LEADERSHIP STYLES IN LIFE-THREATENING CONTEXTS: EXPLORING POLICE OFFICERS' LEVEL OF TRUST

by

Ivys J. Rosado Diaz

ANDREA DAINES, PhD, Faculty Mentor and Chair
HAROLD COHEN, PhD, Committee Member
THOMAS E. POULIN, PhD, Committee Member

Elizabeth Koenig, JD, Dean, School of Public Service Leadership

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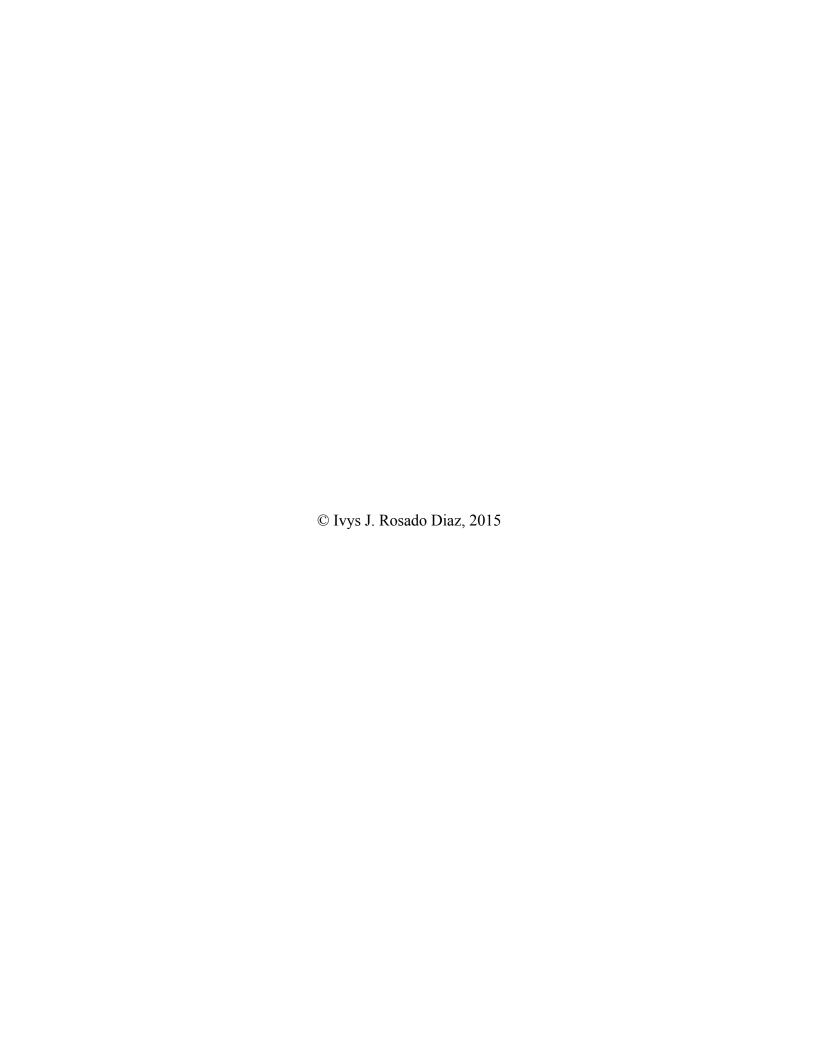
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Abstract

This quantitative study was an exploration of police officers' in Puerto Rico level of trust, perception of leadership style, and perceived leadership effectiveness in two different contexts, normal contexts and life-threatening contexts. Data were collected through a web-based system, SurveyMonkey®, where police officers from Puerto Rico completed an online survey. The survey instrument included the Leadership Style Survey by Dr. Peter Northouse, the Global Trust Scale by Dr. Jason Colquitt, and the Perception of Leadership Effectiveness Scale published in Psych Articles. The sample included 128 sworn, active duty police officers from Puerto Rico. The findings of this study revealed that demographics such as age, sex, and years on the force were not related to trust in the supervisor by the police officers. The study findings further revealed that police supervisors in Puerto Rico demonstrated an authoritarian leadership style in both normal contexts and life-threatening contexts. Multiple regression analysis showed that high levels of authoritarian leadership styles are related to high levels of trust. Although the study findings revealed that, overall, leaders' skills were rated on the subscale as moderately bad, authoritarian leaders were also perceived as effective leaders in both normal contexts and life threatening contexts.

Dedication

Have I not commanded you? Be strong and courageous. Do not be afraid; do not be discouraged, for the Lord your God will be with you wherever you go (Joshua 1:9)

I could not have done this without you besides me every step of this long journey. Thank you God, for always being there through the dark, lonely nights when I just wanted to give up! I want to dedicate this work to my husband and my daughters. I know that obtaining this degree took much time away from us as a family. Tony, I am eternally grateful for your patience, understanding, and love. Janely and Shanira thank you for your love and support even when you are too young to understand why I took on this challenge. This is proof that you can accomplish anything you want in life. Mommy loves you! To my Mom, Dad, and Sister, I hope I have made you proud. To my brother Frank, I know you have witnessed this accomplishment from heaven. To the rest of my family, grandmother, aunts, and cousins, thank you for cheering me on! I promise to make up for all the family gatherings I missed!

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Blessed are the peacemakers, for they shall be called the children of God (Matthew 5:9).

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CHAPTER 1. INTRODUCTION

Introduction to the Problem

Leadership has been a topic researched by many scholars and practitioners in organizational sciences (Barnett & Conley, 2006). Gardner (1990) defined leadership as "the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the leader and his or her followers" (p. 1). Northouse (2007) explaines that leadership is based on four components: (a) it is a process, (b) involves influences, (c) takes place in a group, and (d) involves reaching established goals. It is important to have a clear understanding of leadership and its purpose. Leadership is commonly confused with status, power, and official authority. Gardner (1990) presented a distinction by stating that status is related to a person in a high position and that it has no relationship with leadership. Leaders need followers in order to carry out their role. Researchers suggest leaders should know their followers, thus stimulating and motivating them toward projected goals (Blanchard, Edeburn, O'Connor, & Zigarmi, 2004).

Similar to private companies, public safety organizations have their unique set of goals and objectives. Organizational changes, competition among employees, and conflicting issues will require immediate leader intervention. In this particular setting, effective leadership occurs when leader intervention results in an agreement and understanding by members (Blanchard et al., 2004). Effective leaders are responsible for motivating employees to strive for optimum

performance, motivating employees to collaborate, motivating employees to contribute, and motivating employees to work as a team (Munro, 2008). Furthermore, the degree of trust between subordinates and leaders are an important element in leadership effectiveness in organizations (Burke, Sims, Lazzara & Salas, 2007).

Although leadership theory research has made great developments throughout history, researchers have acknowledged that leadership studies that focus on leadership within contexts lacks empirical support (Campbell, Hannah, & Matthews, 2010; Osborne, Hunt, & Jauch, 2002). One of the leadership contexts highlighted by this study is the one that takes place in dangerous contexts. Furthermore, the specific focus of this study was on the relationship between different leadership styles (authoritarian, democratic, and laissez-faire), level of trust and overall perceived leadership effectiveness during normal contexts and life-threatening contexts experienced by police in Puerto Rico.

Background of the Study

Research in leadership has shown that leadership effectiveness, employee job satisfaction, and positive performance in teams are related to transformational leadership styles (Braun, Peus, Trey, & Weisweiler, 2012; Hannah, Uhl-Bien, Avolio, & Cavarretta, 2009). Careers in which personnel are frequently exposed to life-threatening contexts like firefighting, emergency management, and law enforcement may have different leadership needs (Hannah et al., 2009). For example, while dangerous situations may be rare in a conventional context, they are common in military careers, crisis response organizations, and law enforcement (Campbell et al., 2010; Hannah et al., 2009). Dangerous contexts are settings in which employees are at risk of serious harm or death (Campbell et al., 2010).

Although all these careers have specific contexts that are life-threatening, there are further differences between these types of careers, because each of these has different priorities, different roles, and clearly different responsibilities. For example, military personnel assigned to combat are directly exposed to war, fighting enemies, conducting raids, neutralizing enemy weapons, surveillance, and intelligence gathering (Laurence, 2011). Crisis response teams respond to scenes in which there is a need for de-escalating or diffusion, such as aggressive mentally ill patients (Lord, Bjerregaard, Blevins, & Whisman, 2011). Additionally, these types of careers also have differing frequency of exposure to life-threatening contexts. For example, Hannah et al., (2009) categorize military combat units, Special Weapons and Tactics teams, fire and emergency medical service units as *critical action organizations*.

Police officers are unique because they have different priorities and goals (Johnson, 2012). For example, traditionally, police officers are expected to prevent crime and respond to emergencies (Wilson, 2012). However, police roles and responsibilities have expanded throughout the years. New roles involve community policing, homeland security and emerging crimes such as human trafficking, and cybercrimes (Kraska, 2007; Wilson, 2012).

Recent literature has moved beyond a simplistic view of leadership style; thus, supporting the notion that effective leaders should change their leadership style depending on environmental context (Campbell et al., 2010; Hannah et al., 2009). Previous studies have applied contextual leadership theory and have supported the assumption that leadership depends on the context it takes place (Colquitt, Lepine, Zapata, & Wild, 2011; Osborn et al., 2002, Sweeny, 2010).

Since police leadership in normal contexts and life-threatening contexts has not been previously studied in Puerto Rico, it was important to choose Puerto Rico as the research setting.

Puerto Rico is a small island three times smaller than the State of Rhode Island with an estimated population of 3,725,789 (CIA: The world factbook: Puerto Rico, 2011). It is important to explore leadership in this setting because factors such as language, culture, customs, and beliefs of the potential participants may perceive leadership differently from other settings where this topic has been studied. The results of this study will also add empirical data to the body of knowledge in trust and leadership. This study explores Puerto Rico police leadership styles in normal contexts and life-threatening contexts and officers' level of trust and perception of leader effectiveness in their first-line supervisors.

Statement of the Problem

Law enforcement officers are exposed to dangerous situations while on duty (Brandl & Stroshine, 2003, 2012). Statistics showed that in 2012, 48 police officers died in the United States in the line of duty. These deaths took place in 26 states and United States territories including Puerto Rico and the United States Virgin Islands (FBI Law Enforcement Officers Killed and Assaulted, 2012). These statistics also show that victims' average age was 38, and they had served an average of 12 years on the force (FBI Law Enforcement Officers Killed and Assaulted, 2012). The police department in Puerto Rico employed five out of the 48 police officers presented in these statistics (National Law Enforcement Memorial Fund, 2012). The officers fallen in Puerto Rico were all killed in firearms related incidents while other officers throughout the nation died under different circumstances.

Previous studies examined the relationship between leadership styles and trust in military environments (Sweeney, 2010). However, because of the unique nature of the environment within the police department, the examination of the interaction between potential changes in

leadership style during a life-threatening crisis is key to understanding this complex relationship and any relation to trust between front-line officers and their supervisors. Statistics regarding violent crimes and police officers killed in the line of duty support that police in Puerto Rico are exposed to life-threatening contexts on a daily basis similarly to any other law-enforcing officer in the nation (FBI Law Enforcement Officers Killed and Assaulted, 2012; FBI Uniform Crime Report, 2011). In addition to dealing with a dramatic increase in violent crime, police officers in Puerto Rico suffer from low morale because of abusive supervision, indifferences from supervisors to officers' personal problems, lack of proper equipment, lack of training, and lack of supervisor support (U. S. Department of Justice, 2011). Because Puerto Rico is a territory of the United States, officers may receive widely different training and have different performance standards compared to other police departments across the nation. The United States Department of Justice (2011) found that Puerto Rico, "unlike every state, with the exception of Hawaii, does not have a state-wide authority that establishes minimum law enforcement standards and training requirements" (p. 9). Therefore, it is important to understand how police officers in Puerto Rico perceive their leaders during normal contexts and life-threatening contexts and any relation to perception of trust of leaders. As part of the problem addressed in the present study, it is unknown to what degree police officers of Puerto Rico trust their first-line supervisors during normal contexts and life-threatening contexts. It is also unknown what factors attribute to trust between these police officers and their supervisors. Furthermore, it is unknown if police officers' age, sex, and years on the force influence the level of trust in the supervisor.

Purpose of the Study

Police officers in Puerto Rico and their supervisors involved in life-threatening contexts represent a neglected population in the research literature. Limited research existed that explores police officer level of trust in first-line supervisors during life-threatening contexts. The purpose of this study is to measure police officers' level of trust, perceived leader effectiveness, and leaders' style in two different contexts: normal contexts and life-threatening contexts. This study will measure three different leadership styles that are common in bureaucratic and hierarchical organizations. This study was also an exploration of contextual leadership theory, which posits, "leadership and its effectiveness, in large part, is dependent upon the context" by examining level of trust for supervisors who change their leadership style (Osborn et al., 2002, p. 797). Furthermore, the results of this research will provide a deeper understanding of leadership phenomena in life-threatening contexts, any association with trust, and leadership effectiveness as perceived by followers.

Rationale

A quantitative correlational research method was best suited to answer the research questions designed for this study. Correlational research inquiry includes potential relationships between the dependent and independent variables of the study (Leedy & Ormrod, 2010). This study was an examination of police officers' perceptions of leadership in relation to trust by employing a quantitative research design. Police are unique because they have different roles and responsibilities than military or emergency response teams (Laurence, 2011; Lord, Bjerregaard, Blevins, & Whisman, 2011; Wilson, 2012). Police officers are trained to protect constitutional

rights, and enforce laws and fight crime while being exposed to life-threatening contexts.

Furthermore, the focus of this study was primarily on how police officers perceive their direct supervisor's style during normal contexts and life-threatening contexts. Based on contextual leadership theory, this study was an examination of several hypotheses that the highest level of trust for the police officer's direct supervisor occurs when the leader exhibits a democratic style of leadership under normal circumstances, and then exhibits an authoritarian style of leadership under life-threatening circumstances. The findings from this study added to the current literature of contextual leadership and leadership in dangerous contexts.

Research Questions

This study was an exploration of Puerto Rico police officers' perception of leadership effectiveness, leadership style, and level of trust of their supervisors in two different contexts and life-threatening contexts. This study used six research questions to describe the research participant's answers regarding leadership style, perception of leader effectiveness, and level of trust in their supervisors in two different contexts.

RQ1: What are the demographic characteristics of the sample?

RQ2: What is the relationship between the level of trust in the supervisor by age, sex, and years on the force?

RQ3: What is the relationship between leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts and levels of trust and perception of leadership effectiveness?

RQ4: What is the relationship between leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts and levels of trust and perception of leadership

effectiveness?

RQ5: What is the relationship between the amount of change in leadership style (authoritarian, democratic, and laissez-faire) from normal contexts to life-threatening contexts and the level of trust and perception of leadership effectiveness?

RQ6: Do leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening context have higher levels of trust compared to other leaders?

Significance of the Study

Leadership experts support that being able to lead effectively during dangerous situations should be a public safety priority (Campbell et al., 2010). The results of this study may be essential for social scientists interested in understanding contextual leadership specifically within dangerous situations. Leadership literature has shown that studies of this nature would expand on existing contextual leadership theories that may prepare leaders to lead more effectively under the most adverse situations (Campbell et al., 2010). Furthermore, the findings from this study are important because it will give insight of Puerto Rico police officers perceptions of leadership effectiveness, leadership style, and level of trust of their supervisors in two different contexts, normal contexts and life-threatening contexts. The uniqueness of this study is that policing in Puerto Rico takes place in a different contextual setting. Most importantly, police in Puerto Rico receive different training and lack resources to carry out their duties (U. S. Department of Justice, 2011). Therefore, a possibility existed that these factors may influence leader behavior and defining how leaders are perceived by police officers. Conversely, these same factors may also affect their ability to trust their first-line supervisors in life-threatening contexts.

The results of this study could be useful to inform best practices within police organizations of different cultures. Results of this research would be available for the review of police managers. This study will provide a better understanding of how police officers perceive their leadership personnel in normal and dangerous situations. The results and findings of this research may also serve as a base for the review and implementation of leadership training that specializes in dangerous contexts. This study will most likely suggest future research topics in leadership in dangerous situations and law enforcement.

Definition of Terms

The following conceptual definitions provide the meaning of several terms used throughout the study.

Life-threatening contexts: Refers to the work setting in which leaders and subordinates are faced with "highly dynamic and unpredictable situations and where the outcome of leadership may result in severe physical or psychological injury (or death) to unit members" (Campbell et al., 2010, p. S3).

Normal contexts: Refers to the work setting in which leaders and subordinates are not faced with "severe physical or psychological injury (or death) to unit members" (Campbell et al., 2010, p. S3).

Puerto Rico police: Refers to police officers employed with the Puerto Rico police department (Police Act of Puerto Rico, 1996).

Trust: Refers to the "expectancy of positive (or non-negative) outcomes that one can receive based on the expected action of another party in an interaction characterized by uncertainty" (Bhattacharya, Devinney, & Pillutla, 1998, p. 462).

Assumptions and Limitations

Theoretical Assumptions

Based on contextual leadership theory, the assumption was that followers would trust leaders who change leadership styles when the context changes (Osborn et al., 2002). Contextual leadership theory has four underlying theoretical assumptions. In *stable* contexts, leadership adjusts to internal operations that aim towards accomplishing goals and usually operates in a steady manner and may predict outcomes. During *crisis* contexts, situations shift from stable to unstable conditions jeopardizing goals and priorities. In crisis contexts, events occur unexpectedly with minimal or no time to respond. In a *dynamic equilibrium* context, it is assumed that changes in organizations are due to innovation, technology, competitiveness, or evolving of the organization. *Edge of Chaos* context refers to the transition between "order and chaos" (Osborn et al., 2002, p. 800).

Topical Assumptions

The main topical assumptions prior to conducting this study were: a) police officers have more trust in supervisors that shift from a democratic style to an authoritarian style during lifethreatening contexts; b) supervisors will shift leadership styles in life-threatening contexts; and c) the last assumption was that leaders who demonstrate a strong democratic style in normal contexts would shift to authoritarian leadership style in life-threatening contexts (Osborn et al., 2002).

Methodological Assumptions

The methodological design of this study is aligned with a post-positivist worldview.

According to Muijs (2011) this assumption supported that researchers can use measurement

instruments to study the "physical world" (p. 4). This methodology consists of the observation and collection of the data, formation of hypothesis, and testing theories (Creswell, 2009). Based on this global perspective the methodological assumptions for this study were:

- 1. The data collection method for this study was the use of an online survey. Therefore, it was assumed that potential participants have access to the internet and computer to see the invitation and participate in the study.
- 2. That the survey questions and possible answers were readable and that all police officers were able to answer them.
- 3. That the leadership and trust questionnaires were valid and reliable instruments.
- 4. That police officers shared the link to other potential participants.
- 5. That all participants provided honest answers, including verification of the inclusion criteria.

The post-positivist philosophy is an assumption that the researcher is objective, and the results of the study were not influenced by the researchers' beliefs or personal opinions (Creswell, 2009).

Limitations

This study was limited because the survey was restricted to police officers in Puerto Rico that have encountered a life-threatening situation in the line of duty within the past 5 years. An additional limitation was that the data collection would be through an anonymous online survey; therefore, this method could impede the ability of the researcher to interact personally with the participants. Furthermore, the researcher did not verify if individuals who responded to the survey were police officers. Finally, the study was also limited to the police officers' perceptions of their leaders' style and their objective evaluation.

Theoretical Framework

One of the major assumptions of contextual leadership theory supports that "leadership and its effectiveness, in large part, is dependent upon the context" (Osborn et al., 2002, p. 797). Osborn, Hunt, & Jauch (2002) argued that if the context changes, then leadership changes.

Another assumption related to the contextual leadership theory is "volatility and complexity are keys to characterizing the context" (Osborn et al., 2002, p. 802). Further, Osborn et al. (2002) agreed that organizations are dynamic; therefore, the theoretical lens through which others view leadership should also be dynamic.

Contextual leadership theory expanded when researchers included *dangerous contexts* as a concept and suggested a multilevel and systems approach when studying this topic. Campbell, Hannah, & Matthews (2010) posit, "Leadership is uniquely contextualized when confronting dangerous contexts such that specific causation and contingencies occur that are not present in non-dangerous contexts" (Campbell et al., 2010, p. S157).

Organization of the Remainder of the Study

This study consists of five chapters. The following outline represents a brief summary of the remaining chapters. Chapter 2 of this study begins with a discussion of contextual leadership theory, followed by research in leadership contexts, Lewin's authoritarian, democratic, and laissez-faire leadership styles, leadership styles in law enforcement, diversity in leadership, leadership and culture, and trust in leadership. Chapter 2 ends with a brief historical background of Puerto Rico and the Puerto Rico police department because it is relevant to the research setting. Chapter 3 presents the quantitative research method applied in this study. Chapter 3 also

describes the sampling plan, the survey instrument, data collection method, and the multiple statistical tests used in the data analyses. Chapter 4 presents the results of the analyzed data and includes tables and graphs, illustrating the results of the data analyses. Chapter 5 presents the conclusion of the study's findings. Suggestions and recommendations for future research are proposed at the end of the chapter.

CHAPTER 2. LITERATURE REVIEW

Introduction

This chapter presents a review of existing literature of contextual leadership theory, research in leadership contexts, authoritarian, democratic, and laissez-faire leadership styles, leadership styles in law enforcement, diversity in leadership, leadership and culture, and trust in leadership, and factors that predict trust in leaders. This chapter concludes with a brief historical background of Puerto Rico and the Puerto Rico police department and is relevance to the research setting.

Contextual Leadership Theory

Contextual leadership theory emerged over 50 years ago when researchers acknowledged that leadership relied on the design, setting, and the components of an organization (Osborn et al., 2002). Leadership literature has focused primarily on the relationship between leaders and followers and leader behaviors (Hunt & Dodge, 2000; Osborn et al., 2002; Porter & McLaughlin, 2006). In an effort to expand upon leadership theory, researchers have moved from a traditional view of leadership and drawn their attention to leadership in the context.

Experts in this field refer to contextual leadership theory as the study of the context in which leadership takes place (Osborn et al., 2002). Furthermore, it was argued, "Leadership and its effectiveness, in large part, is dependent upon the context" (Osborn et al., 2002, p. 797).

Furthermore, there is a strong belief that if there is change in context, leadership will change as well (Osborn et al., 2002; Osborn & Marion, 2009).

Research in Leadership Contexts

Several researchers in the field of leadership found that the context of leadership is an understudied and neglected topic (Hunt & Dodge, 2000; Lowe & Gardner, 2000; Osborn et al., 2002). A 16-year review of leadership literature demonstrated the need for studying leadership in organizational contexts (Porter & McLaughlin, 2006). Porter & McLaughlin (2006) revealed that of 373 journal articles analyzed, only 16% focused on the organizational context. A 25-year analysis of the literature contained in the Leadership Quarterly Journal revealed that leadership research has become more complex throughout the years. Although contextual leadership was not among the 29 leadership styles analyzed, leadership in context was recommended for future studies (Dionne et al., 2014).

Conversely, the findings from recent qualitative studies suggested that this is not the case. A critical evaluation of leadership literature throughout 10 academic journals demonstrated that leadership in contexts was the third most predominant theme in the study (Dinh et al. 2014). This evidence voids the lack of research in the context supported by (Hunt & Dodge, 2000; Lowe & Gardner, 2000; Osborn et al., 2002). Dinh et al. (2014) still supported the further study of leadership in the context because the topic was under-researched. Leadership has also been explored in extreme and dangerous contexts (Hannah, Campbell, & Matthews, 2010; Hannah et al., 2009; Yammarino et al., 2010).

Leadership in Extreme Contexts

An extreme context is a setting where organizational members are exposed to unbearable physical, psychological, or psychosocial harm (Hannah et al., 2009). Extreme events are common in public safety organizations such as military, law enforcement, fire, and medical (Hannah et al., 2009). Existing literature denotes the difference between extreme and crisis contexts. Crisis in context is a situation where high-priority goals are vulnerable, and there is little or no time to react (Hannah et al., 2009; Osborn et al., 2002). Extreme contexts refer to situations in which an event exceeds the organizations capacity to predict or prevent it, causing or likely to cause severe physical or mental harm to members (Hannah et al., 2009). The work of Hannah et al. (2009) developed a framework to examine leadership in such extreme contexts; thus, supporting that leadership in this particular context is one of the least researched areas in leadership. Researchers with similar interest of leadership in the context have expanded the literature by narrowing their studies down to dangerous contexts.

Leadership in Dangerous Contexts

Campbell, Hannah, and Matthews (2010) suggested a multilevel and systems approach for studying leadership in the context stated, "Leadership is uniquely contextualized when confronting dangerous contexts such that specific causation and contingencies occur that are not present in non-dangerous contexts" (p. S157). Researchers have provided findings from vast studies of leadership throughout the years but have focused solely on stable working conditions (Baran & Scott, 2010). A review of existing research of leadership in dangerous contexts reveals only a few studies have considered dangerous context such as military and firefighting (Baran & Scott, 2010; Sweeney, 2010).

Empirical studies of leadership in military contexts support that members of such organizations are exposed to ineffective performance, depression, interpersonal conflicts, and in the worst scenario, the loss of life (Yammarino et al., 2010). The work of Yammarino et al. (2010) provided a multilevel model of leadership and team dynamics for leading in dangerous and military contexts. Furthermore, this piece highlights that for leaders to be effective they must be capable of shifting leadership style depending on the goals, objectives, and environmental changes (Yammarino et al., 2010).

A qualitative study examining the phenomenon of dangerous contexts investigated "the social process by which groups make effective sense of the hazards within dangerous contexts such that they avoid catastrophic mistakes" (Baran & Scott, 2010, p. S43). The study included participant observations and ethnographic style interviews with firefighters of the southeast region of the United States. Participants of this study (anonymous firefighters) revealed near death experiences in the line of duty (Baran & Scott, 2010). Themes such as leader behaviors, direction, setting, role acting, role modeling, situational awareness, communication, knowledge, agility, and trust emerged from the data. Results of the qualitative study suggested that existing policies and procedures provide a sense of stability during dangerous contexts. Furthermore, some firefighters reported that even though policies and procedures exist, they might not apply during a life-threatening situation. The design of Baran and Scott (2010) research was intended to develop a theoretical framework of leadership and sensemaking within dangerous contexts.

Lewin's Leadership Styles

A study titled "Patterns of Aggressive Behavior in Experimentally Created 'Social Climates'" became the seminal work for the authoritarian, democratic, and laissez-faire

leadership styles. The study conducted Lewin, Lippitt, and White (1939) intended to identify the differences between group patterns and rebellion against authority, assess if democratic leadership style was more pleasant, and if authoritarian leadership was more effective than democratic leadership. The experimental study consisted of two experiments with 10-year-old boys. The task of the two groups was to make theatrical masks over a three-month period. Each group would have the same leader; however, in one group he would adopt an authoritarian style and in the other group a democratic style (Lewin, Lippitt, & White, 1939). The findings from that study revealed that the group with an authoritarian leader developed patterns of aggressiveness towards other group members. Conversely, the group with the democratic leader presented spontaneous interactions, and were friendly with other group members (Lewin et al., 1939). Unable to draw conclusions from the experiment that raised more questions than answers, researchers decided to conduct a second experiment (Lewin et al., 1939).

The second experiment consisted of four groups of 10-year-old children. Each group had a different leader, and there were more activities added. Furthermore, laissez-faire leadership was added as a variable to the experiment. The boys would have a new leader every 6 weeks throughout a 5-month period (Lewin et al., 1939). The data were collected from observations and participant interviews. The analysis of data collected on both experiments revealed that seven out of 10 boys preferred the laissez-faire leadership style, describing the leader as easy going and that laissez-faire leaders never had much to do. The other three boys preferred the authoritarian leader because they always had something to do and were instructed about how to do things (Lewin et al., 1939). When comparing autocratic and democratic leaders, 19 out of 20 boys preferred to work with the democratic leader. One boy preferred an authoritarian style, he was

the son of an Army leader, which may have influenced his style choice (Lewin et al., 1939).

Foels, Driskell, Mullen and Salas (2000) recognized that Lewin et al. (1939) authoritarian and democratic leadership styles have been a topic of interest for researchers examining the relationship of these leadership styles and group member satisfaction. However, Foels et al. (2000) stated that there is a stream of literature that contradicts Lewin et al. (1939) assumption that democratic leaders are preferred over authoritarian leaders. In an effort to expand the body of knowledge, Foels et al. (2000) conducted a meta analysis of previous studies (e.g. Mullen, 1989; Mullen & Rosenthal, 1985; Rosenthal, 1991). The purpose of the study was to explore if the effects of democratic leadership were moderated by factors such as reality of the group, size of the group, and gender composition of the group. Data for this study were obtained from 19 studies that reflected 72 different effects of democratic leadership style on follower satisfaction (Foels et al., 2000). The overall results of the meta analysis concluded that democratic leadership style in groups reflected more satisfaction than authoritarian leadership style.

Recent studies continue to support that authoritarian leaders are not as effective as democratic leaders. For example, Van Vught, Jepson, Hart, and De Cremer (2004) conducted a study with 126 undergraduate students. The sample was divided into 4 experimental groups that would be driven by authoritarian and democratic leadership styles. A fifth group would be lead by a lassiez-faire leader. The purpose of the study was to study the impact of authoritarian, democratic, and lassiez-faire leadership style on the stability of small groups. Van Vught et al. (2004) hypothesized that authoritarian leaders would "threat group stability by provoking members to exit the group, thus removing vital resources from it" (p. 10). Group stability referred to the "ability of a group to operate as an intact system over an extended period of time"

(p. 3). The study concluded that authoritarian leaders were rated as being more dominant that democratic leaders. Furthermore, the hypothesis of the study was confirmed. Authoritarian leaders did pose threat to group stability because they had more participants exit their groups.

Cuadrado, Navas, Molero, Ferrer, & Morales (2012) adopted Lewin et al., (1939) leadership styles to explore gender differences in leadership styles and organizational outcomes. The study consisted of 226 participants in Spain. Leadership styles such as authoritarian, democratic, task oriented, relationship oriented, transformational, charisma, contingent and reward I, contingent and reward II, management by exception, and lassiez-faire were measured. Researchers predicted that subordinates would rate female leaders as democratic, relationship oriented and transformational. It was also suggested that subordinates would rate male leaders as being authoritarian, task oriented, transactional, and lassiez-faire.

Transformational, transactional and lassiez-faire leadership styles were measured with the Multifactor Leadership Questionnaire 5R (Bass & Avolio, 1990). Furthermore, Cuadrado et al. (2012) designed specific questionnaires for leaders and followers. The items that evaluated authoritarian and democratic were borrowed from the work of Lewin et al. (1939). Findings from this study revealed that subordinates rated female leaders as more authoritarian than male leaders.

Research throughout the years has evolved, contributing different leadership styles such as transformational and transactional leadership (Weber, 1947; Burns, 1978). This present study employed the work of Lewin et al. (1939) because it identified the three leadership styles measured in this study (authoritarian, democratic, and laissez-faire leadership styles). These measures of leadership style seemed to fit best into the present study given that the Puerto Rico

police department is a hierarchical organization with a quasi-military structure (PR.Gov, 2014).

Authoritarian Leadership Style

Authoritarian leadership is the most predominant style used by leaders in police departments. Leaders with this style do not include followers in the decision-making process (Beito, 1999). Authoritarian leaders are controlling, power-oriented, and prefer punishment instead of reward (Bass & Bass, 2008; Puni, Ofei, & Okoe, 2014; Vito, Suresh, & Richards, 2011). Authoritarian leaders are not creative. All they do is obey the established rules. Furthermore, these leaders do not take risks because they believe that a mistake can cause a rank demotion (Puni et al., 2014). The seminal work of authoritarian, democratic, and laissez-faire leadership suggested that authoritarian leadership may negatively affect "team psychological safety and team performance" (De Hoog, Greer & Den Hartog, 2015, p. 3). However, recent studies in authoritarian leadership posit this style has positive and negative effects on team performance (De Hoog et al., 2015). Literature also suggests that the acceptance of authoritarian leadership style depends upon the contexts leadership takes place (Dickson, Den Hartog, & Mitchelson, 2003; De Hoog et al., 2015).

Democratic Leadership Style

Democratic leaders empower followers by asking for advice and opinion in the decision-making process. These types of leaders are open to suggestions, care for follower's individual needs, and use mistakes as learning opportunities for improvement (Bass, 1960; Bass & Bass, 2008; Puni et al., 2014). Democratic leadership style is effective when supported by higher leadership within the organization, when employees are disciplined, and there is time to develop trust between leaders and followers (Bass & Bass, 2008). Furthermore, democratic leadership

requires leaders to be clear on objectives, goals, and identify responsibilities. Democratic leaders praise and reward performance and punishments tend to be the last resource, if needed (Puni et al., 2014). Previous research findings supported that democratic leadership is effective by presenting one of the several examples in which this style has been effective. Bass and Bass (2008) inferred that the research conducted in 1966 revealed that democratic leaders rated as more effective than leaders who adopted authoritarian styles.

Laissez-faire Leadership Style

Laissez-faire leaders do not influence their subordinates and do not demonstrate abilities to lead, but rather demonstrate a lack of leadership (Barbuto, 2005; Bradford & Lippitt, 1945; Northouse, 2011). Laissez-faire leaders do not have clear goals and do not participate in decision making when needed. Lassiez-faire leadership is a "hands off approach" (p. 681) where leaders demonstrate little or no control over the organization (Vito et al., 2011). These leaders also demonstrate indifference to what happens within their organization or work group. In other words, these leaders just do not care what happens in their surroundings. Bass and Bass (2008) posited that laissez-faire leadership is the least effective style for leaders because findings of earlier research supported laissez-faire leadership was negatively related to productivity and employee attitudes (Argyris, 1954; Berrien, 1961; Katz, Maccoby, Gurin & Floor, 1951; Muringhan & Leung, 1976). Furthermore, recent literature supports that laissez-faire leadership was ineffective when measured in hierarchal organizations (Edward & Gill, 2012).

Leadership Styles in Law Enforcement

The structure for most law enforcement organizations is based on Weber's (1947) bureaucratic model. This means that law enforcement organizations require a particular structure

and regulations (Stojkovic, Kalinich, & Klofas, 2008). Girodo (1998) stated that leadership styles within law enforcement organizations are considered *situational* because they may change as working conditions change (Sarver & Miller, 2014). Vito et al. (2011) conducted a study with 123 police managers from 23 different states. The purpose of the study was to inquire about police manager's opinions of their ideal leadership style. The survey used to collect the data, Leader Behavior Description Questionnaire (LBDQ), was used to measure autocratic leadership, known as authoritarian leadership, servant leadership style, and laissez-faire leadership style. The results of the study revealed that the majority of participants preferred servant leadership. Meanwhile, autocratic and laissez-faire leadership styles were strongly rejected (Vito et al., 2011).

Diversity in Leadership

Research in leadership has focused primarily on White males in leadership positions in the United States. Despite the efforts of expanding leadership research in women and ethno cultural minorities, this still remains an understudied population (Ayman & Korabik, 2010; Eagly & Chin, 2010). The United States Bureau of Labor Statistics (2014) showed that 52% of workers in management, professional, and related jobs were females. This report also revealed that women represented more than 50% of the workforce in different occupations such as financial, education, and health among others (U. S. Bureau of Labor Statistics, 2014). In comparison to the United States, women in Puerto Rico represent 52.1% of the population. Furthermore, in 2013, Puerto Rico had 1,021,000 people employed of which 45% were females (Puerto Rico Department of Labor, 2014). In 2014, 485,000 women represented the labor workforce, and 88.5% were actually employed, and the other 11.2% were unemployed (Puerto

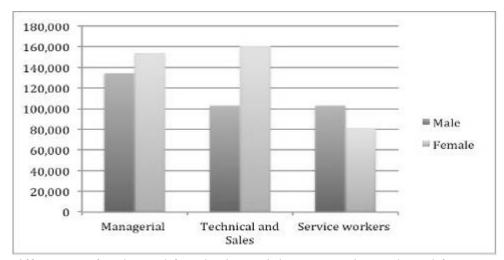


Figure 1. Differences of males and females in top jobs Puerto Rico. Adapted from "Empleo y Desempleo Puerto Rico," by the Department of Labor and Human Resources Puerto Rico, 2014.

In Puerto Rico, 31.7% of employed women held managerial positions that included teachers, managers, and semi-professionals (Puerto Rico Department of Labor, 2014). Another 33.2% hold technical sales and administrative support positions, and 16.7% of women reported working in domestic, protective, or other services (Puerto Rico Department of Labor, 2014). It is important to notice that in 2014, women in Puerto Rico held more managerial positions than men. These statistics suggest that it is important to consider sex as a variable when conducting research in Puerto Rico.

Quader (2011) provided empirical evidence that supported the relationship between different leadership styles and trustworthiness. The main objective of a comparative study between Hillary Clinton and Barack Obama was to measure the perception of leadership styles of these political leaders and to explore differences, if any, in the perception of trust of different cultures and genders (Quader, 2011).

The data were collected through a survey method. The study findings revealed that Hillary Clinton was perceived as a transactional leader, and her leadership qualities were perceived as fair, visionary, honest, and composed. Conversely, Barack Obama was perceived as a transformational leader, and his leadership traits were fair and authentic (Ayman & Korabik, 2010; Quader, 2011). Statistical analyses showed no significant differences between genders and their perception of trust and likelihood of voting for either one of the candidates. Furthermore, no significant differences in the perception of trust and possibility of voting were noted between different cultures. However, the study findings revealed that the perception of trust and commitment toward the candidates were significantly related. Meaning that the more people trusted either candidate, the more likely they would vote for them in an election (Quader, 2011). This last statement supported one of the hypotheses of the present study. Quader (2011) further revealed that effective leaders would have more trust from their followers. The following sections will briefly explain existing research in both topics. Research findings did support that gender and culture matter in leadership studies because these factors may influence leader behavior and leader effectiveness (Ayman & Korabik, 2010).

Leadership and Gender

Women and leadership have become a topic of interest to scholars and researchers in leadership studies (Eagly & Carli, 2003; Eagly & Karau, 2002). Margaret Thatcher and Hillary Clinton are among the most predominant female leaders in history (Bass & Bass, 2008). Margaret Thatcher is known for her strong convictions and the ability to rebuild the British economy in 1979. Hillary Clinton is known as the first woman to be a serious contender for the Democratic nomination as a presidential candidate (Bass & Bass, 2008).

Eagly and Carly (2003) noted that females were more effective leaders than male leaders Conversely, Vecchio (2002) argued that these statements are not supported by academic literature, lacking scientific evidence. Based on existing literature, female leaders are different from male leaders; that is, if women wanted a chance to succeed in their leadership roles, they would have to act like their male colleagues (Bass & Bass, 2008). Research findings regarding the perception of women in management positions demonstrated that both male and females believed that successful managers have skills and traits attributed to male figures (Balgiu, 2013).

In an effort to expand on this belief, Balgiu (2013) focused on attitudes toward female managers in order to determine differences in opinions of employed and non-employed participants. The sample consisted of 46 employees and 247 students. The findings from the study revealed that males in both groups had "less favorable attitudes towards the idea of female managers" than the female participants (Balgiu, 2013, p. 330). The study findings also confirmed that men and women in both groups had negative attitudes toward females in leadership positions. Despite the general perception that men are better in leadership positions than females, another stream of literature findings supported that culture played a significant role in the emergence of women in leadership (Toh & Leonardelli, 2012).

Leadership and Culture

Based on social evolution theories, the predominance of men as leaders is traced back historically to the time when men hunted for animals and women picked seeds and root crops, such as corn, wheat, and rice (Gelfand et al., 2011). The division of labor designated the hunting and protection of food to men and women were responsible for cooking. In these historic times, men were also responsible for protecting their followers from other human beings (Toh &

Leonardelli, 2012).

Gelfand et al. (2011) discussed the differences between tight and loose cultures in 33 nations. Tight cultures were those that "have many strong norms and low tolerance of deviant behavior" (p. 1100). Conversely, loose cultures were identified as those with "weak social norms and high tolerance of deviant behaviors" (Gelfand et al., 2011, p. 1100). For example, Pakistan, Malaysia, Norway, and Japan are considered tight cultures because their rules are to be followed. Those who do not comply with rules are sanctioned (Gelfand et al., 2011; Toh & Leonardelli, 2012). Findings from a recent study revealed that women in loose cultures are more likely to emerge into leadership positions than women do in tight cultures (Toh & Leonardelli, 2013).

Tight Cultures

China and Japan are examples of countries that exhibit "leadership sex-typing" (Toh & Leonardelli, 2013, p.192). Leadership sex typing describes women as feminine and males as masculine (Toh & Leonardelli, 2013). Although male leaders are preferred in many countries, in Germany male and female leaders are preferred equally. Women in Germany prefer to carry out gender roles and responsibilities, such as running a household and raising children (Toh & Leonardelli, 2013). In Malaysia, in order to obtain acceptance from society, female leaders must show they are a maternal figure (Toh & Leonardelli, 2013).

Loose Cultures

In the United States of America, between the years 1976 and 1999, men and women supported the inference that men in leadership positions were more efficient than were women in leadership positions (Toh & Leonardelli, 2013). In Australia, men believed female leaders were as effective as male leaders from Malaysia. Toh and Leonardelli (2013) further argued that

women in the United States tended to recognize the similarity between women and managers, as opposed to women in tight cultures, such as Germany, United Kingdom, China, and Japan.

Findings of another study supported that leadership styles accepted in one culture may not be effective in other cultures (Romero, 2004). Furthermore, Romero (2004) stated that a religion, historic leadership, form of government, and societal power structure has an effect on leadership expectations and preferences. Research findings also supported that leadership in Latin American countries is "high in uncertainty, avoidance, power distance, collectivism, and masculinity when compared to the United States" (Romero, 2004, p. 26).

Trust in Leaders

Trust is a construct of interest of researchers in organizational studies (Bunker, Alban, & Lewicki, 2004). Trust is a concept with various definitions throughout the literature. Mayer et al. (1995) defined trust as:

Willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. (p. 712)

Trust is a process that results from the interaction between leaders and subordinates, which is also referred to as a trustor and trustee relationship (Burke, Sims, Lazzara, & Salas, 2007; Mayer, Davis, & Schoorman, 1995). Existing research supported that managers should work toward gaining higher levels of trust from their followers and that leaders are responsible for fostering trustworthiness in their organizations (Powley & Nissen, 2012). Trust is an element that empowers organizational leaders, and lack of trust is the key to organizational failure (Burke et al., 2007; Sones, 2013). Sones (2013) posited that a leader who has lost trust from his or her subordinates has lost the ability to lead.

The importance of trust in leadership has been studied across several disciplines, such as job satisfaction, teams, communication, justice, psychological contracts, organizational relationships, group behaviors, and conflict management (Dirks, 2000; Dirks & Ferrin, 2002; Walumbwa, Luthans, Avey & Oke, 2011). Dirks and Ferrin (2002) evaluated the primary relationships between trust and twenty-three different constructs. This meta-analysis revealed the findings and implications of previous studies of trust in leadership. One example of the various analysis in this study consisted of a moderator analysis by referents of trust; trust in direct leaders and trust in organizational leadership. The variables measured in these two referents were job performance, organizational citizenship behavior, intent to quit, job satisfaction, organizational commitment, distributive justice, procedural justice, interactional justice, participative decisionmaking, and perceived organizational support. The findings from that study confirmed one of the hypotheses by reporting that trust, job performance, altruism, and job satisfaction were statistically related when the variable measured was a direct leader (Dirks & Ferrin, 2002). Dirks and Ferrin (2002) revealed that the differences between the variables and supporting analysis would show different relationships that would help organizations allocate resources by analyzing the relationship between trust and organizational commitment. Furthermore, the study concluded with a framework that would provide clarity on different perspectives of trust in leadership and how it takes place.

Colquitt, Scott and Lepine (2007) found a weakness in Dirks and Ferrin (2002) metaanalysis. They discussed that Dirks and Ferrin (2002) study ignored variables of risk taking, task performance, citizenship behavior, and counterproductive behavior when measuring trust. In an effort to expand on Dirks and Ferrin (2002) research, Colquitt et al. (2007) research explored the relationship between two different outcomes of trust; risk taking, and job performance. The results of the study showed that trust was moderately to strongly related to risk taking, and was moderately related to job performance in three different areas; (a) task performance, (b) citizen behavior, and (c) counterproductive behavior.

Recent studies further support that trust in leaders is related to job satisfaction. Gibson & Petrosko (2014) studied the relationship between trust in leaders and its effect on job satisfaction and the intent to leave their jobs among nurses. Statistical findings of this research showed a positive relationship between trust in leadership and job satisfaction. The mentioned study also showed that there was a significant negative relationship between trust and intent to leave. It was concluded that trust in leaders "increase job satisfaction and decrease intent to leave" in a healthcare setting (Gibson & Petrosko, 2014, p. 14).

Factors Predicting Trust in Leaders

Although different theories of trust exist (Rousseau, Sitkin, Burt, & Camerer, 1998), the model of trust suggested by Mayer et al. (1995) is widely recognized among researchers and has been used in recent studies of trust in leadership during life-threatening contexts (Colquitt et al., 2011; Mayer et al., 1995; Sweeney, 2010). According to Mayer et al. (1995) proposed model of trust, the factors contributing to perceived trustworthiness are *ability*, *benevolence*, and *integrity*.

Ability. Researchers refer to *ability* as a set of skills, traits, and capacity that enable a person to influence others in a determined setting (Burke et al., 2007; Mayer et al., 1995).

Benevolence. Benevolent leaders are genuine and care for followers; setting aside any personal profit or benefit the leader may receive (Caldwell & Hayes, 2007; Mayer et al., 1995).

Integrity. This factor of trust is "the perception that the trustee adheres to a set of

principles that the trustor finds acceptable" (Mayer & Gavin, 2005, p. 874; Mayer et al., 1995).

Research has shown that ability, benevolence, and integrity are strongly related to trust levels (Colquitt et al., 2007). Even though the model proposed by Mayer et al. (1995) has many strengths, Burke et al. (2007) recognizes that the model lacks the specification of trust factors and trust outcomes. For this reason, Burke et al. (2007) suggested an integrative multilevel model of trust for future trust in leadership research. The model proposes that researchers include the antecedents of trust presented by Mayer et al. (1995), moderators and outcomes of trust. The following sections will discuss recent studies that measure the aforementioned factors in dangerous or life-threatening settings.

Trust in Dangerous Contexts

A review of recent literature concerning trust in dangerous contexts showed several articles from 2010 to 2013. Sweeny (2010) explored if United States soldiers reevaluated trust in their direct supervisors before initiating any combat operations. The findings from Sweeny's quantitative study showed that 72 army soldiers operating in Iraq took the administered survey, and 75% reported that they did reevaluate their trust in their leaders before returning to the combat zone. The findings also revealed that the trust leaders gained during normal contexts were transferred over to the battle context. The overall findings revealed that a leader's ability to lead emerged as the most important factor that influenced the reconsideration of trust in leaders by soldiers in combat (Sweeny, 2010).

Following the same line of research, Colquitt et al. (2011) hypothesized trust in "typical tasks" were significantly related to factors of benevolence and identification of trust in "high reliability" assignments (p. 1002). These factors are important because firefighters spend

numerous hours working together while developing strong ties to their departments. Further, the hypothesis for this study that trust in "high reliability" duties were significantly related to factors of ability and integrity than factors attributed to "typical tasks" (Colquitt et al., 2011, p. 1002).

Colquitt et al. (2011) conducted a longitudinal study that included 126 fire department employees, assigned to 21 work groups. The findings from the study indicated that the trust in typical contexts was related to benevolence and identification while trust in high-reliability contexts was related to co-worker's integrity. Firefighters reported that integrity was a factor to consider when trusting co-workers with planning and physical fitness; thus they believe these are consistent in daily performances (Colquitt et al., 2011). Findings from this study also revealed no relationship between ability and trust in high-reliability contexts.

Another study conducted by Wheatcroft, Alison, and McGrory (2012) examined trust between lead commanders and senior investigating officers that investigated high-profile critical events. The focus of the study was interpersonal relationships, specifically on the influence that trust and mistrust have on decision making by senior officials (Wheatcroft, Alison, & McGrory, 2012). Furthermore, the argument in this study was that lead commanders needed to trust senior investigating officers when it came to high-profile investigations. Those investigations included murder cases that had public exposure. This qualitative inquiry revealed that the trust was the most important theme that emerged in the study. Findings from this study also revealed that the development of trust in critical incident management is important during the decision-making process (Wheatcroft et al., 2012). When focusing on leadership in context, trust has been found to play an important role in a stable context. For example, Hasel (2013) measured the position of trust for leadership effectiveness in crisis and non-crisis situations. Specifically, the study

conducted in the United Kingdom, focused on the collapse of the Lehman Brothers, in 2008. This incident was "the most severe crisis since the Great Depression" (Hasel, 2013, p. 264). A total of 297 employees participated in two survey data collection stages. The results of the research revealed significant differences between the roles of trust in leadership, follower selfefficacy, and job performance (effort). Findings from the study supported that leaders are important when it comes to follower's outcomes in both contexts (stable and non-stable); however, their ability to influence these followers will change depending on the context. The present study focused on police officers in Puerto Rico level of trust in their first-line supervisors, officer's perception of leader effectiveness in normal contexts and life-threatening contexts. The theoretical foundation of this study relied on contextual leadership theory (Hasel, 2013). Even though cultural differences were not measured in this study, it is important to provide an overview of the Puerto Rico and the Puerto Rico police department. The sample chosen for the present study have different cultural customs, political ideologies, and different law enforcement training. Therefore, it is important to have an understanding of them and if these factors will make a difference when studying leadership in contexts.

Puerto Rico Police Department

The focus of the present research study was contextual leadership, and the chosen samples are police officers of Puerto Rico. Although Puerto Rico is a territory of the United States, no research in contextual leadership has explored Puerto Rico as a research setting. The following section allows for further understanding of how leadership takes place in the Puerto Rico police department and how police officers rate their first-line supervisors. The Puerto Rico police department is the primary law enforcement agency, which roles and responsibilities are,

To protect and serve the residents of Puerto Rico by designing and implementing policies and practices that control crime, ensure respect for the Constitution and the rule of law, and enable the Department to enjoy the respect and the confidence of the public. (U. S. Department of Justice, 2011, p. 5)

The Puerto Rico Police Act of 1996 vested the Governor of Puerto Rico with supreme authority of the police department, who then delegates the administration to a superintendent. Police officers of this department serve approximately 3,725,789 citizens (U. S. Census Bureau, 2014). This organization is the second largest law enforcement agency in the country with approximately 17,000 sworn police officers (U. S. Department of Justice, 2011). Even though research with police in Puerto Rico is limited, the U.S. Department of Justice (2011) was able to provide insight of leadership in this setting.

Leadership and Training

The United States Department of Justice identified a series of deficiencies regarding supervision in the Puerto Rico police department. Furthermore, this division stated that leadership preparation process takes months in order to demonstrate competency and that the recommended adequate training for leadership candidates require at least 80-hours of training courses (U. S. Department of Justice, 2011). In Puerto Rico, candidates considered for supervisory roles are required to attend the police academy for a 40-hour training course.

Officers are not required to take a written assessment because promotions are merit-based (U. S. Department of Justice, 2011). This supervisory selection process was harshly criticized by the United States Department of Justice (2011), thus, they stated, "PRPD simply does not provide first-line supervisors the opportunity to develop the necessary skills to effectively manage officers and ensure lawful policing" (p. 67). Conversely, supervisors of the police department in

Puerto Rico stated they lack authority to correct or discipline subordinates in minor offenses (U.S. Department of Justice, 2011).

During the interviews conducted by personnel of the Civil Rights Division, police officers complained that political affiliations were the primary trigger for obtaining promotions instead of competencies, skills, and abilities (U. S. Department of Justice, 2011). Furthermore, it was argued that there might be some truth to these statements because the governor, as chief of police, is the person who promotes high-ranking officials within the department (U. S. Department of Justice, 2011). It was also noted that managers of law enforcement organizations in the United States are elected by citizens or appointed by elected officials.

Summary

This chapter contained a review of the literature explaining that the trust in leadership was attributed to three factors: ability, benevolence, and integrity. Leaders with ability are people with skills, traits, and capacity to influence others. Benevolent leaders are genuine and demonstrate concern for their followers. Furthermore, leaders with integrity demonstrate principles that are respectable (Mayer et al., 1995). When examining these factors in the recent literature on trust in dangerous contexts, the ability to be a trustworthy leader emerged as one of the most important factors that influenced trust in military leaders (Sweeny, 2010). Conversely, another study revealed that there was no relationship between ability and trust in a firefighting context (Colquitt et al., 2011). When reviewing the existing literature about leadership in context, it was discovered that there were two different opinions regarding the subject. Dinh et al. (2014) recognized that leadership in context is a predominant theme in the academic

literature. However, Dinh et al. (2014) still supported the need for further research on the topic in future studies.

This chapter addressed existing research on leadership in life-threatening contexts and the extant literature in dangerous contexts. The concepts of life-threatening contexts and dangerous contexts are similar because employees who work in these settings expose themselves to threats or physical harm (Hannah et al., 2009). The line of research in dangerous contexts focuses on the differences between stable and non-stable working conditions (Baran & Scott, 2010; Colquitt et al., 2011; Sweeney, 2010).

This chapter also included information regarding diversity and gender in leadership.

When conducting research on women and ethnocultural minorities, Ayman and Korabik (2010), along with Eagly and Chin (2010), agreed that challenges currently exist. Earlier in this chapter, statistics from a study by the United States Bureau of Labor Statistics (2014) indicated that women in the United States were represented in more than 50% of the workforce. In Puerto Rico, 45% of women were represented in the labor workforce (Puerto Rico Department of Labor, 2014). The availability of statistics in Puerto Rico regarding diversity in gender in the workforce allows for scholars and researchers to include them in future research.

Leadership in different cultures has highlighted how social evolution theories support the predominance of males as leaders. This section of the chapter provided an explanation of the difference between tight cultures and loose cultures that have different tolerances for men or women crossing gender roles and expectations. Research findings supported the argument that women in loose cultures were more likely to advance into a leadership position than would women in tight cultures (Toh & Leonardelli, 2013). Based on the available literature, the

assumption was that Puerto Rico is a loose culture. This assumption was based on the statistics presented in this chapter that shows there are more female managers in Puerto Rico (Puerto Rico Department of Labor, 2014). However, this is not the case in the police department because males dominate leadership in this organization. According to the Puerto Rico police website, in 2007, 137 females in the department held leadership positions while 1,823 males held leadership positions (Policia.gobierno.pr, 2015).

Trust and respect are highly valued by Hispanics (Bass & Bass, 2008; Bordas, 2001). An historical review of Puerto Rico, its affiliation with the United States, and law enforcement in Puerto Rico was the final topic covered in this chapter. An overview of the police department in Puerto Rico was provided. However, few scholarly articles provided the necessary information regarding police in Puerto Rico as an organization. The information was obtained from an investigation conducted in 2011 by the United States Department of Justice, Civil Rights Division. That study revealed that first-line supervisors of the police in Puerto Rico do not receive proper training in leadership development skills (U. S. Department of Justice, 2011).

Finally, the findings from the literature review indicated that research in leadership contexts in Puerto Rico is limited. Furthermore, numerous studies were available regarding leadership in dangerous contexts; however, none of the recommendations from previous studies considered evaluating the level of trust in supervisors of police officers in Puerto Rico. Despite the fact that cultural difference was not a variable measured in this study, it was important to briefly discuss Puerto Rico and the police department from where the sample was drawn. This is important because cultural difference and the setting may have an effect on how police officers perceive leaders and their ability to trust them in life-threatening contexts. In an effort to

contribute to leadership in contexts literature, the focus of this study was the exploration of leadership styles and perceived leader effectiveness in relation to trust between first-line supervisors and police officers in Puerto Rico. The following chapter explains the research methodology employed in this study.

CHAPTER 3. METHODOLOGY

Research Design

This quantitative, correlational study used contextual leadership theory to examine the relationship between police officers' level of trust, perceived leader effectiveness, and leadership style in two different contexts. This study was also an exploration of a change in leader style depending on the context between normal contexts and life-threatening contexts. This design provided an understanding of how police officers of Puerto Rico perceive leadership effectiveness and their level of trust toward leaders in two different contexts. The purpose of this study was to examine any relations between the dependent variables (trust and perceived leadership effectiveness) and the independent variables (authoritarian, democratic, and lassiesfaire leadership styles normal contexts, authoritarian, democratic, and lassies-faire leadership styles life-threatening contexts, age, sex, and years on the force). Multiple regression analyses were used to examine the relationship between several independent variables and one dependent variable (Aiken, West, & Pitts, 2003). Data were analyzed with SPSS (version 22) data analyses software.

The instrument used for data collection was uploaded into the web-based survey system SurveyMonkey®. Details on the instruments used for data collection are described below. The use of the internet is a popular approach for data collection (Bordens & Abbott, 2011). After a careful review of the literature in research methodologies, an internet survey research design was

the most appropriate for reaching the desired population and collecting data for this study (Creswell, 2009; Wejnert, & Heckathorn, 2008). There are several advantages and disadvantages of internet-based surveys. Some of the advantages of online data collecting are: (a) it has a low cost, (b) feasible for a quick return, (c) gives the respondent time to think through the answers, and (d) the absence of a researcher makes the data collection more valid. One of the disadvantages of this method is that it is limited to internet users (Fowler 2009).

The remainder of this chapter describes the employed research design, population, sample size, research setting, and survey instruments used to collect the data. Furthermore, this chapter also identifies the dependent and independent variables, the research questions and hypotheses along with the data analyses plan. This chapter ends with an overview of ethical considerations regarding this study.

Population and Sample

Population

Police officers employed by the police department in Puerto Rico who had experienced a life-threatening situation within the past 5-years were the population selected for this study.

Sample Size

The analysis used for determining an appropriate sample size was calculated by using the Fidell and Tabachnick (2007) formula for multivariate regression analysis. This formula was appropriate because multiple regression analysis this is the most complicated statistical analysis used in this study. This formula proposes N is to be greater than 50 + 8m, where m = 1 is the number of independent variables. There are nine independent variables (sex, age, years on the force, leadership styles normal, leadership styles life-threatening situations, level of trust,

perception of leader effectiveness, change in leadership style, and leader in context). For this study, an appropriate minimum sample resulted in 122 participants.

Participant Recruitment

Participants were recruited through Facebook social media. An invitation to participate in the study was posted on two Facebook accounts; *Policia de Puerto Rico La Revista*, which had 102,832 followers. The other Facebook group was *Recordando a Mis Hermanos Azules RIP*, an open Facebook group with 5,957 members. Contact was made with *Policia de Puerto Rico La Revista* group moderator via email, and he granted permission to post the link to the study for participant recruiting. The moderators encouraged their group followers to share the invitation on their social media pages so that other police officers in Puerto Rico could see the invitation. The invitation provided a brief explanation of the study and the inclusion criteria. At the end of the invitation, there was a link to the survey, contact phone number, and email of the researcher, and the name of the mentor overseeing this study. The hyperlink directed participants to the informed consent form. If participants agreed to participate, they were directed to the survey. If potential participants declined participation, they saw a thank you note and were directed out of the study.

Inclusion and Exclusion Criteria

This study was appropriate for active duty police officers, of any rank, in Puerto Rico, who have encountered a life-threatening situation in the line of duty within the last 5 years. For the purpose of this study, a life-threatening situation is considered one where the officer perceived that his or her life was in imminent danger. There were no exclusion criteria for this study.

Data Collection Setting and Procedures

As previously stated, the recruitment sites chosen for this study were from social network Facebook groups such as Policia de Puerto Rico La Revista and Recordando a Mis Hermanos Azules RIP. The data were collected anonymously through the web-based survey system SurveyMonkey®. This website was used to collect the data for this study that included the informed consent and demographics. Participants who consented and met the inclusion criteria agreed to participate by clicking on the link "I agree, take me to the survey." Participants were taken into the survey and data collection began by answering the three demographical items that inquired about the participant's sex, age, and years on the police force. The second section of the survey was the leadership style questionnaire that initially consisted of 18 items. However, only 17 items were used to collect data because question number 5 was not included in the web survey in error. The missing item pertained to the group of items that would measure democratic leadership. The third section of the survey measured trust in leadership and consisted of five items. The last section of the survey consisted of one question that captured the perception of leadership effectiveness. At the end of the survey, participants were encouraged to forward the link to other police officers as a form of snowball sampling.

Instrumentation

This study utilized several instruments used in previous research studies. Furthermore, the respective authors provided permission to use the various data collection instruments, as detailed below.

Leadership Style Questionnaire

The leadership style questionnaire, created by Northouse (2011) measures three common styles of leadership: authoritarian, democratic, and laissez-faire. Questions 1, 4, 7, 10, and 13 are the summed measure of *authoritarian* leadership style. Questions 2, 5, 8, 11, 14, and 17 measured *democratic* leadership style. As previously stated, item 5 was deleted in error from the survey; therefore, no data were collected for this specific item. This error may have affected the validity of this subscale. Field (2013) posits *validity* is a property of an instrument that determines if it "actually measures what it is set out to measure" (p. 12). Therefore, this error may have affected the results of the democratic leadership style subscale. Questions 3, 6, 9, 12, 15, and 18 measured *laissez-faire* leadership style. Comparing scores determined which leadership style had more strength. Dr. Northouse confirmed that there were no reliability estimates available for this questionnaire. See Table 1.

Table 1

Interpretation of all Leadership Style Scores

Score	Level of Affiliation
26 or higher	Very high range
21 to 25	High range
16 to 20	Moderate range
11 to 15	Low range
10 or less	Very low range

Perception of Leader Effectiveness

For the purpose of this study, this ordinal variable was measured with a 7-point Likert-type scale in which 1 = extremely bad leadership skills, 2 = very bad leadership skills, 3 = bad leadership skills, 4 = moderately bad leadership skills, 5 = moderately good leadership skills, 6 = very good leadership skills, and 7 = excellent leadership skills.

Change in Leadership Style

This interval variable was computed by subtracting leadership style in normal contexts from leadership style in life-threatening contexts. The further the score is from 0 the greater the amount of change.

Leader in Context

A grouping variable was created where Group 1 represented police officers that reported having leaders that are strongly democratic in normal contexts and then are strongly authoritarian in life-threatening contexts. Group 2 represented police officers who reported various other types of leadership styles.

Level of Trust

This ordinal variable was measured with the Global Trust Scale (Colquitt, 2011). The Global Trust Scale survey instrument is a 5-item global trust scale with the following choices: $1 = in \ general$, $I \ trust \ my \ coworkers$, $2 = it \ bothers \ me \ to \ think \ that \ I \ am \ vulnerable \ to \ my$ coworkers' actions (reverse-coded), $3 = it \ bothers \ me \ when \ I \ have \ to \ rely \ on \ my \ coworkers$ during job tasks (reverse-coded), $4 = I \ am \ confident \ that \ my \ coworkers \ will \ do \ the \ right \ thing \ on$ the job, and $5 = I \ am \ confident \ that \ I \ can \ depend \ on \ my \ coworkers \ when \ performing job \ tasks$.

For the purpose of this study, the word *coworkers* was replaced with the word *supervisor* and the scale responses read as follows: $1 = in \ general$, $I \ trust \ my \ supervisor$, $2 = it \ bothers \ me \ to \ think \ that \ I \ am \ vulnerable \ to \ my \ supervisors' \ actions \ (reverse-coded), <math>3 = It \ bothers \ me \ when \ I$ have to rely on my supervisor during job tasks (reverse-coded), $4 = I \ am \ confident \ that \ my$ supervisor will do the right thing on the job, and $5 = I \ am \ confident \ that \ I \ can \ depend \ on \ my$ supervisor when performing job tasks. Questions 1 through 5 are summed together for a total score ranging from 5 to 25. The items are reversed in the typical fashion. When using a 5-point Likert-type scale, 5s become 1', 4' become 2', 2s become 4s, and 1s become 5s. A 5-point Likert-type scale was used in which $1 = strongly \ disagree$, 2 = disagree, 3 = neutral, 4 = agree, and $5 = strongly \ agree$.

Data Analyses Plan

Data were obtained from participants who answered the online survey. The instrument used for data collection was uploaded into the web-based survey system SurveyMonkey®. After the amounts of acceptable surveys were reached, the survey link was close. Data were exported from SurveyMonkey® and downloaded into an Excel file. Eliminating all of the surveys with incomplete responses cleaned the data. The final data set consisted of 128 surveys that were entered into SPSS for data analysis. The present study used three different statistical analyses. The first used was descriptive statistics in order to describe the age, sex, and years on the force of the sample. Reliability of the instruments used to collect the data was analyzed using Cronbach's alpha. Multiple linear regression was used to predict the relationship between the outcome variable and two or more predictor variables (Field, 2013). The independent variables of this study were authoritarian, democratic, and lassiez-faire leadership styles and the dependent

variables were trust and perceived leadership effectiveness. Independent samples *t*-test was used to verify if there was a significant difference between two groups (Field, 2003). Furthermore, The following data analysis plan was aligned to the research questions:

Research Question 1: What are the demographic characteristics of the sample?

This research question explored age, sex, and years on the force of the sample. Descriptive statistics of demographic variables calculated the mode, median and the mean for the selected sample of the study. The mode is known as the score that is more frequent repeated in the data set. The median is referred to the "middle score of a set of ordered observations" (Field, 2013, p. 879). The *mean* refers to "a simple statistical model of the center of a distribution of scores" (Field, 2013, p. 879).

Research Question 2: What is the relationship between the level of trust in the supervisor by age, sex, and years on the force?

Any relation between the independent variables age, sex, and years on the force and the dependent variable trust, were examined with multiple linear regression analyses. Age, sex, and years on the force were entered into SPSS as the independent variables while trust was entered as the dependent variable. The hypotheses for this question included:

H0₂. The level of trust would not be related to age, sex, and years on the force.

HA₂: The level of trust would be related to age, sex, and years on the force.

Research Question 3: What is the relationship between leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts and level of trust and perception of leadership effectiveness?

The analysis of this question required the use of two regression models: The first model used a multiple regression analysis to measure the relations between the three independent variables; authoritarian, democratic, and laissez-faire leadership styles in normal contexts on the

dependent variable level of trust (Aiken, West, & Pitts, 2003). Multiple regression analysis is used to measure two or more independent variables on one dependent variable (Field, 2009). The second model used a multiple regression analysis to measure the relations between the three independent variables and one dependent variable. Authoritarian, democratic, and laissez-faire leadership styles in normal contexts were entered into SPSS as the independent variables and perception of leadership effectiveness was entered as the dependent variable (Aiken, West, & Pitts, 2003).

The hypotheses for this question included:

H0₃: There is no relationship between leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts, levels of trust and perception of leadership effectiveness.

HA_{3:} Higher authoritarian leadership style in normal contexts would be related to lower levels of trust and lower levels of perceived leadership effectiveness.

HA₃: Democratic leadership style in normal contexts would be related to higher levels of trust and higher levels of perceived leadership effectiveness.

HA₃: Laissez-faire leadership style in normal contexts would be related to lower levels of trust and higher lower levels of perceived leadership effectiveness.

Research Question 4: What is the relationship between leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening situations and level of trust and perception of leadership effectiveness?

A multiple regression analysis was used to measure the relations between the three independent variables. Authoritarian, democratic, and laissez-faire leadership styles in life-threatening contexts were entered into SPSS as independent variables and level of trust was

entered as the dependent variable (Field, 2013). A multiple regression analysis was used to measure the relations between the three independent variables; authoritarian, democratic, and laissez-faire leadership styles in life-threatening contexts on the dependent variable perception of leadership effectiveness (Field, 2013).

The hypotheses for this question included:

H0₄: There is no relationship between leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts, levels of trust and perception of leadership effectiveness.

HA_{4:} Authoritarian leadership style in life-threatening contexts would be related to higher levels of trust and higher levels of perceived leadership effectiveness.

HA₄: Democratic leadership style in life-threatening contexts would be related to lower levels of trust and lower levels of perceived leadership effectiveness.

HA₄: Laissez-faire leadership style in life-threatening contexts would be related to lower levels of trust and lower levels of perceived leadership effectiveness.

Research Question 5: What is the relationship between the amount of change in leadership style from normal contexts to life-threatening contexts and the level of trust and perception of leadership effectiveness?

A simple regression analysis was used to measure the relationship between one outcome variable and one predictor variable change in leadership style (interval) and level of trust (ordinal) (Field, 2013). A simple regression analysis was used to measure the relationship between changes in leadership style (interval) with perception of leadership effectiveness (ordinal) (Field, 2013). The hypotheses for this question included:

H0₅: There is no relationship between the amount of change in leadership style from normal contexts to life-threatening contexts in relation to levels of trust and perception of leadership effectiveness.

HA_{5:} The more change in democratic leadership style from normal contexts to life-threatening contexts would be related to higher levels of trust and higher levels of perception of leadership effectiveness.

HA₅**2**: The more change in authoritarian leadership style from normal contexts to life-threatening contexts would be related to lower levels of trust and lower levels of perception of leadership effectiveness.

HA_{5:} The more change in laissez-faire leadership style from normal contexts to life-threatening contexts would be related to higher levels of trust and higher levels of perception of leadership effectiveness.

Research Question 6: How do different combinations of leadership style (authoritarian, democratic, and laissez-faire) during normal contexts to life-threatening contexts relate to overall perception of trust for police supervisors?

A grouping variable was created where Group 1 equals police officers that have leaders that are strongly democratic in normal contexts and then are strongly authoritarian in life-threatening contexts. Group 2 would be police officers with all other types of leaders. An independent sample *t*-test was used to examine average level of trust between these two groups. A *t*-test was the most appropriate statistical procedure to answer this question because this test determines if there is a significant difference in the mean of the dependent variable between the two independent between two independent samples (Field, 2013). The hypotheses for this question included:

H0₆: There would be no difference between combinations of leadership styles during normal contexts to life-threatening contexts in relation to perception of trust for police supervisors.

HA_{6:} Leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts would be the group with the highest average level of perceived trust from police officers.

Ethical Considerations

An ethical issue that may raise concerns among the participants of this study is the confidentiality of their participation. If any information concerning the identity of the participants is exposed, supervisors may confront them. In order to address the ethical issues, the study was designed to collect data in a way that the invitation to participate was posted on sites that the targeted population would see, and then the participant could participate anonymously. Participants were also informed through the consent form that they could withdrawal from the study at any time, and that their participation would be voluntary. In the performance of research, keeping data anonymous, and avoiding conflicts of interest are some of the ethical concerns that may also arise in the process. The raw data were downloaded from SurveyMonkey® and imported into SPSS. No identifiable data of participants, emails, or IP addresses were collected during this study.

During the data collection process, the researcher was the only person who had the password to access the data in SurveyMonkey®. The retrieved data were kept on flash drives that were kept locked in a safe. The researcher was the only person with access to the safe. All collected data will be destroyed after 7 years. Another ethical concern was the possible conflict

of interest since the researcher could have worked with potential participants. The conflict was mitigated by the fact that the study was administered online and remained anonymous, leaving no opportunity for the researcher to influence or coerce participants.

CHAPTER 4. RESULTS

Introduction

The purpose of this study was to investigate the relationships between (a) leadership styles and level of trust, and (b) leadership styles and perceived leadership effectiveness among active duty Puerto Rico police officers in two different contexts (normal and life-threatening contexts). Survey instruments used in this study included the Leadership Style Survey (Northouse, 2011) and the Global Trust Scale (Colquitt, 2011). An invitation to participate in the study was posted on *Policia de Puerto Rico La Revista and Recordando a Mis Hermanos Azules RIP* Facebook accounts. The requests for participation provided a brief explanation of the study and the inclusion criteria. At the end of the invitation, there was a URL link to the survey. The survey was hosted online by SurveyMonkey®. Data were exported from SurveyMonkey® to SPSS for analysis. Chapter 4 is organized by the introduction, description of the sample, research questions, hypotheses, and a summary of the results.

Description of the Sample

The participants for this study were recruited from law enforcement Facebook groups moderated by active Puerto Rico police agents. The moderators of the groups posted the invitation with a survey link approved by the research committee overseeing this study and the IRB for Capella University. The link through SurveyMonkey.com routed participants to a survey that was initially approved in the English language. The data collection instrument was opened

on February 5, 2014, and closed April 14, 2014. During those 61 days, the English survey was accessed 131 times, and there were 83 partial responses. The invitation was posted on a weekly basis; however, the final data set showed only 48 participants completed the study. This total did not meet the 122 minimum sample calculated for this study.

The researcher discussed the issue with the dissertation committee, stating that the lack of responses might be influenced by the fact that not all potential participants understood the English language. After receiving approval from the committee, all research materials, were translated into the Spanish language. Dr. Nicolas Rosario-Alvarez, Ph.D., revised all of the Spanish materials and confirmed that the translation was accurate. On April 17, 2014, Capella IRB approved the amended research documents and allowed the continuance of the data collection. The Spanish language invitation and survey link in SurveyMonkey® were posted on the same law enforcement Facebook groups from April 14, 2014, until June 2, 2014, for a total of 49 days.

The data collection though SurveyMonkey® was officially closed on June 9, 2014.

During the data collection period, the moderators of the groups reposted the invitation and survey link weekly, encouraging members to participate. The Spanish data collection site was accessed 234 times, of which 112 were partial responses. The collected data were downloaded from the SurveyMonkey® website and imported into an Excel spreadsheet. Furthermore, data were analyzed by using SPSS statistical software, version 22. Before the analysis, all of the partial responses were deleted from the data set. The final data set indicated that 128 participants completed the survey. This number of completed surveys met the required minimum sample of 122 qualifying participants as established in the power analysis (Tabachnick

& Fidell, 2007). No data were collected after obtaining the required number of completed surveys.

Analysis of the Data

Research Question 1: What are the demographic characteristics of the sample?

Research question one was answered with descriptive statistics. Data were obtained from 128 police officers revealing that 60.9% (n = 78) were males and 39.1% (n = 50) were females. Participant ages ranged from 26 to 58 (M = 38.91, SD = 6.44). Participants' years on the force ranged from 0 to 36 years (M = 15.51, SD = 7.06). Perceived overall leadership effectiveness was an ordinal variable in the data set. However, it reflected as a categorical variable for score interpretation. Approximately one-fourth (25.8%, n = 33) of police officers rated their supervisors' leadership effectiveness skills as moderately bad and approximately one-fourth (24.2%, n = 31) rated their supervisors' leadership effectiveness as moderately good, as indicated in Table 2.

Table 2

Perceived Overall Leadership Effectiveness

Leadership Effectiveness	n	%	Cumulative %
Extremely bad leadership skills	4	3.10	3.10
Very bad leadership skills	7	5.50	8.60
Bad leadership skills	17	13.30	21.90
Moderately bad leadership skills	33	25.80	47.70
Moderately good leadership skills	31	24.20	71.90
Very good leadership skills	16	12.50	84.40
Excellent leadership skills	20	15.60	100.00
Total	128	100.00	

Scores were computed for trust and authoritarian, democratic, and lassiez-faire leadership styles in normal and life-threatening contexts. The computed scores were on an interval scale of measurement. The highest mean score was observed for the authoritarian leadership style during life-threatening contexts (M = 21.89, SD = 3.60) whereas the lowest mean score observed was for democratic leadership style during life-threatening contexts (M = 15.90, SD = 3.71). Therefore, the most common leadership style for the police officers' supervisors was authoritarian, and the least common leadership style was democratic. Descriptive statistics for the computed variables are presented in Table 3.

Table 3

Descriptive Statistics for Computed Variables

Variable	N	Minimum	Maximum	M	SD
Authoritarian leadership style - normal contexts	128	7.00	24.00	17.66	3.36
Authoritarian leadership style - life-threatening contexts	128	10.00	29.00	21.89	3.60
Democratic leadership style - normal contexts	128	9.00	27.00	17.30	3.49
Democratic leadership style - life-threatening contexts	128	6.00	25.00	15.90	3.71
Laissez-faire leadership style - normal contexts	128	9.00	25.00	17.30	3.78
Laissez-faire leadership style - life-threatening contexts	128	6.00	23.00	15.99	3.39
Trust aummary totals	128	5.00	25.00	16.40	4.02
Difference authoritarian leadership style - normal contexts and authoritarian leadership style - life-threatening contexts	128	-6.00	6.00	-0.30	1.88
Difference democratic leadership style normal contexts and democratic leadership style life-threatening contexts	128	-12.00	10.00	1.41	2.93
Difference lassiez-faire leadership style - normal contexts and lassiez-faire leadership style - life-threatening contexts	128	-6.00	7.00	0.14	1.81

Descriptive analyses were used to screen data for normality with skew and kurtosis statistics. Distributions with skew values less than the absolute value of two and kurtosis values less than the absolute value of seven were considered to approximate normality (Curran, West, & Finch, 1996). Skewness coefficients ranged from 0.03 to -0.72. Kurtosis coefficients ranged from 0.02 to 3.89. Therefore, the distributions were considered to be normal contexts as indicated in Table 4.

Table 4

Leadership Style Skewness and Kurtosis Coefficients

Variable	N	Skew	Skewness		Kurtosis	
	Statistic	Statistic	<u>SE</u>	Statistic	<u>SE</u>	
Authoritarian leadership style - normal contexts	128	-0.72	0.21	0.67	0.42	
Authoritarian leadership style - life-threatening						
contexts	128	-0.64	0.21	0.53	0.42	
Democratic leadership style - normal contexts	128	-0.18	0.21	-0.04	0.42	
Democratic leadership style - life-threatening						
contexts	128	0.03	0.21	0.21	0.42	
Laissez-faire leadership style - normal contexts	128	-0.18	0.21	-0.41	0.42	
Laissez-faire leadership style - life-threatening						
contexts	128	-0.24	0.21	0.02	0.42	
Trust aummary totals	128	- 0.41	0.21	0.42	0.42	
Difference authoritarian leadership style - normal contexts and authoritarian leadership style - life-threatening contexts	128	0.21	0.21	1.81	0.42	
Difference democratic leadership style normal contexts and democratic leadership style life-threatening contexts	128	-0.31	0.21	3.89	0.42	
Difference lassiez-faire leadership style - normal contexts and lassiez-faire leadership style - life-threatening contexts	128	-0.21	0.21	2.34	0.42	

For score interpretation, if the leadership style score was 26 or higher, it was categorized as being in the very high range. If the score was between 21 and 25, it was considered to be in the high range. If the score was between 16 and 20, it was classified in the moderate range. If the score was between 11 and 15, it was grouped in the low range. If the score was 10 or less, it was labeled to be in the very low range. Relative to the interpretation scores, 78.9% (n = 101) of police officers' leaders were moderate to high in the authoritarian leadership style in normal

contexts as indicated in Table 5. Approximately 95% (n = 122) of police officers' supervisors were moderate to very high in the authoritarian domain in life-threatening contexts (See Table 6). Approximately 84% (n = 107) of police officers' supervisors were very low to moderate in the democratic domain in normal contexts (See Table 7).

Table 5

Authoritarian Leadership Style Normal Contexts Interpretation Score

Interpretation Score	n	%	Cumulative %
Very Low	5	3.90	3.90
Low	22	17.20	21.10
Moderate	79	61.70	82.80
High	22	17.20	100.00
Total	128	100.00	

Table 6

Authoritarian Leadership Style Life-Threatening Contexts Interpretation Score

Interpretation Score	n	%	Cumulative %
Very Low	1	0.80	0.80
Low	5	3.90	4.70
Moderate	37	28.90	33.60
High	64	50.00	83.60
Very High	21	16.40	100.00
Total	128	100.00	

Table 7

Democratic Leadership Style in Normal Contexts Interpretation Score

Interpretation Score	n	%	Cumulative %
Very Low	6	4.70	4.70
Low	33	25.80	30.50
Moderate	68	53.10	83.60
High	20	15.60	99.20
Very High	1	0.80	100.00
Total	128	100.00	

Approximately 91% (n = 116) of police officers' supervisors scored very low to moderate in the democratic domain in life-threatening contexts (See Table 8). Approximately 81% (n = 102) of police officers' supervisors scored very low to moderate in the laissez-faire domain in normal contexts (See Table 9). Approximately 90% (n = 115) of police officers' supervisors scored very low to moderate in the laissez-faire domain in life-threatening contexts (See Table 10).

Table 8

Democratic Leadership Style in Life-threatening Contexts Interpretation Score

Interpretation Score	n	%	Cumulative %
Very Low	11	8.60	8.60
Low	44	34.40	43.00
Moderate	61	47.70	90.60
High	12	9.40	100.00
Total	128	100.00	

Table 9

Laissez-faire Leadership Style in Normal Contexts Interpretation Score

Interpretation Score	n	%	Cumulative %
Very Low	8	6.30	6.30
Low	33	25.80	32.00
Moderate	62	48.40	80.50
High	25	19.50	100.00
Total	128	100.00	

Table 10

Laissez-faire Leadership Style in Life-threatening Contexts Interpretation Score

Interpretation Score	n	%	Cumulative %
Very Low	9	7.00	7.00
Low	49	38.30	45.30
Moderate	57	44.50	89.80
High	13	10.20	100.00
Total	128	100.00	

Reliability Analyses

The reliability of variables of interest was determined using Cronbach's alpha. The internal consistency of the subscales ranged from α = .26 for trust to α = .587 for democratic leadership style normal. Reliability coefficients are presented in Table 11.

Table 11

Reliability Coefficients

Variable	N of Items	Cronbach's alpha
Authoritarian leadership style - normal contexts	5	0.383
Authoritarian leadership style - life threatening	5	0.302
Democratic leadership style - normal contexts	5	0.587
Democratic leadership style - life- threatening contexts	5	0.504
Laissez-faire leadership style - normal contexts	6	0.425
Laissez-faire leadership style - life- threatening contexts	5	0.582
Trust	5	0.260

Research Question 2: What is the relationship between the level of trust in the supervisor by age, sex, and years on the force?

Research Question 2 was investigated with multiple linear regression. The independent variables were age, sex, and years on the force. The dependent variable was the level of trust in the supervisor. Prior to the analysis, the residuals were analyzed. A residual is the difference between the observed and the model-predicted values of the dependent variable. Standardized residuals greater than 3 standard deviations were excluded from the analysis. Standardized residuals ranged from -2.75 to 2.40. An alpha level of .05 was used to determine the level of statistical significance when testing hypotheses. The histogram of the residuals is presented in Figure 2.

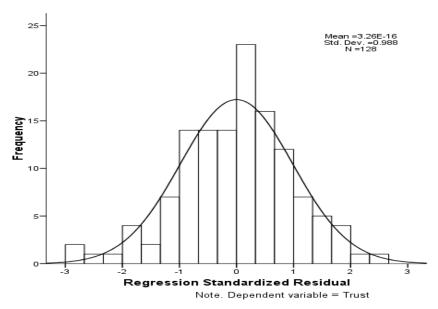


Figure 2. Standardized residuals for trust as an outcome variable for age, sex, and years on the force. Note: Dependent variable – Trust.

The model was not statistically significant, F(3, 124) = 1.62, p = .188. Age was not significantly related to trust in the supervisor, $\beta = -0.12$, t = -0.90, p = .368. Sex was not significantly related to trust in the supervisor, $\beta = 0.13$, t = 1.50, p = .135. Years on the force was not significantly related to trust in the supervisor, $\beta = -0.04$, t = -0.31, p = .76. The model was not statistically significant since the p-value was greater than .05. Regression coefficients for age, sex, and years on force are presented in Table 12.

Table 12

Regression Coefficients for Age, Sex, and Years on Force

Predictor Variable	R	R^2	Adj. R ²	В	SE B	β	t
	0.713	0.038	0.014				
Age				-0.074	0.082	-0.118	-0.903
Gender				1.090	0.724	0.133	1.500
Years on Force				-0.023	0.074	-0.040	-0.306

Note . Dependent variable = Trust

Research Question 2 Hypotheses

 $\mathbf{H0_2}$ stated that the level of trust would not be related to age, sex, and years on the force. The model was not statistically significant, F(3, 124) = 1.62, p = .188. Age, sex, and years on the force were not related to trust in the supervisor. The model was not statistically significant since the p-value was greater than .05. Therefore, the null hypothesis for Research Question 2 not rejected.

 $\mathbf{HA_2}$ stated that the level of trust would be related to age, sex, and years on the force. Age, sex, and years on the force were not related to trust in the supervisor, F(3, 124) = 1.62, p = 0.188. Therefore, the alternative hypothesis for Research Question 2 is not supported.

Research Question 3: What is the relationship between leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts and level of trust and perception of leadership effectiveness?

Research Question 3 was investigated with two regression models. In the first regression model, the independent variables were leadership styles (authoritarian, democratic, and laissezfaire) in normal contexts and the dependent variable was trust. Standardized residuals ranged

from -2.51 to 2.12. A histogram of the standardized residuals is presented in Figure 3.

The model was statistically significant, F(3, 123) = 6.79, p < .001; Adjusted $R^2 = .12$ indicating that 12% of the variance in trust is explained from the model. Examination of the univariate statistics revealed that there was a significant, positive relationship between the authoritarian leadership style in normal contexts and trust, $\beta = .33$, t = 3.88, p < .001. There was a significant, negative relationship between the democratic leadership style in normal contexts and trust in the supervisor, $\beta = .30$, t = -2.10, p = .038. There was no significant relationship between the laissez-faire leadership style in normal contexts and trust in the supervisor, $\beta = .07$, t = 0.51, t = 0.51, t = 0.51. Results indicated that authoritarian leaders in normal contexts earn more trust from police officers. Conversely, democratic leaders in normal contexts and trust were not related. Regression coefficients are presented in Table 13.



Figure 3. Histogram of standardized residuals for trust as an outcome variable for leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts. *Note:* Dependent variable = Trust.

Table 13

Regression Coefficients for Leadership Styles in Normal Contexts and Trust

Predictor Variable	R		R^2	Adj. R ²	В	SE B	β	t
	0.377	***	0.142	0.121				_
Authoritarian leadership style in normal times					0.388	0.100	0.334	3.880 ***
Democratic leadership style in normal times					-0.333	0.159	-0.298	2.100 *
Laissez-faire leadership style in normal times					0.075	0.148	0.073	0.508

Note. Dependent variable = Trust; ***p < .001; *p < .05.

In the second regression model, the independent variables were leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts and the dependent variable was perception of leadership effectiveness. Standardized residuals ranged from -2.69 to 1.82. A histogram of the standardized residuals is presented in Figure 4.

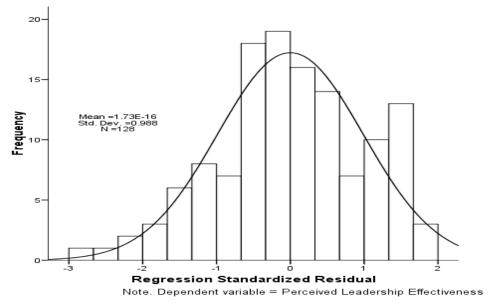


Figure 4. Histogram of standardized residuals for perceived leadership effectiveness of outcome variables for leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts. Note: Dependent variable = Perceived leadership effectiveness.

The model was statistically significant, F(3, 124) = 3.55, p = .017; Adjusted $R^2 = .057$ indicating that 5.7% of the variance in perceived leadership effectiveness is explained from the model. Examination of the univariate statistics revealed that there was a significant, positive relationship between the authoritarian leadership style in normal contexts and perceived leadership effectiveness, $\beta = .23$, t = 2.54, p = .012. There was no significant relationship between the democratic leadership style in normal contexts and perceived leadership effectiveness, $\beta = .27$, t = -1.85, p = .067. There was no significant relationship between the laissez-faire leadership style in normal contexts and perceived leadership effectiveness, $\beta = .24$, t = 1.64, t = 1.64. Findings of this analysis indicated that PRPD officers perceived authoritarian leaders in normal contexts as effective leaders. Regression coefficients are presented in Table 14.

Table 14

Regression Coefficients for Leadership Styles in Normal Contexts and Perceived Leadership Effectiveness

Predictor Variable	R		R^2	Adj. R^2	В	SE B	β	t	
	0.281	*	0.142	0.121					
Authoritarian leadership style in normal contexts					0.104	0.041	0.226	2.540 *	ķ
Democratic leadership style in normal contexts					-0.120	0.065	-0.270	-1.850	
Laissez-faire leadership style in normal contexts					0.100	0.061	0.243	1.640	

Note. Dependent variable = Perceived Leadership Effectiveness; *p < .05.

Research Question 3 Hypotheses

H0₃ stated that there is no relationship between leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts, level of trust and perception of leadership effectiveness. The ANOVA model that came from the regression analysis was statistically significant in the examination of authoritarian leadership style in normal contexts and perceived leadership effectiveness. Furthermore, results showed a significant negative relationship between democratic leadership style in normal context and trust. Therefore, the null hypothesis for Research Question 3 is partially supported. **HA**₃ stated that higher authoritarian leadership style in normal contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness. Examination of the univariate statistics revealed that there was a significant, positive relationship between the authoritarian leadership style in normal contexts and trust in the supervisor, $\beta = .33$, t = 3.88, p < .001. There was a significant, positive relationship

between the authoritarian leadership style in normal contexts and perceived leadership effectiveness, $\beta = .23$, t = 2.54, p = .012. Therefore, the first alternate hypothesis for Research Question 3 is not supported. The significant relationship between authoritarian leadership style in normal contexts and trust in the supervisor were exactly the opposite of the expected outcome.

HA₃ measured police officers' level of trust, perceived leader effectiveness, and leaders' style in two different contexts: normal contexts and life-threatening contexts. Democratic leadership style in normal contexts would be related to a higher level of trust and higher level of perceived leadership effectiveness. There was a significant, negative relationship between the democratic leadership style in normal contexts and trust in the supervisor, $\beta = -.30$, t = -2.10, p = .038. There was no significant relationship between the democratic leadership style in normal contexts and perceived leadership effectiveness, $\beta = -.27$, t = -1.85, p = .067. Therefore, the second alternate hypothesis for Research Question 3 is not supported. The findings of this analysis were exactly the opposite of the expected outcome.

HA_{3:} Laissez-faire leadership style in normal contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness. There was no significant relationship between the laissez-faire leadership style in normal contexts and trust in the supervisor, $\beta = .07$, t = 0.51, p = .612. Therefore, the third alternate hypothesis for Research Question 3 is not supported. There was no significant relationship between the laissez-faire leadership style in normal contexts and perceived leadership effectiveness, $\beta = .24$, t = 1.64, p = .104.

Research Question 4: What is the relationship between leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts and level of trust and perception of leadership effectiveness?

Research Question 4 was investigated with two regression models. In the first regression model, the independent variables were leadership styles (authoritarian, democratic, and laissezfaire) in life-threatening contexts and the dependent variable was trust. Standardized residuals ranged from -2.65 to 1.99. A histogram of the standardized residuals is presented in Figure 5.

The model was statistically significant, F(3, 123) = 5.36, p = .002; Adjusted $R^2 = .094$ indicating that 9.4% of the variance in trust is explained from the model. Examination of the univariate statistics revealed that there was a significant, positive relationship between the authoritarian leadership style in life-threatening contexts and trust in the supervisor, $\beta = .36$, t = 3.49, p = .001. There was no significant relationship between the democratic leadership style in life-threatening contexts and trust in the supervisor, $\beta = -.11$, t = -1.25, p = .215. There was no significant relationship between the laissez-faire leadership style in life-threatening contexts and trust in the supervisor, $\beta = -.06$, t = -.56, p = .574. The model was not statistically significant since the p-value was greater than .05. Regression coefficients are presented in Table 15.

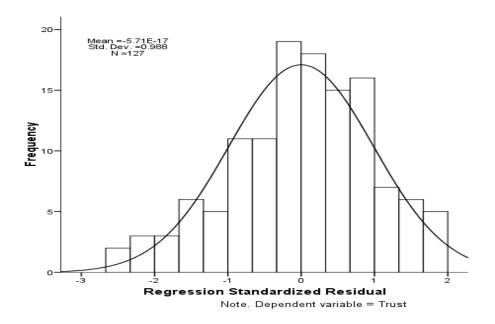


Figure 5. Histogram of standardized residuals for trust as an outcome variable for leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts. Note: Dependent variable = Trust.

Table 15

Regression Coefficients for Leadership Styles in Life-threatening contexts and Trust

Predictor Variable	R		R^2	Adj. R^2	В	SE B	β	t
	0.340	**	0.116	0.094				
Authoritarian leadership style in life-threatening situations					0.391	0.112	0.360	3.480 **
Democratic leadership style in life- threatening situations					-0.117	0.094	-0.112	-1.250
Laissez-faire leadership style in life-threatening situations					-0.070	0.124	-0.061	-0.564

Note. Dependent variable = Trust; **p < .01.

In the second regression model, the independent variables were leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts and the dependent

variable was perception of leadership effectiveness. Standardized residuals ranged from -2.56 to 1.89. A histogram of the standardized residuals is presented in Figure 6.

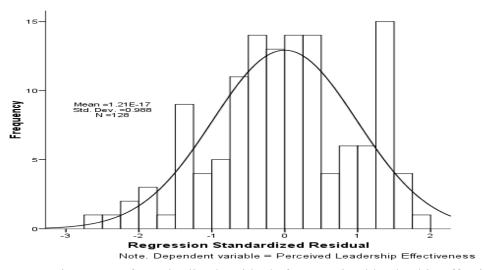


Figure 6. Histogram of standardized residuals for perceived leadership effectiveness of outcome variables for leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts. Note: Dependent variable = Perceived leadership effectiveness.

The model was statistically significant, F(3, 124) = 2.75, p = .046; Adjusted $R^2 = .04$ indicating that 4% of the variance in perceived leadership effectiveness is explained from the model. Examination of the univariate statistics revealed that there was a significant, positive relationship between the authoritarian leadership style in life-threatening contexts and perceived leadership effectiveness, $\beta = .22$, t = 2.04, p = .044. There was no significant relationship between the democratic leadership style in life-threatening contexts and perceived leadership effectiveness, $\beta = .063$, t = .687, p = .493. There was no significant relationship between the laissez-faire leadership style in life-threatening contexts and perceived leadership effectiveness, $\beta = .06$, t = .55, t = .585. Regression coefficients are presented in Table 16.

Table 16

Regression Coefficients for Leadership Styles in Life-threatening Contexts and Perceived Leadership Effectiveness

Predictor Variable	R		R^2	Adj. R^2	В	SE B	β	t	
	0.250	*	0.062	0.040					
Authoritarian leadership style in life-threatening situations					0.092	0.045	0.215	2.040	*
Democratic leadership style in life- threatening situations					-0.026	0.038	-0.063	-0.687	
Laissez-faire leadership style in life-threatening situations					0.028	0.050	0.060	0.547	

Note. Dependent variable = Perceived Leadership Effectiveness; *p < .01.

Research Question 4 Hypotheses

H0₄ stated that there is no relationship between leadership styles (authoritarian, democratic, and laissez-faire) in life-threatening contexts, level of trust and perception of leadership effectiveness. While the models were statistically significant, not all leadership styles were related to trust and perception of leadership effectiveness. Therefore, the null hypothesis for Research Question 4 hypothesis is not rejected.

 $\mathbf{HA_4}$ stated that authoritarian leadership style in life-threatening contexts would be related to a higher level of trust and higher level of perceived leadership effectiveness. There was a significant, positive relationship between the authoritarian leadership style in life-threatening contexts and trust in the supervisor, $\beta = .36$, t = 3.49, p = .001. There was a significant, positive relationship between the authoritarian leadership style in life-threatening contexts and perceived leadership effectiveness, $\beta = .22$, t = 2.04, p = .044. Therefore, the first alternative hypothesis for Research Question 4 was supported.

HA₄ stated that democratic leadership style in life-threatening contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness. There was no significant relationship between the democratic leadership style in life-threatening contexts and trust in the supervisor, $\beta = -.11$, t = -1.25, p = .215. There was no significant relationship between the democratic leadership style in life-threatening contexts and perceived leadership effectiveness, $\beta = -.063$, t = -.687, p = .493. Therefore, the second alternative hypothesis for Research Question 4 is not supported.

HA₄ stated that Laissez-faire leadership style in life-threatening contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness. There was no significant relationship between the laissez-faire leadership style in life-threatening contexts and trust in the supervisor, $\beta = -.06$, t = -.56, p = .574. There was no significant relationship between the laissez-faire leadership style in life-threatening contexts and perceived leadership effectiveness, $\beta = -.06$, t = -.55, p = .585. Therefore, the third alternative hypothesis for Research Question 4 is not supported.

Research Question 5: What is the relationship between the amount of change in leadership style (authoritarian, democratic, and laissez-faire) from normal contexts to life-threatening contexts and the level of trust and perception of leadership effectiveness?

Research Question 5 was investigated with two multiple regression models. In the first regression model, the independent variables were changes leadership styles (authoritarian, democratic, and laissez-faire) from normal contexts to life-threatening contexts, and the dependent variable was trust in the supervisor. Standardized residuals ranged from -2.86 to 2.09. A histogram of the standardized residuals is presented in Figure 7.

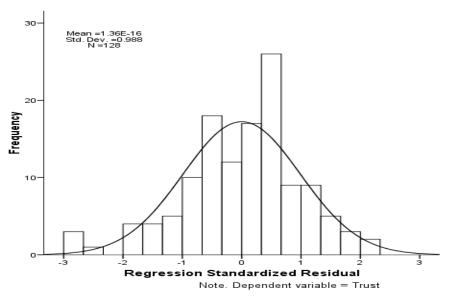


Figure 7. Histogram of standardized residuals for trust as an outcome variable for changes in leadership styles (authoritarian, democratic, and laissez-faire) from normal contexts to lifethreatening contexts. Note: Dependent variable =Trust.

The model was not statistically significant, F(3, 124) = 0.65, p = .585. Examination of the univariate statistics revealed that there was no significant relationship between changes in authoritarian leadership style from normal contexts to life-threatening contexts and trust in the supervisor, $\beta = .02$, t = 0.25, p = .805. There was no significant relationship between changes in democratic leadership style from normal contexts to life-threatening contexts and trust in the supervisor, $\beta = -.06$, t = -0.65, p = .52. There was no significant relationship between changes in the laissez-faire leadership style from normal contexts to life-threatening contexts and trust in the supervisor, $\beta = -.09$, t = -1.02, p = .311. The model was not statistically significant since the p-value was greater than .05. Regression coefficients are presented in Table 17.

Table 17

Regression Coefficients for Changes in Leadership Styles from Normal Contexts to Lifethreatening contexts and Trust

Predictor Variable	R	R^2	Adj. R^2	В	SE B	β	t
	0.124	0.015	-0.008				
Change in authoritarian leadership style from normal contexts to life-threatening contexts				0.047	0.191	0.022	0.248
Change in democratic leadership style from normal contexts to life-threatening contexts				-0.081	0.125	-0.059	-0.645
Change in laissez-faire leadership style from normal contexts to life-threatening contexts				0.207	0.203	-0.093	-1.020

Note. Dependent variable = Trust.

In the second regression model, the independent variables were changes leadership styles (authoritarian, democratic, and laissez-faire) from normal contexts to life-threatening contexts, and the dependent variable was perceived leadership effectiveness. Standardized residuals ranged from -2.31 to 1.57. A histogram of the standardized residuals is presented in Figure 8.

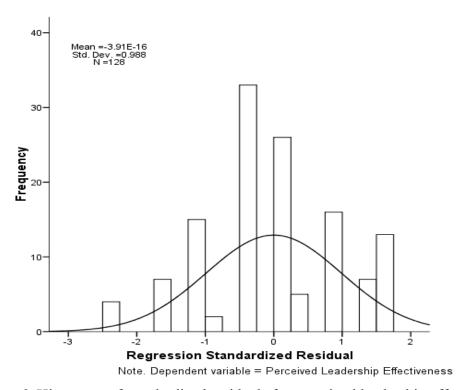


Figure 8. Histogram of standardized residuals for perceived leadership effectiveness of outcome variables for changes in leadership styles (authoritarian, democratic, and laissez-faire) from normal contexts to life-threatening contexts. Note: Dependent variable = Perceived leadership effectiveness.

The model was not statistically significant, F(3, 124) = 0.05, p = .986. Examination of the univariate statistics revealed that there was no significant relationship between changes in authoritarian leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness, $\beta = -.03$, t = -.36, p = .723. There was no significant relationship between changes in democratic leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness, $\beta = -.01$, t = -0.11, p = .916. There was no significant relationship between changes in the laissez-faire leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness, $\beta = -.01$, t = -.08, p = .939. The

model was not statistically significant since the *p*-value was greater than .05. Regression coefficients are presented in Table 18.

Table 18

Regression Coefficients for Changes in Leadership Styles from Normal Contexts to Lifethreatening Contexts and Perceived Leadership Effectiveness

Predictor Variable	R	R^2	Adj. R^2	В	SE B	β	t
	0.034	0.001	-0.023				
Change in authoritarian leadership style from normal contexts to life-threatening contexts				-0.026	0.074	-0.032	-0.355
Change in democratic leadership style from normal contexts to life-threatening contexts				-0.005	0.049	-0.010	-0.106
Change in laissez-faire leadership style from normal contexts to life-							
threatening contexts				-0.006	0.079	-0.007	-0.077

Note. Dependent variable = Perceived Leadership Effectiveness.

Research Question 5 Hypotheses

 $H0_5$ stated that there would be no relationship between the amount of change in leadership style from normal contexts to life-threatening contexts in relation to the level of trust and perception of leadership effectiveness. The regression models were not statistically significant. Therefore, the null hypothesis for Research Question 5 is not rejected.

HA_{5:} stated that the more change in democratic leadership style from normal contexts to life-threatening contexts would be related to a higher level of trust and higher level of

perception of leadership effectiveness. There was no significant relationship between changes in democratic leadership style from normal contexts to life-threatening contexts and trust in the supervisor, $\beta = -.06$, t = -0.65, p = .52. There was no significant relationship between changes in democratic leadership style from normal contexts to lifethreatening contexts and perceived leadership effectiveness, $\beta = -.01$, t = -0.11, p = .916. Therefore, the first alternative hypothesis for Research Question 5 is not supported. HA_{5:} stated that the more change in authoritarian leadership style from normal contexts to life-threatening contexts would be related to the lower level of trust and lower level of perception of leadership effectiveness. There was no significant relationship between changes in authoritarian leadership style from normal contexts to life-threatening contexts and trust in the supervisor, $\beta = .02$, t = 0.25, p = .805. There was no significant relationship between changes in authoritarian leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness, $\beta = -.03$, t = -.36, p =.723. Therefore, the second alternative hypothesis for Research Question 5 is not supported.

HA_{5:} stated that the more change in laissez-faire leadership style from normal contexts to life-threatening contexts would be related to a higher level of trust and higher level of perception of leadership effectiveness. There was no significant relationship between changes in the Laissez-faire leadership style from normal contexts to life-threatening contexts and trust in the supervisor, $\beta = -.09$, t = -1.02, p = .311. There was no significant relationship between changes in the Laissez-faire leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness, $\beta = -.01$, t = -.08, p = -.01

.939. Therefore, the third alternative hypothesis for Research Question 5 is not supported.

Research Question 6: Do leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts have a higher level of trust compared to other leaders?

Research Question 6 was investigated with an independent samples t-test. Prior to the analysis, a grouping variable was created in which Group 1 was comprised of police officers that had leaders that were strongly democratic in normal contexts and then were strongly authoritarian in life-threatening contexts. Group 2 consisted of police officers with all other types of leaders. A cross-tabulation of police officers with democratic leaders in normal contexts, and who were authoritarian leaders in life-threatening contexts revealed there were 18 officers who met the criteria for Group 1. See Table 19. Thus, as indicated in Table 20, there were 18 participants in Group 1 and 110 in Group 2.

Table 19

Cross-tabulation of Democratic Leadership Style in Normal Contexts Interpretation Score by Authoritarian Leadership Style in Life-threatening Contexts Interpretation Score

	Authoritarian Threat Interpretation Score										
Count	Very Low	Low	Moderate	High	Very High	Totals					
Very Low	1	0	1	2	2	6					
Low	0	2	12	14	5	33					
Moderate	0	3	21	34	10	68					
High	0	0	3	13	4	20					
Very High	0	0	1	0	1						
Totals	1	5	37	64	21	128					

Table 20

Grouping Variable

Grouping Variable	n	%
Strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts	18	14.1
All other types of leaders	110	85.9
Totals	128	100

There was no significant difference between the two groups, t (126) = -1.22, p = .114, one-tailed. Leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts (M = 15.33, SD = 4.20) do not have higher level of trust compared to other leaders (M = 16.57, SD = 3.98).

Research Question 6 Hypotheses

 $\mathbf{H0_6}$ stated that there would be no difference between combinations of leadership styles during normal contexts to life-threatening contexts, in relation to perception of trust for police supervisors. Leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts (M = 15.33, SD = 4.20) do not have higher level of trust compared to other leaders (M = 16.57, SD = 3.98), t(126) = -1.22, p = .114, one-tailed. Therefore, the null hypothesis for Research Question 6 is not rejected.

HA₆ stated that leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts would be the group with the highest average level of perceived trust from police officers. Leaders who are strongly democratic in

normal contexts and strongly authoritarian in life-threatening contexts (M = 15.33, SD = 4.20) do not have higher level of trust compared to other leaders (M = 16.57, SD = 3.98), t(126) = -1.22, p = .114, one-tailed. Therefore, the alternative hypothesis for Research Question 6 is not supported.

Statement of Results

This study was conducted to explore leadership styles, police officers' perception of leadership effectiveness, and level of trust of their supervisors in two different contexts, normal and life-threatening contexts. The theoretical framework of contextual leadership theory provides an assumption that leadership is embedded in the context; therefore, leadership style changes if the setting in which leadership takes place changes (Osborn et al., 2002).

Variables of leadership style and trust were measured using existing measurement scales (Colquitt et al., 2011; Northouse, 2011). Cronbach's alpha results obtained in this study ranged from α = .26 for Global Trust Scale to α = .587 for Leadership Style Questionnaire. It is important to mention that although the reliability estimates of these instruments are low, they have been used and published in other studies (Colquitt et al., 2011; Northouse, 2011). Low scores in alpha may be attributed to the few number of questions. However, research findings stated that high scores of alpha (e.g. >0.90) suggested redundancy in the constructs and, therefore, also should be revised (Tavakol, 2011).

Participants included 128 police officers in Puerto Rico. Demographic variables were measured. The findings revealed that age, sex, and years on the force were not related to trust in the supervisor. The leadership style subscale was used to determine what leadership style was stronger in normal contexts and what leadership style was stronger in life-threatening contexts.

The strongest leadership style in both normal contexts and life-threatening contexts was the authoritarian leadership style. Therefore, it is fair to conclude that police officers that participated in this study rate their leaders as authoritarian. The relationship between trust, perceived leader effectiveness, and leadership style (authoritarian, democratic, laissez-faire) in these two contexts were also assessed.

Trust and Perceived Leadership Effectiveness

Authoritarian leadership style. There was a significant, positive relationship between the authoritarian leadership style in normal contexts and trust in the supervisor. There was a significant, positive relationship between the authoritarian leadership style in life-threatening contexts and trust in the supervisor. There was also a significant, positive relationship between the authoritarian leadership style in life-threatening contexts and perceived leadership effectiveness.

Democratic leadership style. There was a significant, negative relationship between the democratic leadership style in normal contexts and trust in the supervisor. There was no significant relationship between the democratic leadership style in life-threatening contexts and trust in the supervisor. There was no significant relationship between the democratic leadership style in normal contexts and perceived leadership effectiveness. There was no significant relationship between the democratic leadership style in life-threatening contexts and perceived leadership effectiveness.

Laissez-faire leadership style. There was no significant relationship between the laissez-faire leadership style in normal contexts and trust in the supervisor. There was no significant relationship between the laissez-faire leadership style in life-threatening contexts and trust in the

supervisor. There was no significant relationship between the laissez-faire leadership style in normal contexts and perceived leadership effectiveness. There was no significant relationship between the laissez-faire leadership style in life-threatening contexts and perceived leadership effectiveness.

Change in Context

The purpose of this study was to examine if there was any relationship between the amount of change in leadership style from normal contexts to life-threatening contexts, perceptions of leadership trust and effectiveness. The change in context variable was computed by subtracting leadership styles (authoritarian, democratic, & laissez-faire) from normal contexts leadership styles (authoritarian, democratic, & laissez-faire) in life-threatening contexts. There was no significant relationship between changes in democratic leadership style from normal contexts to life-threatening contexts and trust in the supervisor. There was no significant relationship between changes in democratic leadership style from normal contexts to lifethreatening contexts and perceived leadership effectiveness. There was no significant relationship between changes in authoritarian leadership style from normal contexts to lifethreatening contexts and trust in the supervisor. There was no significant relationship between changes in authoritarian leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness. There was no significant relationship between changes in the laissez-faire leadership style from normal contexts to life-threatening contexts and trust in the supervisor. There was no significant relationship between changes in the laissez-faire leadership style from normal contexts to life-threatening contexts and perceived leadership effectiveness.

Leader in Context

This grouping variable measured if leaders who changed their leadership style from democratic in a normal context to authoritarian in a life-threatening context were trusted and were perceived effective by police officers. The variable consisted of two groups where Group 1 represented police officers that reported having leaders that are strongly democratic in normal contexts and then are strongly authoritarian in life-threatening contexts. Group 2 represented officers with different types of leaders. The study findings showed that police leaders in Puerto Rico who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts did not have a higher level of trust compared to other leaders. Table 21 provides a summary of the hypotheses tested and the outcomes.

Summary

One hundred and twenty-eight police officers from the Puerto Rico police department completed the survey through the SurveyMonkey® website. Data obtained from 128 police officers revealed that 60.9% (n = 78) were males and 39.1% (n = 50) were females. Participant ages ranged from 26 to 58 (M = 38.91, SD = 6.44). Participants' years on the force ranged from 0 to 36 years (M = 15.51, SD = 7.06). Additional findings using statistical analysis are presented in Table 21. This table includes the research questions of the study and the hypothesis outcome.

Table 21
Summary of Null and Alternative Hypotheses Tested and Outcomes

Hypothesis	Significance	Outcome
RQ2 H0: The level of trust would not be related to age, sex, and years on the force.		Rejected
RQ2 HA ₁ : The level of trust will be related to age, sex, and years on the force.	p = .188	Not Supported
RQ3 H0: There is no relationship between leadership styles (authoritarian, democratic, and laissez-faire) in normal contexts, level of trust and perception of leadership effectiveness		Not Supported
RQ3 HA1: Higher authoritarian leadership style in normal contexts will be related to lower level of trust and lower level of perceived leadership effectiveness.	Trust: p < .001 Leadership Effectiveness: p = .012	Not Supported in Direction Hypothesized Not Supported in Direction Hypothesized
RQ3 HA2: Democratic leadership style in normal contexts will be related to higher level of trust and higher level of perceived leadership effectiveness.	Trust: p = .038 Leadership Effectiveness: p = .067.	Not Supported
RQ3 HA3: Laissez-faire leadership style in normal contexts will be related to lower level of trust and higher lower level of perceived leadership effectiveness.	Trust: p = .612 Leadership Effectiveness: p = .104.	Not Supported
RQ4 H0: There is no relationship between leadership styles (authoritarian, democratic, and laissez-faire) in life- threatening contexts, level of trust and perception of leadership effectiveness		Rejected
RQ4 HA1: Authoritarian leadership style in life-threatening contexts will be related to higher level of trust and higher level of perceived leadership effectiveness.	Trust: p = .001 Leadership Effectiveness: p = .044.	Supported

Table 21
Summary of Alternative Hypotheses Tested and Outcomes (continued)

Hypothesis	Significance	Outcome
RQ4 HA2: Democratic leadership style in life-threatening contexts will be related to lower level of trust and lower level of perceived leadership effectiveness.	Trust: p = .215 Leadership Effectiveness: p = .493.	Not Supported
RQ4 HA3: Laissez-faire leadership style in life-threatening contexts will be related to lower level of trust and lower level of perceived leadership effectiveness.	Trust: p = .574 Leadership Effectiveness: p = .585.	Not Supported
RQ5 H0:there would be no relationship between the amount of change in leadership style from normal contexts to life-threatening contexts in relation to the level of trust and perception of leadership effectiveness		Not Rejected
RQ5 HA1: The more change in democratic leadership style from normal contexts to life-threatening contexts will be related to higher level of trust and higher level of perception of leadership effectiveness	Trust: p = .52 Leadership Effectiveness: p = .916.	Not Supported
RQ5 HA2: The more change in authoritarian leadership style from normal contexts to life-threatening contexts will be related to lower level of trust and lower level of perception of leadership effectiveness.	Trust: p = .805 Leadership Effectiveness: p = .723.	Not Supported
RQ5 HA3: The more change in lassiez- faire leadership style from normal contexts to life-threatening contexts will be related to higher level of trust and higher level of perception of leadership effectiveness.	Trust: p = .311 Leadership Effectiveness: p = .939.	Not Supported

Table 21
Summary of Alternative Hypotheses Tested and Outcomes (continued)

Hypothesis	Significance	Outcome
RQ6 H0: There would be no difference between combinations of leadership styles during normal contexts to life-threatening contexts, in relation to perception of trust for police		Not Rejected
RQ6 HA ₁ : Leaders who are strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts will be the group with the highest average level of perceived trust from police officers.	p = .114	Not Supported

Note. Statistical tests included multiple linear regressions for hypotheses of Research Question 2 through 5, and the independent samples t-test for hypothesis of Research Question 6.

A thorough analysis of the findings of this study along with the implications, limitations, and recommendations for future research will be addressed in Chapter 5.

CHAPTER 5. DISCUSSION, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS

Overview

The purpose of this study was to explore Puerto Rico police officers' level of trust, perceived leader effectiveness and leaders' style in two different contexts: normal contexts and life-threatening contexts. Specifically, this study measured authoritarian, democratic, and lassiez-faire leadership styles in both contexts. Supported by contextual leadership theory as the theoretical framework (Osborn et al., 2002). This study was also an exploration of contextual leadership theory, which posits, "leadership and its effectiveness, in large part, is dependent upon the context" by examining level of trust for supervisors who change their leadership style (Osborn et al., 2002, p. 797). The leadership style questionnaire (Northouse, 2011) and the Global Trust Scale (Colquitt, 2011) were used to measure leadership styles and trust. The recruitment sites chosen for this study were from social network Facebook groups such as *Policia de Puerto Rico La Revista* and *Recordando a Mis Hermanos Azules RIP*. This study consisted of data collected through an anonymous online survey hosted by SurveyMonkey®. A total of 128 police officers completed the survey. The following sections provide a summary of the results, conclusions, limitations, implications, and recommendations for practice.

Discussion of Results

Research Question 1 addressed the demographic characteristics of the sample. The analysis of the descriptive statistics revealed that participant ages ranged from 26 to 58 years, and their years on the force ranged from 0 to 36. Furthermore, the statistics showed that 60.9% of the participants were male, and 39.1% were female. Prior research findings noted that females in the United States are underrepresented in the law enforcement sector (Schuck, 2014). Given that there is a 21.8% difference in gender responses, the data implicated that the gender distribution in Puerto Rico is similar to the gender distribution of police officers in the U.S. in general.

Research Question 2 inquired about the relationship between the level of trust in the supervisor by age, sex, and years on the force. It was hypothesized that these variables would be related to trust in the supervisor. The statistical analysis showed that none of the variables were significantly related to trust in the supervisor.

Research Question 3 hypothesized that higher authoritarian leadership style in normal contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness. It was also hypothesized that democratic leadership style in normal contexts would be related to a higher level of trust and higher level of perceived leadership effectiveness.

Furthermore, it was hypothesized that laissez-faire leadership style in normal contexts would be related to the lower level of trust and higher lower level of perceived leadership effectiveness.

The authoritarian leadership style was the most common reported in the data after calculating the scores for the leadership style questions. Findings of the present study revealed police officers that live in Puerto Rico reported having more trust in authoritarian leaders in

normal situations. The study also revealed that police leaders in Puerto Rico were perceived as effective leaders in normal situations. Researchers suggest that the acceptance of authoritarian leadership depends upon the contexts leadership takes place (Dickson et al., 2003; De Hoog et al., 2015). Even though authoritarian leaders are known to be controlling and power-oriented (Bass & Bass, 2008; Puni, Ofei, & Okoe, 2014; Vito et al., 2011), they were preferred by police officers in Puerto Rico during normal situations.

Research Question 4 hypothesized that authoritarian leadership style in life-threatening contexts would be related to a higher level of trust and higher level of perceived leadership effectiveness. It was also hypothesized that democratic leadership style in life-threatening contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness. The last hypothesis was that laissez-faire leadership style in life-threatening contexts would be related to the lower level of trust and lower level of perceived leadership effectiveness.

As previously discussed, democratic leaders are known to empower followers by asking for advice and opinion in the decision-making process. These types of leaders are open to suggestions, care for follower's individual needs, and use mistakes as learning opportunities for improvement (Bass, 1960; Bass & Bass, 2008; Puni et al., 2014). Even though literature supports that democratic leaders are preferred over authoritarian leaders (Bass & Bass, 2008), the results of this research question suggest the opposite. Police officers in Puerto Rico reported having more trust in authoritarian leaders during life-threatening contexts as opposed to democratic and laissez-faire leaders. Furthermore, authoritarian leaders in life-threatening contexts were also perceived as effective in this context. The findings of these research questions do not support

Lewin et al. (1939) theory, which suggested that group members prefer democratic leaders compared to authoritarian leaders. The present study findings supported the assumption that the acceptance of authoritarian leadership depends upon the contexts leadership takes place (Dickson et al., 2003; De Hoog et al., 2015).

Research Question 5 hypothesized that the more change in democratic leadership style from normal contexts to life-threatening contexts would be related to a higher level of trust and higher level of perception of leadership effectiveness. Furthermore, it was hypothesized that the more change in authoritarian leadership style from normal contexts to life-threatening contexts would be related to the lower level of trust and lower level of perception of leadership effectiveness. It was also hypothesized that the more change in laissez-faire leadership style from normal contexts to life-threatening contexts would be related to a higher level of trust and higher level of perception of leadership effectiveness. The statistical analysis showed there was no significant relationship between changes in authoritarian, democratic, and lassies-faire leadership style from a normal context to a life-threatening context and trusts in the supervisor. These were the same results for all three leadership styles and perceived leadership effectiveness.

Research Question 6 hypothesized that leaders who were strongly democratic in normal contexts and strongly authoritarian in life-threatening contexts would be the group with the highest average level of perceived trust from police officers. The findings from this study revealed no statistical difference between the two groups.

Regarding the perception of leader's effectiveness, 25.8% of the police officers rated their supervisors' leadership effectiveness skills as moderately bad. Another group, 24.2% rated supervisors as moderately good. There is a 1.6% difference between these responses. The

findings from this study indicated that the highest score rated moderately bad leadership skills.

Although authoritarian leaders demonstrated moderately bad leadership skills in life-threatening contexts, leaders still engendered a high level of trust from police officers.

In this present study, the results are not necessarily consistent with existing studies of contextual leadership because there was no change of leadership style between normal situations and life-threatening situations. Contextual leadership theory supports the notion that "leadership and its effectiveness, in large part, is dependent upon the context" (Osborn et al., 2002, p. 797). The findings from this study revealed that authoritarian supervisors in the Puerto Rico police department are considered effective even though the change in leadership style was not statistically significant as the context changed. Furthermore, authoritarian leadership style was considered effective while engendering more trust from followers in this setting.

It is important to note how studies in different cultures yielded different results. Consistent with these findings, existing literature supported that in Chinese organizations, authoritarian leadership is a common practice, and it has been considered effective because of tradition and values (Cheng et al., 2004). As previously determined through the review of the literature in Chapter 2, authoritarian leaders were recognized as controlling and employees are submissive to authority (Farh & Cheng, 2000). Research also supported that Australian and Philippine work teams consider authoritarian leaders as abusive (Kiazad, Restubog, Zagenczyk, Kiewitz, & Tang, 2010). Although the research has shown authoritarian leadership abusive and controlling, the results of this present study revealed that authoritarian leadership is an effective leadership style in a Puerto Rico. The results of this study also determined that police leaders in Puerto Rico rated as democratic leaders and laissez-faire leaders were not perceived effective in

normal contexts, or during life-threatening contexts.

Implications

Throughout different countries, police officers are exposed to life-threatening contexts in the line of duty (Peres et al., 2011). The body of literature in leadership has identified articles pertaining to leadership in life-threatening contexts (Colquitt et al., 2011; Hannah et al., 2009; Sweeney, 2010). Despite the efforts of experts in this field, police officers in Puerto Rico and their supervisors involved in life-threatening situations represent a neglected population in the research literature. Furthermore, no scholarly articles were available regarding the research of police officers level of trust in first-line supervisors during normal contexts and life-threatening contexts in Puerto Rico.

The present study provided insight of the perception of leader effectiveness and level of trust of police officers in Puerto Rico. Because of the unique nature of the environment within the police department, the examination of the interaction between potential changes in leadership style from a normal context to a life-threatening context was key to understanding this complex relationship and any relation to trust between front-line officers and their supervisors. It was the opinion of the participants that supervisors of the police department in Puerto Rico were authoritarian leaders and did not demonstrate a change in leadership from one context to the other. However, the majority of the participants reported trusting their leaders while reporting that leaders' skills were moderately bad. These results may implicate that leaders of this organization have been trained to lead in an authoritarian style. The reults of this study may

implicate there is a need to improve overall leader skills, however this may not be the case for leading in a life-threatening contexts.

Limitations

One of the major limitations of this study was that the subscales used to measure trust and leadership styles were not reliable. The Global Trust Scale was designed for a specific study because existing trust scales were not reliable (Colquitt et al., 2011). The Leadership Style Questionnaire was designed and published in a textbook by a well-known expert in leadership (Northouse, 2011). Although Dr. Northouse did state that he did not have reliability estimates for the instrument, the survey was the most appropriate instrument for assessing the authoritarian, democratic, and lassiez-faire the leadership styles because the instrument specifically measured the variables of interest of the study. Further limitations of this study were obtaining data through an online hosted website (SurveyMonkey®). This method did not allow the collection of qualitative data about participants lived experiences (Creswell, 2009). The sample, population, and participants for this study were also limited to police officers in Puerto Rico that were active and had experienced a life-threatening situation in the line of duty within the past 5 years.

Results might have been different if the data collected included life-threatening experiences in a range of more than 5 years or if retired police officers were included in the study.

Recommendations for Further Research

Researchers in the field of leadership and law enforcement should continue expanding research with police officers in the Puerto Rico Police Department. A review of existing literature addressed leadership and trust in life-threatening contexts, dangerous context, and

crisis context (Baran & Scott, 2010; Campbell et al., 2010; Colquitt et al., 2011; Sweeny, 2010; & Yammarino et al., 2010). Another suggestion is to conduct this study from a qualitative perspective. Given that police officers in Puerto Rico represent a neglected population, it is important to understand their lived experiences of leadership in life-threatening contexts. A further recommendation is that this study should be replicated using standardized testing instruments, and the measurement of other variables, such as, sex differences, job satisfaction, stress, trust in the follower, and cultural differences.

Conclusion

Contextual leadership theory is a relatively new field in leadership research. Furthermore, trust in leadership is an emerging topic in recent research studies (Burke et al., 2007; Colquitt et al., 2011; Dirks & Ferrin, 2002; Mayer et al., 1995; Powley & Nissen, 2012; Sones, 2013). The body of literature on research in dangerous contexts showed that many studies were conducted from a military perspective (Fisher, Hutchings, & Sarros, 2010; Sweeny, 2010; Yammarino et al., 2010). It was also determined that few studies focused on law enforcement organizations. Furthermore, it was evident that the body of knowledge in contextual leadership theory was in need for studies in different cultural settings, specifically Puerto Rico.

Previous chapters included descriptions of the dangers police officers of Puerto Rico are exposed to on a daily basis. Therefore, the need to explore police officers level of trust in supervisors was addressed. The theoretical foundation for this study was through the contextual leadership theory, which provides the assumption that leadership style changes if the setting in which leadership takes place changes. In that same direction, Campbell, Hannah, and Matthews (2010) stated, "leadership is uniquely contextualized when confronting dangerous contexts such

that specific causation and contingencies occur that are not present in non-dangerous contexts" (p. S157).

In an effort to add evidence to the research regarding leadership in dangerous contexts, this study required collecting data from 128 police officers from the Puerto Rico Police

Department that had experienced a life-threatening situation within the past 5 years. The participants were asked to rate their supervisors in normal contexts and during life-threatening contexts. The findings from this study provided information regarding how Police in Puerto Rico officers perceived their leaders, and how much they trusted them during normal contexts and life-threatening contexts. The conclusion is that police supervisors in Puerto Rico were rated as authoritarian leaders and that this leadership style was the strongest style in normal contexts and life-threatening contexts. Police supervisors in Puerto Rico who demonstrated authoritarian leadership style were also perceived as trustworthy by followers in both contexts. However, it was surprising that authoritarian leaders were reported more frequently as leaders who engendered trust, even when the leaders overall leadership skills were rated by the participants as moderately bad.

These results are consistent with the findings of the investigation conducted by the United States Department of Justice in 2011. This report stated, "PRPD simply does not provide first-line supervisors the opportunity to develop the necessary skills to effectively manage officers and ensure lawful policing" (p. 67). The results of this study and the supporting investigation by the U.S. Department of Justice clearly identified a lack of leadership training in the police in Puerto Rico. The police department is currently undergoing an organizational reform, which requires constant training for all rank-and-file officers. It is recommended that

first-line supervisors of the police in Puerto Rico receive training in the development of leadership skills. From a cultural perspective, these findings clearly support the findings of Romero (2004) who stated that leadership styles accepted in one culture might not be effective in other cultures. Findings from a previous study determined that authoritarian leadership style is least valued in China (Gao, Arnulf, & Henning, 2011). However, the findings from this present study provide empirical data supporting the acceptance of authoritarian leadership, specifically in the police department of Puerto Rico. However, the results do not necessarily support contextual leadership theory proposed by Osborne et al. (2002) because police supervisors in Puerto Rico did not change in leadership style from normal to life-threatening contexts.

REFERENCES

- Aiken, L. S., West, S. G., & Pitts, S. C. (2003). Multiple linear regression. In J. Schinka & W. Velicer (Eds.), *Comprehensive handbook of psychology*: Vol. 2. *Research methods in psychology* (pp. 483-507). New York: Wiley. 483.
- Argyris, C. (1954). Human Relations in a bank. *Harvard Business Review*, 32(5), 63-72.
- Ayman, R., & Korabik, K. (2010). Leadership: Why gender and culture matter. *American Psychologist*, 65(3), 157-170.
- Balgiu, B. A. (2013). Perception of women as managers. The difference of attitudes between employees and non-employees. *Procedia Social and Behavioral Sciences*, 78(0), 330-334.
- Baran, B. E., & Scott, C. W. (2010). Organizing ambiguity: A grounded theory of leadership and sensemaking within dangerous contexts. *Military Psychology (Taylor & Francis Ltd)*, 22, 42-69.
- Barbuto, J. E., Jr. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. *Journal of Leadership & Organizational Studies*, 11(4), 26-40.
- Barnett, T., & Conley, J. H. (2006). Ethics. In M. M. Helms (Ed.), *Encyclopedia of Management* (5th ed., pp. 261-265). Detroit: Gale.
- Bass, B.M. (1960). Leadership, psychology, and organizational behavior. Harper: New York.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31.
- Bass, B.B., & Bass, R. (2008). The Bass handbook of leadership: Theory research, & managerial applications (4th ed.). NY: Free Press.
- Beito, L. R. (1999). *Leadership effectiveness in community policing*. Bristol, IN: Wyndham Hall Press.
- Berrien, F.K. (1961). Homeostasis theory of groups- implications for leadership. In L. Petrullo & B. Bass (eds.), *Leadership and interpersonal behavior*, New York: Holt, Rinehart & Winston.
- Bhattacharya, R., Devinney, T. M., & Pillutla, M. M. (1998). A formal model of trust based on outcomes. *Academy of Management Review*, 23(3), 459-472.

- Blanchard, K., Edeburn, C., O'Connor, M. & Zigarmi, D. (2004). *The leader within. Learning enough about yourself to lead others*. Upper Saddle River, NJ: Prentice Hall
- Bordas, J. (2001). Latino leadership: Building a humanistic and diverse society Liderazgo latino: Edificando una sociedad humanistica y diversa. *Journal of Leadership & Organizational Studies*, 8(2), 112-134.
- Bradford, L.R., & Lippitt, R. (1945). Building a democratic workgroup. *Personnel*, 22(3), 142-148.
- Brandl, S. G., & Stroshine, M. S. (2003). Toward an understanding of the physical hazards of police work. *Police Quarterly*, 6(2), 172-191.
- Brandl, S. G., & Stroshine, M. S. (2012). The physical hazards of police work revisited. *Police Quarterly*, 15(3), 262-282.
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The Leadership Quarterly*, 24(1), 270-283.
- Bunker, B. B., Alban, B. T., & Lewicki, R. J. (2004). Ideas in currency and OD practice: Has the well gone dry? *The Journal of Applied Behavioral Science*, 40(4), 403-422.
- Burke, C. S., Sims, D. E., Lazzara, E. H., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *Leadership Quarterly*, 18(6), 606-632.
- Burns, J.M. (1978). Leadership. New York: Harper & Row 3.
- Caldwell, C., & Hayes, L. A. (2007). Leadership, trustworthiness, and the mediating lens. *Journal of Management Development*, 26(3), 261–281.
- Campbell, D. J., Hannah, S. T., & Matthews, M. D. (2010). Leadership in military and other dangerous contexts: Introduction to the special topic issue. *Military Psychology (Taylor & Francis Ltd)*, 22, 1-14.
- Cheng, B.S., Chou, L.F., Wu, T.Y., Huang, M.P. & Farh, J.L. (2004). Paternalistic leadership and subordinate responses: Establishing a leadership model in Chinese organizations. *Asian Journal of Social Psychology*, 7: 89–117.
- CIA: The world factbook: Puerto Rico. (2010). *CIA World Fact Book*, 519-521. Retrieved from http://ezproxy.library.capella.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=tsh&AN=74615845&site=ehost-live&scope=site

- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, *92*(4), 909-927.
- Colquitt, J.A., Lepine, J.A., Zapata, C.P., & Wild, R.E. (2011). Trust in typical and high reliability contexts: Building and reacting to trust among firefighters. *Academy of Management Journal 2011, Vol. 54*, (5) 999–1015.
- Creswell, J.W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Cuadrado, I., Navas, M., Molero, F., Ferrer, E., & Morales, J. F. (2012). Gender differences in leadership styles as a function of leader and subordinates' sex and type of organization. *Journal of Applied Social Psychology*, 42(12), 3083-3113.
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to non-normality and specification error in confirmatory factor analysis American Psychological Association.
- De Hoogh, A. H. B., Greer, L. L., & Den Hartog, D. N. Diabolical dictators or capable commanders? An investigation of the differential effects of autocratic leadership on team performance. *The Leadership Quarterly,* (0). doi:http://dx.doi.org.library.capella.edu/10.1016/j.leaqua.2015.01.001
- Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The Leadership Quarterly*, 14(6), 729-768.
- Dionne, S. D., Gupta, A., Sotak, K. L., Shirreffs, K. A., Serban, A., Hao, C., & Yammarino, F. J. (2014). A 25-year perspective on levels of analysis in leadership research. *The Leadership Quarterly*, 25(1), 6-35.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25(1), 36-62.
- Dirks, K. T. (2000). Trust in leadership and team performance: Evidence from NCAA basketball. *Journal Of Applied Psychology*, 85(6), 1004-1012.
- Dirks, K. T., & Ferrin, D. L. 2002. Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87: 611–628

- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, 14(6), 807-834.
- Eagly, A. H., & Chin, J. L. (2010). Diversity and leadership in a changing world. *American Psychologist*, 65(3), 216-224.
- Edwards, G., & Gill, R. (2012). Transformational leadership across hierarchical levels in UK manufacturing organizations. *Leadership & Organization Development Journal*, 33(1), 25-50.
- Farh, J. L., & Cheng, B. S. (2000). A cultural analysis of paternalistic leadership in Chinese organizations. *Management and organizations in the Chinese context*, 84-127.
- Federal Bureau of Investigation. (2011). *Uniform Crime Report*. Retrieved from http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/violent-crime/violent-crime
- Federal Bureau of Investigation. (2012). *Law Enforcement Officers Killed and Assaulted*. Retrieved from http://www.fbi.gov/about-us/cjis/ucr/leoka/2012
- Fisher, K., Hutchings, K., & Sarros, J. C. (2010). The "Bright" and "Shadow" Aspects of In Extremis Leadership. *Military Psychology (Taylor & Francis Ltd)*, 2289-116.
- Foels, R., Driskell, J. E., Mullen, B., & Salas, E. (2000). The effects of democratic leadership on group member satisfaction: An integration. *Small Group Research*, *31*(6), 676-701.
- Fowler, F. J. (2014). Survey research methods (Vol. 1). Thousand Oaks, CA: Sage Publications.
- Gao, J., Arnulf, J. K., & Henning, K. (2011). Western leadership development and Chinese managers: Exploring the need for contextualization. *Scandinavian Journal of Management*, 27(1), 55-65.
- Gardner, J. W. (1990). On leadership. New York: Free Press.
- Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Beng, C. L., . . . Fischer, R. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, *332*(6033), 1100-1104.
- Gibson, D., & Petrosko, J. (2014). Trust in leader and its effect on job satisfaction and intent to leave in a healthcare setting. *New Horizons in Adult Education & Human Resource Development*, 26(3), 3-19.

- Girodo, M. (1998). Machiavellian, bureaucratic, and transformational leadership styles in police managers: Preliminary findings of interpersonal ethics. *Perceptual and Motor Skills*, 86(2), 419-427.
- Hannah, S. T., Uhl-Bien, M., Avolio, B. J., & Cavarretta, F. L. (2009). A framework for examining leadership in extreme contexts. *The Leadership Quarterly*, 20(6), 897-919.
- Hannah, S. T., Campbell, D. J., & Matthews, M. D. (2010). Advancing a research agenda for leadership in dangerous contexts. *Military Psychology (Taylor & Francis Ltd)*, 22, 157-189.
- Hasel, M. C. (2013). A question of context: The influence of trust on leadership effectiveness during crisis. *Management*, 16(3), 264-293.
- Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, 15-41.
- Hunt, J. G., & Dodge, G. E. (2000). Leadership déjà vu all over again. *The Leadership Quarterly*, 11(4), 435-458.
- Johnson, R. R. (2012). Police organizational commitment: The influence of supervisor feedback and support. *Crime & Delinquency*, doi:10.1177/0011128712466887.
- Katz, D., Maccoby, N., Gurin, G., & Floor, L. G. (1951). Productivity, supervision and morale among railroad workers. Ann Arbor: University of Michigan, Institute of Social Science Research.
- Kiazad, K., Restubog, S. L. D., Zagenczyk, T. J., Kiewitz, C., & Tang, R. L. (2010). In pursuit of power: The role of authoritarian leadership in the relationship between supervisors' Machiavellianism and subordinates' perceptions of abusive supervisory behavior. *Journal of Research in Personality*, 44(4), 512-519.
- Kraska, P.B. (2007). Militarization and policing: its relevance to 21st century police. *Policing: A Journal of Policy and Practice*, *I* (4), 501-513.
- Laurence, J. H. (2011). Military leadership and the complexity of combat and culture. *Military Psychology (Taylor & Francis Ltd)*, 23(5).
- Leedy, P. D., & Ormrod, J. E. (2010). *Practical Research: Planning and Design* (9th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates". *Journal of Social Psychology*, 10(2), 271-299.

- Lord, V. B., Bjerregaard, B., Blevins, K. R., & Whisman, H. (2011). Factors influencing the responses of crisis intervention Team–Certified law enforcement officers. *Police Quarterly*, 14(4), 388-406.
- Lowe, K. B., & Gardner, W. L. (2000). Ten years of the leadership quarterly: Contributions and challenges for the future. *The Leadership Quarterly*, 11(4), 459-514.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, 48(5), 874-888.
- McLaughlin, G. B., & Porter, L. W. (2006). Leadership and the organizational context: Like the weather? *Leadership Quarterly*, 17(6), 559-576.
- Muijs, D. (2011). *Doing quantitative research in education with SPSS. (2nd ed.)*. Thousand Oaks, CA: Sage Publications.
- Mullen, B. (1989). Advanced BASIC Meta-analysis. Hillsadale, NJ: Lawrence Erlbaum.
- Mullen, B., & Rosenthal, R. (1989). *BASIC Meta-analysis: Procedures and programs*. Hillsdale, NJ: Lawrence Erlbaum.
- Munro, J.H. (2008). Roundtable Viewpoints. Organizational Leadership. Iowa: McGraw Hill.
- Murnighan, J. K., & Leung, T. K. (1976). The effects of leadership involvement and the importance of the task on subordinates' performance. *Organizational Behavior and Human Performance*, 17(2), 299-310
- National Law Enforcement Memorial Fund. (2012). *Facts and figures, Archive Recently Fallen Officers 2012*. Retrieved from http://www.nleomf.org/facts/recently-fallen/recently-fallen-2012/index.jsp?page=2
- Northouse, P. G. (2007). *Leadership: Theory and practice (4th ed.)*. Thousand Oaks, CA: Sage Publications.
- Northouse, P. G. (2011). *Introduction to leadership: Concepts and practice (2nd ed.)*. Thousand Oaks, CA: Sage Publications.
- Osborn, R. N., Hunt, J. G., & Jauch, L. R. (2002). Toward a contextual theory of leadership. *The Leadership Quarterly*, 13(6), 797-837.

- Peres, J. F. P., Foerster, B., Santana, L. G., Fereira, M. D., Nasello, A. G., Savoia, M., & Lederman, H. (2011). Police officers under attack: Resilience implications of an MRI study. *Journal of Psychiatric Research*, 45(6), 727-734.
- Policia de Puerto Rico: Historia. (n.d.). *PR.Gov Web site*. Retrieved from http://www.policia.pr.gov/
- Powley, E. H., & Nissen, M. E. (2012). If you can't trust, stick to hierarchy: Structure and trust as contingency factors in threat assessment contexts. *Journal of Homeland Security & Emergency Management*, 9(1), 1-19.
- Police Act of Puerto Rico, 1996. Act 53 of 1996, as amended. Ley de la Policia de Puerto Rico. Retrieved from http://www2.pr.gov/presupuestos/Budget_2012_2013/Aprobado2013Ingles/suppdocs/basel egal_ingles/040/040.pdf
- Puerto Rican. (1999). Key words in multicultural interventions: A dictionary. Westport, CT: Greenwood Press.
- Puerto Rico Department of Labor. Labor Statistics Division. (2014). *Empleo y desempleo Puerto Rico*. Retrieved from http://www.trabajo.pr.gov/pdf/Estadisticas/2014/GT/gt06.pdf
- Puerto Rico Office of Management and Budget. (2014). *Presupuesto recomendado por agencia 2014-2015. Policia de Puerto Rico*. Retrieved from http://www2.pr.gov/presupuestos/Presupuesto2014-2015/PresupuestosAgencias/040.htm
- Puni, A., Ofei, S. B., & Okoe, A. (2014). The effect of leadership styles on firm performance in Ghana. *International Journal of Marketing Studies*, 6(1), 177-185.
- Quader, M. S. (2011). Perception of leadership styles and trust across cultures and gender: A comparative study on Barack Obama and Hillary Clinton. *South Asian Journal of Management*, 18(2), 30-59.
- Romero, E. J. (2004). Latin American leadership: El patron & el lider moderno. *Cross Cultural Management*, 11(3), 25-37.
- Rosenthal, R. (1991). Meta-analytic procedures for social research. Newbury Park, CA: Sage.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Sarver, M. B., & Miller, H. (2014). Police chief leadership: Styles and effectiveness. *Policing*, *37*(1), 126-143.

- Schuck, A. M. (2014). Female representation in law enforcement: The influence of screening, unions, incentives, community policing, CALEA, and size. *Police Quarterly*, 17(1), 54-78.
- Sones, E. (2013). Trust: The DNA of leadership. U.S. Army Medical Department Journal, 33-35.
- Stojkovic, S., Kalinich, D., & Klofas, (2008). *Criminal justice organizations. Administration and Management*. California: Wadsworth Publishing.
- Sweeney, P. J. (2010). Do soldiers reevaluate trust in their leaders prior to combat operations? *Military Psychology (Taylor & Francis Ltd), 22, 70-88.*
- Tabachnick, G. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*. Belmont, CA: Duxbury.
- Tavakol M, & Dennick R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2:53-55.
- Toh, S. M., & Leonardelli, G. J. (2012). Cultural constraints on the emergence of women as leaders. *Journal of World Business*, 47(4), 604-611.
- Toh, S. M., & Leonardelli, G. J. (2013). Cultural constraints on the emergence of women leaders: How global leaders can promote women in different cultures. *Organizational Dynamics*, 42(3), 191-197.
- Triandis, H.C. (1972). *The analysis of subjective culture*. New York: Wiley.
- United States Census Bureau. (2014). Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2013. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
- United States Department of Labor Bureau of Labor Statistics. (2014). *Women in the labor force: A data book*. Retrieved from http://www.bls.gov/cps/wlf-databook-2013.pdf
- United States Department of Justice, Civil Right Division. (2011). *Investigation of the Puerto Rico Police Department*. Retrieved from http://www.justice.gov/crt/about/spl/documents/prpd_letter.pdf
- Van Vugt, M., Jepson, S. F., Hart, C. M., & De Cremer, D. (2004). Autocratic leadership in social dilemmas: A threat to group stability. *Journal of Experimental Social Psychology*, 40(1), 1-13.

- Vecchio, R. P. (2002). Leadership and gender advantage. *The Leadership Quarterly*, 13(6), 643-671.
- Vito, G. F., Suresh, G., & Richards, G. E. (2011). Emphasizing the servant in public service: The opinions of police managers. *Policing*, *34*(4), 674-686.
- Wilson, J. M. (2012). Articulating the dynamic police staffing challenge. *Policing*, 35(2), 327-355.
- Weber, M. (1924/1947). *The theory of social and economic organization*. H.M. Henderson & T. Parsons (Trans.), T. Parsons (Ed.). New York, NY: Free Press.
- Wejnert, C., & Heckathorn, D. D. (2008). Web-based network sampling: Efficiency and efficacy of respondent-driven sampling for online research. *Sociological Methods & Research*, 37(1), 105-134
- Wheatcroft, J. M., Alison, L. A., & McGrory, D. (2012). The influence of trust on senior investigating officers' decision making in high-profile critical incidents. *Police Quarterly*, 15(4), 386-413.
- Yammarino, F. J., Mumford, M. D., Connelly, M. S., & Dionne, S. D. (2010). Leadership and team dynamics for dangerous military contexts. *Military Psychology (Taylor & Francis Ltd)*, 22, 15-41

APPENDIX. STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation, constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name and date	Ivys J. Rosado-Diaz	March 10 th , 2015
Mentor name and school	Andrea Daines PH.D School of Public Service Leadership	