

Social Interactivity (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	1	3	4
3	12	10	22
4	14	17	31
5	44	31	75
6	33	18	51
7 – High	15	13	28
Total	119	92	211

Table 4.38

Social Interactivity (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.47%	1.42%	1.89%
3	5.69%	4.74%	10.43%
4	6.64%	8.06%	14.7%
5	20.85%	14.69%	35.54%
6	15.64%	8.53%	24.17%
7 – High	7.11%	6.16%	13.27%
Total	56.4%	43.6%	100%

The next question that was used to score the respondents' responsiveness asked the respondents to rate their willingness to relate. One of the respondents rated his or her willingness to relate as a 1 (low). Four of the respondents rated their willingness to relate as a 2. Seven of the respondents rated their willingness to relate as a 3. Twenty-two of the respondents rated their willingness to relate as a 4. Fifty-seven of the respondents rated their willingness to relate as a 5. Ninety-five of the respondents rated their

willingness to relate as a 6. Twenty-five of the respondents rated their willingness to relate as a 7 (high). The mean score of this question was 5.44.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief as well as those respondents who identified their status as a volunteer fire chief both rated their willingness to relate as a 6 more frequently than any other rating. The one respondent who rated his willingness to relate as a 1 indicated that he was a career fire chief. The four respondents who rated their willingness to relate as a 2 all indicated that they were volunteer fire chiefs. Seventeen of the 25 respondents who rated their willingness to relate as a 7 indicated that they were career fire chiefs, while the remaining eight respondents indicated that they were volunteer fire chiefs. Tables 4.39 and 4.40 show the responses to the question pertaining to the respondents' willingness to relate.

Table 4.39

Willingness to Relate (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	1	0	1
2	0	4	4
3	1	6	7
4	6	16	22
5	32	25	57
6	62	33	95
7 – High	17	8	25
Total	119	92	211

Table 4.40

Willingness to Relate (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.47%	0.00%	0.47%
2	0.00%	1.9%	1.9%
3	0.47%	2.84%	3.31%
4	2.84%	7.58%	10.42%
5	15.17%	11.85%	27.02%
6	29.38%	15.64%	45.02%
7 – High	8.06%	3.79%	11.85%
Total	56.39%	43.58%	99.99%

The third question that was used to determine the respondents' responsiveness asked the respondents to rate their willingness to share their feelings. Nine of the respondents rated their willingness to share feelings as a 1 (low). Twenty-six of the respondents rated their willingness to share feelings as a 2. Thirty-five of the respondents rated their willingness to share feelings as a 3. Sixty-two of the respondents rated their willingness to share feelings as a 4. Forty-three of the respondents rated their willingness to share feelings as a 5. Twenty-seven of the respondents rated their willingness to share feelings as a 6. Nine of the respondents rated their willingness to share feelings as a 7 (high). The mean score of this question was 4.05.

The responses were then cross-tabulated with the respondents' status as career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief as well as those respondents who identified their status as a volunteer fire chief both rated their willingness to share feelings as a 5 more frequently than any other rating. Two of the nine respondents who rated their willingness to share feelings as a 1 indicated that they were career fire chiefs, while the remaining seven respondents indicated that

they were volunteer fire chiefs. Eight of the nine respondents who rated their willingness to share feelings as a 7 indicated that they were career fire chiefs, while the remaining one respondent indicated that he was a volunteer fire chief. Tables 4.41 and 4.42 show the responses to the question pertaining to sharing of feelings.

Table 4.41

Shares Feelings (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	2	7	9
2	14	12	26
3	18	17	35
4	34	28	62
5	28	15	43
6	15	12	27
7 – High	8	1	9
Total	119	92	211

Table 4.42

Shares Feelings (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.95%	3.32%	4.27%
2	6.64%	5.68%	12.32%
3	8.53%	8.06%	16.59%
4	16.11%	13.27%	29.38%
5	13.27%	7.11%	20.38%
6	7.11%	5.69%	12.8%
7 – High	3.79%	0.47%	4.26%
Total	56.4%	43.6%	100%

The fourth of the eight questions used to determine the respondents' responsiveness asked the respondents to rate their warmness, or how warm they are with others. Two respondents rated their warmness as a 1 (low). Eleven respondents rated

their warmness as a 2. Seventeen respondents rated their warmness as a 3. Sixty respondents rated their warmness as a 4. Sixty-six respondents rated their warmness as a 5. Forty-six respondents rated their warmness as a 6. Nine respondents rated their warmness as a 7 (high). The mean score of this question was 4.66.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief as well as those respondents who identified their status as a volunteer fire chief both rated their warmness to be a 5 more frequently than any other rating. One of the two respondents who rated their warmness as a 1 indicated that he was a career fire chief, while the remaining one respondent indicated that he was a volunteer fire chief. Four of the nine respondents who rated their warmness as a 7 indicated that they were career fire chiefs, while the remaining five respondents indicated that they were volunteer fire chiefs. Tables 4.43 and 4.44 show the responses to the question pertaining to warmness.

Table 4.43

Warmness (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	1	1	2
2	4	7	11
3	9	8	17
4	35	25	60
5	40	26	66
6	26	20	46
7 – High	4	5	9
Total	119	92	211

Table 4.44

Warmness (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.47%	0.47%	0.95%
2	1.9%	3.32%	5.21%
3	4.27%	3.79%	8.06%
4	16.59%	11.84%	28.44%
5	18.96%	12.32%	31.28%
6	12.32%	9.48%	21.8%
7 – High	1.9%	2.37%	4.26%
Total	56.41%	43.59%	100%

The next question that was used to determine the responsiveness of the respondents asked the respondents to rate their openness. Two respondents rated their openness as a 1 (low). Five respondents rated their openness as a 2. Sixteen respondents rated their openness as a 3. Fifteen respondents rated their openness as a 4. Seventy-four respondents rated their openness as a 5. Seventy-seven respondents rated their openness as a 6. Twenty-two respondents rated their openness as a 7. The mean score of this question was 5.24.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their openness to be a 6 more frequently than any other rating. The respondents who identified their status to be a volunteer fire chief, however, rated their openness to be a 5 most frequently. The two respondents who rated their openness as a 1 both indicated that they were volunteer fire chiefs. The five respondents who rated their openness as a 2 all indicated that they were volunteer fire chiefs. Twelve of the 22 respondents who rated their openness as a 7 indicated that they were career fire chiefs,

while the remaining 10 respondents indicated that they were volunteer fire chiefs. Tables 4.45 and 4.46 show the responses to the question pertaining to openness.

Table 4.45

Openness (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	2	2
2	0	5	5
3	2	14	16
4	8	7	15
5	41	33	74
6	56	21	77
7 – High	12	10	22
Total	119	92	211

Table 4.46

Openness (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.95%	0.95%
2	0.00%	2.37%	2.37%
3	0.95%	6.63%	7.58%
4	3.79%	3.32%	7.11%
5	19.43%	15.64%	35.07%
6	26.54%	9.95%	36.49%
7 – High	5.69%	4.74%	10.43%
Total	56.4%	43.6%	100%

The next question that was used to determine the respondents' responsiveness asked the respondents to rate their approachability. Three of the respondents rated their approachability as a 1 (low). Five of the respondents rated their approachability as a 2. Eight of the respondents rated their approachability as a 3. Eight of the respondents rated their approachability as a 4. Fifty-two of the respondents rated their approachability as a

5. Eighty-seven of the respondents rated their approachability as a 6. Forty-eight of the respondents rated their approachability as a 7 (high). The mean response of this question was 5.63.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief along with those respondents who identified their status as a volunteer fire chief both rated their approachability to be a 6 more frequently than any other rating. The three respondents who rated their approachability as a 1 all indicated that they were volunteer fire chiefs. The five respondents who rated their approachability as a 2 all indicated that they were volunteer fire chiefs. Thirty of the 48 respondents who rated their approachability as a 7 indicated that they were career fire chiefs, while the remaining 18 respondents indicated that they were volunteer fire chiefs. Tables 4.47 and 4.48 show the responses to the question pertaining to approachability.

Table 4.47

Approachable (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	3	3
2	0	5	5
3	3	5	8
4	2	6	8
5	34	18	52
6	50	37	87
7 – High	30	18	48
Total	119	92	211

Table 4.48

Approachable (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	1.42%	1.42%
2	0.00%	2.37%	2.37%
3	1.42%	2.37%	3.79%
4	0.95%	2.84%	3.79%
5	16.11%	8.53%	24.64%
6	23.7%	17.54%	41.24%
7 – High	14.22%	8.53%	22.75%
Total	56.4%	43.6%	100%

The seventh of the eight questions that was used to determine the respondents' responsiveness asked the respondents to rate their level of being people oriented. None of the respondents rated their level of being people oriented as a 1 (low). Four of the respondents rated their level of being people oriented as a 2. Fifteen of the respondents rated their level of being people oriented as a 3. Twenty-four of the respondents rated their level of being people oriented as a 4. Fifty of the respondents rated their level of being people oriented as a 5. Seventy-eight of the respondents rated their level of being people oriented as a 6. Forty of the respondents rated their level of being people oriented as a 7 (high). The mean response of this question was 5.44.

The results were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status to be a career fire chief along with those respondents who identified their status to be a volunteer fire chief both rated their level of being people oriented as a 6 more frequently than any other rating. The four respondents who rated their level of being people oriented as a 2 all indicated that they were volunteer fire chiefs. Twenty-two of the 40 respondents who

rated their level of being people oriented as a 7 indicated that they were career fire chiefs, while the remaining 18 respondents indicated that they were volunteer fire chiefs. Tables 4.49 and 4.50 show the responses to the question pertaining to being people oriented.

Table 4.49

People Oriented (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	0	4	4
3	5	10	15
4	17	7	24
5	30	20	50
6	45	33	78
7 – High	22	18	40
Total	119	92	211

Table 4.50

People Oriented (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.00%	1.9%	1.9%
3	2.37%	4.74%	7.11%
4	8.06%	3.32%	11.38%
5	14.21%	9.48%	23.69%
6	21.33%	15.63%	36.96%
7 – High	10.43%	8.53%	18.96%
Total	56.4%	43.6%	100%

The final question of the survey that was used to determine the respondents' responsiveness asked the respondents to rate to what extent they made people feel comfortable. Two of the respondents rated the extent to which they make people feel comfortable as a 1 (low). Five of the respondents rated the extent to which they make

people feel comfortable as a 2. Eight of the respondents rated the extent to which they make people feel comfortable as a 3. Twenty-five of the respondents rated the extent to which they make people feel comfortable as a 4. Sixty-seven of the respondents rated the extent to which they make people feel comfortable as a 5. Eighty-four of the respondents rated the extent to which they make people feel comfortable as a 6. Twenty of the respondents rated the extent to which they make people feel comfortable as a 7 (high). The mean response of this question was 5.28.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated the extent to which they make people feel comfortable to be a 5 more frequently than any other rating. The respondents who identified their status as a volunteer fire chief, however, rated the extent to which they make people feel comfortable to be a 6 most frequently. The two respondents who rated the extent to which they make people feel comfortable as a 1 both indicated that they were volunteer fire chiefs. The five respondents who rated the extent to which they make people feel comfortable as a 2 all indicated that they were volunteer fire chiefs. Eight of the 20 respondents who rated the extent to which they make people feel comfortable as a 7 indicated that they were career fire chiefs, while the remaining 12 respondents indicated that they were volunteer fire chiefs. Tables 4.51 and 4.52 show the responses to the question pertaining to making people feel comfortable.

Table 4.51

Make People Feel Comfortable (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	2	2
2	0	5	5
3	6	2	8
4	13	12	25
5	48	19	67
6	44	40	84
7 – High	8	12	20
Total	119	92	211

Table 4.52

Make People Feel Comfortable (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.95%	0.95%
2	0.00%	2.37%	2.37%
3	2.84%	0.95%	3.79%
4	6.16%	5.69%	11.85%
5	22.75%	9.00%	31.75%
6	20.85%	18.96%	39.81%
7 – High	3.79%	5.69%	9.48%
Total	56.39%	43.61%	100%

The mean score of each of the eight questions used to determine the responsiveness of the respondent was captured, and are displayed in Table 4.53.

Table 4.53

Means of Responsiveness Scores

Responsiveness Dimension Questions	Mean Score
Social	5.09
Willingness to Relate	5.44
Shares Feelings	4.05
Warmness	4.66
Openness	5.24
Approachable	5.63
People Oriented	5.44
Make People Feel Comfortable	5.28

The responses to the eight questions, when tallied, yield a possible outcome range from eight to fifty-six. Table 4.54 outlines the scoring for the Responsive dimension of the study.

Table 4.54

Responsiveness Scoring from the Social Style Profile Social Impression Survey

	Low	Moderate-Low	Moderate-High	High
Responsiveness	8-38	38.05-42.2	42.25-45.5	45.55-56

Each of the 211 responses to the survey was scored in accordance with Table 4.54. The answers to the eight questions pertaining to responsiveness were tallied and the score was categorized as Low, Moderate-Low, Moderate High, and High depending upon the sum of the scores. Sixty-two of the respondents' scores were categorized as Low on the responsiveness index. Forty-six of the respondents' scores were categorized as Moderate-Low on the responsiveness index. Forty-three of the respondents' scores were categorized as Moderate-High on the responsiveness index. Sixty of the respondents' scores were categorized as High on the responsiveness index.

The categorized scores were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Twenty-seven of the 62 respondents who score Low on the responsiveness index indicated that they were career fire chiefs, while the remaining 35 respondents indicated that they were volunteer fire chiefs. Twenty-nine of the 46 respondents who scored Moderate-Low on the responsiveness index indicated that they were career fire chiefs, while the remaining 17 respondents indicated that they were volunteer fire chiefs. Twenty-seven of the 43 respondents who scored Moderate-High on responsiveness index indicated that they were career fire chiefs, while the remaining 16 respondents indicated that they were volunteer fire chiefs. Thirty-six of the 60 respondents who scored High on the responsiveness index indicated that they were career fire chiefs, while the remaining 24 indicated that they were volunteer fire chiefs. Table 4.55 shows the responsiveness index.

Table 4.55

Responsiveness Index (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Low	27	35	62
Moderate-Low	29	17	46
Moderate-High	27	16	43
High	36	24	60
Total	119	92	211

Table 4.56 shows the response percentages of the entire sample on the responsiveness index.

Table 4.56

Assertiveness Index
(Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Low	12.8%	16.59%	29.39%
Moderate-Low	13.74%	8.06%	21.8%
Moderate-High	12.8%	7.58%	20.38%
High	17.06%	11.37%	28.43%
Total	56.4%	43.6%	100%

The responses were then examined with respect to the respondents' status as a career fire chief or a volunteer fire chief. Nearly 23% of the respondents who identified themselves as a career fire chief scored Low on the responsiveness index, while more than 38% of the respondents who identified themselves as a volunteer fire chief scored Low on the responsiveness index. Table 4.57 shows the response percentages of the responsiveness index respective to the respondents' status as a career fire chief or a volunteer fire chief.

Table 4.57

Responsiveness Index
(Response Percentages Respective to Fire Chief Status)

	Career Fire Chief	Volunteer Fire Chief
Low	22.69%	38.04%
Moderate-Low	24.37%	18.48%
Moderate-High	22.69%	17.39%
High	30.25%	26.09%
Total	100%	100%

As previously stated, the Social Style Profile is composed of four quadrants. Quadrant I is the Driver profile and is scored as Moderate-High to High on the

assertiveness index, and Moderate-Low to Low on the responsiveness index. Quadrant IV is the Expressive profile and is scored as Moderate-High to High on the assertiveness index, and Moderate-High to High on the responsiveness index. Quadrant II is the Analytical profile and is scored as Moderate-Low to Low on the assertiveness index, and Moderate-Low to Low on the responsiveness index. Quadrant III is the Amiable profile and is scored as Moderate-Low to Low on the assertiveness index, and Moderate-High to High on the responsiveness index (Gilley & Gilley, 2003; Leimbach, 2014). Table 4.58 shows the four Social Styles respective of the responsiveness index.

Table 4.58

Social Style Profiles

	Analytical	Amiable	Driver	Expressive
Responsiveness	Low Moderate-Low	High Moderate-High	Low Moderate-Low	High Moderate-High

Quadrants I and II, or Drivers and Analyticals, both score Low to Moderate Low on the Responsiveness index, and have lower responsiveness than individuals in Quadrants III and IV, or Amiables and Expressives. The responsiveness index is displayed as the Y axis on the Cartesian Coordinate System. Plots on the positive side of the axis are considered to be less responsive than the plots on the negative side of the axis. Quadrants III and IV, or Amiables and Expressives, are considered to be Emote Responsive, whereas Quadrants I and II, or Drivers and Analyticals, are considered to be Control Responsive (Merrill & Reid, 1981). Figure 4.1 again illustrates the four quadrants and their relation to the assertiveness and responsiveness scales.

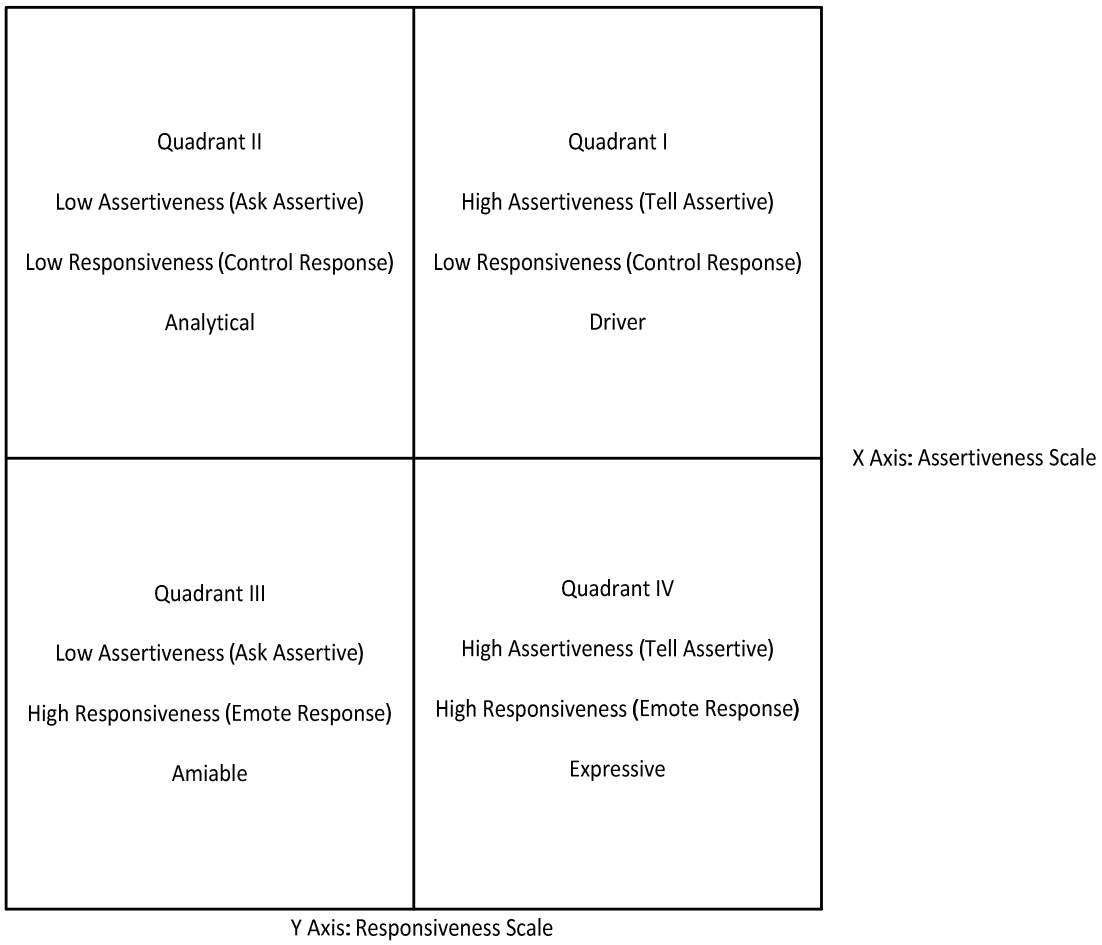

Figure 4.1

Cartesian Plane Indicating Assertiveness and Responsiveness

The responses to the survey were then divided between those respondents who scored Low to Moderate-Low on the responsiveness index and those respondents who scored High to Moderate High on the responsiveness index. In accordance with Table 4.58 and Figure 4.1, the respondents who scored Low to Moderate-Low on the responsiveness index were labeled as Control Responsive, and the respondents who scored High to Moderate-High on the responsiveness index were labeled as Emote

Responsive. One hundred three (103) of the 211 respondents scored High to Moderate-High on the responsiveness index and were labeled as Emote Responsive. One hundred eight (108) of the 211 respondents scored Low to Moderate-Low on the responsiveness index and were labeled as Control Responsive.

The labeling of the respondents as Emote or Control Responsive depending on their scores on the responsiveness index was then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Sixty-three of the 103 respondents who were labeled as Emote Responsive identified themselves as career fire chiefs, while the remaining 40 respondents identified themselves as volunteer fire chiefs. Fifty-six of the 108 respondents who were labeled as Control Responsive identified themselves as career fire chiefs, while the remaining 52 respondents identified themselves as volunteer fire chiefs. Table 4.59 shows the responsiveness rankings of the respondents. Table 4.60 shows the responsiveness ranking percentages of the entire sample. Table 4.61 shows the responsiveness rankings respective to the respondents' status as a career fire chief or a volunteer fire chief.

Table 4.59

Responsive Rankings (Respondents)

	Career Fire Chief	Volunteer Fire Chief	Total
Emote Responsive	63	40	103
Control Responsive	56	52	108
Total	119	92	211

Table 4.60

Responsiveness Rankings (Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Emote Responsive	29.86	18.96	48.82
Control Responsive	26.54	24.64	51.18
Total	56.4	43.6	100%

Table 4.61

Responsiveness Rankings (Percentages Respective to Fire Chief Status)

	Career Fire Chief	Volunteer Fire Chief
Emote Responsive	52.94	43.48
Control Responsive	47.06	56.52
Total	100%	100%

Versatility Responses.

As previously stated, the Social Style Profile Social Impression Survey was composed of thirty-four (34) questions. The survey questions, as discussed in Chapter 3, measured the respondents' assertiveness, responsiveness, and versatility. Eight of the questions target the respondents' assertiveness. Eight of the questions target the respondents' responsiveness. Four of the questions target the respondents' versatility. Four of the questions target specific versatility skills of the respondents. The remaining ten questions are not scored to determine the Social Style of the respondents. The Qualtrics Survey Software utilized for disseminating and administrating the survey was set to require an answer to each question before the respondent was allowed to proceed to the next question, and prohibited the respondent from reviewing previously answered questions. Each of the four questions that were used to capture the respondents' versatility required the respondent to rate themselves using a seven point Likert scale;

with one being the lowest score and seven being the highest score. The respondents were reminded that there were no absolutes, right answers, or wrong answers.

The first question that was used to score the respondents' versatility asked the respondents to rate their flexibility, or how flexible they see themselves. None of the respondents rated flexibility as a 1 (low). Three of the respondents rated their flexibility as a 2. Ten of the respondents rated their flexibility as a 3. Twenty-eight of the respondents rated their flexibility as a 4. Sixty-seven of the respondents rated their flexibility as a 5. Seventy-three of the respondents rated their flexibility as a 6. Thirty respondents rated their flexibility as a 7 (high). The mean score of this question was 5.36.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their flexibility as a 6 more frequently than any other rating. Those respondents who identified their status as a volunteer fire chief, however, rated their flexibility as a 5 most frequently. The three respondents who rated their flexibility as a 2 all identified themselves as volunteer fire chiefs. One of the 10 respondents who rated his flexibility as a 3 identified himself as a career fire chief, while the remaining three respondents identified themselves as volunteer fire chiefs. Twenty-one of the 30 respondents who rated their flexibility as a 7 identified themselves as career fire chiefs, while the remaining nine respondents identified themselves as volunteer fire chiefs. Tables 4.62 and 4.63 show the responses to the question pertaining to flexibility.

Table 4.62

Flexibility (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	0	3	3
3	1	9	10
4	15	13	28
5	35	32	67
6	47	26	73
7 – High	21	9	30
Total	119	92	211

Table 4.63

Flexibility (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.00%	1.42%	1.42%
3	0.47%	4.27%	4.74%
4	7.11%	6.16%	13.27%
5	16.59%	15.17%	31.76%
6	22.27%	12.32%	34.59%
7 – High	9.95%	4.27%	14.22%
Total	56.39%	43.61%	100%

The next question that was used to score the respondents' versatility asked the respondents to rate their versatility, or how versatile they see themselves. None of the respondents rated versatility as a 1 (low) or a 2. Eight of the respondents rated their versatility as a 3. Fifteen of the respondents rated their versatility as a 4. Fifty-six of the respondents rated their versatility as a 5. Eighty-eight of the respondents rated their versatility as a 6. Forty-four of the respondents rated their versatility as a 7 (high). The mean score of this question was 5.69.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief along with those respondents who identified their status to be a volunteer fire chief both rated their versatility to be a 6 more frequently than any other rating. The eight respondents who rated their versatility as a 3 all identified themselves as volunteer fire chiefs. Twenty-six of the 44 respondents who rated their versatility as a 7 identified themselves as career fire chiefs, while the remaining 18 respondents identified themselves as volunteer fire chiefs. Tables 4.64 and 4.65 show the responses to the question pertaining to versatility.

Table 4.64

Versatility (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	0	0	0
3	0	8	8
4	6	9	15
5	29	27	56
6	58	30	88
7 – High	26	18	44
Total	119	92	211

Table 4.65

Versatility (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.00%	0.00%	0.00%
3	0.00%	3.79%	3.79%
4	2.85%	4.26%	7.11%
5	13.74%	12.8%	26.54%
6	27.49%	14.22%	41.71%
7 – High	12.32%	8.53%	20.85%
Total	56.4%	43.6%	100%

The third of the four questions that was used to score the respondents' versatility asked the respondents to rate the adaptability, or how adaptable they see themselves. None of the respondents rated adaptability as a 1 (low). One of the respondents rated his adaptability as a 2. Three of the respondents rated their adaptability as a 3. Twelve of the respondents rated their adaptability as a 4. Seventy-one of the respondents rated their adaptability as a 5. Eighty-eight of the respondents rated their adaptability as a 6. Thirty-six of the respondents rated their adaptability as a 7 (high). The mean score of this question was 5.66.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief rated their adaptability to be a 6 more frequently than any other rating. Those respondents who identified their status to be a volunteer fire chief, however, rated their adaptability to be a 5 most frequently. The single respondent who rated his adaptability as a 2 indicated that he was a volunteer fire chief. The three respondents who rated their adaptability as a 3 all indicated that they were volunteer fire chiefs. Twenty-two of the

36 respondents who rated their adaptability as a 7 indicated that they were career fire chiefs, while the remaining 14 respondents indicated that they were volunteer fire chiefs. Tables 4.66 and 4.67 show the responses to the question pertaining to adaptability.

Table 4.66

Adaptability (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	0	1	1
3	0	3	3
4	3	9	12
5	37	34	71
6	57	31	88
7 – High	22	14	36
Total	119	92	211

Table 4.67

Adaptability (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.00%	0.47%	0.47%
3	0.00%	1.42%	1.42%
4	1.42%	4.27%	5.69%
5	17.54%	16.11%	33.65%
6	27.01%	14.69%	41.7%
7 – High	10.43%	6.64%	17.07%
Total	56.4%	43.6%	100%

The final question that was used to score the respondents' versatility asked the respondents to rate their ability to cope with situations. None of the respondents rated ability to cope with situations as a 1 (low). One of the respondents rated his ability to cope with situations as a 2. None of the respondents rated ability to cope with situations

as a 3. Seven of the respondents rated their ability to cope with situations as a 4. Thirty-six of the respondents rated their ability to cope with situations as a 5. One hundred of the respondents rated their ability to cope with situations as a 6. Sixty-seven of the respondents rated their ability to cope with situations as a 7 (high). The mean score of this question was 6.06.

The responses were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. The respondents who identified their status as a career fire chief along with those respondents who identified their status as a volunteer fire chief both rated their ability to cope as a 6 more frequently than any other rating. The one respondent who rated his ability to cope with situations as a 2 indicated that he was a volunteer fire chief. The seven respondents who rated their ability to cope with situations as a 4 all indicated that they were volunteer fire chiefs. Thirty-eight of the 67 respondents who rated their ability to cope with situations as a 7 indicated that they were career fire chiefs, while the remaining 29 respondents indicated that they were volunteer fire chiefs. Tables 4.68 and 4.69 show the responses to the question pertaining to the ability of the respondents to cope with situations.

Table 4.68

Ability to Cope (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0	0	0
2	0	1	1
3	0	0	0
4	0	7	7
5	13	23	36
6	68	32	100
7 – High	38	29	67
Total	119	92	211

Table 4.69

Ability to Cope (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
1 – Low	0.00%	0.00%	0.00%
2	0.00%	0.47%	0.47%
3	0.00%	0.00%	0.00%
4	0.00%	3.32%	3.32%
5	6.16%	10.9%	17.06%
6	32.22%	15.17%	47.39%
7 – High	18.01%	13.74%	31.75%
Total	56.39%	43.6%	99.99%

The mean score of each of the four questions used to determine the versatility of the respondent was captured, and are displayed in Table 4.70.

Table 4.70

Means of Versatility Scores

Responsiveness Dimension Questions	Mean Score
Flexible	5.36
Versatile	5.69
Adaptable	5.66
Ability to Cope	6.06

The responses to the four questions, when tallied, yield a possible outcome range from four to twenty-eight. Table 4.71 outlines the scoring for the Versatility dimension of the study.

Table 4.71

Responsiveness Scoring

	Low	Moderate-Low	Moderate-High	High
Versatility	4-18.8	18.85-20.5	20.55-22	22.05-28

Each of the 211 responses to the survey was scored in accordance with Table 4.71. The answers to the four questions pertaining to versatility were tallied and the score was categorized as Low, Moderate-Low, Moderate-High, and High depending upon the sum of the scores. Seventeen of the respondents' scores on the versatility index were categorized as Low. Twenty-two of the respondents' scores were categorized as Moderate-Low on the versatility index. Fifty-three of the respondents' scores were categorized as Moderate-High on the versatility index. One hundred nineteen of the respondents' scores were categorized as High on the versatility index.

The categorized scores were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Two of the 17 respondents who scored Low on the versatility index indicated that they were career fire chiefs, while the remaining 15 respondents indicated that they were volunteer fire chiefs. Ten of the 22 respondents who scored Moderate-Low on the versatility index indicated that they were career fire chiefs, while the remaining 12 indicated that they were volunteer fire chiefs. Twenty-six of the 53 respondents who scored Moderate-High on the versatility index indicated that they were career fire chiefs, while the remaining 27 respondents indicated that they were volunteer fire chiefs. Eighty-one of the 119 respondents who scored High on the versatility index indicated that they were career fire chiefs, while the remaining 38

respondents indicated that they were volunteer fire chiefs. Table 4.72 shows the versatility index.

Table 4.72

Versatility Index (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Low	2	15	17
Moderate-Low	10	12	22
Moderate-High	26	27	53
High	81	38	119
Total	119	92	211

Table 4.73 shows the response percentages of the entire sample on the versatility index.

Table 4.73

Versatility Index (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Low	0.95%	7.11%	8.06%
Moderate-Low	4.74%	5.68%	10.42%
Moderate-High	12.32%	12.80%	25.12%
High	38.39%	18.01%	56.40%
Total	56.4%	43.6%	100%

The responses were then examined with respect to the respondents' status as a career fire chief or a volunteer fire chief. More than 68% of the career fire chiefs scored High on the versatility index, while less than 2% scored Low on the versatility index. Table 4.74 shows the response percentages of the versatility index respective to the respondents' status as a career fire chief or a volunteer fire chief.

Table 4.74

Versatility Index
(Response Percentages Respective to Fire Chief Status)

	Career Fire Chief	Volunteer Fire Chief
Low	1.68%	16.3%
Moderate-Low	8.4%	13.04%
Moderate-High	21.85%	29.35%
High	68.07%	41.3%
Total	100%	99.99%

Social Style Profile

The Social Style profile is developed by examining the observable characteristics of an individual's assertiveness and responsiveness. The compiled Social Style profile can be plotted within a Cartesian coordinate system. The X-axis indicates the individual's assertiveness, while the Y-axis indicates the individual's responsiveness. The origin is neutral. A positive X value indicates high assertiveness, while a negative X value indicates low assertiveness. A positive Y value indicates low responsiveness while a negative Y value indicates high responsiveness. The higher the X value the more assertive the individual. An individual with high assertiveness is more likely to tell someone to perform a task than is an individual with low assertiveness, which is more likely to ask an individual to perform a task. However, the lower the Y value the more responsive the individual. An individual with high responsiveness is more likely to be influenced by emotion, while an individual with low responsiveness is more likely to control their responsiveness (Merrill & Reid, 1981).

The Social Style Profile is composed of four quadrants. Quadrant I is the Driver profile and is scored as Moderate-High to High on the assertiveness index, and Moderate-

Low to Low on the responsiveness index. Quadrant IV is the Expressive profile and is scored as Moderate-High to High on the assertiveness index, and Moderate-High to High on the responsiveness index. Quadrant II is the Analytical profile and is scored as Moderate-Low to Low on the assertiveness index, and Moderate-Low to Low on the responsiveness index. Quadrant III is the Amiable profile and is scored as Moderate-Low to Low on the assertiveness index, and Moderate-High to High on the responsiveness index (Gilley & Gilley, 2003; Leimbach, 2014).

Quadrants I and IV, or Drivers and Expressives, both score Moderate-High to High on the Assertiveness index, and are more assertive than individuals in Quadrants II and III, or Analyticals and Amiables. The assertiveness index is displayed as the X axis on the Cartesian Coordinate System. Plots on the positive side of the axis are considered to be more assertive than plots on the negative side of the axis. Quadrants I and IV are on the positive side of the axis, while Quadrants II and III are on the negative side. Quadrants I and IV, or Drivers and Expressives, are considered to be Tell Assertive, whereas Quadrants II and III, or Analyticals and Amiables, are considered to be Ask Assertive (Merrill & Reid, 1981).

Quadrants I and II, or Drivers and Analyticals, both score Low to Moderate Low on the Responsiveness index, and have lower responsiveness than individuals in Quadrants III and IV, or Amiables and Expressives. The responsiveness index is displayed as the Y axis on the Cartesian Coordinate System. Plots on the positive side of the axis are considered to be less responsive than the plots on the negative side of the axis. Quadrants III and IV, or Amiables and Expressives, are considered to be Emote Responsive, whereas Quadrants I and II, or Drivers and Analyticals, are considered to be

Control Responsive (Merrill & Reid, 1981). Table 4.75 shows the Social Style profiles with respect to the assertiveness and responsiveness indexes.

Table 4.75

Social Style Profiles

	Analytical	Amiable	Driver	Expressive
Assertiveness	Low Moderate-Low	Low Moderate-Low	High Moderate-High	High Moderate-High
Responsiveness	Low Moderate-Low	High Moderate-High	Low Moderate-Low	High Moderate-High

Figure 4.1 again shows the Social Style profiles and the quadrants with respect to the assertiveness and responsiveness scales.

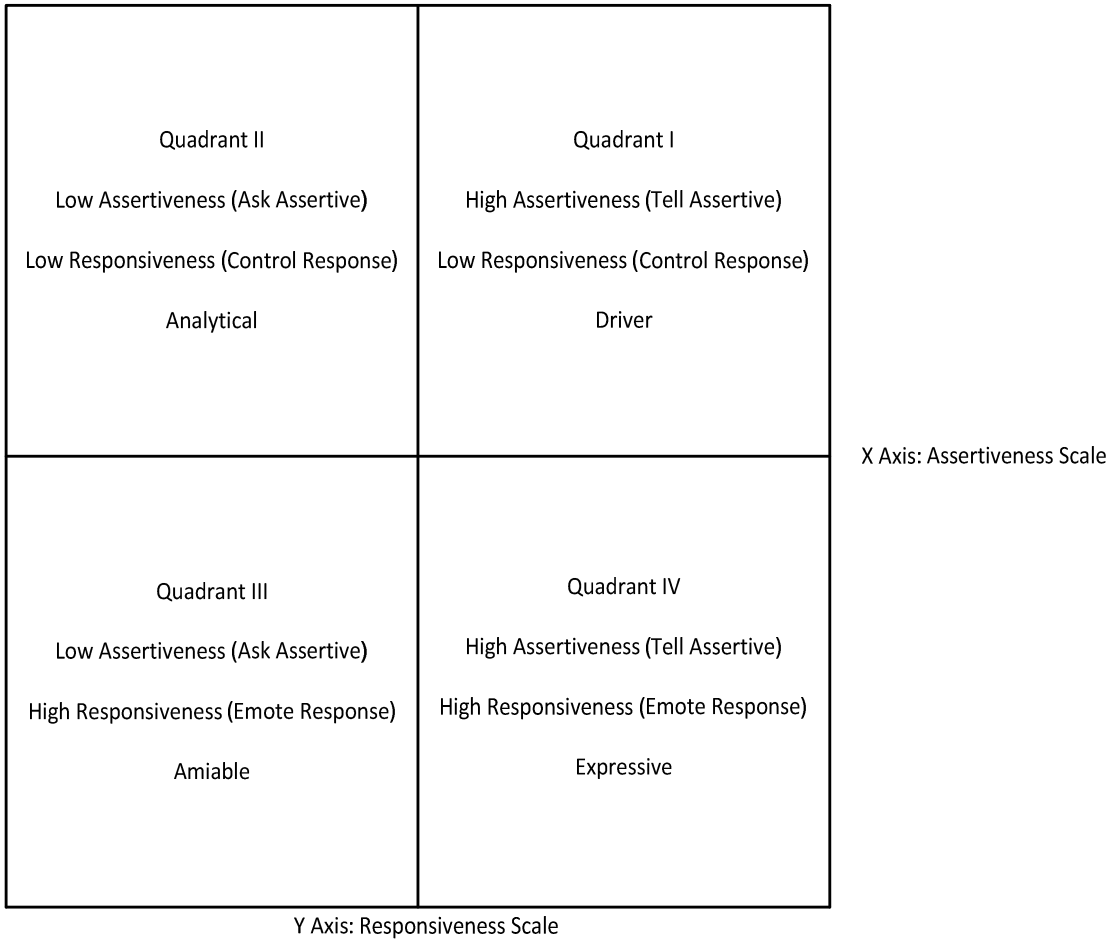

Figure 4.1

Cartesian Plane Indicating Assertiveness and Responsiveness

The Social Style profile is determined by the respondents' scores on both the assertiveness scale and the responsiveness scale. The eight questions on the survey that were used to determine the assertiveness of the respondent were scored in accordance with Table 4.33.

The responses to the survey were then divided between those respondents who scored Low to Moderate-Low on the assertiveness index and those respondents who

scored High to Moderate High on the assertiveness index. In accordance with Table 4.33 and Figure 4.1, the respondents who scored Low to Moderate-Low on the assertiveness index were labeled as Ask Assertive, and the respondents who scored High to Moderate-High on the assertiveness index were labeled as Tell Assertive. One hundred nine of the 211 respondents scored High to Moderate-High on the assertiveness index and were labeled as Tell Assertive. One hundred two of the 211 respondents scored Low to Moderate-Low on the assertiveness index and were labeled as Ask Assertive.

The labeling of the respondents as Ask Assertive or Tell Assertive depending on their scores on the assertiveness index was then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Sixty-six of the 109 respondents who were labeled as Tell Assertive indicated that they were career fire chiefs, while the remaining 43 respondents indicated that they were volunteer fire chiefs. Fifty-three of the 102 respondents who labeled as Ask Assertive indicated that they were career fire chiefs, while the remaining 49 respondents indicated that they were volunteer fire chiefs. Table 4.76 shows the assertiveness rankings of the respondents.

Table 4.76

Assertiveness Rankings (Respondents)

	Career Fire Chief	Volunteer Fire Chief	Total
Tell Assertive	66	43	109
Ask Assertive	53	49	102
Total	119	92	211

The eight questions on the survey that were used to determine the responsiveness of the respondents were scored in accordance with Table 4.58. The responses to the

survey were then divided between those respondents who scored Low to Moderate-Low on the responsiveness index and those respondents who scored High to Moderate High on the responsiveness index. In accordance with Table 4.58 and Figure 4.1, the respondents who scored Low to Moderate-Low on the responsiveness index were labeled as Control Responsive, and the respondents who scored High to Moderate-High on the responsiveness index were labeled as Emote Responsive. One hundred three (103) of the 211 respondents scored High to Moderate-High on the responsiveness index and were labeled as Emote Responsive. One hundred eight (108) of the 211 respondents scored Low to Moderate-Low on the responsiveness index and were labeled as Control Responsive.

The labeling of the respondents as Emote or Control Responsive depending on their scores on the responsiveness index was then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Sixty-three of the 103 respondents who were labeled as Emote Responsive identified themselves as career fire chiefs, while the remaining 40 respondents identified themselves as volunteer fire chiefs. Fifty-six of the 108 respondents who were labeled as Control Responsive identified themselves as career fire chiefs, while the remaining 52 respondents identified themselves as volunteer fire chiefs. Table 4.77 shows the responsiveness rankings of the respondents.

Table 4.77

Responsive Rankings (Respondents)

	Career Fire Chief	Volunteer Fire Chief	Total
Emote Responsive	63	40	103
Control Responsive	56	52	108
Total	119	92	211

The assertiveness rankings of the respondents were then cross-tabulated with the responsiveness rankings of the respondents to determine the Social Style profile of the respondents. Fifty-three of the 211 respondents scored Moderate-High to High on the assertiveness index and were labeled as Tell Assertive, and also scored Moderate-Low to Low on the responsiveness index and were labeled as Control Responsive. These respondents (Tell Assertive, Control Responsive) are plotted in Quadrant I of Figure 4.1, and are defined as Drivers.

Fifty-six of the 211 respondents scored Moderate-Low to Low on the assertiveness index and were labeled as Ask Assertive, and also scored Moderate-Low to Low on the responsiveness index and were labeled as Control Responsive. These respondents (Ask Assertive, Control Responsive) are plotted in Quadrant II of Figure 4.1, and are defined as Analyticals.

Forty-seven of the 211 respondents scored Moderate-Low to Low on the assertiveness index and were labeled as Ask Assertive, and also scored Moderate-High to High on the responsiveness index and were labeled as Emote Responsive. These respondents (Ask Assertive, Emote Responsive) are plotted in Quadrant III of Figure 4.1, and are defined as Amiables.

Fifty-six of the 211 respondents scored Moderate-High to High on the assertiveness index and were labeled as Tell Assertive, and also scored Moderate-High to High on the responsiveness index and were labeled as Emote Responsive. These respondents (Tell Assertive, Emote Responsive) are plotted in Quadrant IV of Figure 4.1, and are defined as Expressives.

Table 4.78 shows the respondents' rankings on the combined assertiveness and responsiveness index.

Table 4.78

Assertiveness and Responsiveness Index Responses

	Ask Assertive	Tell Assertive	Total
Control Responsive	55	53	108
Emote Responsive	47	56	103
Total	102	109	211

Table 4.79 shows the response percentages on the combined assertiveness and responsiveness index.

Table 4.79

Assertiveness and Responsiveness Index Response Percentages

	Ask Assertive	Tell Assertive	Total
Control Responsive	26.07%	25.12%	51.19%
Emote Responsive	22.27%	26.54%	48.81%
Total	48.34%	51.66%	100%

Table 4.80 shows the Social Style Profile of the respondents.

Table 4.80

Social Style Profiles

Drivers	Analyticals	Amiables	Expressives
53	55	47	56
25.12%	26.07%	22.27%	26.54%

The Social Styles were then cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief. Twenty-seven of the 53 respondents who were

identified as a Driver indicated that they were career fire chiefs, while the remaining 17 respondents indicated that they were volunteer fire chiefs. Twenty-nine of the 55 respondents who were identified as an Analytical indicated that they were career fire chiefs, while the remaining 26 respondents indicated that they were volunteer fire chiefs. Twenty-four of the 47 respondents who were identified as an Amiable indicated that they were career fire chiefs, while the remaining 23 respondents indicated that they were volunteer fire chiefs. Thirty-nine of the 56 respondents who were identified as an Expressive indicated that they were career fire chiefs, while the remaining 17 respondents indicated that they were volunteer fire chiefs. Table 4.81 shows the Social Style of the respondents.

Table 4.81

Social Style of the Respondents (Responses)

	Career Fire Chief	Volunteer Fire Chief	Total
Driver	27	26	53
Analytical	29	26	55
Amiable	24	23	47
Expressive	39	17	56
Total	119	92	211

Table 4.82

Social Style of the Respondents (Response Percentages)

	Career Fire Chief	Volunteer Fire Chief	Total
Driver	12.80%	12.32%	25.12%
Analytical	13.74%	12.32%	26.06%
Amiable	11.37%	10.90%	22.27%
Expressive	18.48%	8.06%	26.54%
Total	56.39%	43.6%	99.99%

The responses were then examined with respect to the respondents' status as a career fire chief or a volunteer fire chief. Nearly 23% of the respondents who identified themselves as career fire chiefs were identified as Drivers, while more than 28% of the respondents who identified themselves as volunteer fire chiefs were identified as Drivers. Table 4.83 shows the response percentages respective of the respondents' status as a career fire chief or a volunteer fire chief.

Table 4.83

Social Style of the Respondents
(Response Percentages Respective to Fire Chief Status)

	Career Fire Chief	Volunteer Fire Chief
Driver	22.69%	28.26%
Analytical	24.37%	28.26%
Amiable	20.17%	25.00%
Expressive	32.77%	18.48%
Total	100%	100%

The responses were then examined with respect to the respondents' Social Style profile. For instance, 50.94% of the 53 respondents who were identified as Drivers identified themselves as career fire chiefs, while the remaining 49.06% of the Drivers identified themselves as volunteer fire chiefs. Table 4.84 shows the response percentages respective to the Social Style.

Table 4.84

Response Percentages Respective to Social Style

	Career Fire Chief	Volunteer Fire Chief	Total
Driver	50.94%	49.06%	53
Analytical	52.73%	47.27%	55
Amiable	51.06%	48.94%	47
Expressive	69.64%	30.36%	56

Hypothesis 1

Hypothesis 1: There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief.

Hypothesis 1 was tested by the t-test statistical method. The results of the survey were coded and entered into SPSS for analysis. As indicated in Table 4.81, the 211 respondents were categorized by the respondents' status as a career fire chief or a volunteer fire chief, and then cross-tabulated with the Social Style of the respondents. The variable Fire Chief Status (FCS) was binarily coded; the 119 career fire chiefs were coded as a zero (0) and the 92 volunteer fire chiefs were coded as a one (1). The variable Social Style (SS) was nominally coded; the 53 drivers were coded as a zero (0), the 55 analyticals were coded as a one (1), the 47 amiables were coded as a two (2), and the 56 expressives were coded as a three (3).

To test Hypothesis 1, the variable FCS was identified as the independent variable and the variable SS was identified as the dependent variable. The output generated by SPSS was then reviewed and evaluated. Table 4.85 shows the Group Statistics of the SPSS generated output.

Table 4.85

Group Statistics

Fire Chief Status	N	Mean	Std. Deviation	Std. Error Mean
Career	119	1.63	1.163	0.107
Volunteer	92	1.34	1.082	0.113

The data displayed in Table 4.85 indicates that the N values (119 career fire chiefs and 92 volunteer fire chiefs) coincide with the number of career fire chiefs and volunteer fire chiefs who elected to participate in the study and completed the online survey. All 211 of the responses were included in the t-test analysis.

The next series of output generated by SPSS tested whether the variance (variation) of the scores of the two groups (career fire chiefs and volunteer fire chiefs) was the same (Pallant, 2010). The Lavene's Test for Equality of Variances is displayed in Table 4.86. The Lavene's Test for Equality of Variances indicated a significance value to determine equal variances. A significance value larger than 0.05 means that the variances for the two groups are the same. "This means that the assumption of equal variances has not been violated" (Pallant, 2010, p. 242), and equal variances are assumed.

Table 4.86

Levene's Test for Equality of Variances

	F	Sig.
Equal Variances Assumed	2.061	0.153

The significance value displayed in Table 4.86 is 0.153, which is greater than 0.05, thus indicating that the variances for the two groups are the same. The assumption of equal variances has not been violated and equal variances are assumed.

Now that equal variances for the two groups are assumed, the significance of the difference between the two groups can be assessed. Table 4.87 shows the t-test for equality of means, as generated in the SPSS output.

Table 4.87

t-test for Equality of Means

	T	df	Sig.	Mean Diff	Std. Error	Lower	Upper
Equal Variances Assumed	1.872	209	0.063	0.293	0.157	-0.016	0.602

The value in the significance column of Table 4.87 indicates whether there is a significant difference in the mean scores of the dependent variable for each of the two groups. A significance value less than 0.05 indicated that the difference in the means of the scores of the dependent variable for each of the two groups is significantly different. A significance value greater than 0.05 indicates that the difference in the means of the scores of the dependent variable for each of the two groups is not significant. (Pallant, 2010). Table 4.87 also shows the mean difference between the two groups. The mean difference between the two groups is 0.293. The value displayed in the significance column is 0.063, which is greater than 0.05, thus indicating that the difference of the means of the scores of the dependent variable for each of the two groups is not significant.

The strength of the association, or the effect size, was then calculated to determine the "the relative magnitude of the differences between means, or the amount of the total variance in the dependent variable that is predictable from knowledge of the levels of the independent variable" (Pallant, 2010, p. 210). Partial eta squared is a common effect size statistic. "Partial eta squared effect size statistics indicate the proportion of variance of the dependent variable that is explained by the independent variable" (Pallant, 2010, p. 210). Partial eta squared is not computed by SPSS when

running a t-test for equality of means. Pallant (2010) gives the formula for calculating the partial eta squared as:

$$Eta\ squared\ = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$

Table 4.87 identifies the t value as 1.872. Table 4.84 identifies N1 as 119 and N2 as 92. When the values are included into the partial eta squared equation, we see the following

$$Eta\ squared\ = \frac{1.872^2}{1.872^2 + (119 + 92 - 2)}$$

$$Eta\ squared\ = \frac{1.872^2}{1.872^2 + 209}$$

$$Eta\ squared\ = \frac{3.504}{3.504 + 209}$$

$$Eta\ squared\ = \frac{3.504}{212.504}$$

$$Eta\ squared\ = 0.016$$

The partial eta squared value is 0.016. This means that 1.6 per cent of the variance in Social Style is explained by the status of the fire chief as a career fire chief or a volunteer fire chief.

The independent sample t-test was conducted to compare the Social Style profiles for career fire chiefs and volunteer fire chiefs. There was no significant difference in the Social Style profiles for career fire chiefs (Mean = 1.63, Standard Deviation = 1.163) and volunteer fire chiefs (Mean = 1.34, Standard Deviation = 1.082); t = 1.872, Significance (p) = 0.063. The magnitude of the differences in the means (Mean Difference = 0.293,

95% Confidence Interval of the Difference: -0.016 to 0.602) was small (partial eta squared = 0.016). Therefore, Hypothesis 1 (There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief) is not supported.

Hypothesis 2

Hypothesis 2: Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs.

Hypothesis 2 was tested by logistic regression. The results of the survey, as previously discussed in this chapter, were coded and entered into SPSS for analysis. As indicated in Table 4.81, the 211 respondents were categorized by the respondents' status as a career fire chief or a volunteer fire chief, and then cross-tabulated with the Social Style of the respondents. The variable Fire Chief Status (FCS) was binarily coded; the 119 career fire chiefs were coded as a zero (0) and the 92 volunteer fire chiefs were coded as a one (1). The variable Responsiveness (RRS) was binarily coded; the one hundred three (103) Emote responsives were coded as a zero (0) and the one hundred eight (108) Control responsives were coded as a one (1).

To test Hypothesis 2, the variable FCS was identified as the independent variable and the variable RRS was identified as the dependent variable. The output generated by SPSS was then reviewed and evaluated. Table 4.88 shows the Case Processing Summary of the SPSS generated output.

Table 4.88

Case Processing Summary

	N	Percent
Included in Analysis	211	100.00
Missing Cases	0.00	0.00
Total	211	100.00

The data displayed in Table 4.88 indicates that the N values (119 career fire chiefs and 92 volunteer fire chiefs) coincide with the number of career fire chiefs and volunteer fire chiefs who elected to participate in the study and completed the online survey. All 211 of the responses were included in the logistic regression analysis.

The next step was to check the assumptions of the analysis, and for high intercorrelations among the independent variables. Logistic regression does not check for multicollinearity, so the coded data for the independent variable FCS and the dependent variable RRS were analyzed using a linear regression analysis to determine the Collinearity Statistics. Table 4.89 shows the coefficients output as generated from the linear regression analysis.

Table 4.89

Coefficients

	Collinearity Statistics	
	Tolerance	VIF
Fire Chief Status	1.000	1.000

Two values are given in Table 4.89; Tolerance and VIF. "Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables" (Pallant, 2010, p. 158). A Tolerance value of less than

0.10 indicates that the multiple correlation with other variables is high, suggesting multicollinearity. VIF (variance inflation factor) values above 10 indicate multicollinearity (Pallant, 2010). Table 4.89 shows the Tolerance value to be 1.00 (well above 0.10) and the VIF value to be 1.00 (well below 10), thus indicating that multicollinearity is not an issue with this analysis.

Once the case processing summary was reviewed and the N values were verified and the absence of high intercorrelations among the variables noted, the final assumption to be verified for this analysis was the presence of outliers. There were no outliers identified in this analysis.

The next step to test Hypothesis 2 was to review the Omnibus Tests of Model Coefficients in the SPSS output. This series of output is also known as the goodness of fit. Table 4.90 shows the Omnibus Tests of Model Coefficients.

Table 4.90

Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Model	1.863	1	0.172

The Omnibus Tests of Model Coefficients table returned a Chi-square value of 1.863 with one degree of freedom, and a Significance value of 0.172. In this analysis, the Significance value is greater than 0.05, thus indicating that the model to determine the relationship between FCS and RRS cannot significantly predict the responsiveness value (Emote or Control) of the respondent based on the fire chief's status as a career or volunteer fire chief.

The Model Summary table from the SPSS generated output was the next series of output that was reviewed to test Hypothesis 2. "The Cox & Snell R Square and the Nagelkerke R Square values provide an indication of the amount of variation in the dependent variable explained by the model" (Pallant, 2010, p. 176). Table 4.91 shows the Model Summary table from the SPSS output.

Table 4.91

Model Summary

Cox & Snell R Square	Nagelkerke R Square
0.009	0.012

The values are 0.009 and 0.012, suggesting that only between 0.9 percent and 1.2 percent of the variability is explained by this set of variables (FCS and RRS).

The final series of SPSS output that was reviewed to test Hypothesis 2 was the Variables in the Equation table. This series of output reports the significance of the relationship between the independent variable and the dependent variable. The Wald value indicates the contribution of the dependent variable on the independent variable. The Significance value indicates the statistical significance of the relationship between the dependent variable and the independent variable. The Beta (B) value is used to determine the probability of a value of a dependent variable based upon the value of the independent variable. The odds ratios (Exp(B)) represents the odds of being in one of the categories of the dependent variable based on the value of the independent variable. The final values used in this series of output are the 95 percent confidence intervals, which

give the lower and upper intervals to which there is 95 percent confidence in the odds being within the values (Pallant, 2010). Table 4.92 shows the Variables in the Equation.

Table 4.92

Variables in the Equation

						95% Confidence Interval	
	B	Wald	Df	Sig.	Exp(B)	Lower	Upper
FCS	0.380	1.854	1	0.173	1.462	0.846	2.528

The values displayed in the Variables in the Equation output were then reviewed. The Beta (B) value (0.380) is positive, and indicates that an individual who is a volunteer fire chief is more likely to be Control than Emote. However, this value is not statistically significant and is determined by the number of responses. The Wald value (1.854) indicates that the relationship of the independent variable and the dependent variable is not significant. The significance value (0.173) is greater than 0.05, thus indicating that the relationship is not statistically significant, and that one cannot predict the responsiveness of a chief based on the status of the fire chief as a career fire chief or a volunteer fire chief. The odds ratio (Exp(B)) value (1.462) indicates that the odds of being Control over Emote are 1.462 times higher for a volunteer fire chief than a career fire chief, with the Exp(B) value (1.462) falling within the lower and upper 95 percent confidence intervals. (0.846 to 2.528).

There is a greater probability of a volunteer fire chief being Control responsive than being Emote responsive. However, the findings are not statistically significant as indicated by the Wald value (1.854) and the significance value (0.173). Therefore,

Hypothesis 2 (Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs) is not supported.

Hypothesis 3

Hypothesis 3: Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale.

Hypothesis 3 was tested by logistic regression. The results of the survey, as previously discussed in this chapter, were coded and entered into SPSS for analysis. As indicated in Table 4.81, the 211 respondents were categorized by the respondents' status as a career fire chief or a volunteer fire chief, and then cross-tabulated with the Social Style of the respondents. The variable Fire Chief Status (FCS) was binarily coded; the 119 career fire chiefs were coded as a zero (0) and the 92 volunteer fire chiefs were coded as a one (1). The variable Assertiveness (ARS) was binarily coded; the one hundred two (102) Ask assertives were coded as a zero (0) and the one hundred nine (109) Tell assertives were coded as a one (1).

To test Hypothesis 3, the variable FCS was identified as the independent variable and the variable ARS was identified as the dependent variable. The output generated by SPSS was then reviewed and evaluated. Table 4.93 shows the Case Processing Summary of the SPSS generated output.

Table 4.93

Case Processing Summary

	N	Percent
Included in Analysis	211	100.00
Missing Cases	0.00	0.00
Total	211	100.00

The data displayed in Table 4.93 indicates that the N values (119 career fire chiefs and 92 volunteer fire chiefs) coincide with the number of career fire chiefs and volunteer fire chiefs who elected to participate in the study and completed the online survey. All 211 of the responses were included in the logistic regression analysis.

The next step was to check the assumptions of the analysis, and for high intercorrelations among the independent variables. Logistic regression does not check for multicollinearity, so the coded data for the independent variable FCS and the dependent variable ARS were analyzed using a linear regression analysis to determine the Collinearity Statistics. Table 4.94 shows the coefficients output as generated from the linear regression analysis.

Table 4.94

Coefficients

	Collinearity Statistics	
	Tolerance	VIF
Fire Chief Status	1.000	1.000

Two values are given in Table 4.94; Tolerance and VIF. "Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables" (Pallant, 2010, p. 158). A Tolerance value of less than

0.10 indicates that the multiple correlation with other variables is high, suggesting multicollinearity. VIF (variance inflation factor) values above 10 indicate multicollinearity (Pallant, 2010). Table 4.94 shows the Tolerance value to be 1.00 (well above 0.10) and the VIF value to be 1.00 (well below 10), thus indicating that multicollinearity is not an issue with this analysis.

Once the case processing summary was reviewed and the N values were verified and the absence of high intercorrelations among the variables noted, the final assumption to be verified for this analysis was the presence of outliers. There were no outliers identified in this analysis.

The next step to test Hypothesis 3 was to review the Omnibus Tests of Model Coefficients in the SPSS output. This series of output is also known as the goodness of fit. Table 4.95 shows the Omnibus Tests of Model Coefficients.

Table 4.95

Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Model	1.582	1	0.208

The Omnibus Tests of Model Coefficients table returned a Chi-square value of 1.582 with one degree of freedom, and a Significance value of 0.208. In this analysis, the Significance value is greater than 0.05, thus indicating that the model to determine the relationship between FCS and ARS cannot significantly predict the responsiveness value (Ask or Tell) of the respondent based on the fire chief's status as a career or volunteer fire chief.

The Model Summary table from the SPSS generated output was the next series of output that was reviewed to test Hypothesis 3. "The Cox & Snell R Square and the Nagelkerke R Square values provide an indication of the amount of variation in the dependent variable explained by the model" (Pallant, 2010, p. 176). Table 4.96 shows the Model Summary table from the SPSS output.

Table 4.96

Model Summary

Cox & Snell R Square	Nagelkerke R Square
0.007	0.010

The values are 0.007 and 0.010, suggesting that only between 0.7 percent and 1.0 percent of the variability is explained by this set of variables (FCS and ARS).

The final series of SPSS output that was reviewed to test Hypothesis 3 was the Variables in the Equation table. This series of output reports the significance of the relationship between the independent variable and the dependent variable. The Wald value indicates the contribution of the dependent variable on the independent variable. The Significance value indicates the statistical significance of the relationship between the dependent variable and the independent variable. The Beta (B) value is used to determine the probability of a value of a dependent variable based upon the value of the independent variable. The odds ratios (Exp(B)) represents the odds of being in one of the categories of the dependent variable based on the value of the independent variable. The final values used in this series of output are the 95 percent confidence intervals, which

give the lower and upper intervals to which there is 95 percent confidence in the odds being within the values (Pallant, 2010). Table 4.97 shows the Variables in the Equation.

Table 4.97

Variables in the Equation

						95% Confidence Interval	
	B	Wald	Df	Sig.	Exp(B)	Lower	Upper
FCS	-0.350	1.577	1	0.209	0.705	0.408	1.217

The values displayed in the Variables in the Equation output were then reviewed. The Beta (B) value (-0.350) is negative, and indicates that an individual who is a volunteer fire chief is less likely to be Tell than Ask. However, this value is not statistically significant and is determined by the number of responses. The Wald value (1.577) indicates that the relationship of the independent variable and the dependent variable is not significant. The significance value (0.209) is greater than 0.05, thus indicating that the relationship is not significant, and that one cannot predict the assertiveness of a chief based on the status of the fire chief as a career fire chief or a volunteer fire chief. The odds ratio (Exp(B)) value (0.705) indicates that the odds of a being Ask over Tell are 1.418 times higher (0.705/1 gives an inverse relationship. Instead of indicating that a volunteer fire chief is 0.705 times less likely to be Tell over Ask, we inversed relationship and indicated that the volunteer fire chief is 1.418 times more likely to be Ask assertive rather than Tell assertive) for a volunteer fire chief than a career fire chief, with the Exp(B) value falling within the 95 percent confidence interval. Although there is a greater probability of a volunteer fire chief being Ask assertive, the findings are not statistically significant as indicated by the Wald value (1.577) and the

significance value (0.209). Therefore, Hypothesis 3 (Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale) is not supported.

Common Method Variance

Harmon's single factor analysis is "one of the most widely used techniques … to address the issue of common method variance" (Podsakoff et al., 2003, p. 889). This technique uses exploratory factor analysis to identify variance among the variables associated with method variance. The exploratory factor analysis was used on the data to identify potential variance that could attribute to method bias.

The coded independent variable FCS and the coded dependent variables RRS, ARS, and SS were entered into SPSS and the factor analysis was conducted. The SPSS generated output returned the Total Variance Explained. The Total Variance Explained indicated that the percent of variance was 48.268, below 50%, which indicates that common method bias was not a limitation in this study.

Final Results

Hypothesis 1: There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief. Hypothesis 1 is not supported. There was not a statistically significant difference in the relationship between a fire chief's status as a career fire chief or a volunteer fire chief.

Hypothesis 2: Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs. Hypothesis 2 is not

supported. There was not a statistically significant difference in the responsiveness of an individual based upon the individual's status as a career fire chief or a volunteer fire chief. The responsiveness of the fire chief could not be statistically predicted based on the individual's status as a career fire chief or a volunteer fire chief.

Hypothesis 3: Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale. Hypothesis 3 is not supported. There was not a statistically significant difference in the assertiveness of an individual based upon the individual's status as a career fire chief or a volunteer fire chief. The assertiveness of the fire chief could not be statistically predicted based on the individual's status as a career fire chief or a volunteer fire chief.

Chapter 5.

Conclusions

As previously shown, fire has plagued man through the ages. The ancient civilizations used fire as a weapon against their enemies. Fire brigades formed and protected villages, towns, communities, and cities. The United States of America is not immune from the devastating effects of fire. The American response to the plague of fire was the fire department. Fire departments, as noted in Chapter 1, are administered and led by the fire chief.

Chapter 1 of this study introduced the reader to the American fire service and to the theory of Social Style. The cultures of both the career fire service and the volunteer fire service, as well as hybrids between the two were presented. The fire department and the fire chief were defined, as well as the career and volunteer fire service cultures. Additionally, the four Social Style profiles were defined for the reader. The purpose and the significance of the study were presented and the research project was outlined. The research problem and the historic background to the problem were discussed and presented. The hypotheses were presented along with potentially identified theoretical and practical contributions.

Chapter 2 of this study presented to the reader the review of literature related to this study. The related literature included an analysis of the American fire service along

with the cultures of the career fire service and the cultures of the volunteer fire service. The role of the fire chief was examined and differences in the career fire chief and the volunteer fire chief that were touched on in Chapter 1 were elaborated upon and presented. Additionally, the concept of volunteerism was examined and the reader was presented with the various reasons why an individual volunteers.

The theories of personalities were discussed, specifically the theory of Social Style. The Social Style theory was examined and the four personality profiles, or quadrants, that were identified in Chapter 1 were elaborated upon and further defined. There were ties made to Social Style profiles and leadership traits, as well as Social Style profiles and teams.

The review of related literature presented in Chapter 2 identified that, although an abundance of literature had been published regarding the American fire service, the fire chief, and the theory of Social Style, no empirical research had been conducted regarding whether a difference existed between the Social Style of a career fire chief and a volunteer fire chief. This research gap was one of the foundations for this study.

Chapter 3 presented the research design to the reader. The design of the study characterized the population of the study, identified the sample of Texas fire chiefs, and outlined how the sample was selected from the population. The limitations of the study based upon the sample were introduced to the reader along with the limitations of the analyses. The technique and method of collecting the data was discussed. The survey instrument was identified and the validity of the instrument presented. The statistical

analyses used to test each of the hypotheses were discussed, as well as the methods for accounting for biases.

Chapter 4 presented the results of the study. The data collected from the survey instrument was categorically presented. The descriptive demographic data was isolated and presented. The specific questions of the survey that were used to determine the assertiveness and responsiveness of the respondent were examined and presented. The Social Styles of the fire chiefs were calculated using the scoring matrix of assertiveness and responsiveness. The Social Styles were cross-tabulated with the respondents' status as a career fire chief or a volunteer fire chief and presented. The hypotheses were then tested, and the results of the statistical analyses presented.

Chapter 5 will present the conclusions of the study. The findings of the study, the answer to the research question, and the theoretical and practical contributions to the academic field, along with the identified avenues of future research regarding the theory of Social Style will be presented.

Answering the Research Question

The purpose of this study was to identify and examine the Social Style of fire chiefs in the State of Texas and determine if a difference existed between the Social Style of a career fire chief and a volunteer fire chief. This study set out to answer the question: Does a career fire chief of a large metropolitan fire department rate similarly on the assertiveness/ responsiveness Social Style scale as a fire chief of a rural volunteer fire department?

Hypothesis 1: There will be a relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief. The statistical analysis used to test Hypothesis 1 was the t-test. The results of the test indicated that there was not a significant relationship between the fire chief's status as a career fire chief or a volunteer fire chief. Hypothesis 1 was not supported by this study. There is not a statistically significant relationship between a fire chief's status as a career fire chief or a volunteer fire chief and the Social Style of the fire chief.

Hypothesis 2: Using the Social Style Analysis, volunteer fire chiefs will score higher in the responsive category (emote) than career fire chiefs. The statistical analysis used to test Hypothesis 2 was logistic regression. The results of the logistic regression analysis was that there was not a statistically significant difference in the responsiveness of an individual based upon the individual's status as a career fire chief or a volunteer fire chief. The responsiveness of the fire chief could not be statistically predicted based upon the individual's status as a career fire chief or a volunteer fire chief. Hypothesis 2 was not supported by this study. Career fire chiefs actually scored higher in the responsiveness category (emote) (52.94%) than did the volunteer fire chiefs (43.48%).

Hypothesis 3: Using the Social Style Analysis, there will be no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the ratings on the assertive axis of the Social Style scale. The statistical analysis used to test Hypothesis 3 was logistic regression. The results of the logistic regression analysis was that there was not a statistically significant difference in the assertiveness of an individual based upon the individual's status as a career fire chief or a volunteer fire chief. The assertiveness of the fire chief could not be statistically predicted based on the individual's

status as a career fire chief or a volunteer fire chief. While this study did indicate that there was no relationship between the fire chief's status as a career fire chief or a volunteer fire chief and the respondents' ratings on the assertive axis of the Social Style scale, the relationship between the variables was not statistically significant; therefore the hypothesis is not supported.

This study answered the question, addressed the hypotheses, and opened avenues for additional research. According to this study, there is not a significant difference in the Social Style of a career fire chief and a volunteer fire chief. There was not any evidence produced or uncovered by this study to suggest that there is a difference in the Social Style of a career fire chief and a volunteer fire chief. Furthermore, this study showed that neither the assertiveness or the responsiveness of a fire chief could be predicted by the fire chief's status as a career fire chief or a volunteer fire chief.

The difference in Social Style affects the individual's action and reactions pertaining to risk taking. Pierce (2005) identifies drivers as "risk-takers and deep thinkers;" analyticals as "risk-avoiders and deep thinkers;" amiables as "risk-avoiders and feeling-reactors;" and expressives as "risk-takers and feeling-reactors" (2005, p. 45). The understanding of an individual's Social Style leads to an understanding of their probability to take risk (Pierce, 2005). Chapter 1 of this study posed that the safety of the firefighters may be directly linked to the aggressiveness, or the elevated potential to take risk, of the fire chief. This study showed no common link between a fire chief's status as a career fire chief or a volunteer fire chief and their potential to take risk based upon their Social Style. Therefore, while employee safety has been linked to risk taking, one cannot surmise that a volunteer fire fighter is placed into dangerous situations more frequently

than a career fire fighter because volunteer fire chiefs are risk takers whereas career fire chiefs are risk avoiders. This study did not identify volunteer fire chiefs to be more or less risk averse than career fire chiefs.

Furthermore, this study showed that there is not a dominant Social Style among the fire chiefs within the state of Texas. The Social Styles of the fire chiefs who elected to participate in this study were not statistically significant relative to the fire chief's status as a career fire chief or a volunteer fire chief. Statistically, there were as many Amiables as there were Drivers.

Theory Contributions

This study is theoretically underpinned by the theory of Social Style. This study does not directly expand the Social Style theory. However, little, if any research has been conducted that applies the theory of Social Style to the management of volunteers or to the management by volunteers and compared it to the management of employees in a business or professional setting. This study has bridged the theoretical gap in the use and application of the theory of Social Style to compare professionals and volunteers, and has shown that there is no difference between the two groups.

The purpose of this study was to determine if there was a difference between the Social Style of career fire chiefs and volunteer fire chiefs. The chief officers of the fire departments were the focus of this study. The theory of Social Style was used to provide the theoretical foundation for the study; however, with the focus on human capital applied to the American fire service, a theoretical concept for future research or

development might be the application of human capital theory to provide a theoretical foundation to the theory of Social Style or vice versa.

This study will provide for additional research in the application of Social Style to the management of or the management by volunteers. In a professional business environment, people feel the need to be there (the need to have a job and provide for one's family). However, with volunteers, individuals volunteer for personal reasons and generally have a desire or want to be there. This study has opened the door for the application of the theory of Social Style to volunteers and volunteer organizations.

As discussed in Chapter 2, people volunteer for a variety of reasons, and some volunteer to feel empowered, or to acquire control, or to have perceived or assumed authority. The assumed or perceived power one may have as a volunteer fire chief could be abused, therefore giving volunteers a reputation of being aggressive. Similarly, volunteers may be viewed as less competent or more amiable than their professional counterparts. This study refuted both of those possibilities and showed that there is statistically no difference in the aggressiveness or amiability between volunteer fire chiefs and their professional counterparts.

Practical Contributions

The practical contributions of this study can be applied directly to the American fire service, but also to industry in general. As previously stated, the theory of Social Style has been applied to industry injury rates, and it was proven that theoretical risk takers, according to the theory of Social Style, are more prone to be injured on the job or in the workplace (Pierce, 2005). However, the study was limited to employees and their

predisposition to take risks. The study did not address the risks taken by management when it comes to personnel or employee safety. The practical findings of this study, much like the potential for additional research, can be expanded beyond the American fire service, and has practical applications to business. The theory of Social Style can be used to identify the theoretical risk takers according to their respective Social Style. The previous statements have articulated that taking risk may be interpreted negatively when the subject is personnel safety. In the corporate world, however, the concept of taking risk is viewed differently. "The importance of risk to decision making is attested by its position in decision theory, by its standing in managerial ideology, and by the burgeoning interest in risk assessment and management" (March & Shapira, 1987, p. 1404). Risk is generally recognized as a personal incentive to achieve a goal or an objective, rather than an organizational approach. Managers often view risk taking as an essential component of running a successful business and draw a distinct difference between taking risk and gambling (March & Shapira, 1987).

Using the theory of Social Style to identify theoretical risk takers could prove beneficial to corporate boards or executives when searching for attributes or qualities to apply to a job search for an executive officer or manager. Additionally, as shown herein, the concept applies to volunteer organizations when selecting an executive officer as well. The bottom line is that the organization has to determine whether or not risk taking is an attribute.

The practical applications are applied to the fire service, particularly to the safety of the firefighters. These applications, however, can be applied to blue-collar industries, corporations, or volunteer organizations. Each entity will have a different perspective on

risk taking. Social Style has been shown to identify risk takers (Gilley & Gilley, 2003). This study directly applies to risk taking personalities on a fire ground, but can be applied across a broad spectrum of business and industry, and equally applied to volunteer organizations outside the fire service.

Future Research

Developing avenues for additional research from this study has little limitation. This study opens the door for additional research in the area of Social Style and executive leaders and organizations. An unintended limitation of this study was the omission of additional descriptive demographic data from the participants. For instance, this study did not capture the total years of experience that each of the participants had in the fire service, or total years of experience that each of the participants had as a fire chief. Additionally, the study did not capture whether the participants had any additional management experience that could impact or influence their Social Style at work. Furthermore, the study did not capture the occupation of the volunteer fire chiefs. It is an assumption that the volunteer fire chiefs who elected to participate in this study have full time careers, or are retired from a full time career. This study did not capture what that experience might have been, or how that experience might have affected the outcomes of the study.

Residual data was collected by this research project that was not utilized in testing the hypotheses. Another potential expansion of this study, and perhaps the most logical expansion, would be to analyze the data that was collected from this study that was not used to test the hypotheses. For example, the focus of this study, according to Hypothesis 2 and Hypothesis 3, was the respondents' assertiveness and responsiveness. The data that

was collected was sufficient to not only plot the respondents' Social Style on the Cartesian Plane (which was done to test Hypothesis 1), but to plot the respondents' Social Style sub-quadrant. For instance, an individual who scored moderate-high to high on the assertive index and moderate-low to low responsive index was plotted in Quadrant I (Driver); however, the data that was collected and the instrument used to determine the Social Style of the respondent allows for a more detailed plotting into the sub-quadrant of Quadrant I. An individual's score on the Social Style analysis can be further defined. An individual who scores High Assertive and Low Responsive can be plotted on the Cartesian Plane as a Driver-Driver. An individual who scores Moderate-High Assertive and Low Responsive can be plotted on the Cartesian Plane as an Analytical-Driver. An individual who scores Moderate-High Assertive and Moderate-Low Responsive can be plotted on the Cartesian Plane as an Amiable-Driver. An individual who scores High Assertive and Moderate-Low Responsive can be plotted on the Cartesian Plane as an Expressive-Driver. This is true of each of the four quadrants of the Social Style profile.

Jung argued that there is no difference in the personalities of the populations, and that there is an approximate even delineation among the personality types. The study could be expanded to challenge Jung's work at the sub-quadrant level, and determine whether a relationship exists between the Social Style of the respondent (plotted at the sub-quadrant level) and the respondents' status as a career fire chief or a volunteer fire chief.

In addition to the analysis of the collected data, another expansion of the data that was collected as part of this study would be the measure of versatility and versatility skills. The instrument collected the versatility scores of the respondents. However,

versatility was not used to test the hypotheses presented in this study. Therefore, an avenue of additional research could be to determine the versatility scores of the respondents and determine if a relationship exists between the versatility of the respondents and the respondents' status as a career fire chief or a volunteer fire chief. Likewise, the survey instrument collected the responses to certain versatility skills. These skills were not used in this study, but could be included for future analysis to determine if a relationship exists between the versatility skills of the respondents and the respondents' status as a career fire chief or a volunteer fire chief.

Many of the limitations of this study have been identified and discussed. One of the other limitations of this study was that the sample was career fire chiefs and volunteer fire chiefs of fire departments in the state of Texas. Chapter 3 identified that the ratio of career fire chiefs to volunteer fire chiefs in Texas is similar to the national ratio. One cannot help but ponder if the Social Styles identified by the sample of this study are reflective of the Social Style of the fire chiefs nationally. The similarity that each of the participants in this study shared was that they are the fire chiefs of a fire department in Texas. Would an expansion of this study, or a similar study, that included only fire chiefs from fire department in Massachusetts yield similar results? Would an expansion of this study, or a similar study, that included fire chiefs from each of the states yield similar results? Would an expansion of this study, or a similar study, that included fire chiefs from other nations yield similar results? Are the results of this study, which identified no significant difference in the Social Styles of career fire chiefs and volunteer fire chiefs in Texas, reflective of the fire service outside of Texas?

Realizing that this study only addressed executive managers from the fire service is another limitation. This study did not attempt to determine if the Social Style of chief executive officers within the American fire service are similar to the Social Style of chief executive officers of other industries, whether foreign or domestic. Would a similar study that included an analysis of the Social Style of chief executive officers who are employed by hospitals to the chairmen of the boards of directors (who are not paid) of hospitals yield similar results? Would a similar study that included the analysis of the Social Style of a chief executive officer of a public school district (school superintendent (paid)) and the presidents of the boards of trustees of public school districts (not paid) yield similar results? Are the results of this study, which showed no significant difference in the Social Style of paid chief executives and non-paid chief executives, true of other industries?

Unraveling true personalities by including additional variables into a similar study would be another potential avenue for additional research that is opened by this study. Social Style affects perceptions of trust and credibility of leaders (Gross, 2002). The addition of the leadership styles as a variable could apply to an expansion of this study, or to a similar study. Several leadership styles have been identified, including but not limited to authoritarian leader, transactional leader, transformational leader, and Laissez-faire leader (Politis, 2001). The potential for additional research here is to include leadership styles along with Social Style and determine if the leadership style of the career fire chiefs are different from the leadership style of the volunteer fire chiefs. This could be expanded even further to determine if there was a relationship between the Social Style of the fire chief and the leadership style of the fire chief. These findings

could be used to determine if a particular combination of leadership style and Social Style was prevalent among career fire chiefs, and likewise among volunteer fire chiefs. In other words, is there a particular leadership style and Social Style combination that a career fire chief tends to have? Is there a particular leadership style and Social Style combination that a volunteer fire chief tends to have? Is there a difference between the leadership style and Social Style combination of a career fire chief and that of a volunteer fire chief?

Moreover, the addition of the variable of leadership style could be used to expand a similar or follow-up study to include participants outside of the fire service. Would the leadership style and Social Style combination of a chief executive officer of a company in the oil and gas industry compare with the leadership style and Social Style combination of a chief executive officer of a national non-profit organization?

Similarly, trustworthiness (or trust that people have in an individual) is another variable that could be included in an additional research study. Similar to the variable to leadership style, the measure of the perceived trustworthiness of the fire chief by the fire fighters could be included. Is there a difference in the perceived trustworthiness (the perception the fire fighters have, and the amount of trust the fire fighters have for their chief) of a career fire chief compared to a volunteer fire chief? This variable could be combined with the fire chief's Social Style and determine if there is a relationship between the fire chief's Social Style and the perceived trustworthiness they have among their subordinates. This could be expanded further to determine if there exists a trustworthiness and Social Style combination that is more prevalent among fire chiefs, and whether there is a difference in the Social Style and trustworthiness combination of

career fire chiefs and volunteer fire chiefs. This potential research area, too, could be expanded beyond the fire service.

Expanding this study to determine the ability of the respondent to flex from one quadrant (or sub-quadrant) on the Cartesian Plane into another quadrant (or sub-quadrant) would be another avenue for future research. This study did not capture the respondents' ability to flex from one style to another. The potential expansion here would be to identify if a relationship exists between the individual's ability to flex and the individuals' status as a career fire chief or a volunteer fire chief. This potential research area could also spread beyond the limits offered by this study and beyond the setting of the American fire service.

Yielded by this study were the results showing that there is not a difference in the Social Style of a career fire chief and a volunteer fire chief in the state of Texas. Furthermore, this study has shown that among the participants, the Social Styles were fairly evenly distributed among the four quadrants. An individual's Social Style cannot be predicted by their status as a career fire chief or a volunteer fire chief.

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