AN EXAMINATION OF VOLUNTEER FIRE OFFICER LEADERSHIP STYLE AND THE
JOB SATISFACTION AND TURNOVER INTENTION OF VOLUNTEER FIREFIGHTERS
IN NORTH CENTRAL NORTH CAROLINA

by

Robert Mull Miller

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Dissertation
Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

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Liberty University, School of Business
August 2021
Abstract

The need for volunteer firefighters continues to grow as communities expand and requests for emergency service response rises. The purpose of this study was designed to examine the relationships between the leadership behaviors of chief fire officers and the volunteer satisfaction and turnover intention of volunteer firefighters in North Central North Carolina. This study focused on the three leadership styles that comprise the full range leadership model, including transformational, transactional, and passive/avoidant. Three research questions supported this study which looked at the effects of leadership behaviors on volunteer satisfaction, leadership behaviors on turnover intention, and volunteer satisfaction on turnover intention. The research study questions were answered through testing the research hypotheses using statistical analysis techniques. Responses from 353 volunteer firefighters were analyzed to measure the significance of the relationships between study variables. The findings of the study indicate a statistically significant relationship between transformational and passive/avoidant leadership behaviors with both volunteer satisfaction and turnover intention. The findings show a positive relationship between transformational leadership and the volunteer satisfaction of volunteer firefighters, while a negative relationship exists between passive/avoidant leadership behaviors and volunteer satisfaction. The study also found a negative relationship between transformational leadership and turnover intention, which represents a decrease in the intention of volunteer firefighters to leave the organization. Alternatively, passive/avoidant leadership behaviors indicated a positive relationship with turnover intention, thus increasing the potential for turnover. Finally, the study results indicated a negative relationship between volunteer satisfaction and turnover intention of volunteer firefighters.

Key words: leadership, volunteer, job satisfaction, employee retention, fire department
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Approvals

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Robert Mull Miller, Doctoral Candidate    Date

_________________________________________   ___________________
John Borek Ph.D, Dissertation Chair     Date

_________________________________________   ___________________
Christopher Hicks Ph.D, Committee Member    Date

_________________________________________   ___________________
Edward M. Moore Ph.D, Director of Doctoral Programs    Date
Dedication

The completion of this significant chapter in my life represents the sacrifices, support, and guidance of many individuals who have played an important role in my journey. First, my mother, Tammy, your model of perseverance and determination through the years have shown me that it is possible to overcome any obstacle that life throws in your path. You are a constant reminder that “Blessed is the one who perseveres under trial because, having stood the test, that person will receive the crown of life that the Lord has promised to those who love Him” (James 1:12, NIV). Without the trials that we overcame I would not be the man I am today. Next, my beautiful wife, Anna. You encouraged me early in our relationship to never stop learning and growing. Your unwavering support and undying confidence in me provided the drive to persevere to reach what seemed like an unachievable goal. We have weathered the storms of marriage, careers, and family; yet we continue to grow stronger and closer. To our wonderful son, Jerry, you are the blessing that lights my day and you inspire me to consistently be the greatest role model I can be and to never give up. Your laugh, enthusiasm, cheer, and patience were instrumental in the achievement of this monumental occasion. Daddy is finally done with his “distertation”. I love you all more than you will ever know and am forever grateful for your love and support.

Additionally, this study is dedicated to all of those who have lost their lives in the protection and service to others. To the 343, the Charleston Nine, and the other heroes who paid the ultimate price while attempting to save the lives of strangers, “My command is this: Love each other as I have loved you. Greater love has no one than this: to lay down one’s life for one’s friends” (John 15:12-13, NIV).
Acknowledgments

To my extended family, without your continuous support and willingness to help with any need the accomplishment of this goal would have been much more difficult. Thank you to my friends who patiently understood when I was not available and for the support through the process. Also, I am so thankful for the friends that I have made through this DBA journey. Together we have persisted and have been able to reach our goals. Specifically, thank you to Isaiah, my cohort partner. We persisted through the writing of a dissertation and these experiences have provided for our personal, spiritual, and professional growth and development.

Chief Torain, you are an exemplary leader who always put the development and growth of your team as the priority of the organization. Your willingness to perform any task and take on any role within the department is how we should each strive to be both within the fire service and in general business practices. Your department is a model for how departments of any size should endeavor to operate. Thank you for your endless support to this research project and for always being available to listen. I would also like to thank the men and women of your department for their support, guidance, and training through the years.

I would like to share my sincerest appreciation to my chair Dr. Borek, who has provided a stable base for establishing, developing, and completing this research project. Your thorough and diligent reviews have generated a product that I am extremely proud of. Thank you, Dr. Hicks, for your comments and support as a member of my Dissertation Committee. Thank you to Dr. Bowery for also being a part of my committee and for your service to our country. I would like to express my gratitude to Dr. Moore and all the faculty and staff of the Liberty University School of Business. Your support and guidance that you all provide to your students shows your love and dedication to furthering God’s plan for mankind and for business.
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Section 1: Foundation of the Study

Throughout history of the United States, volunteerism has been a distinct part of the culture and democracy that defines the nation (Dreyfus, 2018). In his book, Democracy in America, Alexis De Tocqueville (1840) acknowledged the willingness of Americans to act with persistent kindness and perform good deeds without seeking recognition to facilitate a reputation of selflessness and sacrifice. Dreyfus (2018) suggested that the interactions associated with volunteer activities bring individuals and communities together and foster an environment founded in compassion, understanding, appreciation, and empathy. Today, the tradition of voluntary service continues in the United States. In 2017, the Corporation for National and Community Service (CNCS) reported that nearly 77.4 million Americans provided volunteer service through various organizations (CNCS, 2018).

In 2001, a call for emergency assistance was made nearly every 1.5 seconds from somewhere in the United States (Granito, 2003). Since the 1700s, the fire service has relied on the willingness of volunteers to respond in the aid of their fellow citizens (IAFC, 2019). In May 1736, Benjamin Franklin wrote that thanks to actions of many volunteers, a fire that started in a long strand of attached buildings was safely suppressed and most of the structures were saved prior to complete destruction (Labaree, 1961). One of the first volunteer fire departments, the New York Volunteer Department, established in December of 1737, was comprised of 30 men who were required to be ready for service both day and night or face a fine (Granito, 2003; PBS, 2002). In 2018, of the estimated 1,115,000 firefighters in the United States, over 67% were volunteers (Evarts & Stein, 2020).

Over the past several decades, the volunteer fire service in the United States has experienced a downward trend in the total number of volunteer firefighters and the number of
volunteer firefighters per 1,000 people served (Evarts & Stein, 2020). Granito (2003) discussed that while in 1983 there were approximately 3.8 volunteer firefighters per 1000 Americans, this ratio fell to less than 2.8 volunteers per American in 2000. Although the total number of volunteers in the United States peaked in 2017, the number of volunteer firefighters fell to a historical low of 682,600 firefighters (NVFC, 2020). The United States population continues to grow, and the need for emergency response is increasing; however, there is a nationwide shortage of volunteer firefighters, frequently due to high turnover rates (Bodin, 2017).

This section examines the impact of chief fire officers' leadership behaviors on job satisfaction and volunteer firefighters' turnover intention. First, the background of the problem that discusses the importance of volunteer firefighters and the impact that leadership can have on both job satisfaction and volunteer turnover intention is presented. Next, the general and specific problem statements and the purpose of the research are provided. Then, the nature of the study describes both the research methods and designs considered for this study. Additionally, the chosen method and design are discussed. Next, the research questions and hypotheses that will guide the study are proposed. Finally, the theoretical framework, definition of terms, assumptions, limitations, delimitations, and significance of the study are reviewed.

**Background of the Problem**

Many nonprofit organizations and groups rely on volunteers as their primary workforce, and these individuals are critical to the success of the organization. In 2017, the CNCS estimated the value of work provided through voluntary service in the United States was approximately $167 billion (CNCS, 2018). In 2015, approximately 25% of Americans performed some type of volunteer service, which equates to over 62.6 million volunteers (CNCS, 2016). The
volunteerism rate rose to a record-high of over 30% of Americans in 2017, with more nearly 77.4 million Americans providing more than 6.9 billion hours of service (CNCS, 2018).

Volunteer firefighters provide a service to their community by responding to structure fires, motor vehicle accidents, medical emergencies, and other requests for emergency aid by the citizens they serve. The National Fire Protection Association (NFPA) estimated that these volunteer firefighters provide a value of approximately $46.9 billion annually to the communities they serve (Zhuang et al., 2017). Firefighter turnover represents a cost and time investment for both the firefighter and the fire department, leading to reduced emergency call response rates. While the total number of volunteer firefighters is experiencing a downward trend, the total number of emergency response requests is skyrocketing, with the total number of emergency calls showing a nearly 300% increase since the late 1980s (NFPA, 2019).

Senses-Ozurt and Villicana-Reyna (2016) found a positive relationship between volunteer leadership's inclusiveness and volunteer satisfaction and retention; however, they did not identify a link between satisfaction and retention. Similarly, research has shown that volunteer firefighters are more likely to remain active members when their chief fire officers' direction fosters an environment of inclusion (Gagné et al., 2019). Myar (2017) described how when fire officers in a major German city practiced transformational leadership, their volunteer firefighters had greater feelings of self-value and a more profound commitment to the organization. Long (2018) identified lower turnover levels in New Zealand’s volunteer fire departments where officers implemented transformational leadership habits.

A body of literature exists on an international scale that examines the relationship between chief fire officer leadership and volunteer firefighter job satisfaction and turnover; however, few studies regarding American volunteer fire departments are present. A review of
academic literature did not identify any research that focused on the relationship between the leadership style of chief fire officers and job satisfaction and the turnover intention of volunteer firefighters in North Carolina. This study aimed to investigate a connection between chief fire officers' leadership style on job satisfaction and volunteer firefighters' turnover intention in North Central North Carolina. The study evaluated the strength of the relationship between job satisfaction and turnover intention and the chief fire officer’s leadership style independently.

**Problem Statement**

The general problem to be addressed was the effect of leadership style on volunteers’ job satisfaction resulting in increased turnover intention. The rate of volunteerism in the United States fluctuates from year to year, and more than one-third of volunteers stop performing volunteer work each year (Eisner et al., 2009). These variations represent costs to the organization of both time and financial investments to the volunteer workforce. Posner (2015) identified that leading in a volunteer organization requires a different leadership approach than leading in similar professional organizations. Nonprofit organizations' success relies on utilizing effective leadership styles of volunteer leadership to increase satisfaction and reduce turnover among volunteers (Senses-Ozyurt & Villicana-Reyna, 2016).

Evarts and Stein (2020) noted that the volunteer fire service had experienced a 16% decline in membership between 2015 and 2018. The International Association of Fire Chiefs (IAFC) reported that one of the leading reasons that volunteer firefighters leave the fire service is due to ineffective leadership practices, including poor communication and unclear expectations (IAFC, 2019). McGill et al. (2019) argued that the leadership style of chief fire officers must “help volunteers to feel more competent, have ownership over their work, and feel like they belong” (p. 16). The specific problem to be addressed was the effect of the leadership style of
chief fire officers of volunteer fire departments in North Central North Carolina on volunteer firefighters’ job satisfaction and turnover intention.

**Purpose Statement**

The purpose of this quantitative correlational study was to investigate whether a relationship exists between the leadership styles of the participating chief fire officers and job satisfaction and the turnover intention of the volunteer firefighters they lead. This study expands the existing body of knowledge by examining the relationship between chief fire officer leadership style and the job satisfaction and turnover intention of volunteer firefighters. To retain volunteer firefighters, chief fire officers must understand the impact of their leadership style on job satisfaction and, ultimately, firefighters' intention to remain active members of the department (Gagné et al., 2019; Long, 2018; Malinen & Mankkinen, 2018). Evaluation of this problem occurs through focused analyses of the measures of job satisfaction and turnover intention of volunteer firefighters in North Central North Carolina.

Additionally, the purpose of this research was to provide information for creating positive change in the retention of volunteer firefighters through effective leadership practices by chief fire officers. This study's findings will provide the leadership of volunteer fire departments and associated organizations with useful information that can aid in the development of leadership training initiatives. Understanding the impact of various leadership behaviors will help institute effective management practices in the volunteer fire service. Improvements to volunteer firefighters' job satisfaction and turnover intention represent a potential benefit to volunteer fire departments’ individuals and communities.
Research Questions

This research study evaluated chief fire officers' leadership and their leadership styles on job satisfaction and volunteer firefighters' turnover intention in North Central North Carolina. The study also assessed the relationship between volunteer firefighters’ job satisfaction and turnover intention. The IAFC (2019) discussed that volunteer firefighters rarely leave the fire service due to the job requirements; instead, their departure is due to the people and, more specifically, the department's leadership. The specific research questions for this study were:

RQ1: To what extent is there a relationship between the leadership style of the chief fire officers and the job satisfaction of the selected volunteer firefighters in North Central North Carolina?

RQ2: To what extent is there a relationship between the leadership style of the chief fire officers and the turnover intention of the selected volunteer firefighters in North Central North Carolina?

RQ3: To what extent is there a relationship between the job satisfaction and turnover intention of the selected volunteer firefighters in North Central North Carolina?

Hypotheses

This quantitative correlational research study examined the relationship between the leadership behaviors of the chief fire officers and job satisfaction and turnover intention of participating volunteer firefighters in North Central North Carolina. An investigation of the specific problem statement occurred through a correlational study of leadership style and how it impacts job satisfaction and volunteer firefighters' turnover intention. This study utilized established surveys for gathering data that were analyzed to test the hypotheses in participating volunteer fire departments in North Central North Carolina.
The first research question guiding the research:

RQ1: To what extent is there a relationship between the leadership style of the chief fire officers and the job satisfaction of the selected volunteer firefighters in North Central North Carolina?

H10: There is no statistically significant relationship between the leadership of the chief fire officers and the job satisfaction of the volunteer firefighters.

H1A: There is a statistically significant relationship between the leadership style of the chief fire officers and the job satisfaction of the volunteer firefighters.

If the data collected had not shown consistency in participating volunteer firefighters' job satisfaction related to either transformational, transactional, or passive/avoidant leadership styles, then the researcher would have failed to reject the null hypothesis. If a statistically significant relationship had been identified between leadership styles and job satisfaction, then the researcher would have rejected the null hypothesis.

The second research question guiding the research:

RQ2: To what extent is there a relationship between the leadership style of the chief fire officers and the turnover intention of the selected volunteer firefighters in North Central North Carolina?

H20: There is no statistically significant relationship between the leadership of the chief fire officers and the turnover intention of the volunteer firefighters.

H2A: There is a statistically significant relationship between the leadership style of the chief fire officers and the turnover intention of the volunteer firefighters.

If the data collected had not shown consistency in participating volunteer firefighters' turnover intention related to either transformational, transactional, or passive/avoidant leadership
styles, then the researcher would have failed to reject the null hypothesis. If a statistically significant relationship had been identified between leadership styles and turnover intention, then the researcher would have rejected the null hypothesis.

The third research question guiding the research:

RQ3: To what extent is there a relationship between the job satisfaction and turnover intention of the selected volunteer firefighters in North Central North Carolina?

H3₀: There is no statistically significant relationship between the volunteer satisfaction and the turnover intention of the volunteer firefighters.

H3ₐ: There is a statistically significant relationship between the volunteer satisfaction and the turnover intention of the volunteer firefighters.

If the data collected had not shown consistency in participating volunteer firefighters' turnover intention related to the volunteer firefighter's job satisfaction, then the researcher would have failed to reject the null hypothesis. If a statistically significant relationship had been identified between job satisfaction and volunteer firefighters' turnover intention, then the researcher would have rejected the null hypothesis.

Nature of the Study

Creswell (2014) discussed that the “research problem or issue being studied, the personal experiences of the researcher, and the audience for whom the researcher writes” (p. 21) provide guidance to the research design and method of the study. The first step in determining the research method and design is to establish the research question; then, the researcher can apply the appropriate research design and method to address it (Stake, 2010). The three most used research designs are fixed (quantitative), flexible (qualitative), and mixed methods. Several
specific strategies for conducting research comprise each research design, and these methods provide a direction and procedure that guides the study (Creswell, 2014; Leavy, 2017).

**Discussion of Research Paradigms**

Research is influenced by various research paradigms, or philosophical worldviews, that make assumptions about how the world works (Creswell, 2014). Research paradigms guide the methods and techniques of research through an understanding and manipulation of the ontology, epistemology, axiology, methodology, and rigor of the research study (Kivunja & Kuyini, 2017). There are many research paradigms that have been proposed over the years of research. Table 1 shows the popular research paradigms presented in literature.

**Table 1**

*Popular Research Paradigms from Literature*

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<tr>
<td>Research Paradigms</td>
<td>Positivism</td>
<td>Post-Positivism</td>
<td>Positivism</td>
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<tr>
<td>Post-Positivism</td>
<td>Constructivism</td>
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<td>Critical Theory</td>
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<td>Critical Theory</td>
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<td>Constructivism</td>
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The primary goal of a positivistic research study is to identify and examine relationships between independent and dependent research variables through a quantitative statistical analysis (Park et al., 2020). The positivistic research paradigm is grounded in the scientific research method, which utilizes deductive reasoning, formulization of study hypotheses, and mathematical analyses to make predictions based on measurable outcomes (Kivunga & Kuyini, 2017). The positivist theory relies on the numeric measurement of observations to quantify a data set that is analyzed and tested to generate research outcomes (Creswell, 2014).

This research study was guided by the positivist research paradigm. Positivism was the appropriate research paradigm to guide this research study being that the goal of the study was to
utilize analytical techniques to test study hypotheses (Kivunga & Kuyini, 2017). This research studied relied on the collection of data that was collected through survey instruments that were completed anonymously by the study participants (Creswell, 2014). The design of the study evaluated the relationships between a group of independent and dependent variables to determine the effects that exist (Park et al., 2020).

**Discussion of Design**

**Flexible Design.** Creswell and Poth (2018) described flexible, or qualitative, research as utilizing theoretical frameworks to guide a study to define the meaning individuals or groups place on a social issue. The flexible design relies on data that characterize individuals' experiences in response to the research issue (Stake, 2010). Qualitative research provides a means for the researcher to determine the participants’ meaning and personal values related to the research problem (Creswell, 2014). Furthermore, it allows the researcher to make interpretations based on the data. The five primary designs of the qualitative method are narrative, phenomenology, grounded theory, ethnography, and case study (Creswell & Poth, 2018).

**Fixed Design.** Fixed, or quantitative, research designs collect data by measuring variables and then examining relationships between them to determine patterns or correlations (Leavy, 2017). A fixed design is critical for testing theories or hypotheses that describe the relationships between variables (Creswell, 2014). The foundation of the quantitative research method is the mathematical evaluation of numerical data and the application of statistical theory (Goertz & Mahoney, 2012). The four research designs that support a fixed design include experimental, quasi-experimental, descriptive, and correlational (Creswell, 2014).
**Mixed Methods.** The mixed-methods approach integrates qualitative and quantitative approaches to achieve the desired results of the research study (Leavy, 2017). The mixed-methods approach allows the researcher to incorporate both methods' strengths and the use of a more comprehensive array of research tools and techniques (Hesse-Biber, 2010). This approach requires the researcher to design two sets of research questions to address both the numeric aspect and describe the narrative situation of the study (Plano & Ivankova, 2016). Rutberg and Bouikidis (2018) explained that the mixed methods approach implements data analysis to generate “meta-inferences about the research question” (p. 212). The three most common mixed method techniques are convergent parallel, explanatory sequential, and exploratory sequential (Creswell, 2014).

**Chosen Design.** This study implemented a fixed research design to evaluate the relationship between leadership style and job satisfaction and volunteer firefighters' turnover intention in North Carolina. The researcher selected the quantitative design for this study to generate conclusions representing the population of volunteer firefighters in North Central North Carolina. The fixed design is the preferred technique for many researchers in the field of leadership. Following a review of articles published in Leadership Quarterly, a prominent leadership journal, Gardner et al. (2010) found that 87% of the articles implemented a quantitative research approach when examining leadership practices. Fixed research requires that data be collected and analyzed through statistical analysis before any conclusions may be derived (Watson, 2015). Data for quantitative research methods can be obtained through experimental or survey methods and often utilizes existing survey tools and scales to ensure the study results' validity and reliability (Boeren, 2018).
This study utilized proven research instruments to produce quantitative data representing the chief fire officers' behaviors and characteristics and volunteer firefighters. Thus, the flexible and mixed methods research methods do not fit this study (Creswell, 2014). Qualitative research often seeks to generate inferences about individuals, while quantitative analysis drives conclusions about populations (Goertz & Mahoney, 2012). Additionally, flexible research designs cannot express certainty in their results through a numerical representation of the data (Stake, 2010). Although the mixed methods design may add additional credibility to the findings by incorporating exploratory or explanatory designs, the necessary data collection and time-intensive data analysis are constraints for use in this study (Creswell, 2014).

Discussion of Method

Experimental. True experimental research methods reveal causal relationships between dependent and independent variables and offer high control and validity (DePoy & Gitlin, 2016). The experimental research method allows a researcher to determine the effect of an action, treatment, or intervention on an outcome (O’Dwyer & Bernauer, 2016). An experimental research method is useful when the researcher maintains certain variables at a constant while evaluating changes in the target variable (Vogt et al., 2012). In an experimental method, the researcher assigns the control and test groups at random before implementing any group actions (O’Dwyer & Bernauer, 2016).

Quasi-Experimental. Quasi-experimental and experimental methods are very similar in that both techniques seek to identify a cause-and-effect relationship through the control and treatment of independent variables (O’Dwyer & Bernauer, 2016). However, quasi-experimental groups do not allow for the random assignment of control and test variables (Depoy & Gitlin,
Descriptive. The goal of the descriptive method is to examine the incidence or frequency of characteristics present within the study population (Brink & Wood, 2012). In this method, researchers do not manipulate study variables; instead, the researcher attempts to observe a specific phenomenon and determine if a causal relationship exists (Rutberg & Bouikidis, 2018). The descriptive research method is a useful tool for documenting a characteristic or trait within the study population and can provide baseline data for the population (Brink & Wood, 2012).

Correlational. The correlational method does not allow for manipulating the study variables; instead, it seeks to measure the variables and determine if relationships and patterns exist in the data (DePoy & Gitlin, 2016). Correlational methods are often utilized when examining how individuals interact in real-life situations (Tharenou et al., 2007). The correlational method relies on the researcher's ability to support their hypotheses with existing literature (Brink & Wood, 2012). In a correlational research study, the researcher generates and tests hypotheses that show a relationship between two or more variables (Weathington et al., 2012). Correlational methods allow the researcher to present inferences representative of a specific population when the sample size represents the total population (Tharenou et al., 2007).

Chosen Design. This study utilized a quantitative correlational method to examine the relationship between chief fire officers' leadership style, job satisfaction, and volunteer firefighters' turnover intention. This research study did not seek to identify a cause-and-effect relationship, so the experimental and quasi-experimental methods were not appropriate alternatives (Depoy & Gitlin, 2016). This study employed survey tools to gather data on job satisfaction, turnover intention, and the chief fire officers' perceived leadership styles from the
participating volunteer firefighters. The correlational research method is useful for assessing the relationship between two or more pieces of information from study participants (Weathington et al., 2012).

**Summary of the Nature of the Study**

The researcher must be cognizant of potential biases in the research study, systematic data collection processes, the implementation of reliable and proven instrumentation methods, and appropriate statistical analysis to control these biases (DePoy & Gitlin, 2016). The data collected in this study were used to examine the relationship between the chief fire officer’s leadership style and job satisfaction and the participating volunteer firefighters' turnover intention. The quantitative correlational approach was a strong fit for the needs of this research study. The goal of this research study was to test the hypothesis that a relationship exists between the chief fire officers' leadership style and their volunteer firefighters' job satisfaction and turnover intention.

**Theoretical Framework**

This quantitative correlational research study aimed to examine the impact of the chief fire officers' leadership styles on job satisfaction and turnover intention of participating volunteer firefighters. As shown in Figure 1, four theories were selected to provide the theoretical framework for this study. The full range leadership model guides the exploration of the leadership style of the chief fire officers. Maslow’s Hierarchy of Needs, the Self-Determination Theory, and Herzberg’s Two-Factor Theory of Motivation provide the framework for examining the level of job satisfaction of volunteer firefighters. The level of volunteer job satisfaction offers additional insight into the turnover intention of volunteer firefighters.
**Theories**

**Full Range Leadership Model.** The full range leadership model incorporates three main leadership styles, which are categorized by the level of effectiveness, activity, and frequency of the leader, including transformational, transactional, and passive/avoidant leadership (Arenas, 2019; Oprea et al., 2020). Transformational leadership relies on leaders' ability to motivate their followers, which positively relates to employee job satisfaction (Aydogmus et al., 2018). Transformational leaders stimulate their followers to perform and enhance their satisfaction by inspiring them by creating an environment that fosters individual growth and group performance to achieve a common goal (Puni et al., 2018). Four dimensions comprise the transformational leadership theory: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Northouse, 2016). Transactional leadership influences their followers through routine social and value exchanges, leading to individual and organizational goal achievement (Arenas, 2019). Contingent reward and management-by-exception are the two key behaviors that encompass the transactional leadership theory (Northouse, 2016). Finally,
laissez-faire or passive/avoidant leadership is associated with an absence of feedback, leadership involvement, rewards, and recognition (Oprea et al., 2020). Passive/avoidant leadership differs from transformational and transactional in that it lacks the leadership interaction and desire to aid in follower growth (Northouse, 2016).

**Herzberg’s Two-Factor Theory.** Herzberg’s two-factor theory, also known as motivation-hygiene theory, states that employees have two distinct satisfaction dimensions: job satisfaction and job dissatisfaction (Herzberg et al., 1959). Intrinsic motivators, such as achievement, increased responsibility, and recognition, impact an individual’s job satisfaction (Knoop, 1994). In contrast, job dissatisfaction is related to extrinsic factors like company policies, salary and benefits, peer relationships, and perceived security. Motivators are linked to job satisfaction, while hygiene factors are related to dissatisfaction (Hur, 2018). These motivators link employee motivation, job satisfaction, and commitment (Herzberg et al., 1959).

**Maslow’s Hierarchy of Needs.** Abraham Maslow developed his theory of the hierarchy of needs that describes the five human need levels (Maslow, 1943). These needs make up a pyramid with the base need being physiological requirements and then progressing through safety, love and belonging, esteem, and self-actualization needs. Maslow claims that individuals cannot advance to the next level of requirements until they fulfill the lower-level conditions of the pyramid. The hierarchy of needs covers both material and psychological rewards, and leaders must understand that neither of these rewards is sufficient to provide satisfaction on their own (Stewart et al., 2018).

**Self-Determination Theory.** Deci and Ryan (1985) developed the self-determination theory, which contrasts the types of motivation that drives humanity, autonomous and controlled. Autonomous motivation leads to autonomy and self-direction, while controlled motivation
causes the individual to behave in a particular manner and limited freedom (Deci & Ryan, 2008). Further, they explain that intrinsic and extrinsic motivation are mediators for behavior and drive individuals to achieve three basic needs: autonomy, competence, and relatedness. Unlike Maslow’s needs theory, self-determination does not present the three needs as levels that require a stepwise progression (Gagné & Deci, 2005). Instead, the requirements are complementary, and an individual can achieve all or part of a need at any given time.

**Actors**

The actors for this research study were comprised of two groups: chief fire officers and volunteer firefighters. The chief fire officer provides the leadership of the fire department and is responsible for general business operations along with emergency scene operations. For the purposes of this study, the chief fire officer provided the leadership that was evaluated by the participating volunteer firefighters. The volunteer firefighters provide service to their community through voluntary response to a variety of emergency responses including fires, motor vehicle accidents, and medical emergencies. For the purposes of this study, the volunteer firefighters provided several key data points, including their perception of the chief fire officer’s leadership behaviors, their level of volunteer satisfaction, and their turnover intention.

**Variables**

**Leadership Behaviors.** Leadership behavior plays an important role in the job satisfaction and turnover intention of employees. In this study, the perceived leadership behaviors of the chief fire officers were measured from the viewpoint of the participating volunteer firefighters. The leadership behavior provided the independent variables for the study. The leadership behaviors considered for this study comprise the full range leadership model, including transformational, transactional, and passive/avoidant.
**Job Satisfaction.** Job satisfaction is a critical component of ensuring that personnel perform to their highest potential and remain as loyal employees of the organization. Job satisfaction, specifically volunteer satisfaction, provided a dependent variable for this study. The level of volunteer satisfaction was measured using the VSI. The relationship between the leadership behaviors of the chief fire officers and the volunteer satisfaction was evaluated to support RQ1.

**Turnover Intention.** Turnover intention is a key metric for businesses to be able to understand the likelihood that employees may choose to voluntarily leave the organization. Turnover intention was the second dependent variable of this study. The level of turnover intention was measured using the TIS-6. RQ2 relied on the evaluation of the relationship between the leadership behavior of the chief fire officers and the level of the turnover intention for the participating volunteer firefighters. Additionally, the effect of volunteer satisfaction on turnover intention was assessed to support RQ3.

**Relationships Between Theories, Actors, and Variables**

This research study examined the relationship between leadership style and job satisfaction and volunteers' turnover intention within the volunteer fire service of North Central North Carolina. The full range leadership model combines several popular leadership approaches that have been the focus of research over several decades, including transformational, transactional, and passive/avoidant leadership (Northouse, 2016). The full range leadership model supports the study by providing insight into the leadership practices that motivate, inspire, and develop employees. The study utilized survey instruments to gather information on the perceived leadership style of the participating chief fire officers (Northouse, 2016). Leadership style is the independent variable of this study.
The direct impact on employee job satisfaction is an individual’s attitude related to work itself rather than the overall work environment (Hur, 2018). Holston-Okae and Mushi (2018) found that job satisfaction, work environment, and employee engagement predict voluntary turnover intentions. The motivating factors of Herzberg’s theory are aligned with the higher-order needs in Maslow’s theory, whereas the hygiene factors are akin to the lower-order needs (Hur, 2018). The psychological needs required by the self-determination theory are relational to individual morale and motivation and do not require the lower order needs of Maslow’s theory to achieve fulfillment (Rasskazova et al., 2016). While Herzberg’s approach focused on paid employees, it has been utilized in research regarding volunteers' motivation and showed a positive relationship with improved volunteer satisfaction (Lamb & Ogle, 2019). For this reason, Herzberg’s two-factor theory will aid this research by acknowledging the relationship between leadership style and volunteer firefighter job satisfaction. Volunteer positions do not typically meet the lower levels of Maslow’s hierarchy; thus, volunteer leaders must drive organizations to address the needs of love and belonging, esteem, and self-actualization.

Maslow’s hierarchy of needs, Herzberg’s two-factor theory, and the self-determination theory support the research study by providing mechanisms to examine the selected volunteer firefighters' job satisfaction. The study will utilize survey instruments to determine job satisfaction and their intent to remain active in the volunteer fire service. Job satisfaction and turnover intention are the dependent variables of the research study.

**Summary of the Research Framework**

The full range leadership model informs the study by evaluating the participating chief fire officers' perceived leadership style. Maslow’s hierarchy of needs, self-determination theory, and Herzberg’s two-factor theory support the research questions by providing a foundation for
understanding what impacts employee job satisfaction and turnover intention. Job satisfaction is an essential factor in business monitoring as a lack of fulfillment is linked with voluntary turnover and absenteeism (Abelha et al., 2018). There is no evidence of any studies that examine the relationship between the leadership style of chief fire officers and job satisfaction and the turnover intention of volunteer firefighters in North Central North Carolina.

**Definition of Terms**

*Chief fire officer:* In the fire service, there are typically three officers that make up the chief officer command structure: battalion chief, assistant chief, and fire chief (Fire Tactics, 2020); however, the only required position is fire chief.

*Fire department:* A fire department is an agency or organization with a formal arrangement with either a state, county, city, town or another governing body to provide emergency services, including fire suppression and emergency medical services (Emergency Management and Assistance, 2011). Additionally, there are four categories of fire departments in the United States: fully career (100% career), mostly career (51-99% career), mostly volunteer (1-50% career), and fully volunteer (100% volunteer) (NFPA, 2019).

*Fire district:* Fire district refers to the area of a city, town, or municipality that falls under the purview of a fire department for emergency response (Office of State Fire Marshal, 2018).

*Firefighter:* A firefighter is a certified member of a fire department that responds to and extinguishes fires or provides other emergency services directed by the department (Emergency Management and Assistance, 2011).

*Full range leadership model:* The full range leadership model refers to a leadership model that includes the transformational, transactional, and passive/avoidant leadership theories (Arenas, 2019).
**Job satisfaction:** Dilig-Ruiz et al. (2018) discuss that job satisfaction includes both an individual’s attitude towards their job and the perception versus expectation of an individual towards their work environment.

**Leadership style:** Leadership style is the behavioral pattern of an individual and describes how they support and direct their followers in various situations (Northouse, 2016).

**Multifactor Leadership Questionnaire (MLQ):** The MLQ is a widely accepted measure of the perception of leadership style that evaluates a leader’s behavior in each of the factors in the full range leadership model (Northouse, 2016). There are two varieties of this assessment available for use, the MLQ standard form or the MLQ short form (MLQ 5X) (Bass & Avolio, 2004).

**Nonprofit organization:** A nonprofit organization is a private, self-governing operation that distributes profits and services to achieve the purpose of the organization (Anheier, 2014).

**North Central North Carolina:** This study focuses on volunteer fire departments in the North Central geographic region of North Carolina, as described by the North Carolina Department of Commerce (NCDC) (2016). Figure 2 shows the counties included in the North Central zone. These counties include Chatham, Durham, Edgecombe, Franklin, Granville, Harnett, Johnston, Lee, Nash, Orange, Person, Vance, Wake, Warren, and Wilson (NCDC, 2016).
**Figure 2**

*Geographic Regions of North Carolina*

*Note.* This map shows the delineation of zones in North Carolina. Adapted from *Prosperity Zones,* by the North Carolina Department of Commerce (NCDC), 2016 (https://files.nc.gov/nccommerce/documents/LEAD/Maps/PZ.pdf). In the public domain.

*Laissez-faire leadership:* Laissez-faire leadership is described as the avoidance or absence of leadership, resulting in not meeting the expectations and needs of their subordinates and the organization (Bass & Riggio, 2006).

*Transactional leadership:* Transactional leadership is characterized as management by exchanging value-added items to meet the extrinsic needs of their subordinates to advance the agenda of both the leader and the followers (Avolio et al., 1999; Northouse, 2016).

*Transformational leadership:* Burns (1978) defines transformational leadership as a tactic where the leader collaborates and engages with their followers to increase the development and motivation of a team.

*Turnover intention:* Turnover intention is described as the behavior intention or plan to leave an organization willingly and consciously (Bothma & Roodt, 2013; Lacity et al., 2008).
Turnover Intention Scale (TIS): The TIS is an instrument used to measure a worker's intention to either stay with or leave an organization and is based on planned behavior theory (Roodt, 2004).

Voluntary turnover: Voluntary turnover refers to an individual's at-will decision to leave an organization (Memon et al., 2016).

Volunteer firefighter: A volunteer firefighter is a firefighter who receives no financial compensation for their services provided to the community on behalf of the fire department (Emergency Management and Assistance, 2011).

Volunteer Satisfaction Index (VSI): The VSI is a survey instrument designed to measure job satisfaction in volunteer personnel (Galindo-Kuhn & Guzley, 2002).

Assumptions, Limitations, Delimitations

The assumptions, limitations, and delimitations bound the study, provide meaning and support for the research and conclusions, and address issues that could impact the study findings' interpretation or generalization (Lunenburg & Irby, 2008). This section presents the study assumptions with the study participants, survey instruments, and research processes. Next, the limitations and boundaries of the study are discussed. Finally, the section describes the delimitations, or self-imposed limitations, that define the scope and intent of the study.

Assumptions

Researchers utilize assumptions within their studies to describe procedural and hypothetical beliefs that are generally accepted as valid by other researchers (Simon, 2011). First, the research study assumed that participants will be inclined to take part in the survey. Conrad and Serlin (2006) discussed that participants who feel pressured into participating in an investigation might provide responses that are not accurate. The study also assumed participants'
responses are objective and represent their actual level of satisfaction and perception of their respective chief officers. Hamby and Taylor (2016) discussed that survey respondents could often respond to questions with answers that are considered good enough rather than providing the time and effort to optimize their response to achieve a more representative view of their feelings. Another assumption was that firefighters themselves will complete the surveys. The study assumed that participants have been working under the chief officer's direction for a duration suitable to form an accurate assessment of the leadership style. The final assumption was that an adequate number of completed surveys will be received to meet the minimum sample size requirements of the study. Ensuring everyone is aware that involvement in the research is strictly voluntary, and all responses are confidential helped mitigate the participant risks.

**Limitations**

A limitation of the study is the sample size and geographic requirements necessary to maintain study feasibility. By limiting the analysis to volunteer fire departments operating in North Central North Carolina, the study conclusions cannot be generalized to include a larger population. This limitation was mitigated using random sampling and ensuring that an adequate, representative sample of data was collected. Another limitation of the study is the use of surveys as a data-gathering tool, restricting the participant's ability to provide an individualized reaction. However, this study relied on survey instruments that implement Likert scales to measure responses, useful for quantifying participants' thoughts and observations (Guthrie, 2010). Additionally, the short data collection period and resource constraints are limiting factors. This limitation was mitigated by ensuring that the research study did not progress out of the data collection phase until the data were collected, sorted, and verified.
**Delimitations**

The study is constrained to include only fire departments that serve communities within North Central North Carolina. Additionally, the study is limited to only include volunteer or mostly volunteer fire departments. Over 80% of fire departments in the United States are either volunteer or mostly volunteer and have nearly 750,000 members (Evarts & Stein, 2020). The study is also bound by focusing on the chief fire officers’ leadership style and does not include any other officer positions present in the participating departments. The study scope is limited to leadership styles discussed in the full range leadership model. The transformational leadership style is common in the fire service and has been found to be a preferred behavior among fire officers (Becker, 2016; Odom, 2011).

**Significance of the Study**

Previous research studies reveal positive outcomes from implementing transformational leadership in the fire service (Alyn, 2010; Church, 2013). However, examining the relationship between leadership style and volunteer firefighter job satisfaction did not identify any studies specific to volunteer fire departments in North Central North Carolina. The findings of the study may help reduce volunteer firefighter turnover by determining the relationship between leadership style and volunteer firefighter job satisfaction and turnover intention. Additionally, this research adds to the body of knowledge regarding the link between job satisfaction and turnover intention. Identifying a positive relationship between leadership behaviors and the job satisfaction of volunteer firefighters will aid the volunteer fire service by supporting the development and implementation of improved leadership training programs.
Reduction of Gaps in the Literature

Prior research studies have explored the implementation of various leadership styles within the volunteer fire service (Mayr, 2017; Odom, 2011), the reduction in the turnover intention of volunteer firefighters (Haug & Gaskins, 2012; Long, 2018), and the relationship between job satisfaction and leadership style (Aydogmus et al., 2018; Puni et al., 2018; Ward, 2019). However, a thorough review of available literature found limited research that links the concepts of leadership, volunteer firefighter job satisfaction, and volunteer firefighter turnover intention. There is value in examining the impact of chief officers' leadership style and how it can impact firefighters' job satisfaction, ultimately limiting firefighter turnover. This study fills the observed gaps by examining the relationship between leadership style and job satisfaction and turnover intention of volunteer firefighters in North Central North Carolina.

Implications for Biblical Integration

God created humanity to rule over His creation and be stewards of the Earth (Genesis 1:28, New International Version). From the beginning of creation through the fall of humanity, work has been an expectation for humans and an integral part of God’s plan for individuals and businesses alike (Keller & Alsdorf, 2012). Through the performance of work in God’s honor and His image, we will receive an eternal inheritance from the Lord (Colossians 3:23-25). Work and business aim to advance His kingdom by creating wealth and environments that provide innovative and beneficial work (Van Duzer, 2010). The leadership of the organization is critical components of ensuring that businesses and organizations can achieve the mission and goals of the organization. Hebrews 10:24-25 (NIV) describes the role of the leader, “and let us consider how we may spur one another on toward love and good deeds…but encouraging one another and all the more as you see the Day approaching”. The chief fire officers are the fire service leaders
and are accountable for providing opportunities for their followers to serve their community and perform meaningful work. The leadership of the organization plays a vital role in ensuring their followers’ satisfaction (Proverbs 29:2).

Volunteerism is a foundational principle when implementing a Biblical worldview of business and work (I Corinthians 9:17-19). Isaiah 58:10 teaches, “and if you spend yourselves in behalf of the hungry and satisfy the needs of the oppressed, then your light will rise in the darkness, and your night will become like the noonday.” Both professional and volunteers play a role in achieving God’s business and humankind (Van Duzer, 2010). Keller and Alsdorf (2012) describe that God does not differentiate between the various levels of professions, nor does he place a higher value on one over another. Christ has provided the gifts necessary to perform our calling and to serve our communities as stewards of the Lord (I Peter 4:10). Inherently firefighting is a dangerous profession, and with this comes the understanding that a firefighter may give their life in the protection of others at any moment. John 15:13 explains, “Greater love has no one than this, to lay down one’s life for one’s friends.” The leadership of the fire department must overcome this potential danger through the development and motivation of the firefighters.

In most volunteer fire departments, the membership of the fire department elects the fire officers. Similarly, God directs that humankind should “Choose for your tribes wise, understanding, and experienced men, and I will appoint them as your heads” (Deuteronomy 1:13, English Standard Version). This study seeks to understand further the relationship between leadership styles of chief fire officers and job satisfaction and retention of volunteer firefighters. Volunteer fire department leadership is responsible for establishing an environment that fosters the firefighters' development and growth and provides the membership opportunity to provide
service to their community. Additionally, the officers must ensure that the firefighters maintain their job satisfaction and desire to continue their community assistance. Galatians 6:9 reminds, “And let us not grow weary of doing good, for in due season we will reap, if we do not give up.”

**Benefit to Business Practice and Relationship to Cognate**

This quantitative research study seeks to advance the field of leadership within the business sector. Specifically, this research focused on managing volunteer fire departments, which operate as nonprofit organizations. Since the 1980s, nonprofit organizations have adopted more business-like governance and operational structures (Maier et al., 2014). Hall and O’Dwyer (2017) discussed that due to nonprofits' varied management and governance structures, they represent organizations that can enhance the understanding of leadership in all sectors of business. Leaders in volunteer organizations must lead differently than their counterparts in paid organizations and are often required to “use more leadership behaviors” (Posner, 2015, p. 894). The assimilation of the research questions, theories, and concepts is valuable for understanding leadership in the volunteer fire service, other nonprofit organizations, and business.

**Summary of the Significance of the Study**

This research study seeks to further the body of knowledge on the relationship between leadership style and job satisfaction and the turnover intention in volunteer firefighters. On a global scale, the volunteer fire service is facing difficulties in attracting and retaining firefighters, while the need for emergency response is continuing to grow (Malinen & Mankkinen, 2018). Thus, this study is significant for improving volunteer firefighters' retention rates and improving volunteer fire departments' leadership. Jones and Berry (2017) discussed that effective leadership is critical to maintaining volunteer firefighters' job satisfaction and reducing turnover rates.
Sustaining high job satisfaction is a crucial component of lowering employees' turnover intention (Randhawa, 2007).

**A Review of the Professional and Academic Literature**

This study was inspired and guided by the existing literature and research on volunteer leadership. This literature review intended to connect the current body of knowledge and the research questions. This literature review evaluated the four theories that comprise the theoretical framework, including the full range leadership model, Herzberg's two-factor theory, Maslow's hierarchy of needs, and self-determination theory.

Modern volunteer fire departments operate as nonprofit organizations, which creates an environment that requires leadership on the emergency scene and managing a business (Seeger, 2012b). Volunteer fire departments serve many small, rural areas that rely on firefighters' voluntary services due to the lack of funding to fund a career department (NVFC, 2018). Across the nation, volunteer fire departments are facing a growing concern of how to recruit and retain a sufficient force of volunteer firefighters to meet the ever-increasing demand for emergency response (Austin, 2003).

The volunteer fire service in the United States is experiencing continuous growth in the number of calls for help while battling a decrease in volunteers willing to risk their lives in others' service (Bodin, 2017). Previous studies have identified the various styles of leadership, their prevalence, and their impact on the overall effectiveness of the fire service (Armstrong, 2006; Becker, 2016; Brauer, 2016; Buttenschon, 2016; Odom, 2011, Russell et al., 2015; Sedlmeyer & Dwyer, 2018; Smith et al., 2016). Furthermore, several studies support the importance of fire chiefs’ leadership on job satisfaction (Herald 2001; Malinen & Mankkinen, 2018) and retention of firefighters (Gagné et al., 2019; Long, 2018; Snook et al., 2006).
Four theories provide the framework for this research study: the full range leadership model, Herzberg's two-factor theory, Maslow's hierarchy of needs, and self-determination theory. The full range leadership model, two-factor, and self-determination theories support the need to evaluate chief fire officers' leadership style. The two-factor, hierarchy of needs, and self-determination theories support examining job satisfaction and retention of volunteer firefighters.

First, the literature review presents literature that discusses volunteerism and leadership in volunteer organizations. Next, the history, organizational culture, organizational structure, and oversight of the fire service are introduced. The section then evaluates research regarding job satisfaction and turnover intention, and retention in volunteer organizations and the volunteer fire service. Finally, the literature review examines the supporting theories, including the full range leadership model, Herzberg's two-factor theory, Maslow's hierarchy of needs, and the self-determination theory.

Voluntary Turnover

Two categories comprise employee turnover: voluntary and involuntary turnover. Involuntary turnover is the decision of the organization to end an individual's employment due to a specific cause, including performance, organizational need, or noncompliance with corporate policies (Rubenstein et al., 2019). Alternatively, voluntary turnover is the individual's decision to leave the organization under their own free will (Memon et al., 2016). For this research study, retention and turnover refer to an employee's or volunteer's individual choice to discontinue service.

The retention of employees and employee turnover triggers have been a focus of research for business scholars for many years (Hulin, 1968; March & Simon, 1958). Early research on the retention of employees began with March and Simon (1958). Their study identified the
availability and desirability for career progression as drivers for internal and external turnover. Research has identified positive relationships between job satisfaction and employee retention, where increased job satisfaction yields higher employee retention (Al-Asadi et al., 2019; Hulin, 1968; Hurst et al., 2017; March & Simon, 1958; Senses-Ozyurt & Villicana-Reyna, 2016).

Job satisfaction, employee motivation, compensation, and the work environment impact an employee's turnover intention (Holston-Okae & Mushi, 2018; Iqbal & Hashmi, 2015). An organization's leadership should also create a work environment that provides for employees' development and support, thus increasing motivation and job satisfaction. Job satisfaction can negatively influence an employee's turnover intention within an organization, meaning that a lower level of comfort is associated with a higher turnover intention (Hurst et al., 2017; Randhawa, 2007). Various workplace events will impact the satisfaction or dissatisfaction, which changes the individual's future consideration of continued service to the organization (Guha & Chakrabarti, 2015; Memon et al., 2016).

Turnover intention and job satisfaction drivers are similar across private and public organizations (Herald, 2001). Fallon and Rice (2015) proposed that the perceived level of employee development impacts volunteers' retention rate, and volunteer satisfaction is a mediating factor for turnover intention. However, Senses-Ozyurt and Villicana-Reyna (2016) found no significant relationship between volunteer satisfaction and volunteer retention. Instead, intrinsic motivators were proposed as a better measure of turnover intention when working with volunteers. Ensuring volunteers remain satisfied is critically essential when leading a volunteer organization as the membership can freely leave at any point if their job satisfaction lowers due to their needs not being met (Posner, 2015). Memon et al. (2016) discussed that an individual's
psychological well-being, organizational commitment, satisfaction, and dissatisfaction are predictors for employee retention.

**The Cost of Turnover**

More than one-third of volunteers choose not to continue their service to an organization longer than a year (Eisner et al., 2009). Volunteers who do not return represent a loss of nearly 2 billion hours of service and a potential value of almost $38 billion. In 2014, the amount of time donated by volunteer firefighters was worth an estimated $46.9 billion, which equates to 16.4% of the total cost caused by fires that year (Zhuang et al., 2017). In addition to the value of the time donated by volunteers, additional costs are associated with the individual's departure, including recruiting replacements, training replacements, and lost time until the replacement can operate at their full potential (Buzeti et al., 2016). In the volunteer fire service, where departments spend approximately $20,000 to train and equip each new firefighter, managing volunteer retention must be a top priority for volunteer leaders (NVFC, 2020).

**Volunteerism**

Dantas (2014) defined volunteerism as an activity performed to benefit an organization or community without coercion or the expectation of financial gain. Snyder and Omoto (2008) identified volunteer work as a service activity performed over an extended period and performed to assist an organization that desires support. Although many view volunteering as a philanthropic activity, organizations must consider that individuals only volunteer if they are interested in the activity or group (Wilson, 2012). The reasons why individuals begin volunteering and what motivates them to remain active volunteers are critical pieces of information for organizations that rely on volunteers (Hustinx et al., 2010; Wilson, 2012). Individuals volunteer their time to benefit their community to meet the needs of the organization
(Dantas, 2014). Recruiting new volunteers comes at a higher cost than maintaining the active volunteers; thus, organizational leadership must understand their volunteers' needs and the motives that drive volunteer retention (Nemțeanu & Tarcza, 2016). Merrilees et al. (2020) proposed a link between volunteer retention and the volunteer's level of commitment to the organization and their job satisfaction, which are impacted by appropriate leadership and management practices.

**Volunteerism in America.** Dreyfus (2018) described volunteering in America as being as old as the country itself and is the "hallmark of American civic life" (p. 2) as evidenced following national catastrophes when volunteer organizations experience tremendous outpourings of aid. Similarly, de Tocqueville (2000) discussed that Americans came together to achieve a common interest, joined groups meaningful to themselves or their families, and provided service to others. Furthermore, he identified this service as crucial to the survival of early America. In 2017, Americans performed nearly seven billion hours of community service, providing a value of almost $167 billion worth of service (CNCS, 2018). Over 75% of volunteers in the United States choose to donate their time to religious organizations, sports, cultural, arts, education, and youth services associations (CNCS, 2018). The US Bureau of Labor Statistics (2015) reported that nearly 57% of volunteers in 2015 were between the ages of 35 and 55. Volunteerism in the United States plays a critical role in the citizens' daily lives, with volunteer rates exceeding many other countries; however, in the last few decades, volunteerism rates have declined while the need for volunteers is rising (Dreyfus, 2018).

**A Comparison of Paid Employees and Volunteers.** While the roles and responsibilities may be akin to a paid employee, their motivation to perform work is vastly different (Bittschi et al., 2015). Further, it often lacks the support of compensation, benefits, and advancement
opportunities. Leading volunteer organizations requires more effort and creativity than paid
groups due to the lack of financial reward, an extrinsic motivator; alternatively, volunteers
receive their payment through intrinsic motivational factors (Posner, 2015; Senses-Ozyurt &
Villicana-Reyna, 2016). Instead of receiving compensation for a job well done, volunteers rely
on formal or informal recognition from the leadership of the organization (Bittschi et al., 2015;
Fallon & Rice, 2015). Job satisfaction in volunteer organizations is achieved through different
mechanisms than paid organizations and is more reliant on the leaders to meet the volunteers' needs (Posner, 2015). Jernigan and Beggs (2015) proposed that paid employees in the public sector express lower job satisfaction than employees in private businesses or volunteers.

Leadership in Volunteer Organizations. The administration of a volunteer organization
drives the organizational culture and impacts most aspects of the group, including engagement,
satisfaction, and retention (Malinen & Mankkinen, 2018). McBey et al. (2017) found that
organizational commitment improved in volunteers when leaders encouraged autonomy,
independence, competence, and recognized value. Developing the leadership capabilities of those who lead volunteer organizations will benefit the leader and their followers and those that benefit from the volunteer services (Posner, 2015). Volunteers are more aware of the characteristics and principles of their leaders when compared to their counterparts in for-profit organizations, and these values will keep volunteers active (Senses-Ozyurt & Villicana-Reyna, 2016). To maximize volunteer satisfaction and retention, a volunteer leader must establish clear roles, responsibilities, and expectations for volunteers while still maintaining an environment that fosters respect, trust, and rapport (Schreiner et al., 2018).
The Fire Service

**History of the Fire Service in America.** The American fire service is rooted in the earliest colonial history when catastrophic fires impacted many of the first settlements and towns in America (Hashagen, 2003). Devastating fires in Jamestown (1608), Plymouth Plantation (1623), Boston (1653), and New Amsterdam (1655) demonstrated the impact on the developing colonies in America and the need for fire prevention and suppression measures (Granito, 2003). Many American cities introduced fire companies responsible for protecting life and property from the damaging effects of fire (Carp, 2001).

In 1648, Peter Stuyvesant recruited four volunteers to serve as fire wardens in the colonial settlement of New Amsterdam (Hashagen, 2003). These men performed fire inspections and issue fines to fund firefighting equipment ("A Brief Lesson in Fire Service History", 1998; Green, 2014). Later, eight men volunteered to perform nightly patrols to patrol the streets watching for signs of fire, and utilized large, wooden rattles to alert citizens to form bucket brigades (Hashagen, 2003). In 1678, following several large fires in Boston, Massachusetts, the city-appointed thirteen men operated as the first paid firefighters (Collins, 2012). Thomas Atkins is recognized as the officer of a fire department in America (Hashagen, 2003). The first officially recognized volunteer fire brigade, the Union Fire Company, was organized and led by Benjamin Franklin in 1736, serving Philadelphia, Pennsylvania (Green, 2014). This volunteer fire company became the standard for all volunteer fire organizations founded during that time (Hashagen, 2003).

The town of Cincinnati, Ohio, established the first fully paid fire department in the United States in 1853 (Collins, 2012). As cities continued developing and mature full-time career fire departments, it became necessary to support sprawling urban growth (Granito, 2003). In
1865, the full-time Metropolitan Fire Department replaced the volunteer fire department of New York City (Collins, 2012). Following World War II, a firefighter's role evolved from performing only fire suppression efforts to responding to other emergency needs, including emergency medical service needs (Granito, 2003). As the nation continued to advance, so did the emergency response requirements creating a need for organizations to share knowledge and experiences to allow firefighters to maintain a competitive edge over the fires they fought (Collins, 2012).

In 1873, Fire Chief Eli Bates, of the New York Fire Department, formed a national organization, the National Association of Fire Engineers. This organization brought together fire leadership to exchange ideas and methods to facilitate the American fire service ("A Brief Lesson in Fire Service History, 1998). The National Commission on Fire Prevention and Control (NCFPC) issued its report, America Burning, in 1973, which made many recommendations to address the fire problem in America, including the formation of the United States Fire Administration (Granito, 2003). The National Volunteer Fire Council (NVFC) was founded in 1976 to provide unification, standardization, and support for American volunteer fire and emergency services departments (Collins, 2012).

Today there are over 29,705 fire departments in the United States, with 24,328 departments being all or mostly volunteer (NVFC, 2020). The services provided by volunteer departments have evolved over the years to include search and rescue, vehicle extrication, emergency medicine, and disaster relief (Seeger, 2012b). The number of calls related to structure fires has decreased over the past several decades (Coughlin, 2016). Still, these calls have been replaced at an alarming rate by an abundance of emergency medical responses.

Fire Service Organizational Culture. It is essential to understand an organization's culture when evaluating how various aspects are related to one another. An organization's culture
forms the group's foundation and generates the commitment and drive for employees to perform (van den Berg & Wilderom, 2004). Schein and Schein (2017) define organizational culture as:

the accumulated shared learning of that group as it solves its problems of external adaption and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, feel, and behave in relation to those problems. (p. 6)

More simply put, an organization's culture is the shared perception of its methods and practices that may differ from other groups (van den Berg & Wilderom, 2004). An organization's values and beliefs of the group's leadership impact the development and definition of an organization’s culture (Schneider et al., 2013). Compton (2003) described that traditions, history, policies, management structure, facilities, and uniforming help form the organizational culture. Uniformed organizations, such as police, fire, emergency services, and military organizations, have unique cultures and characteristics that are not present in other professions (US Fire Administration, 2015).

As many soldiers transitioned back into civilian life and joined volunteer fire companies, the post-Civil War era is considered a leading reason for the para-military culture of today’s fire department leadership structure (Clark, 2015). Similarly, following World War II, the boom in residential development generated an increase in the demand for firefighters met by rural and suburban volunteer fire departments comprised of many war veterans happy to be a part of a para-military organization (Collins, 2012). All uniformed organizations have a unique and well-defined organizational culture isolated from other groups and society and is deeply rooted in tradition and history (Soeters, 2000). This reliance on traditions to shape the corporate culture can lead to ineffective techniques (US Fire Administration, 2015). While the fire service culture
is rooted in tradition, it is critical to understand that each fire department creates its culture founded in these historical methods and shaped by the response to internal and external influences (NVFC, 2018).

Today, the fire service's organizational culture aligns with many other modern uniformed organizations, including military, police, and health services (Archer, 1999). Paramilitary organizations' distinctive culture derives from the extreme levels of the inherent danger associated with the job and the familial bonds that develop among the various divisions and ranks (Soeters, 2000). Archer (1999) describes the fire service's organizational culture as highly authoritarian with a strict hierarchical structure. The fire service's rigid organizational structure is a requirement to overcome the chaos that can develop on the scene of a fire or other emergency (Carp, 2001). Leaders within the fire service must be able to look beyond achieving the mission to the "human factors required to lead people to accomplish that mission" (Roth, 2011, p. 56). A rank-based power structure, a highly prescriptive discipline code, and tightly formed teams that spend large amounts of time together working and learning are characteristics of the fire service's organizational culture (Archer, 1999). Similarly, Soeters (2000) presented hierarchical leadership structures, highly disciplined operations, and a communal lifestyle as the culture's foundation across paramilitary organizations. Additionally, the paramilitary culture includes clearly defined rule systems and a complex division of labor with specialized task forces performing specific tasks (Chappell & Lanza-Kaduce, 2010).

Archer (1999) contended that that fire service operates where bureaucracy and rank underline the standard managerial system, and power guides the leadership style. The internal bureaucracies within individual fire departments are a function of the decision-making process that is strictly reliant on the rank structure to make operational decisions at an emergency scene
The fire service's organizational culture impacts how the firefighters and leaders interact with each other; it determines where they sit on the fire apparatus, their role during an emergency response, and where they sit at the dinner table (US Fire Administration, 2015).

Firefighters spend large amounts of time with their fellow firefighters during emergency response and downtime activities around the fire station (US Fire Administration, 2015). Hofstede (2001) characterized this as a two-sided or Janusian organizational culture, represented by both an emergency response and non-emergency administrative functions in daily work activities. During these non-emergency periods of business, an organizational culture founded in power, rank, and bureaucracy can negatively impact job satisfaction (Archer, 1999).

**Fire Service Organizational Structure.** The organizational structure consists of the hierarchical design, organizational justice, communication techniques, and corporate support, which are the foundation for how an organization operates (Qureshi et al., 2016). Mogoiu (2017) describes the organization’s structure as the arrangement of sub-organizations to achieve its goals and mission. The structure of an organization impacts all aspects of communication, and a practical design maximizes the transfer of knowledge and the sharing of information across departments (Koohborfardhaghghi & Altmann, 2017). A firm's structure directly influences how various organizational levels collaborate, communicate, and participate in decision-making (Pérez-Valls et al., 2017). When there is a strategic distribution of social, cultural, administrative, and technological matters in all roles within an organization, the structure is adequately designed (Cristóbal et al., 2018). The sharing of knowledge, management competencies, operational performance, culture, innovation, leadership practices, and quality management are all impacted by its structure (Rosenberg & Keller, 2016). The three key dimensions encompass organizational structure: formalization, complexity, and centralization (Dedahanov et al., 2017; Horch, 2018;
Pérez-Valls et al., 2017). Centralization and formalization within an organization define the organizational structure as either organic or mechanistic (Meydan & Köksal, 2019). Furthermore, organizational structures include bureaucratic, divisional, functional, hierarchical, matrix, geographic, and hybrid systems (Ahmady et al., 2016; Daft, 2016; Koohborfardhaghighi & Altmann, 2017).

Bureaucratic organizational structures are essential for firms that utilize a highly centralized command structure that includes ordered units with specific and individual duties (Ahmady et al., 2016). The bureaucratic organizational structure implements stringent procedures, policies, and rules to guide and instruct all operations (Janicijevic, 2017). Additionally, the bureaucratic organizational structure relies heavily on formalizing the firm's processes and procedural methods to maximize effectiveness and establish authority among organizational leadership (Borry et al., 2018). Vertical divisions that create specialized groups are critical to bureaucratic organizations as they are responsible for daily operations that are dependent on a centralized leadership team (Rivera, 2016). Uniformed organizations most often operate under bureaucratic organizational structures because of their dependence on operating procedure standardization, coordinated operations, and command scenarios that require strong leadership (Ahmady et al., 2016).

In most career departments, individual units, usually by truck, receive assignments to specialized tasks such as victim search and recovery, fire suppression, water supply, technical rescue, ladder operations, roof activities, and medical. The fire department's leadership seniority structure usually increases from probationary firefighter through firefighter, engineer, lieutenant, captain, and chief officers, including battalion chief, assistant chief, and fire chief (Armstrong, 2006). Fire departments differ from typical business bureaucracies due to the reliance on outside
organizations required by the turbulent operating environment and continuously evolving emergency services requirements (Rivera, 2016). Further, career fire department leadership is often seniority driven progress through the ranks, while volunteer departments elect leadership positions from the membership (Armstrong, 2006). Horch (2018) discussed the importance of finding a balance between a professional organization's formalized structure and a volunteer organization's looser arrangement to provide intrinsic motivation to retain volunteer firefighters.

The Volunteer Firefighter. Many of the nation's early political leaders participated in firefighting efforts, including Benjamin Franklin, George Washington, and John Hancock (Collins, 2012; NVFC, 2018). Historically, community and government leaders served with their local volunteer fire departments; today, most volunteer fire department personnel seek to serve the communities they call home (NVFC, 2018). Austin (2003) stated that "a representative cross-section of the American population, young and old, male and female" (p. 144) comprises the modern-day volunteer fire service.

Volunteer firefighters often join and remain active as volunteers through the support and encouragement of friends and family (SalterMitchell Inc., 2015). Additionally, volunteer firefighters are motivated by a sense of duty to serve others, tradition and pride found from merely providing an essential, potentially lifesaving service to their community (Austin, 2003). Church (2013) found intrinsic motivation rather than extrinsic factors drive career firefighters and fire officers to perform. While this study only included career firefighters, likely, intrinsic motivational factors also push volunteer firefighters to do their best in their roles.

Fire Service Leadership. The need to care for others, finding the intrinsic reward in performing work, identifying shortcomings, celebrating wins at emergency scenes, and, ultimately, serving their communities are drivers for leaders in the fire service (Reed, 2015). A
leader in the fire service's role is an evolving dynamic that relies on acceptance from all department members and must overcome the traditional mindset of maintaining a single, consistent strategy (Sedlmeyer & Dwyer, 2018). Evaluating and managing emergency scenarios that demand decision-making that minimizes the firefighters' hazards while maximizing the community's benefit is a constant challenge for chief fire officers (Cohen-Hatton et al., 2015).

On a fire scene, the chief officer must tackle several tasks in close coordination, including stopping the fire's growth, searching for victims, coordinating water supplies, and rotating firefighter crew assignments (Coughlin, 2016). Fire officers must be able to implement at least two forms of leadership. They must act with military precision on the fire scene and decide tactics based on knowledge and procedure (Bashoor, 2020). Alternatively, non-emergency situations allow for shared decision-making and inclusion.

The leadership of a volunteer fire department "set the tone, policies, expectations, and ultimately the culture" (p. 132), which can impact the job satisfaction and retention of firefighters (NVFC, 2018). Volunteer fire department leadership must be prepared to facilitate the development of new firefighters and seasoned firefighters to remain on the leading edge of a continually changing environment (US Fire Administration, 2007). However, Roth (2011) discussed the lack of a definitive leadership development program as a significant challenge facing the volunteer fire service. Volunteer retention issues in many volunteer fire departments are linked, either directly or indirectly, to poor leadership from department officers (US Fire Administration, 2007). Chief fire officers must identify each volunteer firefighter's strengths and weaknesses and create a strategy that leverages the assets and a development plan to overcome the shortcomings (Roth, 2011).
Transformational Leadership. In a study of professional firefighters in Houston, Texas, Odom (2011) identified transformational leadership as the style of leadership most preferred across several generational cohorts of career firefighters, with passive/avoidant leadership least preferred. Odom also noted that both non-rank career firefighters and lower-level career fire officers favored the transformational leadership style. These findings align with Becker's (2016) conclusions, who found that transformational leadership was the respondents' predominant leadership style to a survey study of the 1000 active students in the National Fire Academy's (NFA) Executive Fire Officer program. Arnold et al. (2016) discussed that transformational leadership, specifically individual consideration, was vital for leading during extreme or emergencies. Alternatively, Geier (2016) found that, in the fire service, transformational leadership was used less often during emergencies than routine operations. While the two previous studies included participants from career fire departments, they will likely hold these same volunteer fire service preferences. Three of the twelve fire officers who participated in a study by Buttenschon (2016) exhibited transformational leadership traits. Furthermore, one participant described a fire officer's role to include motivating all department members to achieve the organization's overall mission.

Valero et al. (2015) found that when a leader of an emergency services department practices transformational leadership, their followers view the organization as highly resilient. Additionally, these researchers discuss that in an emergency, the transformational leader's ability to make timely and informed decisions that motivate their followers to perform the necessary actions can help overcome emergency scenarios' unpredictability. Smith et al. (2016) discuss that implementing transformational leadership practices within the fire service can positively impact the department's safety climate. Geier (2016) found that transformational leadership was the best
predictor of follower performance when leading during routine, non-emergency operations. Furthermore, transformational leadership and fostering an environment of growth and support can enhance firefighters' intrinsic motivation (Church, 2013). Mayr (2017) highlighted transformational leadership as an impactful leadership style in the volunteer fire service highly mediated by the firefighters' perceived social impact.

**Transactional Leadership.** Odom (2011) found that participating career firefighters in Houston, Texas preferred transactional leadership practices much less than transformational leadership practices. Shin (2014) found that transactional leadership was the second most prominent leadership style in Oklahoma's fire chiefs. Furthermore, Shin identified that transactional leadership positively correlates with participating volunteer firefighters' organizational commitment in Oklahoma. Geier (2016) found that the leadership practices associated with transactional leadership, expressly contingent reward, were predominant indicators of followers’ performance when leading in extreme or emergency events. Compliance, obedience, and safety adherence are achieved by utilizing transactional leadership (Arnold et al., 2016; Willis et al., 2017).

**Laissez-Faire Leadership.** Odom (2011) identified that laissez-faire leadership was the least preferred leadership style among participating career firefighters in Houston, Texas, across various generational cohorts and the fire department's multiple ranks. The passive/avoidant style was much less prominent than transformational or transactional, as identified in participating Oklahoma volunteer fire chiefs (Shin, 2014). Similarly, Becker (2016) found that fire service leaders were significantly less likely to practice laissez-faire leadership than the standardized population identified by Bass and Avolio (2004). Shin (2014) also found that volunteer firefighters' organizational commitment decreased when the fire chief practiced passive/avoidant
leadership. Geier (2016) discovered that the practice of passive/avoidant leadership does not change between routine and emergencies.

**Additional Leadership Styles.** Historically, chief officers in the fire service have been shown to practice autocratic leadership through the design and implementation of policies and procedures which provide direct and succinct guidance on the operational expectations (Smith et al., 2016). The authoritarian leadership style is a valuable practice in the fire service, as an authoritative leader aids their followers in understanding how they fit into the organization and motivates their followers to achieve the mission (NVFC, 2018). However, the authoritarian leadership style can drive volunteer firefighters away from their departments due to the perception of micro-management (US Fire Administration, 2007).

Sedlmeyer and Dwyer (2018) noted that 80% of their study participants utilized servant leadership principles in managing a fire department. Alternatively, Buttenschon (2016) found that 25% of study participants either self-identified or exhibited servant leadership traits as a chief fire officer. Russell et al. (2015) found that many fire and emergency services organizations showed servant leadership characteristics and concluded that due to the positive impact on job satisfaction, an increase in servant leadership within the fire service would be beneficial. Their research concluded that leaders in the fire and emergency services must, above all other things, serve their followers through continuous development, active listening, and understanding their needs. Reed (2015) discussed that firefighters who served under chief officers, with servant leadership behaviors, felt a higher sense of empowerment and often took on more accountability and responsibility.
Job Satisfaction

Enhancing job satisfaction can lead to improvements in job performance, organizational commitment, and attendance while lowering turnover intention (Rahimi et al., 2016). Job satisfaction, driven by the organization's culture and leadership, is connected to organizational citizenship behaviors (Al-Asadi et al., 2019). In addition to the satisfiers identified in Herzberg's two-factor theory, performing meaningful work, shared decision-making, utilization of individual strengths and knowledge, contributing to the community, and having pride and influence in the organization are contributing factors to job satisfaction (Farrington & Lillah, 2019; Kim & Fernandez, 2017).

Leadership and Job Satisfaction. Extrinsic job satisfaction implications were more significant due to the connection between the hygiene factors of social relationships and development (Al-Asadi et al., 2019). Furthermore, psychological empowerment is an essential mediator in achieving job satisfaction and is achieved through collective decision-making, goal internalization, and shared responsibilities. Leadership can positively impact employees' job satisfaction by building trust and interpersonal relationships between leaders and their employees (Akdol & Arikboga, 2017; Asencio, 2016). Organizations where leaders allow workers to have greater control over work practices, represent a culture that fosters employee satisfaction (Paull & Omari, 2015). Additionally, leadership support and recognition are critical motivators that improve employees' and volunteers' job satisfaction and strengthen their commitment to the organization (Bowling et al., 2015).

Transformational Leadership. Most of the previous research into the correlation between leadership styles and job satisfaction presents that transformational leadership is more closely related to job satisfaction than other popular leadership styles (Burns, 2007).
Additionally, the individualized consideration factor of transformational leadership has a significantly larger, positive relationship with job satisfaction than transactional leadership (Asencio, 2016). Each of the four dimensions of transformational leadership shows a positive relationship to employee job satisfaction (Abelha et al., 2018; Puni et al., 2018). Sayadi (2016) discussed that the increases in charismatic leadership use resulted in higher job satisfaction percentages. Aydogmus et al. (2018) discussed that perceived transformational leadership has a direct and indirect positive relationship with job satisfaction. Transformational leaders influence job satisfaction by practicing fairness, seeking mutual respect, promoting pride, and intellectually challenging their employees (Puni et al., 2018). Alternatively, Lan et al. (2019) found that transformational leadership harmed teachers' job satisfaction, potentially due to participants' extra burden to meet the leader's developmental and transformational goals.

**Transactional Leadership.** When employees experience feelings of trust and autonomy through the utilization of transactional leadership, specifically active management-by-exception, the employees reported a greater sense of pride and satisfaction with their jobs (Wuryanti & Rismawan, 2020). Rathnaraj and Vimala (2018) identified a positive relationship between transactional leadership and employee job satisfaction; however, these impacts were limited to indirect effects. Similarly, Lan et al. (2019) discussed that transactional leadership practices positively affect employees' outward job satisfaction but do not impact the employee's inner feelings. Puni et al. (2018) found that the transactional leadership factor of contingent reward has a significant positive effect on employee job satisfaction, and this indicator exceeded all the transformational leadership factors.

**Laissez-Faire Leadership.** Several studies indicate a significant negative relationship between laissez-faire leadership and job satisfaction (Barnett, 2017; Sayadi, 2016; Shah et al.,
Skogstad et al. (2014) found that laissez-faire leadership resulted in overall negative impacts on employee job satisfaction; however, they identified the effects as long-term, taking up to two years before the effects were recognized. Alternatively, Ghorbanian (2012) found no significant relationship between the passive/avoidant leadership style and participating in emergency medical technicians' job satisfaction. Additionally, Pishgooie et al. (2018) identified a positive relationship between Iranian hospital nurses' job satisfaction and passive/avoidant leadership practices by their head nurses.

**Job Satisfaction in Volunteer Organizations.** Smith and Grove (2017) identified helping others in a time of crisis, or altruistic inspiration, as the leading cause of American Red Cross volunteers' satisfaction. Additionally, these researchers identified disorganization, management inefficiencies, and communication issues as leading causes of dissatisfaction. Nearly all the identified factors for dissatisfaction are opportunities that can be mitigated by effective leadership practices. Organizational leadership must consider the extrinsic motivators of fairness and equal treatment of all members as impactful to a volunteer's satisfaction (Hurst et al., 2017). One of the critical drivers for volunteer satisfaction is the relationship between the leadership and volunteers; specifically, the leader must balance managing expectations and providing opportunities for shared leadership and recognition for performance (Schreiner et al., 2018). Senses-Ozyurt and Villicana-Reyna (2016) found a significant positive relationship between leadership integrity and inclusiveness with volunteer job satisfaction.

**Job Satisfaction of Volunteer Firefighters.** Paramilitary organizations demand members to be prepared to accept the intense rules and rank structures, which are characteristics of these structures (Chappell & Lanza-Kaduce, 2010). The volunteer fire service requires chief officers to practice two forms of leadership. The emergency scene runs with military-like
precision and structure (US Fire Administration, 2007). In contrast, the management at the station should be a more participative style of leadership. An organization’s leadership, which derives from both power and rank, must protect against members' over-legislation to prevent frustration from their followers (Archer, 1999). Transformational leadership lessens the negative impacts that can result from operating with a bureaucratic organizational structure by overcoming the feelings of powerlessness and meaninglessness through shared decision-making and development (Sarros et al., 2002).

The chief officers of a fire department must be consistent in their approach to leading their firefighters, quickly cause adverse impacts to satisfaction down the chain of command (Alyn, 2012). Many volunteer firefighters decide to be a part of a department to fulfill the need to serve others and their community; however, interactions between other personnel and leadership present an opportunity for lowered satisfaction (Herald, 2001). Volunteer firefighters desire to share some ownership within the organization and to have their contributions recognized (US Fire Administration, 2007). Introducing autonomy into a volunteer fire department by allowing firefighters to utilize their strengths and weaknesses to guide their training needs and task assignments can improve job satisfaction (Henderson & Sowa, 2019).

Volunteer firefighters who join a fire service that is motivated by assisting their community are more likely to be satisfied with their role as a volunteer (Henderson & Sowa, 2019). Caring for others and providing developmental opportunities were noted as the highest influencers for job satisfaction (Farrington & Lillah, 2019). Iqbal and Hashmi (2015) found that only 38.5% of the surveyed volunteer firefighters experienced high job satisfaction levels and identified a volunteer firefighter's duties as detractors from job satisfaction and retention. The Australian volunteer emergency services identified a positive impact on volunteers' job
satisfaction and retention rates following introducing a new training program that focused on understanding and meeting their volunteers' psychological needs (Jones & Berry, 2017).

Firefighters and fire officers are more intrinsically motivated by a sense of purpose and service; however, firefighters also exhibit some need for extrinsic motivation, mainly using recognition (Church, 2013). The perception of the importance of the services provided by a volunteer fire department can help to improve job satisfaction and to recognize the need for continued service to the department and the community (Henderson & Sowa, 2019).

**Turnover Intention**

There are many reasons why an individual may choose not to continue their service with an organization, including improper alignment of skillsets with assignments, failure to recognize contributions, ineffective training programs, and poor leadership (Eisner et al., 2009). Additionally, the modern workforce is aging, which presents a challenge for today's business leaders to motivate and retain a committed, skilled workforce (Guha & Chakrabarti, 2015).

Babalola et al. (2016) identified a significant relationship between frequent change and increased turnover intention of employees and that the actions of the organization’s leadership mediate the impact from constant change. Similarly, Long (2018) proposed that while leadership can impact an employee's turnover intention, it is more likely that the relationship between the employee and the organization drives the turnover intention, with the leadership being a mediating factor.

**Leadership and Turnover Intention.** The individual relationships that leaders create with their followers by identifying their needs and developing beyond their deficiencies positively impact turnover intention (Turgut et al., 2017). A leader’s positive depiction of the organization transfers to employees and aids in developing organizational commitment and trust in both the business and the leader, which results in lowered turnover intention (Kashyap &
Rangnekar, 2016). Huning et al. (2020) identified perceived organizational support and embeddedness in the job and organization as servant leadership mediators on employee turnover intention.

**Transformational Leadership.** Leaders who represent the concept of idealized influence utilized a shared purpose to gain the respect and trust of their followers to achieve commitment to both the leader and the organization, which is a precursor to lowering employee turnover (Eberly et al., 2017; Ng, 2017). Inspirational motivation allows leaders to recognize good work, leading to improvements in their followers' organizational commitment, job performance, purpose and decreased turnover intention (Aldatmaz et al., 2018; Eberly et al., 2017). By providing opportunities for problem-solving and innovation, leaders who practice intellectual stimulation foster an environment that challenges employees and positively impacts employee retention (Jolly & Masetti-Placci, 2016; Ng, 2017). Finally, leaders who portray individualized consideration produce feelings of value and personal development, leading to improved job satisfaction, trust, dedication, and employee retention (Duan et al., 2017; Kerdngern & Thanitbenjasith, 2017). Conversely, Sayadi (2016) discussed that while charismatic leadership positively impacts job satisfaction, it does not significantly impact employees' turnover intention.

**Transactional Leadership.** Several studies have shown significant positive relationships between transactional leadership and employees' turnover intention (Luthra & Singh, 2019; Masood et al., 2020). Additionally, Luthra and Singh (2019) found that transactional leadership had a more significant impact on improving employee turnover intention than transformational leadership due to reward as a motivating driver to remain with the organization. Alternatively, Maaitah (2018) and Eom (2015) found that transactional leadership resulted in no significant relationships with employee turnover intention.
**Laissez-Faire Leadership.** Laissez-faire leadership has been shown to have a significant, negative relationship with employees' intention to remain with an organization (Masood et al., 2020; Sayadi, 2016). Passive/avoidant leadership lacks the support, feedback, and direction that can lead to employee burnout and increased employees' turnover intention (Masood et al., 2020; Usman et al., 2020). Conversely, Pisghooie et al. (2018) indicated a positive relationship between turnover intention and passive/avoidant leadership practices in Iranian hospitals.

**Retention in Volunteer Organizations.** There are countless reasons that an individual may decide to join a volunteer organization; however, to retain these volunteers, the organization must demonstrate their service's value and recognize their contributions (McBey et al., 2017). The tenure of volunteering is undergoing a transition from a long-term commitment to episodic and short-term ventures (McNamee & Peterson, 2015). These researchers noted this as a concern for volunteer organizations due to the time and financial investments required for volunteer success. Turnover is a costly endeavor for both paid and volunteer organizations; thus, organizations must seek to understand the factors that impact an individual's turnover intention (Fallon & Rice, 2015). Additionally, volunteer organizations must try to retain their leadership, which also identifies the need for satisfaction and the opportunity for meaningful work as reasons to remain with the organization (Posner, 2015).

Before a leader can effectively manage a volunteer organization, they must first identify why individuals choose to volunteer and then leverage these drivers to retain volunteers (Kupietz, 2019). A leading motivator for volunteers is their passion for the organization, and when leaders can identify and foster this love, they will create an environment that preserves the volunteer workforce (Bang, 2015; Lamb & Ogle, 2019). Furthermore, recognition is a critical component of increasing volunteer retention (Hager & Brudney, 2015). Support and recognition
of volunteers are vital components that generated satisfaction and intent to remain with the organization (Fallon & Rice, 2015). Volunteers are more likely to stay active in a volunteer organization when the organization's leadership forms individual relationships with the volunteers, shares decision-making responsibilities, and makes the volunteer feel needed and valued (Senses-Ozyurt & Villicana-Reyna, 2016). Job satisfaction is higher, and turnover intention is lower when volunteers view the organization's leadership as fair and uniform in their followers' treatment (Hurst et al., 2017).

**Volunteer Firefighter Retention.** For years volunteer fire departments could count on a steady flow of members driven by strong family traditions and camaraderie (Seegers, 2012a). However, recently the number of volunteers joining volunteer fire departments has slowed, and much of the force is aging out of service (Seegers, 2012b). Additionally, the fire service is experiencing a transition from decades of service to shorter tenures for volunteers (Malinen & Mankkinen, 2018). With this reduction comes the need to determine how to attract volunteers and how to retain them. Volunteer firefighter retention is vital due to the high costs of the time, money, and resources invested in preparing each new firefighter for service (NVFC, 2018).

Many factors can impact a volunteer firefighter's decision to leave a department, including the time demands, training requirements, family or career conflicts, personal injury, relocation, aging, and leadership (Austin, 2003; NVFC, 2020). The volunteer fire service faces an aging dilemma, with 54% of firefighters over 40 (NVFC, 2020). A study of Finnish volunteer firefighters concluded that lack of time to dedicate to the department and schedule conflicts with school, work, or other hobbies were the leading causes of volunteer turnover (Malinen & Mankkinen, 2018). The study also noted a hostile atmosphere within the department (36%) and interpersonal conflict with leadership (30%) as barriers to continued volunteer service. Similarly,
a study by the Public Safety Institute at Saint Joseph's University (2004) found that nearly half of
the respondents noted organizational leadership problems or poorly managed internal conflict as
their reason for leaving a volunteer fire department. The study also indicated that 44.5% of
participants suggested that satisfaction achieved through receiving praise and recognition drove
their desire to continue to be a part of the organization. How chief officers interact with
firefighters and ineffective communication among the ranks is a commonly identified factor that
can negatively influence volunteer firefighter retention (SalterMitchell Inc. 2015).

Snook et al. (2006) proposed that for volunteer fire officers to retain firefighters, the
department must achieve the following elements: meet individual firefighter needs, provide
recognition and reward, provide appropriate leadership to all members, and offer a challenging
learning environment. Proactive leadership effective for the fire service's specific needs is crucial
to retaining volunteer firefighters (US Fire Administration, 2007). Recently, volunteer fire
departments have begun to offer incentive programs based on retention commitments, level of
response, and routine attendance to boost satisfaction among the members, thus improving
retention rates (Seeger, 2012a). The fire department's organizational culture is also an essential
aspect of retaining volunteer firefighters and is guided by the department's chief fire officers
(NVFC, 2018). The department's administration must foster an organizational culture of
inclusion, shared decision-making, and satisfaction to improve volunteer firefighter retention
(Gagné et al., 2019). Leadership can help overcome the negative aspects of the bureaucratic
organizational structure by fostering an environment of development and inclusion, thus
improving volunteer firefighter satisfaction (Russell et al., 2015). Transformational leadership
highlights individuals' value, cultivates a sense of purpose, and can combat the rigid
organizational structure required by the fire service; thus, leading to improved retention (Sarros
et al., 2002). However, Long (2018) identified no significant correlations between the constructs of transformational leadership and retention of volunteer firefighters.

**Theories Supporting the Theoretical Framework**

**Transformational Leadership.**

**History.** James Downton first developed the theory of transformational leadership in 1973; however, it did not gain popularity as an emerging leadership strategy until 1978, when James Burns introduced it in his book *Leadership* (Northouse, 2016). Burns (1978) described transformational leadership as the process by which a leader builds a relationship with their followers, resulting in improved follower motivation and morale. Bass (1985) further developed the theory of transformational leadership by explaining that transformational leadership is measured based on the influence passed from leaders to followers. Since its conception in the early 1980s, transformational leadership has continued to develop and is considered one of the most popular modern leadership approaches (Northouse, 2016).

**Transformational Leadership Theory.** Transformational leadership's focus is fostering change in leaders and those they lead (Kendrick, 2011). Transformational leadership relies on influence rather than the power of rank or position (Schaubroeck et al., 2016). The reliance on influence is an innovative approach to leadership as it changes the role of the leader from a manager to a partner and coach (Mathew & Gupta, 2015). It requires the leader to lead by example and be a role model to motivate their followers to achieve a common goal by performing above expectations (Northouse, 2016). Northouse (2016) described this form of leadership as one that is "concerned with emotions, values, ethics, standards, and long-term goals" (p. 161). It requires leadership to persuade their followers to accept certain behaviors to achieve the desired results (Bush, 2018). The transformational leadership theory carries high
validity when explaining how followers perceive many behavioral, attitudinal, and relational outcomes (Hock et al., 2018).

**Characteristics of a Transformational Leader.** Four dimensions comprise the transformational leadership theory, including idealized influence (charisma), inspirational motivation, intellectual stimulation, and individualized consideration (Cheung & Wong, 2011). Northouse (2016) described idealized influence (charisma) as awareness and attention to their followers' emotions. The leader's influence represents their role as a model for their followers' expected actions and relies on the trust between leaders and followers as a critical aspect of achieving idealized influence (Kendrick, 2011; Mathew & Gupta, 2015). Idealized influence is fundamental for allowing followers to develop a deep trust and respect for the leader (Northouse, 2016). When leaders create an environment that combines positive reinforcement and encouragement, followers achieve higher performance and are inspired to perform at greater capacities to become leaders themselves (Kendrick, 2011).

The second factor, inspirational motivation, is founded around the leader who inspires the followers by lifting their spirits and increasing their motivation (Mathew & Gupta, 2015). The leader serves as an inspiration to their followers by setting high expectations and motivating them to become united in their mission and vision (Northouse, 2016). This factor builds a vision for the future, and the leader offers that vision to the followers and ensures that they are all valued contributors to reaching the goals outlined in the concept (Gumusluoglu & Islev, 2009). Inspirational motivation relies on the follower's abilities to make the right decision during situations that may present difficulties and challenges (Kendrick, 2011). Inspirational motivation prioritizes the development of shared goals among all team members (Kendrick, 2011). This
factor depends on the leader to inspire their followers to maximize their potential to reach the collective team goal instead of merely focusing on their self-interest (Northouse, 2016).

The third factor, intellectual stimulation, is the drive created by leaders to ignite their creativity and utilize innovation to complete their tasks (Northouse, 2016). Kendrick (2011) describes that intellectual stimulation “challenges the follower to question the basic assumptions and to generate a more creative solution to problems” (p. 14). Leaders are of significant influence when they utilize intellectual stimulation to challenge their followers' methods of thinking because it fosters problem-solving and improves methodologies (Mathew & Gupta, 2015). Intellectual stimulation promotes an environment where independent work can occur in a supportive environment that encourages followers to learn and explore new ideas and innovations (Northouse, 2016). This approach expands the followers' knowledge base and stimulates new thought processes and concepts to otherwise outdated and old procedures (Gumusluoglu & Islev, 2009). It propels followers to evaluate their values and beliefs and examine their interactions with the leader's and the organization's values and beliefs (Northouse, 2016).

The fourth factor, individualized consideration, creates feelings of value among followers while still providing the necessary feedback, support, and growth opportunities (Kendrick, 2011). When the leader supports and meets each follower's specialized needs independently, they can achieve individualized consideration (Mathew & Gupta, 2015). When leaders foster a supportive network for their followers by acting as active listeners and advisers for their team, they can create an environment that encourages individualized consideration (Northouse, 2016). To succeed with individualized consideration, leaders form meaningful relationships with each of their followers to assess and leverage each follower's strengths and weaknesses (Gumusluoglu
leaders must be cognizant of each team member's individualized needs to make informed decisions to meet their specific needs in the form of directives and support (Northouse, 2016).

**Strengths of Transformational Leadership.** Transformational leadership is one of the most effective leadership styles in shaping followers' performance and development in the military, uniformed, and corporate organizations (Sosik et al., 2018). Cheung and Wong (2011) stated that "a transformational leader provides verbal persuasion and psychological arousal to develop employees' self-efficacy" (p. 660). Followers who prefer transformational leaders often describe their leader as providing vision, support, and encouragement, usually found "out front advocating change for others" (Northouse, 2016, pp. 176-177). Transformational leaders empower their followers to reach their maximum potential and drive exceptional performance (Gumusluoglu & Islev, 2009). Sosik et al. (2018) discussed that transformational leadership behaviors are critical to character strengths important in the military and uniformed service, including courage, integrity, social intelligence, and self-control. A further strength of the transformational leadership approach is that it can be taught and adapted for utilization at all management levels and various organizations (Northouse, 2016; Sosik et al., 2018).

Additionally, some perceive transformational leaders as having greater effectiveness in leadership than other leadership approaches. Transformational leaders receive promotions at a higher frequency, produce improved fiscal and operational outcomes, and have greater effectiveness in leading people than different leadership approaches (Mathew & Gupta, 2015).

**Weaknesses of Transformational Leadership.** Some critics of the transformational leadership theory disagree that the four factors are independent of one another and should be considered a single element (Northouse, 2016). Bass and Steidlmeier (1999) discussed that...
detractors argue that transformational leadership is unethical as the leader leverages their followers' emotions to manipulate their behaviors to ignore their personal needs to achieve the team's needs. Transformational leadership is a far-reaching style that is also very broad in scope, thus losing clarity on command parameters (Northouse, 2016). Vito et al. (2014) opined that followers of a transformational leader rarely influence the leader because they are a captain of idealized sovereignty. Additionally, some critics suggest that you cannot teach transformational leadership, but instead, the theory relies on innate abilities or characteristics present in an individual (Northouse, 2016).

Transactional Leadership.

**History.** Max Weber first posited the ideals associated with transactional leadership when he described rational-legal leadership in 1947. Burns (1978) advanced Weber’s theory of transactional leadership driven by responsibility, fairness, and fulfilling commitments. Bass (1985) continued to develop the theory of transactional leadership and introduced the three guiding dimensions of contingent reward, active management-by-exception, and passive management-by-exception. Today, transactional leadership is an instrumental part of the full range leadership model, a useful business leadership model, and a complementary approach to transformational leadership; however, it is also criticized as an ineffective leadership practice (McCleskey, 2014; STU, 2014; 2018b).

**Transactional Leadership Theory.** Transactional leadership utilizes interactions and exchanges between a leader and their followers intended to offer benefits to both parties (Bass, 1985; Burns, 1978; McCleskey, 2014). Transactional leaders establish a clear structure for the organization by defining specific roles and responsibilities for each member (Afsar et al., 2017). Transactional leadership is effective in highly structured organizations and when the individual’s
goals and self-interest align with its interest (Jensen et al., 2019; STU, 2014; 2018b).

Transactional leaders influence their followers by administering rewards or corrective actions based on performance (McCleskey, 2014). Leaders rely on the mutual exchange to develop an understanding with their followers where achieving goals is rewarded while failure to achieve goals receive punishments (Afsar et al., 2017; Deichmann & Stam, 2015). In contrast to transformational leaders, transactional leaders rely on their authority to direct and motivate their followers (STU, 2014; 2018b). Leaders monitor their followers for adherence to the rules and expectations and provide consequences if deviances are identified (Afsar et al., 2017).

**Characteristics of a Transactional Leader.** The three factors that comprise the transactional leadership approach are contingent reward, active management-by-exception, and passive management-by-exception (Bass & Avolio, 2004). Contingent reward is the agreement between leaders and followers where followers exchange effort for specific rewards or recognition (Northouse, 2016). Contingent reward requires a clear leader-follower relationship with established boundaries and mutually beneficial outcomes (Afshari & Gibson, 2016). Contingent rewards must represent the follower's effort or performance to be considered effective motivators (Jensen et al., 2019). Contingent reward relies on the follower's satisfaction to effectively drive follower performance (Afshari & Gibson, 2016).

Management-by-exception entails corrective coaching, negative feedback, and leaders' negative punishment (Northouse, 2016). Active management-by-exception leaders monitor their followers for mistakes or break the rules and take corrective actions as necessary (Kanat-Maymon et al., 2020). By tracking employees and correcting undesirable actions early, the active leader can address issues before they become larger problems (Dartey-Baah & Addo, 2018). Passive management-by-exception leaders intercede after problems have already occurred
Followers of passive management-by-exception leadership express little concern for employees (Flatau-Harrison et al., 2020).

**Strengths of Transactional Leadership.** Transactional leadership creates an environment for followers to concentrate on operational excellence by incentivizing customer service, quality, production rates, and cost reductions (McCleskey, 2014). Transactional leaders perform best in organizational environments that are stable, certain, and routine (Afsar et al., 2017). Transactional leaders establish the rewards and penalties that motivate workers to follow the plan to quickly achieve organizational goals (STU, 2014; 2018b). Through the exchange, the leader can achieve performance goals, provide motivation through contractual agreements, avoid organizational risks, and improve operational efficiency (McCleskey, 2014). Transactional leadership is effective for emergency services organizations as the clearly defined expectations allow everyone to know their roles and responsibilities during crises (STU, 2014; 2018b). Similarly, Flatau-Harrison et al. (2020) found that the transactional leadership practices of rewarding positive behavior and punishing negative behavior drive safety-conscious operations in dangerous situations.

**Weaknesses of Transactional Leadership.** A transactional leader does not individualize the follower's needs or provide personal growth and development (Northouse, 2016). The need for constant gratification from the exchanges between the leader and follower often leads to resentment and short-term relationships between the participants (McCleskey, 2014). Transactional leaders maintain normality and utilize control on their followers, which can reduce entrepreneurial behaviors, as followers are not encouraged to explore new opportunities or exceed their job responsibilities (Afsar et al., 2017). Leaders avoid the risks associated with change and innovation by maintaining constant stability and the status quo (Deichmann & Stam,
Transactional leadership stifles individual creativity, and personal initiative as the goals and objectives are established with defined methods and expectations (STU, 2014, 2018b).

**Passive/Avoidant Leadership.**

**History.** Kurt Lewin identified laissez-faire leadership as one of the three primary leadership styles in the 1930s (STU, 2014, 2018a). Bass (1985) continued to advance the concept of laissez-faire leadership and termed the behaviors as passive/avoidant leadership, which allows autonomy to the followers. Today, passive/avoidant leadership continues to be a focus of research, with various research studies discussing the destructive impacts of avoidance (Buch et al., 2015; Breevaart & Zacher, 2019; Kanat-Maymon et al., 2020) and others positing the positive effects of autonomy (Pahi & Hamid, 2016; Yang, 2015).

**Passive/Avoidant Leadership Theory.** Passive/avoidant leadership is described as a hands-off approach to leadership, where leaders take little action, give little feedback, provide no opportunities for development, and relinquish responsibilities (Northouse, 2016). Passive/avoidant leadership relies on the followers' skills and motivation to achieve the organization's goals (STU, 2014, 2018a). Laissez-faire leaders require their followers to make decisions and perform tasks autonomously and provide all the necessary resources to be successful (Sayadi, 2016). Passive/avoidant leadership behaviors are useful practices when leaders can form strong teams that are experts in their responsibilities and are given the latitudes to operate as they see fit (STU, 2014, 2018a).

**Strengths of Passive/Avoidant Leadership.** Passive/avoidant leadership is useful when organizations face numerous decisions, decision-making is easy, tasks are routine or non-complex, or there are few rules and regulations (Sayadi, 2016). Passive/avoidant leadership creates an environment where followers are highly responsible for their achievements and
failures and can make their own decisions (STU, 2014, 2018a). Passive/avoidant leadership allows employees to solve their own problems and work through situations that often represent excellent learning and development opportunities (Sayadi, 2016).

**Weaknesses of Passive/Avoidant Leadership.** Passive/avoidant leaders are withdrawn from their leadership duties and decision-making responsibilities (Buch et al., 2015). Passive/avoidant leadership is often associated with neglecting employees and their needs resulting in decreased motivation and performance (Kanat-Maymon et al., 2020). When laissez-faire leaders manage groups, they often lack time management due to ambiguous expectations (STU, 2014, 2018a). Breevaart and Zacher (2019) found that followers of passive/avoidant leaders had lower levels of trust in their leaders and lower perceptions of leader effectiveness when compared to transformational leaders. Buch et al. (2015) discussed that laissez-faire leadership creates higher burnout in employees from the lack of leader support.

**Herzberg's Two-Factor Theory.** Herzberg proposed the two-factor theory of motivation, which argues that job satisfaction and dissatisfaction are two different scales driven by different sets of factors (Herzberg, 2008; Herzberg et al., 1959). According to his theory, satisfaction is associated with motivators, while hygiene factors trigger dissatisfaction (Herzberg, 1968, 2008). The motivators are linked to the work itself and include recognition, achievement, responsibility, and development. Alternatively, the hygiene factors are related to the work environment, which provides for compensation, benefits, relationships with others, and organizational policies and procedures. Herzberg's theory's foundation was research and observations of paid employees; however, with caution, the method can be applied to volunteer organizations (Lamb & Ogle, 2019).
Hur (2018) found that leaders in the public sector aligned with the two-factor theory's general principles in that the work itself had a more significant impact on their job satisfaction rather than the work environment. Substantial improvements to job satisfaction were achieved when public sector employees had the authority to perform their jobs, had a sense of pride, and recognized their efforts. Similarly, when volunteers are challenged and given responsibility, they exhibit higher levels of pride and a sense of achievement, which leads to improved satisfaction (Lamb & Ogle, 2019). Smith and Grove’s (2017) findings support Herzberg's theory, where the hygiene factors do not contribute to the satisfaction of volunteers, but the policies, procedures, and managerial issues create dissatisfaction.

**Maslow's Hierarchy of Needs.** Maslow's (1943) hierarchy of needs theory consists of five physiological needs that motivate humankind, starting with subsistence, security, association, respect, and self-actualization. Evaluating Maslow's theory from the perspective of work brings together compensation, benefits, organizational culture, and leadership into a single view that can impact an employee's motivation and satisfaction (Stewart et al., 2018). There are two levels of Maslow’s theory: the lower level consisting of the necessary physical, safety, and security needs (Rasskazova et al., 2016). Additionally, the levels of need are "complementary, not substitutable" (p. 551) as employees showed the highest level of motivation, commitment, and engagement when the organization and job met all their needs.

Maslow (1943) argued that for an individual to move to the next level of the hierarchy, they must achieve all the previous needs. Rasskazova et al. (2016) proposed that low-level conditions will aid in the development of the higher-level needs; thus, helping the individual achieve maximum satisfaction. An employer's compensation and benefits aid in meeting the lowest level of needs (Steward et al., 2018). In contrast, the higher-level needs require an
organization's leadership to recognize employees' efforts and provide the opportunity to perform meaningful work. The highest level of self-actualization is an awkward stage to achieve, as the individual must believe what they bring to the organization is essential, valued, and recognized at all levels of the organization (Fisher & Royster, 2016).

**Self-Determination Theory.** The self-determination theory presents three psychological needs of people for optimal performance and well-being: autonomy, belonging, and competence (Gagné et al., 2019; Jones & Berry, 2017). This theory focuses on the comparative strength of autonomous motivation against controlled motivation (Gagné & Deci, 2005). The three needs have a simultaneous effect on the individual, did not mediate other individual needs, and are not reliant on achieving the low-level needs offered by Maslow (Rasskazova et al., 2016). Additionally, the three conditions associated with the self-determination theory are strongly related to improved employee morale and employee motivation. Following the integration of the self-determination theory into the training of volunteer leaders of emergency response organizations in Australia resulted in a positive impact on volunteer personnel retention (Jones & Berry, 2017). The self-determination theory varies from other motivation theories due to the focus on the type of motivation rather than the amount (Gagné & Deci, 2005). When evaluated from the self-determination theory perspective, influential, internalized extrinsic motivation was a useful predictor for employee performance (Zhang et al., 2016).

**Summary of the Literature Review**

Professional organizations must maintain employee satisfaction to ensure that their employees remain loyal to the organization, thus reducing employee turnover intention (Randhawa, 2007). This principle can also be applied across volunteer organizations and, more specifically, volunteer fire departments and must begin with effective leadership of the
organization. Volunteers are not contractually bound to the organization; thus, turnover is far more pervasive and potentially volatile for an organization (Mayr, 2017). Many factors impact today's issue with retaining volunteer firefighters on a community, state, national, and international level. Among these factors, one of the leading reasons that firefighters leave their departments is leadership problems (US Fire Administration, 2007).

A change is necessary to allow fire departments to attract and retain the firefighters required to meet the increasing demands. This culture shift must be led by the chief fire officers and include all department members (NVFC, 2018). When chief fire officers create an environment that makes volunteer firefighters feel a sense of belonging, shared ownership of the organization, and development, it leads to improvements in firefighter motivation, satisfaction, and retention (McGill et al., 2019). The future of the volunteer fire service rests in the hands of the current leaders; volunteer fire leaders must strive to understand what motivates a volunteer and develop their leadership styles to meet the firefighters' needs (Kupietz, 2019).

Summary of Section 1 and Transition

This quantitative research study examined the relationship between the leadership style of chief fire officers and the job satisfaction and the turnover intention of volunteer firefighters in North Central North Carolina. Transformational, transactional, and passive/avoidant leadership theories were evaluated to determine if the leadership style and behaviors impacted job satisfaction among the participating volunteer firefighters. Additionally, the turnover intention was examined for these firefighters to predict if effective leadership can aid in reducing volunteer firefighter turnover. The knowledge gained from this study will assist in the continuous improvement of training programs for fire officers and firefighters in North Central North Carolina.
The next section will discuss the collection and assembly of the data for this research study. The study participants, population, and sampling will be presented and defended. Additionally, the process for analyzing the data will be discussed, and the data's reliability and validity.

Section 2: The Project

This section of the quantitative correlational study presents the design utilized to examine the impact of leadership behaviors of selected chief fire officers on the job satisfaction and the turnover intention of volunteer firefighters in North Central North Carolina. Data collection was completed using generally accepted survey instruments that are reliable and valid for measuring their intended results. The data collected were aggregated and evaluated using the Statistical Package for the Social Sciences (SPSS) software to determine the data's linear correlation. First, the section provides the role of the researcher and the study participants. The research method and design, study population, and sample population are presented. Then, the data collection, organization, and analysis techniques are reviewed. The section concludes with a discussion of the reliability and validity of the study and study instruments.

Purpose Statement

The purpose of this quantitative correlational study is to investigate whether a relationship exists between the leadership styles of the participating chief fire officers and job satisfaction and the turnover intention of the volunteer firefighters they lead. This study expands the existing body of knowledge by examining the relationship between chief fire officer leadership style and the job satisfaction and turnover intention of volunteer firefighters. To retain volunteer firefighters, chief fire officers must understand the impact of their leadership style on job satisfaction and, ultimately, firefighters' intention to remain active members of the
department (Gagné et al., 2019; Long, 2018; Malinen & Mankkinen, 2018). Evaluation of this problem occurs through focused analyses on the measure of job satisfaction and turnover intention of volunteer firefighters in North Central North Carolina.

Additionally, the purpose of this research is to provide information for creating positive change in the retention of volunteer firefighters through effective leadership practices by chief fire officers. This study's findings will provide the leadership of volunteer fire departments and associated organizations with useful information that can aid in the development of leadership training initiatives. Understanding the impact of various leadership behaviors will help institute effective management practices in the volunteer fire service. Improvements to volunteer firefighters' job satisfaction and turnover intention represent a potential benefit to volunteer fire departments' individuals and communities.

Role of the Researcher

The researcher's role included identifying the study population, collaborating, managing the research process, performing data collection and analysis, publishing the results, and evaluating the study's findings (Kyvik, 2013). The quantitative researcher identified the population and further defined a representative study sample to maintain an acceptable risk tolerance, repeatability, certainty, and precision (Hoy & Adams, 2015). The researcher designed the data collection process to show respect for the participants and their privacy, operate within relevant laws and policies, and maintain regard for the study participants' culture and norms (Fassinger & Sorrow, 2013). Furthermore, the researcher recognized the study participants' cultural and societal histories, values, customs, and traditions.

This research study was collected using existing survey instruments that have been developed and validated by their respective authors and independent researchers. The
The researcher’s role was limited to contacting the chief fire officers to determine their willingness to allow their department to participate in the research process, data organization and entry, and statistical analysis of the data. Data collection was performed using a paper-and-pencil survey questionnaire. Surveys were distributed to participants and administered at the fire department by an officer to avoid potential impacts on participants' work schedules, accessibility, or comfort (Fassinger & Sorrow, 2013). The use of internet-based surveys has gained popularity as a suitable tool for research; however, it can limit some study participants (Fowler, 2014).

The researcher calculated the study’s sample population based on the estimated total population for the geographic study area. The researcher verified that all surveys included in the study were complete, the firefighter met all participation requirements, and received a minimum of 339 surveys before concluding the data collection phase. After data collection, the researcher assembled and consolidated the data into a format to be analyzed with the SPSS software. During data entry, the researcher avoided the potential for error in both coding errors and transcription mistakes. To overcome the potential for human errors during data entry, proper data cleaning and data entry methods were implemented throughout the data analysis process (Fowler, 2014). Once the analysis and investigation were complete, the findings were generated and reported. During the study, no judgments or opinions regarding the outcomes were offered to avoid the introduction of personal biases into the results.

**Research Methodology**

A quantitative, correlational study was utilized for this research project. This study method and design allow for an effective investigation into the relationship between chief fire officer leadership style and volunteer firefighter satisfaction and its impact on a firefighter’s turnover intention (Brudson, 2016; Leedy & Ormrod, 2016). The study's focus was to understand
the job satisfaction and turnover intention of volunteer firefighters by identifying correlations with the influence of the leadership style of chief fire officers. Implementing an appropriate research method and design was critical to properly evaluate the study questions (Creswell & Creswell, 2017).

**Discussion of Fixed Design**

The fixed research design allowed for data collection, formatting, coding, and statistical analysis, which enabled the researcher to generate conclusions from the data analysis (Brunsdon, 2016). Creswell and Creswell (2017) discussed that the quantitative research is critical to identifying and understanding the study variables' inter-relational factors. For this study, survey instruments measured by a Likert-type scale were utilized to collect the required data. This approach allowed the researcher to measure the study participants’ opinions as a numerical value that can be easily interpreted via statistical analysis (Hackett, 2019). The fixed design utilized a mathematical representation of complex research variables to investigate connections between the study variables (O’Dwyer & Bernauer, 2016). Hackett (2019) explained that the statistical analysis performed in quantitative research is crucial to summarizing the collected data, identifying patterns, and portraying relationships and connections. The fixed design allowed the researcher to generalize the defined relationships to the larger population (Creswell, 2014). For this study, the quantitative research method was the appropriate choice. It provided a means for the researcher to identify and measure the potential relationship between leadership style, an independent variable, job satisfaction and volunteer turnover intention, and dependent variables (O’Dwyer & Bernauer, 2016).
**Discussion of Correlational Method**

Correlational studies identify and test the extent of the relationship between two or more variables within a population (Leedy & Ormrod, 2016). The correlational method was a functional design that is straightforward, inexpensive to administer, and relatively quick to complete (Lappe, 2000; Stake, 2010). A correlational method is critical for research studies that do not allow for the random assignment of study participants to groups when studying the differences between specific demographics or populations (Curtis et al., 2016). Similarly, Goodwin and Goodwin (2016) discussed that it is impossible to assign study participants to groups when performing a study that attempts to determine a relationship between job satisfaction and another variable; thus, this study required a non-experimental, correlational design.

Correlational studies are practical when the researcher seeks to measure the relationship between variables, specifically where the researcher has no control over the independent variables (Lappe, 2000). However, a correlational method cannot identify the causal relationship between the research variables (O’Dwyer & Bernauer, 2016). Additionally, a correlational study may identify future studies to determine the cause and effect or examine the relationship between alternative variables (Curtis et al., 2016). The correlational method was an appropriate choice for this research study as the researcher is seeking to identify and measure the relationship between the leadership practices of chief fire officers and the job satisfaction and turnover intention of the volunteer firefighters within the same department (Leedy & Ormrod, 2016; Stake, 2010).

**Summary of Research Methodology**

Quantitative research techniques have evolved and advanced over time, allowing researchers to explore and evaluate innovative research questions from countless new angles.
The quantitative correlational study design allowed the researcher to perform observational research with limited influence stemming from interactions with the study participants (Gravetter & Forzano, 2018). This study utilized a quantitative, correlational design to investigate the relationship between leadership style, job satisfaction, and turnover intention within volunteer fire departments in North Central North Carolina. The chosen design and method were the appropriate structure to effectively examine the proposed research hypotheses and fulfill the study questions through a statistical analysis of the survey participants' quantified responses (Stake, 2010).

**Participants**

The area of focus for this study was North Central North Carolina as defined by the North Carolina Department of Commerce, which includes the following counties: Chatham, Durham, Edgecombe, Franklin, Granville, Harnett, Johnston, Lee, Nash, Orange, Person, Vance, Wake, Warren, and Wilson. Data were not collected on the name or location of the fire departments based on responses from participating volunteer firefighters. Only fully volunteer or mostly volunteer departments were included in this study. Only volunteer firefighters were considered for participation in the survey for fire departments that have both paid and volunteer firefighters. Additionally, the fire officer role was limited to the chief fire officer. There were no limitations placed on the tenure of service for inclusion in the research study. Only participants that are 18 years or older were included in the study. While many departments allow junior firefighters, who are between 16 and 18 years of age, to join and respond to emergency calls, their role in the emergency scenes is limited. Thus, their level of satisfaction or turnover intention may be different than the intended study population. Participants completed the surveys anonymously to protect their privacy and to strengthen the validity of the data. The questionnaire included a
consent form that provided the study participant with information on how their data will be used and described the steps taken to ensure anonymity.

**Population and Sampling**

Ideally, the research study would include the total population to gather a full understanding of the issue; however, it is universally accepted to utilize a sample population to generate findings that can be generalized to the total population (Creswell & Creswell, 2017). The study population and eligibility criteria for inclusion in this study are provided below. The statistical method for calculating the sample size is discussed, and the necessary sample size is presented.

**Discussion of Population**

The total population is the complete set of individuals to which the study findings will be inferred (Levy & Lemeshow, 2008). For this study, the total population consisted of volunteer firefighters who are active members of volunteer or mostly volunteer fire departments. The regional focus area was limited to North Central North Carolina as defined by the North Carolina Department of Commerce, including the following fifteen counties: Chatham, Durham, Edgecombe, Franklin, Granville, Harnett, Johnston, Lee, Nash, Orange, Person, Vance, Wake, Warren, and Wilson (NCDC, 2016). Creswell and Poth (2018) explain the importance of capturing all potential study participants when identifying the total population. The Office of the State Fire Marshal maintains a directory of all fire departments by county, which are in good standing and certified to respond to emergency needs within their district (OSFM, 2020). As shown in Table 2, there were 144 active volunteer or mostly volunteer fire departments within the North Central region included in calculating the total study population at the time of this study. The OSFM requires that volunteer fire departments maintain a minimum of 20 personnel
on their roster (North Carolina Association of Fire Chiefs and Office of the State Fire Marshal, 2017).

**Table 2**

*Number of Volunteer Fire Departments in North Central North Carolina, by County*

<table>
<thead>
<tr>
<th>County</th>
<th># of Volunteer Fire Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chatham</td>
<td>8</td>
</tr>
<tr>
<td>Durham</td>
<td>3</td>
</tr>
<tr>
<td>Edgecombe</td>
<td>10</td>
</tr>
<tr>
<td>Franklin</td>
<td>11</td>
</tr>
<tr>
<td>Granville</td>
<td>13</td>
</tr>
<tr>
<td>Harnett</td>
<td>9</td>
</tr>
<tr>
<td>Johnston</td>
<td>20</td>
</tr>
<tr>
<td>Lee</td>
<td>7</td>
</tr>
<tr>
<td>Nash</td>
<td>14</td>
</tr>
<tr>
<td>Orange</td>
<td>5</td>
</tr>
<tr>
<td>Person</td>
<td>7</td>
</tr>
<tr>
<td>Vance</td>
<td>6</td>
</tr>
<tr>
<td>Wake</td>
<td>5</td>
</tr>
<tr>
<td>Warren</td>
<td>15</td>
</tr>
<tr>
<td>Wilson</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144</strong></td>
</tr>
</tbody>
</table>

*Note.* Information gathered from OSFM (2020). The number of fire departments includes fully volunteer and mostly volunteer departments.

For departments classified as mostly volunteers, only responses from volunteer firefighters who receive no compensation for service were included in the study. This data point was determined from a question within the demographics section of the survey instrument.

Similarly, only responses from volunteer firefighters who were 18 years of age and older were included in the study. Chief officers included in the study included paid and volunteer personnel.

**Discussion of Sampling**

According to Levy and Lemeshow (2008), sampling allows the researcher to represent the total population to generate findings that can be generalized to the whole population. In
quantitative research, sampling is performed using a random sampling method to generate a representative grouping of study participants that corresponds to the total population’s characteristics, thus allowing the study findings to be generalized (Creswell & Creswell, 2017). The two broad categories of sample methods are probability and non-probability. They are differentiated based on the potential for every member of the population to be included (Levy & Lemeshow, 2008).

This study utilized a conventional probability method for generating the study sample. To calculate the estimated total population, the minimum number of firefighters for a department to be considered in good standing (20) was used as the standard of volunteer firefighters per department. The total population included all 144 volunteer or mostly volunteer fire departments, as identified from the OSFM directory located within the study’s regional boundaries. Thus, the total population for the study was 2,880 volunteer firefighters. O’Dwyer and Bernauer (2016) recommended a .95 confidence level and a ±.05 margin of error. Assuming these values and utilizing Cochran’s modified sample size formula, a sample size of 339 participants was required to achieve an acceptable representation of the total population.

**Summary of Population and Sampling**

Identifying the total population and an appropriate sampling method were required to investigate a potential correlation between chief fire officers' leadership style and the job satisfaction and turnover intention of the volunteer firefighters they lead. An adequate sample size allowed the researcher to generalize the study’s findings to the total population. Achieving the required sample size for this study was a critical step in the data collection process, which is discussed below.
Data Collection & Organization

Fixed research studies rely on the collection and statistical analysis of numerical data representing the participants’ attitudes or opinions (Creswell, 2014). First, the instruments, which comprise the complete study questionnaire, are described. Next, the techniques that were utilized for data collection are presented. Finally, the methods for data organization are discussed. Study participants were recruited from volunteer fire departments in fifteen counties in North Central North Carolina. Names of the participating fire departments were not shared as a part of this study. The data gathering process utilized pre-established survey instruments that aligned with and supported the research questions and hypotheses.

Data Collection Plan

Before beginning the data collection process, approval was obtained from the Liberty University Institutional Review Board (IRB). A list of emergency services departments, including emergency medical services, fire, rescue, and combination departments in each of the counties within the regional boundary, was generated from the OSFM. The list provided the name of each emergency services department in the county, alphabetically. The list was evaluated, and all departments other than fully volunteer or mostly volunteer fire departments were removed. The individual county lists were then merged into a single list of 144 fire departments. Microsoft Excel was used to generate a random number from “1” to “144” for each department. The list was then sorted numerically by their assigned random number. The next step was to send an invitation to the chief fire officer of the first 50 fire departments on the randomized list to determine their willingness to participate in the research study. The invitation directed the chief fire officer to a Google Forms document that allowed them to verify their
desire to participate in the study. Thirty-three volunteer fire departments were chosen to participate in the initial study due to the limitation of rights to administer 500 MLQ-5X surveys. In addition to the questionnaire, study participants received a consent form and instructions on completing the survey. Study participants were required to acknowledge their understanding and consent by initialing the consent form before beginning the survey. Surveys were sent to the fire departments with anonymous return labels to ensure that no identifying information could be collected. The survey was administered at a routine department meeting or training event via a fire department officer. The questionnaire does not request information from participants that could be used for personal or department identification. The estimated time to complete the survey instrument, including the demographics section and three survey instruments, was less than one hour. Once completed, the department officer that proctored the survey returned the questionnaires to the researcher via the United States Postal Service mail.

**Instruments**

The three instruments chosen to gather the numerical data necessary for the research were generally accepted methods that measure volunteer job satisfaction, turnover intention, and leadership behaviors. Permission to use each device was obtained from the author or owner of the instrument before inclusion in the research questionnaire. The questionnaire began with a demographics section that gathered information including gender, age, verification of voluntary service, time served with their current fire department, role within the department, and the average amount of time spent volunteering each week. The instrument chosen to measure the chief fire officers' leadership style was the Multifactor Leadership Questionnaire (MLQ-5X) developed by Bass and Avolio (2004). The Volunteer Satisfaction Index (VSI) was employed to measure firefighters' satisfaction with various aspects of their role as volunteers (Galindo-Kuhn
& Guzley, 2002). Finally, the Turnover Intention Scale (TIS-6) provided the measure of the intent for individual volunteer firefighters to leave the fire service voluntarily (Roodt, 2004).

**Multifactor Leadership Questionnaire.** Bass and Avolio developed the MLQ in 1985 to identify and align a leader’s traits and behaviors to the following seven focus areas: idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management-by-exception, and laissez-faire (Hinkin & Schriesheim, 2008; Northouse, 2016). This survey instrument was administered from the rater’s perspective to gather the volunteer firefighter’s perception of their chief fire officers' transformational leadership behaviors. The MLQ-5X portion of the survey consisted of 45 questions that took approximately 20 minutes to complete. The form utilized a five-point Likert scale to measure the participant’s perception of a leader’s behavior regarding the factors associated with the leadership style employed by the department's chief fire officer (Avolio et al., 1999; Northouse, 2016). The scale ranged from [0] “not at all”, [1] “once in a while”, [2] “sometimes”, [3] “fairly often”, to [4] “frequently, if not always” (Bass & Avolio, 2004). Permission to use the MLQ-5X was obtained by procuring a license to reproduce the owner's questionnaire (Appendix A).

**Volunteer Satisfaction Index.** The job satisfaction of the volunteer firefighters was measured using the VSI. Galindo-Kuhn and Guzley introduced the VSI in 2002 to fill a gap in job satisfaction literature by focusing specifically on volunteer workers' satisfaction. This section of the questionnaire contains 40 items measuring four job satisfaction dimensions, including organizational support, participation efficacy, empowerment, and group integration (Galindo-Kuhn & Guzley, 2002). This portion of the questionnaire took 10 minutes to complete. The responses were measured using a seven-point Likert scale where [1] is “very dissatisfied,” and [7] is “very satisfied”. Permission to use the VSI was obtained from the author (Appendix A).
**Turnover Intention Scale.** The potential for volunteers to leave the organization was measured using Roodt’s (2004) turnover intention scale (TIS). More specifically, the TIS's shortened version, known as TIS-6, was included in the research questionnaire. This section of the questionnaire consisted of six questions that took approximately three minutes to complete. The responses were measured using a five-point Likert-type scale to quantify the study participants' desire to either stay or leave the volunteer fire service. The Likert scale ranged from [1] to [5] using the following scales: never/always, totally dissatisfying/very satisfying, and highly unlikely/high likely (Roodt, 2004). Permission to use the TIS-6 questionnaire was obtained from the author (Appendix A).

**Data Organization Plan**

The data were stored via hard copy and transferred manually into a Microsoft Excel spreadsheet for storage and cleaning before being uploaded into the SPSS software package for analysis. Hard copies were stored in a locked document safe accessible only by the researcher. A digital copy was scanned and stored on the researcher’s computer and a back-up electronic storage device, secured with a username and password only accessible by the researcher. Access to the SPSS software package was protected by a unique username and password only available to the researcher. Following any requirement to hold the research data from the IRB, all electronic data will be deleted from the researcher's electronic storage devices, and the hard copies will be destroyed.

**Summary of Data Collection & Organization**

The data were stored via hard copy and transferred manually into a Microsoft Excel spreadsheet for storage and cleaning before being uploaded into the SPSS software package for analysis. Hard copies were stored in a locked document safe accessible only by the researcher. A
digital copy was scanned and stored on the researcher’s computer and a back-up electronic storage device, secured with a username and password only accessible by the researcher. Access to the SPSS software package was protected by a unique username and password only available to the researcher. Following any requirement to hold the research data from the IRB, all electronic data will be deleted from the researcher's electronic storage devices, and the hard copies will be destroyed.

Data Analysis

This research study investigated the strength of the relationship between chief fire officers' leadership behaviors and the job satisfaction and turnover intention of participating volunteer firefighters. To evaluate this relationship, a comparison of the variables was carried out using quantitative research methods. A correlational analysis was performed on the survey data to identify and measure the strength of relationships between leadership behaviors and job satisfaction and turnover intention. The researcher coded the data for analysis using the SPSS software package version 27.0 from a Microsoft Excel storage file.

The inferential analysis provided the data for the primary means of data evaluation for the study. The study utilized the Pearson product-moment correlation coefficient (r) and Spearman’s rho coefficient, t-test, and multiple regression analysis to identify and measure the strength of the relationships between the dependent and independent variables. The correlation analyses were an effective means of measuring the linear relationship's strength between two variables and can compare data points with different units (Mendenhall & Sinich, 2012). The relationship between the study variables was quantified by calculating both correlation coefficients, which quantify the linear relationship's significance from -1 to +1, representing a significant negative or positive correlation, respectively (Adler & Clark, 2015). A coefficient result of “0” indicates no linearity
between the research variables (Morgan et al., 2011). The coefficient was used to examine the
direct correlation between leadership behavior and overall volunteer satisfaction and turnover
intention. Similar studies evaluating the relationship between leadership behaviors and job
satisfaction, employee retention, and other organizational performance indicators utilized the
Pearson correlation analysis, Spearman’s rho, and multiple regression analysis to evaluate the
quantitative data (Abelha et al., 2018, Senses-Ozyurt & Villicana-Reyna, 2016; Shin, 2014). A
value of $\alpha=0.05$ was used as a cutoff determinant of significance, and the associated $p$-value was
considered when determining the acceptance or rejection of the null hypotheses. Structural
equation modeling was used to determine the R-squared coefficient to determine the goodness of
fit for the models (O’Dwyer & Bernauer, 2013).

The Variables

Table 3 shows the demographic data collected by the questionnaire.

**Table 3**

*Demographic Study Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>G</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>Verification of Volunteer Service</td>
<td>V</td>
<td>3</td>
</tr>
<tr>
<td>Years of Volunteer Fire Service</td>
<td>T</td>
<td>4</td>
</tr>
<tr>
<td>Length of Time Under Current Fire Chief</td>
<td>CC</td>
<td>5</td>
</tr>
<tr>
<td>Position (Firefighter/Engineer/Officer)</td>
<td>P</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4 categorizes the variables examined during this study. The independent variable
represented the leadership behavior of the participating department’s chief fire officers. The
MLQ-5X survey instrument measured the perceived leadership behaviors of the chief fire
officers from the firefighters’ perspective and provided the ordinal data necessary for analysis.
The dependent variables for the study included job satisfaction and turnover intention of the
volunteer firefighters. The VSI and TIS-6 provided the nominal data from the firefighters’ perspective for analysis. Additionally, several covariates were collected from the demographics section, including gender, age, years of service, and position. The statistical analysis of the independent variables generated an understanding of how leadership behaviors correlate with volunteer firefighters’ job satisfaction and turnover intention.

Table 4

*Variables and Data Type with Associated Measurement Instrument*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Survey Instrument</th>
<th>Type of Data</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>MLQ-5X</td>
<td>Ordinal</td>
<td>TL</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>MLQ-5X</td>
<td>Ordinal</td>
<td>TA</td>
</tr>
<tr>
<td>Passive/Avoidant Leadership</td>
<td>MLQ-5X</td>
<td>Ordinal</td>
<td>PA</td>
</tr>
<tr>
<td>Volunteer Satisfaction</td>
<td>VSI</td>
<td>Nominal</td>
<td>VS</td>
</tr>
<tr>
<td>Turnover Intention</td>
<td>TIS-6</td>
<td>Nominal</td>
<td>TI</td>
</tr>
</tbody>
</table>

The MLQ-5X rater form provided a measure based on a Likert scale from “0” to “4”. The data were scored by averaging the participating individual’s responses to the questions about each leadership factor including, idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management-by-exception, and laissez-faire (Bass & Avolio, 2004). Next, this average was compared against the norm tables provided by Bass and Avolio (2004) to determine how the evaluated chief fire officer behaves compared to the expected norm.

Descriptive Statistics

Standard deviation is a measure that represents the spread of the data points, within an approved range, around the mean value (Mendenhall & Sinich, 2012). Skewness is defined as the distribution of the data to one side of the bell curve, with zero representing a perfectly normal distribution of study data (Kim, 2013; Morgan et al., 2011). Skewness is a critical factor as many
inferential statistical analyses rely on normal data distribution, which is often considered to fall between positive and negative one (Morgan et al., 2011). Alternatively, when analyzing larger sample sizes (n > 300), an absolute value of skewness less than two should be considered as an approximately normal distribution (Kim, 2013). Kurtosis refers to the dispersion of the data points and represents how the data varies from a standard bell curve distribution (Brown & Saunders, 2008). However, kurtosis does not typically impact most statistical analyses (Morgan et al., 2011). Ghasemi and Zahediasl (2012) argue that no normality criterion from skewness or kurtosis should be applied in studies with substantial sample sizes when determining statistical analysis techniques.

**Hypotheses 1**

The volunteer firefighters' job satisfaction was a dependent variable for the first research question: (RQ1) To what extent is there a relationship between the leadership style of the chief fire officers and the job satisfaction of the selected volunteer firefighters in North Central North Carolina? This question was supported by the null hypothesis (H1\(_0\)) that assumes there is no significant relationship between the leadership style of chief fire officers and the job satisfaction of volunteer firefighters and the alternative hypothesis (H1\(_a\)) that states there is a considerable relationship present between the variables. The VSI questionnaire (Galindo-Kuhn & Guzley, 2002) was used to measure the participating volunteer firefighters' satisfaction. This instrument applied a Likert scale from “1” to “7” to indicate the participant’s level of satisfaction with various aspects of volunteer service (Wong et al., 2011). The average score for each of the five dimensions of volunteer satisfaction was calculated, including work assignment, participation efficacy, group integration, organizational support, and communication quality (Galindo-Kuhn & Guzley, 2002).
**Hypotheses 2**

The intent to remain an active member of the volunteer fire service was the dependent variable for the second research question: (RQ2) To what extent is there a relationship between the leadership style of the chief fire officers and the turnover intention of the selected volunteer firefighters in North Central North Carolina? The second research question was supported by the null hypothesis ($H_{20}$) that states there is no statistically significant relationship between a chief fire officer's leadership style and the turnover intention of their volunteer firefighters. In contrast, the alternative hypothesis ($H_{2A}$) accepts that a significant relationship exists between these variables. The TIS-6 was used to determine the turnover intention of the study participants. The TIS-6 measured the participant’s choice to stay with an organization using a Likert scale scored from “1” to “5”. The responses were summed and compared against a midpoint score of 18. Scores below 18 represented an intent to stay with the organization, and scores above 18 a desire to leave (Roodt, 2004).

**Hypotheses 3**

The relationship between the job satisfaction and level of the participating volunteer firefighters' turnover intention was the focus of the third research question: (RQ3) To what extent is there a relationship between the job satisfaction and turnover intention of the selected volunteer firefighters in North Central North Carolina? The third research question was supported by the null hypothesis ($H_{30}$) that states there is no statistically significant relationship between volunteer satisfaction and the participating volunteer firefighters' turnover intention. In contrast, the alternative hypothesis ($H_{3A}$) accepts that a significant relationship exists between these variables. Data collected from the VSI and TIS-6 were utilized to determine if this relationship exists.
Summary of Data Analysis

The data analysis began by entering the data from the paper and pencil questionnaires into Microsoft Excel. Next, the study data was then cleaned for any incomplete data sets or violations of study inclusion requirements. The researcher then verified that the minimum sample size had been achieved. The study data were loaded into the SPSS software package to perform the statistical analysis used to answer the research questions and test the study hypotheses.

Initially, the descriptive statistics for the data sets were calculated and evaluated for linearity and the appropriateness of the proposed data analysis techniques was reviewed. Hypothesis testing began by calculating the Pearson correlation coefficients and Spearman’s rho to identify and measure the strength of the linear relationship between the study variables. A multiple regression analysis was used to estimate the relationship between the leadership behavior of chief fire officers and the volunteer satisfaction and turnover intention of the volunteer firefighters they lead. Finally, the results were reviewed and scrutinized by the researcher. The results of the analysis are provided in the following sections.

Reliability and Validity

Reliability and validity are crucial aspects of maintaining the research study's significance and findings (O’Dwyer & Bernauer, 2013). Creswell (2014) describes reliability as measuring an instrument’s internal consistency and stability over time. Validity refers to the extent to which the instrument measures the intended behavior or perception, allowing the researcher to draw the desired inference from the tool (Carmines & Zeller, 1979; Creswell, 2014). Confirming the reliability and validity of a research study is critical to generating credible, generalizable, and consistent results.
Reliability

The reliability of survey instruments or measures represents the expectation that the tool will yield consistent results (Leavy, 2017). Measuring reliability in a research study is an essential step in allowing the researcher to generalize the study’s findings to the total population (Creswell & Creswell, 2017). Additionally, the reliability of a study represents future researchers' ability to use the same research method to produce consistent results (Creswell, 2014). Cronbach’s alpha is the most common measurement of internal reliability, which measures the degree of correlation between answers for related questions (Rowe, 2015). The value of Cronbach’s alpha should be greater than .70 to support the instrument's internal reliability (Morgan et al., 2011). Additionally, a score of greater than .95 may indicate redundancy within the instrument representing an opportunity to shorten the survey instrument by losing data points (Rowe, 2015).

The MLQ-5X is a widely accepted measure of the leadership behaviors associated with each of the full range leadership model (Northouse, 2016). The MLQ has undergone many revisions that have helped refine and strengthen the tool (Schriesheim et al., 2009). Table 5 shows the Cronbach’s alpha coefficients and associated questions for this study's transformational leadership factors. The alpha values range from .72 to .91 and are all within the acceptable range for a reliable measure of the chief fire officers' leadership style.
Table 5

*MLQ-5X Cronbach Alpha Coefficients*

<table>
<thead>
<tr>
<th>Leadership Factor</th>
<th>Data Coding</th>
<th>Associated Questions</th>
<th>Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence (Attributed)</td>
<td>IA</td>
<td>16, 24, 27, 31</td>
<td>.88</td>
</tr>
<tr>
<td>Idealized Influence (Behavior)</td>
<td>IB</td>
<td>12, 20, 29, 40</td>
<td>.89</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>IM</td>
<td>15, 19, 32, 42</td>
<td>.91</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>IS</td>
<td>8, 14, 36, 38</td>
<td>.89</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>IC</td>
<td>21, 25, 35, 37</td>
<td>.91</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>CR</td>
<td>7, 17, 22, 41</td>
<td>.87</td>
</tr>
<tr>
<td>Management-by-Exception (Active)</td>
<td>MBEA</td>
<td>10, 28, 30, 33</td>
<td>.72</td>
</tr>
<tr>
<td>Management-by-Exception (Passive)</td>
<td>MBEP</td>
<td>9, 18, 23, 26</td>
<td>.86</td>
</tr>
<tr>
<td>Laissez-Faire</td>
<td>LF</td>
<td>11, 13, 34, 39</td>
<td>.83</td>
</tr>
</tbody>
</table>


The VSI is a survey instrument utilized to measure the level of job satisfaction of volunteers. Table 6 presents the four dimensions of the VSI instrument and the associated questions from the questionnaire and the Cronbach alpha coefficients. The coefficients of correlation for this instrument range between .75 and .91 and fall within the acceptable range for reliability and support this study's primary research goal by evaluating volunteer firefighters' job satisfaction.
Table 6

*VSI Cronbach Alpha Coefficients*

<table>
<thead>
<tr>
<th>Volunteer Satisfaction Dimension</th>
<th>Data Coding</th>
<th>Associated Questions</th>
<th>Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Support OS</td>
<td>OS</td>
<td>46, 59, 62, 69, 72, 73, 74, 77, 78, 79</td>
<td>.91</td>
</tr>
<tr>
<td>Participation Efficacy PE</td>
<td>PE</td>
<td>50, 60, 65, 75, 81</td>
<td>.84</td>
</tr>
<tr>
<td>Empowerment EM</td>
<td>EM</td>
<td>44, 52, 54</td>
<td>.75</td>
</tr>
<tr>
<td>Group Integration GI</td>
<td>GI</td>
<td>47, 48, 57, 68</td>
<td>.87</td>
</tr>
</tbody>
</table>

*Note.* Cronbach alpha coefficients from Galindo-Kuhn and Guzley (2002).

This study utilized the shortened version (TIS-6) of the TIS developed by Roodt (2004). This instrument measured employees’ intentions to stay with the organization or voluntarily separate from the organization. The Cronbach alpha for this instrument is $\alpha=.80$ (Bothma & Roodt, 2013). This alpha is acceptable, and the survey instrument was utilized to measure the turnover intention of the participating volunteer firefighters.

*Validity*

A study’s validity makes sure that the chosen data collection instruments measure the intended behavior or perceptions, the statistical analysis is appropriate to draw the desired conclusions, the findings are generalizable, and ensures that safeguards are used to prevent external influences on the results (Leavy, 2017). Carmines and Zeller (1979) discussed that it is critical to validate that the survey instrument utilized is appropriate for the study and measures the desired phenomenon. Thus, a survey instrument with high validity measures what it is intended and produces a real result.

The MLQ-5X has been determined to be a reliable and valid instrument for measuring leadership behaviors associated with the nine components of the full-range leadership theory (Antonakis et al., 2003). A study by Wong et al. (2011) verified the construct and criterion
validity of the VSI as a useful measure of the job satisfaction of volunteer workers. The TIS-6 instrument has been validated as a measure of employees' turnover intention (Bothma & Roodt, 2013). Defining the study population is an external threat to validity and can limit the researcher's ability to generalize the findings to the total population (Taylor, 2013). The sample population for this study was generated randomly from the total population, which allows for the generalization of findings. An appropriately designed, probability-based sample population creates representative and unbiased data and requires a study with strong external validity (O’Dwyer & Bernauer, 2016). Additionally, the study utilized a procedural approach to data collection and analysis, which was uniform across all participants and data sets. The limited communication between researcher and participants helped prevent any unintentional influence or bias on the study participants, thus improving the data's validity (Taylor, 2013).

**Summary of Reliability and Validity**

Reliability and validity are the two main criteria for evaluating quantitative research studies (Leavy, 2017). These two factors are essential to ensure that a research study's findings are dependable and that another researcher could reproduce the analysis and generate similar results. The researcher used the SPSS software package to perform a correlational analysis on the data collected using the following survey instruments: MLQ-5X, VSI, and TIS-6. The survey instruments chosen for data collection were reliable and valid measures capable of measuring the desired results. The data collection procedures, data storage processes, and data analysis techniques were strictly adhered to for this study, thereby improving its reliability and repeatability. It is assumed that the study participants willingly and truthfully participated in the research process; therefore, the findings are valid measures of the study’s intended results.
Summary of Section 2 and Transition

This quantitative correlational study investigated how the chief fire officers' leadership behaviors impacted job satisfaction and the turnover intention of participating volunteer firefighters in North Central North Carolina. This section discussed the role of the researcher and the participants in gathering and analyzing the data necessary to test the study hypothesis and answer the research questions. Additionally, the study's method and design were presented, and literature was provided supporting the decision to utilize a quantitative correlational study as the most appropriate design for this study. The section also described the sample calculation method and data collection procedures. Finally, the techniques for organizing and analyzing the data using SPSS software were discussed.

The final section of this dissertation presents an overview of the study, expected themes and patterns, and the presentation of the findings. Included is a discussion of the applications for practice, recommendations for action, and future study opportunities. The study results and the relationships identified between leadership behavior and job satisfaction and turnover intention are explained.
Section 3: Application to Professional Practice and Implications for Change

The findings of this study further the existing body of knowledge regarding the effect of leadership behavior on job satisfaction and turnover intention. This section presents the overall business problem addressed by the study and the recommended applications to professional practice. The recommendations for further study and proposed recommendations for action within business and the volunteer fire service are presented. This researcher’s reflections on the study and the findings are also included in this section. Finally, the summary and conclusions of the study are discussed.

Overview of the Study

Throughout the world, the public relies on volunteer emergency services personnel to be their primary line of defense during a wide array of emergency response requests (NVFC, 2020). In public service organizations, human capital is the most important factor through which outcomes are achieved; thus, it is critical to ensure effective management of the volunteers that donate their time and service to the protection of others (Henderson & Sowa, 2019; Meyer, 2003). Leadership behaviors have been shown to impact employees' job satisfaction and turnover intention (Aydogmus et al., 2018; Braun et al., 2013). Faldetta et al. (2013) identified job satisfaction as a leading contributor to high turnover rates. Furthermore, the NVFC (2020) identified poor leadership practices, including lack of coordination, failure to manage change, and authoritative management behaviors, as leading recruitment and retention challenges facing volunteer fire departments.

This quantitative correlational research study focused on identifying and measuring the strength of the relationship between leadership behaviors and the job satisfaction and turnover intention of volunteer firefighters in North Central North Carolina. The Multifactor Leadership
Questionnaire (MLQ-5X) was used to measure the chief fire officers' perceived leadership behaviors as either transformational, transactional, or passive/avoidant (Bass & Avolio, 2004). Leadership behaviors of the chief fire officers were the independent variables of the study. The dependent variables were collected using the Volunteer Satisfaction Index (VSI) (Galindo-Kuhn & Guzley, 2002) and the Turnover Intention Scale (TIS-6) (Roodt, 2004).

The researcher invited study participants through a direct invitation to fire chiefs of mostly or fully volunteer fire departments within the geographic study region. The study population was comprised of volunteer firefighters over 18 years old who were not compensated for their service. Written surveys were utilized to gather the data from the volunteer firefighters and were collected and recorded anonymously. Data were loaded into Microsoft Excel for data cleaning and preparation for analysis. SPSS for Windows version 27 was used for the comprehensive statistical analysis. The three research questions and the associated hypotheses were analyzed using various descriptive and inferential statistical techniques. The findings indicate a statistically significant relationship between transformational and passive/avoidant leadership behaviors on volunteer firefighters' job satisfaction and turnover intention.

**Presentation of the Findings**

This quantitative correlational study utilized three established survey instruments to evaluate the impact of the leadership behaviors of chief fire officers and the volunteer satisfaction and turnover intention of volunteer firefighters. The presentation of findings discusses the details and characteristics of the study data and evaluates the appropriateness of the data through statistical analysis using descriptive statistics. Only respondents who met the qualifying criteria established in section two were included in the study analysis. An exhaustive analysis of the study data and hypotheses testing was performed using IBM SPSS version 27 for
Windows. Appropriate graphs and tables support the interpretation of the study findings. Finally, the relationship of the findings to the research problem, research questions, theoretical framework, and existing scholarly literature are discussed.

**Study Data Details and Characteristics**

To achieve a random sample, which is considered representative of the study population, all fire departments in the study area were entered into a randomized list for inclusion (Mendenhall & Sinich, 2012). The initial sample population consisted of 33 volunteer fire departments with a total of 495 individual surveys distributed. Of the surveys that were distributed, 364 surveys were returned, representing a 73.53% response rate. Through a detailed analysis and cleansing of the data, several disqualifiers were identified that lowered the overall number of surveys included in the quantitative analysis. Six surveys were removed as the respondents indicated they were less than 18 years old. Additionally, three surveys were thrown out as the respondents marked that they received compensation for their duties within the fire service. Finally, two surveys were discarded due to the respondents denoting they were not firefighters, driver/operators, or officers. The final resulting participant sample for this study presented 353 surveys available for analysis. The sample size achieved aligns with the requirements defined in section two for a .95 confidence level and a ±.05 margin of error with a minimum of 339 responses.

For the MLQ-5X, the questions were grouped into subscales according to their intended leadership dimension: idealized influence attributes, idealized influence behavior, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management by exception (active), management by exception (passive), and laissez-faire (Bass & Avolio, 2004). Next, the individual leadership dimensions were aggregated to ascertain the scores for the
primary leadership: transformational, transactional, and passive/avoidant. For the VSI, the questions were grouped into the following four subscales of volunteer satisfaction: organizational support, participation efficacy, empowerment, and group integration (Galindo-Kuhn & Guzley, 2002). Scores for these subscales were calculated by determining the aggregate score for the associated questions. The overall satisfaction was calculated by summing scores to all the VSI questions. For the TIS-6, the scores for all the related questions were added together and compared against the scale provided by Roodt (2004).

**Demographics**

A crucial opportunity of randomized sampling is to achieve a sample that is representative of the demographic characteristics to achieve an accurate depiction of the population (Asiamah et al., 2017). The gender and age demographics, shown in Table 7, align with the statistics for firefighters published by the NFPA in 2018 (Evarts & Stein, 2020). Of the survey respondents included in the analysis, 87% were male and 13% were female (N=353). Additionally, 63.1% of the participating volunteer firefighters fall between 31 and 60 (N=353).

**Table 7**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>307</td>
<td>87.0</td>
</tr>
<tr>
<td>Female</td>
<td>46</td>
<td>13.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 - 30</td>
<td>79</td>
<td>22.4</td>
</tr>
<tr>
<td>31 - 45</td>
<td>99</td>
<td>28.0</td>
</tr>
<tr>
<td>46 - 60</td>
<td>124</td>
<td>35.1</td>
</tr>
<tr>
<td>60 +</td>
<td>51</td>
<td>14.4</td>
</tr>
</tbody>
</table>

*N = 353

Note. Sums may not equal due to rounding errors.

Similarly, the breakdown of the years of service supports the findings presented by Evarts and Stein (2020) for volunteer firefighter tenure in 2018. As shown in Table 8, the study findings
indicate that a large percentage (40.2%) of participating volunteer firefighters have served for
more than 15 years. The lowest rate (5.7%) of respondents have been a volunteer firefighter for
less than one year.

**Table 8**

*Tenure Period*

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1</td>
<td>20</td>
<td>5.7</td>
</tr>
<tr>
<td>1 - 3</td>
<td>53</td>
<td>15.0</td>
</tr>
<tr>
<td>4 - 10</td>
<td>104</td>
<td>29.5</td>
</tr>
<tr>
<td>11 - 15</td>
<td>34</td>
<td>9.6</td>
</tr>
<tr>
<td>15 +</td>
<td>142</td>
<td>40.2</td>
</tr>
</tbody>
</table>

*N = 353*

*Note.* Sums may not equal due to rounding errors.

The demographic data provide a cross-section of the study participants that is imperative
to the relevance of the study and is typical of the current study population. Overall, the sample
satisfactorily meets the intent to reach a representative sample of the population, which is a
critical aspect of a quantitative correlational study to successfully test the hypotheses and
ultimately investigate the research questions (Field, 2013).

**Reliability**

Cronbach’s alpha reliability tests were utilized to ensure the survey instruments were
properly measuring their intended results to gather the data necessary for investigating the
research questions associated with this research study (Tavakol & Dennick, 2011). Cronbach’s
alpha coefficient (α) is measured on a scale from zero to one with higher values indicating
increased reliability and consistency (George & Mallery, 2016). George and Mallery
recommended specific guidelines to evaluate the level of reliability and consistency, specifically:
greater than .90 (excellent), .89 to .80 (good), .79 to .70 (acceptable), .69 to .60 (questionable),
and below .59 (poor). Idealized influence attributed, inspirational motivation, contingent reward,
organizational support, and turnover intention showed excellent reliability. Idealized influence behavior, individual consideration, management by exception (passive), laissez-faire, participation efficacy, and group integration presented good internal consistency. Management by exception (active) ($\alpha = .67$) displayed questionable reliability. Cronbach’s alpha values for the MLQ-5X, VSI, and TIS-6 subscales are shown in Table 9.

**Table 9**

*Study Specific - Cronbach’s Alpha Reliability Analysis*

<table>
<thead>
<tr>
<th>Construct/Variable</th>
<th># of Items</th>
<th>$\alpha$</th>
<th>Guideline Rating (George &amp; Mallery, 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership Attributes (MLQ-5X)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transformational Leadership</strong></td>
<td>TL 20</td>
<td>.97</td>
<td>Excellent</td>
</tr>
<tr>
<td>Idealized Influence Attributed</td>
<td>IA 4</td>
<td>.91</td>
<td>Excellent</td>
</tr>
<tr>
<td>Idealized Influence Behavior</td>
<td>IB 4</td>
<td>.83</td>
<td>Good</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>IM 4</td>
<td>.91</td>
<td>Excellent</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>IS 4</td>
<td>.87</td>
<td>Good</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>IC 4</td>
<td>.81</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Transactional Leadership</strong></td>
<td>TA 8</td>
<td>.84</td>
<td>Good</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>CR 4</td>
<td>.92</td>
<td>Excellent</td>
</tr>
<tr>
<td>Management by Exception (Active)</td>
<td>MBEA 4</td>
<td>.67</td>
<td>Questionable</td>
</tr>
<tr>
<td><strong>Passive/Avoidant Leadership</strong></td>
<td>PA 8</td>
<td>.92</td>
<td>Excellent</td>
</tr>
<tr>
<td>Management by Exception (Passive)</td>
<td>MBEP 4</td>
<td>.84</td>
<td>Good</td>
</tr>
<tr>
<td>Laissez-Faire</td>
<td>LF 4</td>
<td>.87</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Volunteer Satisfaction (VSI)</strong></td>
<td>VS 40</td>
<td>.98</td>
<td>Excellent</td>
</tr>
<tr>
<td><strong>Organizational Support</strong></td>
<td>OS 10</td>
<td>.97</td>
<td>Excellent</td>
</tr>
<tr>
<td><strong>Participation Efficacy</strong></td>
<td>PE 5</td>
<td>.84</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Empowerment</strong></td>
<td>EM 3</td>
<td>.86</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Group Integration</strong></td>
<td>GI 4</td>
<td>.89</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Turnover Intention (TIS-6)</strong></td>
<td>TI 6</td>
<td>.93</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

$N = 353$

**Descriptive Statistics**

This quantitative correlational study utilized the MLQ-5X to determine the perceived leadership style of the chief fire officer from the standpoint of the volunteer firefighter. The leadership style, which comprises the full range leadership model, was the independent variable.
in this research study. The study also used the VSI and TIS-6 surveys to gather information on the volunteer satisfaction and turnover intention of the participating volunteer firefighters.

Table 10 shows the descriptive statistics for the leadership variables, including minimum and maximum scores, average score distribution, standard deviation, skewness, and kurtosis. For transformational leadership, perceptions ranged from 0.60 to 4.00, with an average score of 2.69 (SD = 1.03). Transactional leadership scores ranged from 0.25 to 4.00, with an average of 2.44 (SD = 0.85). The passive/avoidant leadership scores ranged from 0.00 to 3.50, with an average rating of 1.12 (SD = 1.01).

Table 10

Descriptive Statistics of Leadership Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th># of Items</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL</td>
<td>20</td>
<td>0.60</td>
<td>4.00</td>
<td>2.69</td>
<td>1.03</td>
<td>-0.58</td>
<td>-1.05</td>
</tr>
<tr>
<td>TA</td>
<td>8</td>
<td>0.25</td>
<td>4.00</td>
<td>2.44</td>
<td>0.85</td>
<td>-0.30</td>
<td>-0.46</td>
</tr>
<tr>
<td>PA</td>
<td>8</td>
<td>0.00</td>
<td>3.50</td>
<td>1.12</td>
<td>1.01</td>
<td>0.79</td>
<td>-0.69</td>
</tr>
</tbody>
</table>

N = 353

Table 11 shows the descriptive statistics for the study data related to the volunteer satisfaction and turnover intention, including minimum and maximum scores, average score distribution, standard deviation, skewness, and kurtosis. For organizational support, scores ranged from 12 to 70, with an average score of 54.87 (SD = 16.88). Participation efficacy totals varied between 17 to 35, with an average score of 30.03 (SD = 5.38). The results for empowerment ranged from 4 to 21, with an average rating of 17.48 (SD = 4.38). Group integration results fell between 8 and 28, with an average score of 24.04 (SD = 4.58). Overall volunteer satisfaction ranged from 107 to 280, with an average of 233.61 (SD = 47.98). Finally, turnover intention results ranged from 6 to 30, with an average score of 11.71 (SD = 6.50).
Table 11

Descriptive Statistics of VSI and TIS-6 Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th># of Items</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS</td>
<td>40</td>
<td>107</td>
<td>280</td>
<td>234</td>
<td>47.98</td>
<td>-1.04</td>
<td>-0.05</td>
</tr>
<tr>
<td>OS</td>
<td>10</td>
<td>12</td>
<td>70</td>
<td>55</td>
<td>16.88</td>
<td>-1.04</td>
<td>-0.22</td>
</tr>
<tr>
<td>PE</td>
<td>5</td>
<td>17</td>
<td>35</td>
<td>30</td>
<td>5.378</td>
<td>-1.03</td>
<td>-0.19</td>
</tr>
<tr>
<td>EM</td>
<td>3</td>
<td>4</td>
<td>21</td>
<td>17</td>
<td>4.35</td>
<td>-1.30</td>
<td>0.88</td>
</tr>
<tr>
<td>GI</td>
<td>4</td>
<td>8</td>
<td>28</td>
<td>24</td>
<td>4.58</td>
<td>-1.51</td>
<td>2.17</td>
</tr>
<tr>
<td>TI</td>
<td>6</td>
<td>6.00</td>
<td>30.00</td>
<td>11.71</td>
<td>6.50</td>
<td>1.05</td>
<td>-0.08</td>
</tr>
</tbody>
</table>

$N = 353$

The linearity of the data was confirmed by visually examining the Q-Q plots for the leadership behavior variables associated with these research questions. The following Q-Q plots for transformational (Figure 3), transactional (Figure 4), and passive/avoidant (Figure 5) leadership behaviors were evaluated for the observed versus expected outcomes. As shown below, the Q-Q plots for both the transformational and passive-avoidant leadership behaviors indicate an approximately normal distribution with a heavy tail. In contrast, the Q-Q plot for transactional data represents an approximately normal distribution (Ford, 2015). The calculated skewness values support this for transformational, transactional, and passive/avoidant, -.58, -.30, and .79, respectively.
Figure 3

Q-Q plot for Transformational Leadership

Figure 4

Q-Q plot for Transactional Leadership
Figure 6 and Figure 7 depict the negative skewness of the volunteer satisfaction rating for participating volunteer firefighters, indicating a left distribution with a platykurtic (heavy tail) distribution. The visual indication of skewness of the data is supported by the calculated skewness of -1.04.
Figure 6

*Histogram of the Frequency of the Overall Satisfaction Scores*

Figure 7

*Q-Q plot for Volunteer Satisfaction*
Figure 8 and Figure 9 indicate positive (right) skewness of the data representing the turnover intention of the volunteer firefighters, with a platykurtic (heavy tail) distribution. The visual assessment of the skewness of the data is supported by the calculated skewness of 1.05.

**Figure 8**

*Histogram of the Frequency of the Turnover Intention Scores*
### Hypotheses Testing

The data analyzed in this research study were collected using Likert-type scales. There are varying opinions on using Likert scales and their classification as ordinal or interval scales (Carifio & Perla, 2008; Norman, 2010; Wu & Leung, 2017). The classification of the values garnered through Likert scale survey responses drives the validity of studies using parametric versus non-parametric statistical analysis techniques (Carifio & Perla, 2008). Cronbach (1957) argued that the basic nature of correlational study lies in the variation of data, rather than central tendencies. Carifio and Perla (2008) argued that it is appropriate and acceptable to use parametric statistical analysis such as ANOVA and Pearson correlation coefficients when analyzing data collected through Likert scale responses, even if there are non-normal distributions present. Well-constructed Likert scale questionnaires can be assumed to represent interval data and are acceptable for use with ANOVA, t-tests, and other parametric statistical
analyses (Emerson, 2017). Similarly, Norman (2010) provided support that parametric techniques will effectively produce satisfactory results even when using non-normal or asymmetrical data distributions. For this study, it was decided that correlation testing and regression analysis were appropriate to test the study hypotheses to achieve the desired outcomes.

Inferential statistical techniques were utilized to investigate the research questions through hypothesis testing. Inferential statistics allow the researcher to analyze the data to conclude from the study participants that extend out to the study population (Brown & Saunders, 2008). The hypothesis testing and analysis began by testing the strength of the association between variables. Due to the variation in acceptable skewness values, both the Pearson correlation coefficient \( r \) and the Spearman rho were calculated to determine the correlation between variables. The general interpretation of the strength of the relationship, or effect size, measured by the correlation calculations used in this study is shown in Table 12.

**Table 12**

*Interpretation of the Effect Size*

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>Pearson Correlation (r)</th>
<th>Spearman’s rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much larger than typical</td>
<td>( r \geq .70 )</td>
<td>( \rho \geq .70 )</td>
</tr>
<tr>
<td>Large</td>
<td>(.69 &lt; r &lt; .50)</td>
<td>(.69 &lt; \rho &lt; .5)</td>
</tr>
<tr>
<td>Medium</td>
<td>(.49 &lt; r &lt; .30)</td>
<td>(.49 &lt; \rho &lt; .30)</td>
</tr>
<tr>
<td>Small</td>
<td>( r &lt; .29 )</td>
<td>( \rho &lt; .29 )</td>
</tr>
</tbody>
</table>

*Note.* Adapted from Morgan et al. (2011). *IBM SPSS for introductory statistics: Use and interpretation (4th ed.)*

Linear regression analyses were performed to test the significance of the relationship to support the final decision to reject or accept the research hypotheses. For a factorial ANOVA analysis, the data would need to be recoded to lower the number of categories for volunteer
satisfaction and turnover intention, resulting in a loss of data (Leech et al., 2005). Alternatively, a multiple linear regression analysis is a statistical process that estimates the relationship between a single dependent variable and multiple independent variables (Morgan et al., 2011). T-tests are statistical techniques used to calculate the means of two groups of variables used to predict the chance of the event occurring (Morgan et al., 2011). For this study, based on the number of data points that comprise the independent variables, linear regression was chosen as the appropriate statistical technique. Hypotheses H1 and H2 utilized multiple linear regression analysis, and hypothesis H3 was examined using linear regression analysis.

The Durbin-Watson test was evaluated to determine the presence of residual correlation, where values fall between zero and four with the desired value of two (Mendenhall & Sinich, 2012). Next, to verify the assumption of linearity, the partial regression plots were visually inspected to determine if a linear relationship exists between the variables (Morgan et al., 2011). Additionally, the statistical results were evaluated for multicollinearity to prevent inaccurate results due to intercorrelations between predictor variables (Leech et al., 2005). Collinearity was checked by calculating the variance inflation factor (VIF), which is recommended to be less than 10 (Hair et al., 2010).

**Hypothesis 1.** Hypotheses H1₀ and H1ₐ evaluated the magnitude of the relationship between the leadership behaviors of chief fire officers and the volunteer satisfaction of the firefighters they lead. The MLQ-5X (Bass & Avolio, 2004) was utilized to determine the chief fire officer's perceived leadership behaviors, which is the independent variable of this study. Volunteer job satisfaction, a dependent variable, was calculated using the VSI (Galind-Kuhn & Guzley, 2002). To investigate the relationship between leadership behavior and volunteer satisfaction, the following hypotheses were explored:
H10: There is no statistically significant relationship between the leadership of the chief
fire officers and the job satisfaction of the volunteer firefighters.

H1A: There is a statistically significant relationship between the leadership style of the
chief fire officers and the job satisfaction of the volunteer firefighters.

To investigate if a statistically significant relationship exists between the chief fire
officers' leadership behavior and the job satisfaction of their volunteer firefighters, correlations
were calculated for the variables. Volunteer satisfaction was found to be slightly skewed
(skewness = -1.04), which violates the assumption of data normality; however, the sample size
was very large (N = 353). Therefore, both the Pearson correlation coefficient and Spearman’s rho
were calculated at a .01 level (2-tailed). Table 13 shows the calculated coefficients of correlation.
Both transformational and transactional leadership had a much larger than normal positive
correlation to the job satisfaction of the volunteer firefighters, .88 (p < .001) and .74 (p < .001),
respectively. Passive/avoidant leadership behaviors have a much larger than normal negative
correlation (r = -.79, p < .001) to the volunteer firefighters' job satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation (r)</th>
<th>p</th>
<th>Spearman’s rho</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL - VS</td>
<td>.88</td>
<td>&lt; .001</td>
<td>.85</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>TA - VS</td>
<td>.74</td>
<td>&lt; .001</td>
<td>.72</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>PA - VS</td>
<td>-.79</td>
<td>&lt; .001</td>
<td>-.73</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

A multiple regression analysis was run to further examine the significance of the
relationship between leadership behaviors and firefighter volunteer satisfaction. Linearity was
assessed through a visual assessment of the partial regression plots for transformational,
transactional, and passive/avoidant, as shown in Figures 10, 11, and 12, respectively. The
assumption of independence of residuals was accepted based on the Durbin-Watson statistic of 1.99. No evidence of multicollinearity was noted, as assessed VIF values were all less than ten. Normality was determined by visual observation of the histogram of the distribution of standardized residuals of the multiple regression analysis and the residual plot of standardized residuals versus predicted values. The histogram (Figure 13) reveals a symmetrical distribution of the residuals and indicates that all observations are within ±3 standard deviations of the mean. The residual plot, shown in Figure 14, represents an approximately linear alignment of the standardized residuals. Thus, there are no violations that would prevent using the multiple regression analysis, and all results are considered valid and reliable.

Figure 10

Partial Regression Plot for VS and TL
Figure 11

*Partial Regression Plot for VS and TA*

![Partial Regression Plot for VS and TA](image)

Figure 12

*Partial Regression Plot for VS and PA*

![Partial Regression Plot for VS and PA](image)
Figure 13

Histogram of Standardized Residuals for Volunteer Satisfaction

Figure 14

P-P Plot of Standardized Residuals for Volunteer Satisfaction
The regression model had an R-squared value of .78, which indicates that the leadership behaviors of the chief fire officers explain 77.9% of the total variance in volunteer satisfaction of the volunteer firefighters. The overall model was found to be statistically significant ($F(3, 349) = 409.31, p < .001$). Table 13 presents the estimates of effects for each leadership behavior on the job satisfaction of volunteer firefighters. The t-test results indicated that transformational and passive/avoidant leadership behaviors significantly impact the volunteer firefighters' job satisfaction. The t-test for the transactional leadership behavior indicates that the relationship is not statistically significant at $p < .05$. Transformational leadership had a statistically significant, positive impact on volunteer satisfaction ($\beta = .64$, $t(353) = 9.41$, $p < 0.001$). Passive/avoidant leadership behaviors had a statistically significant, negative impact on volunteer satisfaction ($\beta = -.19$, $t(353) = -3.77$, $p < .001$).

Table 14

<table>
<thead>
<tr>
<th>VS</th>
<th>$B$</th>
<th>$\beta$</th>
<th>t</th>
<th>P-value</th>
<th>95% CI for $\beta$</th>
<th>VIF</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LL</td>
<td>UL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.78</td>
<td>.78</td>
</tr>
<tr>
<td>TL</td>
<td>30.10</td>
<td>.64</td>
<td>9.41</td>
<td>&lt;.001</td>
<td>23.81</td>
<td>36.40</td>
<td>7.38</td>
<td></td>
</tr>
<tr>
<td>TA</td>
<td>5.09</td>
<td>.09</td>
<td>1.94</td>
<td>.05</td>
<td>-.06</td>
<td>10.24</td>
<td>3.43</td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>-8.80</td>
<td>-.19</td>
<td>-3.77</td>
<td>&lt;.001</td>
<td>-13.39</td>
<td>-4.21</td>
<td>3.83</td>
<td></td>
</tr>
</tbody>
</table>

Note. Model = “Enter” method in SPSS. $B$ = unstandardized regression coefficient; $\beta$ = standardized coefficient; CI = confidence interval; LL = lower limit; UL = upper limit; $R^2$ = coefficient of determination; $\Delta R^2$ = adjusted $R^2$.

The accepted $\alpha$ for this study was .05, which correlates to a 5% probability of a type I error. Table 14 shows the calculated power of the analysis ($\beta$), effect size, and significance. The probability of having a type II error was calculated by subtracting the power from one (1-$\beta$). The
probability of a type II error occurring for each of the study variables was found to be 0%, based on the sample size, effect size, and p-value.

**Table 15**

*Type II Error Calculation for Volunteer Satisfaction*

<table>
<thead>
<tr>
<th>VS</th>
<th>P-value</th>
<th>Effect Size</th>
<th>Power</th>
<th>Type II Error Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL</td>
<td>&lt; .001</td>
<td>.94</td>
<td>1.00</td>
<td>0%</td>
</tr>
<tr>
<td>TA</td>
<td>&lt; .001</td>
<td>.77</td>
<td>1.00</td>
<td>0%</td>
</tr>
<tr>
<td>PA</td>
<td>&lt; .001</td>
<td>.88</td>
<td>1.00</td>
<td>0%</td>
</tr>
</tbody>
</table>

*N = 353*

The results derived from both the correlation and regression analyses indicate a statistically significant relationship between the transformational and passive/avoidant leadership styles of the chief fire officers and the volunteer firefighters' job satisfaction in North Central North Carolina. Thus, the chief fire officers' leadership behaviors have a significant predictive effect on the volunteer satisfaction of their firefighters. Transformational leadership positively affects volunteer satisfaction, while passive/avoidant behaviors have a negative impact. The results of this statistical analysis support a positive response to research question RQ1, and the resulting outcome is a rejection of the null hypothesis, \( H_1 \).

**Hypothesis 2.** Hypotheses \( H_2 \) and \( H_{2A} \) evaluated the significance of the relationship between the leadership behaviors of chief fire officers and the turnover intention of the volunteer firefighters they lead. The MLQ-5X (Bass & Avolio, 2004) was utilized to determine the chief fire officer's perceived leadership behaviors, which is the independent variable of this study. Turnover intention, a dependent variable, was calculated using the TIS-6 (Roodt, 2004). To investigate the relationship between leadership behavior and the turnover intention of volunteer firefighters, the following hypotheses were explored:
H2o: There is no statistically significant relationship between the leadership of the chief fire officers and the turnover intention of the volunteer firefighters.

H2Λ: There is a statistically significant relationship between the leadership style of the chief fire officers and the turnover intention of the volunteer firefighters.

To determine if a statistically significant relationship exists between the chief fire officers’ leadership behaviors and the turnover intention of volunteer firefighters, correlations were calculated for the associated variables. The turnover intention data was found to be slightly skewed (skewness = 1.05), which violates the assumption of data normality; however, the sample size was very large (N = 353). Thus, both the Pearson correlation coefficient and Spearman’s rho were calculated at a .01 level (2-tailed). Table 15 shows the calculated coefficients of correlation. Transformational leadership had the strongest (r = -.83, p < .001) negative correlation to the turnover intention of the volunteer firefighters. This negative correlation indicates that transformational leadership decreases the turnover intention of the volunteer firefighters. Transactional leadership also had a large negative correlation (r = -.63, p < .001) to the volunteer firefighters’ turnover intention. Passive/avoidant leadership behavior had a much larger than normal positive correlation (r = .83, p < .001) to the turnover intention of the volunteer firefighters, which represents an increase in the intent to leave the organization.

Table 16

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation (r)</th>
<th>p</th>
<th>Spearman’s rho</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL – TI</td>
<td>-.83</td>
<td>&lt; .001</td>
<td>-.75</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>TA – TI</td>
<td>-.63</td>
<td>&lt; .001</td>
<td>-.63</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>PA – TI</td>
<td>.83</td>
<td>&lt; .001</td>
<td>.63</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

A multiple regression analysis was run to further examine the significance of the relationship between leadership behaviors and the volunteer firefighters’ turnover intention.
Linearity was assessed through a visual assessment of the partial regression plots for transformational, transactional, and passive/avoidant, as shown in Figures 15, 16, and 17, respectively. The assumption of independence of residuals was accepted based on the Durbin-Watson statistic of 2.16. No evidence of multicollinearity was noted, as assessed VIF values were all less than ten. Normality was determined by visual observation of the histogram of the distribution of standardized residuals of the multiple regression analysis and the residual plot of standardized residuals versus predicted values. The histogram (Figure 18) reveals a symmetrical distribution of the residuals and indicates that five observations fell outside of the limit of ±3 standard deviations of the mean. A further investigation of these data points did not identify high leverage points (leverage values > .2) (Huber, 1981) or any highly influential points (Cook’s distance value > 1) (Cook and Weisberg, 1982). Thus, the five outliers were not removed from the study data. The residual plot, shown in Figure 19, represents an approximately linear alignment of the standardized residuals. Thus, there are no violations that would prevent using the multiple regression analysis, and all results are considered valid and reliable.
Figure 15

Partial Regression Plot for TI and TL

Figure 16

Partial Regression Plot for TI and TA
Figure 17

Partial Regression Plot for TI and PA

Figure 18

Histogram of Standardized Residuals for Volunteer Satisfaction
The regression model had an R-squared value of .74, which indicates that the chief fire officers' leadership behaviors explain 74.4% of the total variance in the volunteer firefighters' turnover intention. The overall model was found to be statistically significant ($F(3, 349) = 338.78, p < .001$). Table 16 presents the estimates of effects for each leadership behavior on the turnover intention of the volunteer firefighters. The t-test results indicate that transformational and passive/avoidant leadership behaviors significantly impact the volunteer firefighters' turnover intention. The t-test for the transactional leadership behaviors indicated that the relationship is not statistically significant at $p < .05$. Transformational leadership had a statistically significant, negative impact on turnover intention ($\beta = -.53, t(353) = -7.18, p < 0.001$). Passive/avoidant leadership behaviors had a statistically significant, positive impact on turnover intention ($\beta = .44, t(353) = 8.27, p < .001$).
Table 17

Multiple Regression Results for Turnover Intention

<table>
<thead>
<tr>
<th></th>
<th>TI</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>P-value</th>
<th>95% CI for β</th>
<th>VIF</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TL</td>
<td>-3.34</td>
<td>-.53</td>
<td>-7.18</td>
<td>&lt;.001</td>
<td>-4.26</td>
<td>-2.43</td>
<td>7.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA</td>
<td>.67</td>
<td>.09</td>
<td>1.77</td>
<td>.08</td>
<td>-.08</td>
<td>1.42</td>
<td>3.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>2.81</td>
<td>.44</td>
<td>8.27</td>
<td>&lt;.001</td>
<td>2.14</td>
<td>3.47</td>
<td>3.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Model = “Enter” method in SPSS. B = unstandardized regression coefficient; β = standardized coefficient; CI = confidence interval; LL = lower limit; UL = upper limit; R² = coefficient of determination; ΔR² = adjusted R².

The accepted α for this study was .05, which correlates to a 5% probability of a type I error. Table 17 shows the calculated power of the analysis (β), effect size, significance. The probability of having a type II error was calculated by subtracting the power from one (1-β). The probability of a type II error occurring for each of the study variables was found to be 0%, based on the sample size, effect size, and p-value.

Table 18

Type II Error Calculation for Turnover Intention

<table>
<thead>
<tr>
<th>TI</th>
<th>P-value</th>
<th>Effect Size</th>
<th>Power</th>
<th>Type II Error Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL</td>
<td>&lt; .001</td>
<td>.96</td>
<td>1.00</td>
<td>0%</td>
</tr>
<tr>
<td>TA</td>
<td>&lt; .001</td>
<td>.94</td>
<td>1.00</td>
<td>0%</td>
</tr>
<tr>
<td>PA</td>
<td>&lt; .001</td>
<td>.95</td>
<td>1.00</td>
<td>0%</td>
</tr>
</tbody>
</table>

N = 353

The results derived from both the correlation and regression analyses indicate a statistically significant relationship between the transformational and passive/avoidant leadership styles of the chief fire officers and the volunteer firefighters' turnover intention in North Central North Carolina. Thus, the chief fire officers' leadership behaviors have a significant predictive
effect on the turnover intention of their firefighters. Transformational leadership has a negative impact on turnover intention (decreases the intent to leave the organization), while passive/avoidant behaviors positively impact (increased intent to leave the organization). The results of this statistical analysis support a positive response to research question RQ2, and the resulting outcome is a rejection of the null hypothesis, H2.

Hypothesis 3. Hypotheses H30 and H3A evaluated the significance of the relationship between the volunteer satisfaction and the turnover intention of the participating volunteer firefighters. The VSI (Galindo-Kuhn & Guzley, 2002) was utilized to determine the turnover intention of the participating volunteer firefighters, and their turnover intention was calculated using the TIS-6 (Roodt, 2004). To investigate the relationship between volunteer satisfaction and the turnover intention of participating volunteer firefighters, the following hypotheses were explored:

H30: There is no statistically significant relationship between the volunteer satisfaction and the turnover intention of the volunteer firefighters.

H3A: There is a statistically significant relationship between the volunteer satisfaction and the turnover intention of the volunteer firefighters.

To determine if a statistically significant relationship exists between the volunteer firefighters' job satisfaction and the turnover intention, correlations were calculated for the associated variables. The data for both volunteer satisfaction (skewness = -1.04) and turnover intention (skewness = 1.05) violated the assumption of data normality; however, the sample size was very large (N = 353). Thus, both the Pearson correlation coefficient and Spearman’s rho were calculated at a .01 level (2-tailed). Table 18 shows the calculated coefficients of correlation. A much larger than normal negative correlation exists between the volunteer firefighters' job
satisfaction and the turnover intention \((r = -.84, p < .001)\). This negative correlation indicates higher levels of volunteer satisfaction decrease the turnover intention of the volunteer firefighters.

**Table 19**

*Correlation Coefficients Leadership Behaviors to Turnover Intention*

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation (r)</th>
<th>p</th>
<th>Spearman’s rho</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS – TI</td>
<td>-.84</td>
<td>&lt;.001</td>
<td>-.81</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

A simple linear regression analysis was run to further examine the relationship between volunteer firefighter satisfaction and the volunteer firefighters' turnover intention. The assumption of independence of residuals was accepted based on the Durbin-Watson statistic of 2.05. A scatterplot of volunteer satisfaction against turnover intention was plotted. Linearity was determined through a visual analysis of the scatterplot, as shown in Figure 20. Normality was determined by a visual inspection of the histogram of the distribution of standardized residuals of the multiple regression analysis and the residual plot of standardized residuals versus predicted values. The histogram (Figure 21) reveals a symmetrical distribution of the residuals and indicates that four observations fell outside of the limit of ±3 standard deviations of the mean. A further investigation of these data points did not identify high leverage points (leverage values > .2) (Huber, 1981) or any highly influential points (Cook’s distance value > 1) (Cook and Weisberg, 1982). Thus, the four outliers were not removed from the study data. The residual plot, shown in Figure 22, represents an approximately linear alignment of the standardized residuals. Thus, there are no violations that would prevent using the multiple regression analysis, and all results are considered valid and reliable.
Figure 20

*Scatterplot of Volunteer Satisfaction Against Turnover Intention*

![Scatterplot of Volunteer Satisfaction Against Turnover Intention](image)

Figure 21

*Histogram of Standardized Residuals for VS Against TI*

![Histogram of Standardized Residuals for VS Against TI](image)
The regression model had an R-squared value of .71, which indicates that volunteer firefighter job satisfaction explains 70.8% of the total variance in the volunteer firefighters' turnover intention. The overall model was found to be statistically significant ($F(1, 351) = 852.48, p < .001$). Table 19 presents the estimates of effects for volunteer satisfaction on the turnover intention of the volunteer firefighters. The t-test results indicated that volunteer satisfaction has a statistically significant impact on the volunteer firefighters' turnover intention. Volunteer satisfaction has a statistically significant, negative impact on turnover intention ($\beta = -.84, t(353) = -29.20, p < .001$).
Table 20

Multiple Regression Results for Volunteer Satisfaction Against Turnover Intention

<table>
<thead>
<tr>
<th>TI</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>P-value</th>
<th>95% CI for $\beta$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>.71</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td>.71</td>
<td>.71</td>
</tr>
<tr>
<td>VS</td>
<td>-.11</td>
<td>-.84</td>
<td>-29.20</td>
<td>&lt;.001</td>
<td>-.12</td>
<td>-.11</td>
<td></td>
</tr>
</tbody>
</table>

Note. Model = “Enter” method in SPSS. $B = \text{unstandardized regression coefficient}; \ \beta = \text{standardized coefficient}; \ \text{CI = confidence interval}; \ \text{LL = lower limit}; \ \text{UL = upper limit}; \ R^2 = \text{coefficient of determination}; \ \Delta R^2 = \text{adjusted R}^2$.

The accepted $\alpha$ for this study was .05, which correlates to a 5% probability of a type I error. Table 20 shows the calculated power of the analysis ($\beta$), effect size, and significance. The probability of having a type II error was calculated by subtracting the power from one (1-\(\beta\)). The probability of a type II error occurring for each of the study variables was found to be 0%, based on the sample size, effect size, and p-value.

Table 21

Type II Error Calculation for Volunteer Satisfaction Against Turnover Intention

<table>
<thead>
<tr>
<th>TI</th>
<th>P-value</th>
<th>Effect Size</th>
<th>Power</th>
<th>Type II Error Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS</td>
<td>&lt;.001</td>
<td>.94</td>
<td>1.00</td>
<td>0%</td>
</tr>
</tbody>
</table>

$N = 353$

The results derived from both the correlation and regression analyses indicate a statistically significant relationship between the volunteer satisfaction and the volunteer firefighters' turnover intention in North Central North Carolina. Thus, the volunteer satisfaction of firefighters has a significant predictive effect on their turnover intention. Volunteer satisfaction has a negative impact on turnover intention (decreases the intent to leave the
organization). The results of this statistical analysis support a positive response to research question RQ3, and the resulting outcome is a rejection of the null hypothesis, H3_0.

**Relationship of Findings**

**Relationship to the Research Questions.** Three research questions guided this quantitative, correlational research study. Data was collected to address each of the research questions through appropriate statistical analyses to test the study hypotheses. The hypotheses testing results are presented in the following section as it relates to the research questions. The three research questions that drove the study are:

RQ1: To what extent is there a relationship between the leadership style of the chief fire officers and the job satisfaction of the selected volunteer firefighters in North Central North Carolina?

RQ2: To what extent is there a relationship between the leadership style of the chief fire officers and the turnover intention of the selected volunteer firefighters in North Central North Carolina?

RQ3: To what extent is there a relationship between the job satisfaction and turnover intention of the selected volunteer firefighters in North Central North Carolina?

The first research question focused on the impact of a chief fire officer’s leadership behavior on the volunteer firefighters' job satisfaction within the department. The chief fire officer's perceived leadership behaviors were recorded using the MLQ-5X rater form (Bass & Avolio, 2004). The MLQ-5X is a useful tool for measuring the level of perceived leadership behaviors categorized as transformational, transactional, or passive/avoidant, which comprise the full range leadership model (Northouse, 2016). This was compared with the level of volunteer satisfaction for each participating firefighter, obtained using the VSI (Galindo-Kuhn & Guzley,
Volunteer satisfaction and job satisfaction are often used synonymously, where volunteer satisfaction is usually explicitly derived from personal volition and the perceived value of reward rather than financial compensation (Henderson & Sowa, 2019). The null hypothesis supporting this research question stated no statistically significant relationship between leadership behaviors and volunteer satisfaction. Based on the correlational and regression analysis results, a statistically significant relationship existed between transformational and passive/avoidant leadership behaviors of the chief fire officers and the volunteer satisfaction of the volunteer firefighters. Spearman’s rho and Pearson’s correlation analyses positively impacted volunteer satisfaction when the chief fire officers exhibited transformational leadership behaviors. At the same time, passive/avoidant behaviors negatively impacted the level of volunteer satisfaction. Thus, the null hypothesis associated with RQ1 has been rejected.

The second research question was dedicated to identifying the presence of a relationship between the chief fire officer’s leadership behavior and the turnover intention of the volunteer firefighters. As discussed above, the MLQ-5X (Bass & Avolio, 2004) was utilized to determine the chief fire officer’s perceived leadership behaviors from the perspective of the volunteer firefighter. The desire to leave the organization, or turnover intention, was measured using the TIS-6 (Roodt, 2004). While employees may express turnover intention without leaving an organization, it is an important metric to monitor as it can describe the overall health of the organization (Cho & Lewis, 2012). The null hypothesis for RQ2 indicated the lack of a statistically significant relationship between the perceived leadership behaviors of the chief fire officers and the volunteer firefighters’ turnover intention. Through both correlational and regression analysis, a statistically significant relationship was identified between these variables. The correlational analyses found that transformational leadership behaviors resulted in a negative
impact on volunteer firefighter turnover intention. This negative impact suggests that volunteer firefighters' desire to leave the volunteer fire service is lower when the chief fire officers exhibited transformational leadership behaviors. Alternatively, the chief fire officers' passive/avoidant leadership behaviors had a positive effect on the turnover intention or an increase in the desire to leave the organization. Based on the results of the hypothesis testing for RQ2, the associated null hypothesis was rejected.

Finally, the third research question sought to understand the relationship between a volunteer firefighter’s job satisfaction and their turnover intention. This null hypothesis for this research question assumed there was no statistically significant relationship between the volunteer satisfaction and turnover intention in the volunteer firefighters. Spearman’s rho and Pearson’s correlation analyses were performed, which resulted in a statistically significant, negative relationship between these two variables. This suggests that the volunteer firefighters with positive job satisfaction intend to remain active members of their fire department. Based on the results of the hypotheses testing, the null hypothesis for RQ3 has been rejected.

**Relationship to the Theoretical Framework.** The theoretical framework seeks to provide a means to identify the problem to be addressed by the research study and the approach that will be employed to address the issue (Lederman & Lederman, 2015). The framework of this study is anchored by the application of four key theories to understand the impact of leadership behaviors on the volunteer satisfaction and turnover intention of volunteer firefighters. The full range leadership model is essential to determining the chief fire officers' leadership behaviors. Maslow’s hierarchy of needs, the self-determination theory, and Herzberg’s two-factor theories guide the application of leadership behaviors to volunteer satisfaction and turnover intention. Combining the full range leadership model with Maslow’s hierarchy of needs, the self-
determination theory, and Herzberg’s two-factor theories allowed the researcher to examine the existence of relationships between leadership behavior, volunteer satisfaction, and turnover intention.

Herzberg’s two-factor theory was included in the theoretical framework based on the support provided to similar studies that sought to identify a relationship between leadership and employees' job satisfaction (Hur, 2018; Thant & Chang, 2021). Herzberg’s two-factor theory is founded on the principle that an employee either experiences satisfaction or dissatisfaction in their work (Herzberg et al., 1959). The two-factor theory is a practical approach to examining the influences of various factors that can impact job satisfaction (Thant & Chang, 2021). Specifically, the theory discusses the effect of leadership quality on either job satisfaction or dissatisfaction (Herzberg et al., 1959). Herzberg’s two-factor theory supports the findings as leadership behaviors were identified to act as both a promoter and detractor to job satisfaction.

The self-determination theory and Maslow’s hierarchy of needs are critical to understanding the drivers for motivation for employees. Maslow’s hierarchy of needs focuses on the progression through the levels of need, with each need having to be fulfilled before the individual can move to the next stage (Maslow, 1943). The most basic needs are often met through employment and can be attributed to increases in job satisfaction (Rahimi et al., 2016). Alternatively, the self-determination theory does not require a stepwise progression through the levels of need (Gagné & Deci, 2005). These two theories are necessary to the framework of the study through the contributions to the understanding of the needs of employees and volunteers used to address the research questions, as both motivators and hygiene factors that influence job satisfaction and dissatisfaction (Thant & Chang, 2021). The statistically significant findings
support the theoretical framework of the study, which provides structure and alignment to the research study.

**Relationship to the Literature.** The findings of this study are consistent with previous studies that examined the relationship between leadership style and the job satisfaction and turnover intention of employees in various organizations and industries. Using statistical analyses, significant relationships were identified between transformational and passive/avoidant leadership behaviors and the job satisfaction and turnover intention of the volunteer firefighters.

Abdelhafiz et al. (2016) performed a study on the impact of leadership style on nurses' job satisfaction in hospitals in Jordan. The study used the MLQ-5X form to measure the head nurses' perceived leadership behaviors and a study-specific survey to assess the nurses' job satisfaction. The study found that transformational and transactional leadership behaviors had a statistically significant impact on nurses' job satisfaction. In contrast, passive/avoidant leadership behaviors had statistically significant adverse effects. The methods used by these researchers support the MLQ-5X as an appropriate tool to measure the perceived leadership behaviors. Additionally, the findings are supported by similar effects from transformational and passive/avoidant leadership styles.

Oostlander et al. (2014) conducted a study that examined leadership as a predictor of volunteer satisfaction within the field of education on a global scale. The study data was collected using a survey measuring autonomy-supportive leadership, inner needs satisfaction, independent motivation, and volunteer satisfaction. The findings indicated a significant relationship between leadership and volunteer satisfaction and the tenure of the volunteers. The results of this research study identified a significant relationship between leadership and volunteer satisfaction which aligns with the findings of Oostlander et al. (2014).
Benevene et al. (2018) conducted a study to investigate the effect of leadership on volunteer satisfaction and commitment to the organization. The study used the VSI to collect and measure the job satisfaction and organizational commitment of the volunteers and their intention to remain volunteers. The findings support the critical role of leadership in maintaining volunteer satisfaction and preventing volunteer turnover. The successful use of the VSI by Benevene et al. provides support for utilizing the tool as a measure of the level of job satisfaction specific to volunteers.

**Relationship to the Problem.** The problem to be addressed by this study was the effect of leadership behaviors on the job satisfaction and turnover intention of the volunteer firefighters within selected North Central North Carolina volunteer fire departments. To address this problem, the research study was designed to measure the perceived leadership behavior of participating fire chiefs and compare it with the volunteer firefighters' level of satisfaction and turnover intention. Job satisfaction is a critical component of employee retention (Rose & Raja, 2016). The volunteer fire service is experiencing a decline in volunteer firefighter retention, reducing nearly 70,000 volunteers between 2015 and 2018 (NVFC, 2020).

The results of this study provide support to the potential effects on volunteer satisfaction and turnover intention that can occur from leadership interactions. A statistically significant positive impact was identified between transformational leadership behaviors and both volunteer satisfaction and turnover intention. Additionally, a similar relationship existed between transformational leadership behaviors and the reduction in turnover intention for the participating volunteer firefighters. When combined, these effects can positively impact the retention of volunteer firefighters, which could help combat the continued decline of active volunteers.
Summary of the findings

This quantitative correlational research study sought to identify and examine the relationship between the chief fire officers' leadership behaviors and the volunteer satisfaction and turnover intention of their firefighters. Data were collected using the MLQ-5X, VSI, and TIS-6. The results were achieved through detailed statistical analyses using IBM SPSS version 27 for Windows. Data cleaning identified 11 surveys not included in the analyses due to violations of study participation requirements. By analyzing 353 surveys from volunteer firefighters spread across a 15-county region in North Central North Carolina, insights were gained into the job satisfaction and turnover intention of the volunteer firefighters and the chief fire officers' leadership behavior in the same region. The survey data was critical to address the research questions and test the hypotheses. Table 21 shows the findings of this study, which indicate a statistically significant relationship between volunteer satisfaction, turnover intention, and leadership behaviors.

Table 22

Summary of Findings

<table>
<thead>
<tr>
<th>Variable</th>
<th>Research Question</th>
<th>Spearman’s rho</th>
<th>Statistically Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL – VS</td>
<td>RQ1</td>
<td>.85</td>
<td>Yes</td>
</tr>
<tr>
<td>TA – VS</td>
<td>RQ1</td>
<td>.72</td>
<td>No</td>
</tr>
<tr>
<td>PA – VS</td>
<td>RQ1</td>
<td>-.73</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The findings indicate that transformational leadership improves volunteer satisfaction and decreases the turnover intention of the firefighters. It can be concluded that the more transformational behaviors that a chief fire officer exhibits, their firefighter will be more satisfied
and less likely to turnover. Alternatively, passive/avoidant leadership has a negative effect on volunteer satisfaction and increases firefighters' turnover intention. Thus, if the chief fire officers have more passive/avoidant tendencies, their firefighters will experience lower satisfaction levels and are more likely to leave the department. The findings of this study are consistent with previous studies examining the effect of leadership styles on the job satisfaction and turnover intention of the volunteer firefighters.

**Application to Professional Practice**

The purpose of this quantitative correlational research study was to further the existing body of knowledge regarding the effect of leadership behavior and job satisfaction and employee retention. The overall problem was examined through a focused study on the relationship between the chief fire officers' leadership behaviors and the job satisfaction and turnover intention of the volunteer firefighters in North Central North Carolina. Additionally, the findings of this research are applicable to the fields of leadership and business in both for-profit and non-profit organizations. This section presents the application of this research study to leadership practices and explains how these findings can improve volunteer satisfaction and lower turnover intention.

**Improving General Business Practice**

The full range leadership model classifies leadership behaviors into three categories: transformational, transactional, and passive/avoidant (Arenas, 2019). An organization’s leadership plays a critical role in the development, growth, satisfaction, and retention of the human capital of the organization (Aydogmus et al., 2018; Northouse, 2016). Additionally, leaders are essential for fostering an environment that generates innovation, adaption, and execution, which drives employees to fulfill the organization’s goals and mission (Antonakis &
Thus, the implementation of effective leadership strategies and behaviors is vital to strengthen an organization’s performance. The results of this research study align with prior research that leadership is impactful to the overall satisfaction and retention of employees. This study was designed to assist in the development and evolution of leadership training initiatives to provide a focus on leadership behaviors that provide a positive impact on employee satisfaction and retention.

The first research question sought to gain an understanding of the effect of chief officer leadership behavior on the job satisfaction of volunteer firefighters. Transformational and passive/avoidant leadership behaviors had a statistically significant relationship with job satisfaction. The study results indicate a direct positive effect of transformational leadership behaviors on volunteer firefighters' job satisfaction. Alternatively, passive/avoidant leadership behaviors had a statistically significant negative impact on the volunteer satisfaction of firefighters. The presence of a statistically significant finding indicates that when firefighters perceive their chief fire officer as more transformational, they are more satisfied with their role as a volunteer firefighter. Parry and Sinha (2005) found that transformational leadership behaviors are considered trainable as learned behavior. Thus, fire departments and fire associations should focus on providing leadership training that increases the chief fire officer's transformational leadership behaviors.

The second research question was designed to improve the understanding of the relationship between the leadership behavior of the chief fire officers and the turnover intention of the volunteer firefighters they lead. Both transformational and passive/avoidant leadership behaviors were found to have a statistically significant relationship to the turnover intention of the volunteer firefighters. The findings indicate that transformational leadership has a negative
effect on volunteer firefighter turnover intention. Conversely, passive/avoidant leadership behaviors generate a positive impact on the turnover intention of the volunteer firefighters, which indicates that when a chief fire officer is perceived to have predominant passive/avoidant behaviors, the turnover intention of the firefighters is higher. Many volunteer fire departments struggle to maintain the required staff necessary to respond to the increasing demand for emergency services (NVFC, 2020). Due to the continued decline of active volunteer firefighters, it is imperative that leadership training be designed to strengthen the transformational leadership behaviors of chief fire officers.

Finally, the third research question was intended to evaluate the relationship between job satisfaction and turnover intention of the volunteer firefighters. A statistically significant relationship was identified between these two variables. The study results support previous literature findings that suggest job satisfaction is a predictor of voluntary turnover intention (Holston-Okae & Mushi, 2018; Hurst et al., 2017; Iqbal & Hashimi, 2015). Since there is a significant relationship between volunteer satisfaction and turnover intention, organizations should employ strategies to improve overall job satisfaction to decrease voluntary turnover within the fire service. By reducing voluntary turnover, fire departments can ultimately reduce the financial and other burdens associated with replacing personnel. According to the NVFC (2020), the average cost to train and equip a firefighter in the United States is approximately $27,000.

**Potential Application Strategies**

The statistically significant relationships between transformational leadership and improved job satisfaction and turnover intention indicate that transformational leadership appeals to volunteer firefighters. Transformational leadership relies on the leader's ability to inspire their
followers to excel beyond their perceptions of their limitations (Northouse, 2016). A transformational leader is not removed from their followers; instead, the leader is an intimate member of the team and leads through example and actions (Northouse, 2016). Most volunteer fire departments operate with a less rigid bureaucratic structure when compared to fully paid fire departments. This flatter organizational structure allows for a more direct relationship to be formed and a more impactful effect from the leadership behaviors of a chief fire officer on the volunteer firefighters they lead.

The means and methods of a transformational leader are very well-suited for use within the volunteer fire service. Schaubroeck et al. (2007) discussed that transformational leaders who can instill a sense of respect for their authority, while still attending to the needs and suggestions of their followers, generated substantially higher levels of performance. It is critical for the leadership of these organizations to focus time, attention, and resources to fight against the continued decline in the number of active volunteer firefighters. The findings of this research study support the need for the application of leadership practices that may improve the volunteer satisfaction and turnover intention of volunteer firefighters.

The first recommendation for action is to encourage the growth of current fire service leadership’s understanding of their leadership behaviors and the current status of their department. Using a leadership behavior measurement tool, such as the MLQ, fire officers at all levels of the hierarchy can better understand both their self-perceptions and other’s perceptions of their leadership style. This recommendation is not limited to the chief fire officer of the department. While the organizational structure of the volunteer fire service does allow for a close relationship between the chief fire officer and all members of the department, there are times when other officers are asked to lead sub-teams within the department. Additionally, the
leadership of the fire department should utilize anonymous surveys to measure the satisfaction and turnover intention of the volunteer staff of the department. All surveys should remain anonymous to encourage firefighters to depict their feelings accurately without fear of retribution. This information will be helpful to the department leadership when determining how the volunteer firefighters perceive their role within the fire department.

The second recommendation of this study is for the governing agencies of the volunteer fire service to create leadership training initiatives that foster the growth and development of transformational leadership behaviors for fire officers. As noted above, these training opportunities should not be limited to the chief fire officer. Each of the officers within the department serve a specific role in the department's overall leadership and requires the motivation of firefighters to achieve the desired results. Parry and Sinha (2005) found that an effective leadership training program can increase the prevalence of all five transformational leadership behaviors; however, classroom learning alone is not an effective means of leadership learning. By combining the leadership training initiatives with action-based learning in the fire service, transformational leadership can be increased within the fire service to overcome the increase in volunteer firefighter turnover.

Finally, these changes will not occur without continuous improvement. Chief fire officers must continue to monitor the levels of satisfaction and turnover intention within their department. It is realized that leadership behavior is not the only potential impact to these factors; thus, the chief fire officer must take the time to monitor the needs of the department and address any identified opportunities to improve volunteer satisfaction and reduce turnover.
Summary of Application to Professional Practice

The findings of this research study have contributed to the existing body of knowledge associated with the effects of leadership behaviors on job satisfaction and turnover intention. The study results indicate the existence of statistically significant relationships between the study variables, which can be used to improve business practices within both for-profit and non-profit organizations. The application of the study findings reveals that training should be designed to increase the transformational leadership behaviors of chief fire officers, which will improve the job satisfaction of volunteer firefighters while lowering their turnover intention.

Recommendations for Further Study

The findings from this research study support several recommendations for future study opportunities. The first recommendation is to expand the geographic limitation of the study. This research study focused on the geographic region bounded by 15 counties in North Central North Carolina. The expansion of the study area would allow for further development of the generalizations that can be garnered from the findings of this study.

This research study was limited to volunteer firefighters who were not compensated for their service. The second recommendation is for this study to be replicated to include mostly paid and fully paid fire departments. The inclusion of professional firefighters, who are compensated for their service, will allow for a comparison of the findings for volunteer and paid firefighters. Professional fire departments operate in a much more strict and bureaucratic management style and are often much more significant, with greater degrees of separation between the firefighters and the chief fire officers. Often fire departments may be comprised of a combination of both professional and volunteer firefighters, and these two groups may vary in their preference of leadership behaviors, job satisfaction, and turnover intention.
Another recommendation is to expand the study to include the effect of tenure on the job satisfaction and turnover intention of firefighters. Firefighters who have served many years in the fire service may be more likely to have higher turnover intentions later in their career due to the levels of strenuous or dangerous activities associated with emergency services. Younger firefighters who have not yet achieved full certification may have their volunteer satisfaction impacted due to the increased demand for training to achieve necessary certifications. Additionally, chief fire officers who have served in a leadership role for many years may impact their leadership style, with early service being driven by enthusiasm and burnout affecting later years of service.

This study was performed during an unprecedented time in history due to the effects of a global pandemic. It is recommended that this study be replicated at a time during which there are fewer restrictions and regulations in place. It is understood that influences to the volunteer satisfaction of the participating firefighters could have occurred due to increased dangers to the emergency responders. Additionally, during this time many individuals were impacted financially due to the pandemic, which could also have affected the responses received during this study.

The results of this research study indicated the existence of a statistically significant relationship between leadership behavior and the job satisfaction and turnover intention of volunteer firefighters. However, it is understood that there are additional considerations that could contribute to volunteer satisfaction and turnover intention. The final recommendation for further study is to utilize qualitative or mixed-methods research to provide additional insight into the factors that impact job satisfaction and turnover intention of volunteer firefighters.
Reflections

This quantitative correlational study collected data from participating volunteer firefighters to determine the potential relationship between leadership behavior and volunteer satisfaction and turnover intention. Data were collected through survey questions measured using a Likert-type scale administered to the volunteer firefighters in North Central North Carolina. Participants had to be at least 18 years of age and receive no compensation for their work as firefighters. The findings of the study support the existence of a relationship between leadership behavior and the volunteer satisfaction and turnover intention of the participating volunteer firefighters. The research process provided the opportunity for the personal and professional growth of the researcher.

Personal & Professional Growth

The researcher found the quantitative research study process to be both exciting and challenging. Having served in various leadership roles over the past 14 years with for-profit organizations, it was compelling to observe the preferred leadership behaviors of the volunteer firefighters. Based on professional experiences, the researcher realized the effect of leadership behaviors on their level of job satisfaction and turnover intention; however, it was enlightening to generate findings that supported the personal views of the researcher.

The researcher has served as both a paid and volunteer firefighter for six years. The researcher acknowledges the critical role that the volunteer fire service plays within the community and has a personal desire to ensure the continued development of fire leadership training opportunities. The researcher’s involvement in the fire service could produce biases and preconceived theories based on personal experiences in emergency services. The study was designed to allow for the anonymous collection of participant data that was analyzed strictly to
address the research problem by testing the study hypotheses. The researcher did not directly interact with any of the study participants during or after the data collection phase of the study.

At the time of the study, the researcher served in a leadership role for several non-profit organizations. As a leader within these organizations, the researcher recognizes the importance of leadership and the actual effect that leadership can have on job satisfaction and retention of a qualified and driven workforce. The researcher has a passion for the development of strong leaders in both personal and professional practice. The information gathered during this research study has provided the researcher with effective behaviors that can be implemented in the leadership of these organizations. The researcher was able to learn from this study and was able to experience personal and professional growth.

**Biblical Perspective**

The Bible provides countless examples of effective outcomes derived from effective leadership. Leadership plays a significant role in the current business environment and is essential to executing an organization’s strategy, goals, and mission (Northouse, 2016). The success of a volunteer fire department relies on the involvement and actions of each member. The chief fire officer defines each member's role, and their ability to inspire each firefighter to perform is instrumental in successfully overcoming the challenges associated with emergency response. Similarly, Paul explained that the church is comprised of each member united through Jesus Christ, with each member playing a critical role in the operations of the church (1 Corinthians, NIV).

Transformational leadership is founded on the growth and development of individuals to achieve organizational goals and mission. Transformational leaders seek to identify and cultivate the strengths of each of their followers. 1 Kings 3:9 (NIV) teaches that a leader must allow his
followers to lead and distinguish what is right, which is critical to leaders' continued growth. Furthermore, the leader must motivate and inspire their followers through encouragement and love, which will, in turn, foster their perceived satisfaction with their work (Hebrews 10:24-25, NIV).

When members of any organization are happy and motivated to perform the mission of the organization, outsiders of the organization are compelled to join the organization and take part. Meyer (2003) explained that a motivated and satisfied firefighter is one of the most significant recruiting and retention tools available to the volunteer fire service. This is also evident in the early church when Paul described that new members would be drawn to the church by witnessing the unity and fellowship enjoyed by church members (Acts 2:47, NIV).

The leadership of the organization plays a crucial role in reducing the turnover of the membership. The volunteer fire service is experiencing declining membership globally and hit a record low in 2019 (NVFC, 2020). If left unchecked, this will impact many individuals and communities across the nation and world. A contributing factor to this decline is poor leadership and a lack of a unified focus (NVFC, 2020). Ephesians 4:1-3 (NIV) teaches that unity can only be achieved through patience and “bearing with one another in love”. Through patience and developing others, transformational leaders can empower their followers to achieve greatness. While leadership is also a learnable behavior, it also maintains some innate tendencies. The Lord provides everyone with specific gifts and talents that are necessary to perform His work. Romans 12:6-8 (NIV) teaches that leaders are given the gift of zeal required to lead their followers to achieve excellence.

The field of emergency services is rooted in service to others. Hebrews 13:16 (NIV) directs Christians to do good in the service of others as these sacrifices please the Lord.
Similarly, Galatians 6:9 instructs that all Christians should “not grow weary of doing good.”

Through service to others, firefighters perform God's will and further his plan for humanity on Earth. Firefighters are willing to lay down their lives in the service and protection of others, which is the greatest example of love for mankind (John 15:13, NIV). Specifically for volunteer firefighters, they willingly perform acts of kindness and service in the face of extreme danger with no expectation of reward in return. Acts 20:35 (NIV) teaches that everyone should seek to work hard in the service of the weak and needy, as it is “more blessed to give than to receive.”

**Summary of Reflections**

The doctoral journey has provided countless opportunities for the researcher to evaluate their volunteer fire service perspective through both a business lens and a Christian worldview. The researcher grew in their understanding of many aspects of business that can be applied to both professional and volunteer service. These learnings will benefit the growth and development of the individuals and organizations that the researcher serves. The researcher continuously relies on the teachings of Joshua 1:9 (KJV) “… Be strong and of good courage; be not afraid, neither be though dismayed: for the Lord thy God is with thee whithersoever thou goest.” In a professional career, volunteer service, or educational journey, we must never forget that the Lord will provide the means necessary and the gifts to overcome when we trust in Him and perform His work.

**Summary of Section 3**

This quantitative correlational research study was designed to examine the relationship between chief fire officer leadership behaviors and the job satisfaction and the turnover intention of volunteer firefighters. A written survey comprised of the MLQ-5X, VSI, and TIS-6 was utilized to measure the perceived leadership behaviors of the chief fire officers and the volunteer
satisfaction and turnover intention of the volunteer firefighters. Data was collected, cleaned, and analyzed to test the research hypotheses. The research study findings indicated a positive relationship between transformational leadership behaviors of the chief fire officers on the volunteer satisfaction of the volunteer firefighters and a negative relationship between passive/avoidant leadership behaviors and the volunteer satisfaction of the volunteer firefighters. Alternatively, the findings show a negative relationship between transformational leadership and turnover intention, while passive/avoidant leadership behaviors resulted in a positive relationship with turnover intention. There were no statistically significant relationships identified with the transactional leadership behaviors of the chief fire officers on either volunteer satisfaction or turnover intention. The results of this study are supported by several traditional research theories, including the full range leadership model, Maslow’s hierarchy of needs, the self-determination theory, and Herzberg’s two-factor theory.

**Summary and Study Conclusions**

Job satisfaction and turnover intention are critical elements to the overall success of an organization. According to research, leadership behaviors are impactful to an employee’s job satisfaction and turnover intention (Aydogmus et al., 2018; Braun et al., 2013; Faldetta et al., 2013). This quantitative correlational research study was conducted on volunteer firefighters that serve fifteen counties in North Central North Carolina. The study sought to examine the relationship between the leadership behaviors of chief fire officers and the volunteer satisfaction and turnover intention of the participating volunteer firefighters. Data were collected to measure the study variables using established survey instruments, including the MLQ-5X, VSI, and TIS-6. The survey responses were anonymous and did not identify the survey participants, the chief fire officers, or the fire departments that participated in the study. The SPSS version 27 was
utilized for the statistical analyses required to test the study hypotheses in support of the research questions.

The study’s findings indicated a positive relationship between transformational leadership behaviors and the volunteer satisfaction of participating volunteer firefighters and a negative relationship between passive/avoidant leadership behaviors and volunteer satisfaction. There was no statistically significant relationship between transactional leadership and the volunteer satisfaction of participating volunteer firefighters. The results of the study also indicated a negative relationship between transformational leadership behaviors and the turnover intention of the volunteer firefighters. This negative relationship suggests that when chief fire officers exhibit transformational leadership behaviors the intention of the volunteer firefighters to leave the organization are lowered. Alternatively, a positive relationship was identified between passive/avoidant leadership behaviors and the turnover intention of the participating volunteer firefighters. There was no statistically significant relationship identified between transactional leadership behaviors and the turnover intention of the volunteer firefighters. Finally, the study results indicated a statistically significant negative relationship between the volunteer satisfaction and turnover intention of the participating volunteer firefighters. As noted above, this implies that higher levels of volunteer satisfaction results in lowered turnover intention.

The results and findings of this research study advances the body of knowledge concerning the relationship that exists between leadership behavior and the turnover intention and job satisfaction of employees. The study provides insight into the volunteer satisfaction and turnover intention of volunteer firefighters in North Central North Carolina. The findings of this study are consistent with similar previous studies that examined leadership behaviors and job
satisfaction and leadership behaviors and turnover intention. The results of this study help to close the gap that exists in the existing body of literature regarding the leadership behaviors and both volunteer satisfaction and turnover intention of volunteer firefighters in North Central North Carolina.
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Appendix A: Permission to Use Survey Instruments

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Multifactor Leadership Questionnaire™
Instrument (Leader and Rater Form)
and Scoring Guide
(Form 5X-Short)

by Bruce Avolio and Bernard Bass

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Dear Robert

You are welcome to use the TIS for your research. For this purpose please find the TIS-15 attached for your convenience. This TIS-6 (version 4) consists of the first six items high-lighted in yellow. You may use any one of these two versions. The TIS is based on the Theory of Planned Behaviour.

The only two conditions for using the TIS are that it may not be used for commercial purposes and second that it should be properly referenced as (Roodt, 2004) as in the article by Bothma & Roodt (2013) in the *SA Journal of Human Resource Management* (open access).

It is easy to score the TIS-6. Merely add the item scores to get a total score. The midpoint of the scale is 18 (3 x 6). If the total score is below 18 then the it indicates a desire to stay. If the scores are above 18 it indicates a desire to leave the organisation. The minimum a person can get is 6 (6 x 1) and the maximum is 30 (5 x 6). No item scores need to be reflected (reverse scored).

It is recommended that you conduct a CFA on the item scores to assess the dimensionality of the scale. We found that respondents with a matric (grade 12) tertiary school qualification tend to understand the items better and consequently an uni-dimensional factor structure is obtained.

If you wish to translate the TIS in a local language, you are welcome to do so. It is recommended that a language expert is used in the translate - back translate method.

I wish you all the best with your research!

Best regards

Prof Gert Roodt
August 20, 2020

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Permission has been granted by Roseanna Galindo-Kuhn, author and developer of the Volunteer Satisfaction Index (VSI), to reprint and use the measurement instrument for your academic research in volunteerism provided the following agreement conditions are consented to:

- Permission is being granted for the singular use in your current research project: “An examination of chief fire officer leadership style and the job satisfaction and retention of volunteer firefighters in North Central North Carolinas”. It is understood that your research will include administering the VSI to a population of approximately 350 volunteers for this research project in a study that evaluates the “relationship between chief fire officer leadership behaviors and the job satisfaction and turnover intention of the volunteer firefighters they lead”.

- This research is being conducted in partial fulfillment of a Doctoral degree in Business Administration – Leadership through Liberty University. The aforementioned research project is under the supervision of Dr. John Borek, Academic Chair. Additional and/or subsequent use beyond the scope of the aforementioned research project is prohibited. No fee will be required for this use in pursuit of this academic research project.

- In exchange for the use of the Volunteer Satisfaction Index (VSI), academic scholars agree to share a copy of the finished research paper with the author and a copy of the raw VSI data set that was collected. Data sets are to be submitted as SPSS or Excel files to the author and developer of the VSI within 6 months of survey administration or publication, whichever comes first.

- Please use the standard credit line:


By using the VSI in the research project, the researcher, Mr. Robert Miller, agrees to these terms. If you have any questions, you may contact me at the number below.

Sincerely,