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The Impact of Company Grade Officer Self-Sacrificial Behavior on Subordinate Assessments of Leader Charisma

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College of Social and Behavioral Sciences

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Danjel Bout

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2013

Abstract

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by

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M.A., University of California at Davis, 2006

B.A., California State Polytechnic University at Pomona, 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Industrial and Organizational Psychology

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Abstract

Newly commissioned officers in the U.S. Army are taught to lead their soldiers from the front and to voluntarily make personal sacrifices in the service of the nation. Although this facet of military culture is seen as critical to the integrity of the force, there are few research studies describing the impact of leader self-sacrifice in the U.S. Army. Research evolving from the transformational leadership literature indicates that civilian leaders who engage in self-sacrificial behavior are viewed as more charismatic than their counterparts and that this perception is particularly pronounced in crisis situations. The current study extended this research to a military population utilizing a quantitative experimental research design. Respondents were randomly assigned to written vignettes that manipulated leader self-sacrifice and the combat environment and then provided assessments of the company grade officer's attributed charisma. Currently serving enlisted and commissioned officers in the California Army National Guard ($n = 218$) took part in the research, and ANOVA test results indicated that both self-sacrifice and the experience of combat significantly increase perceptions of a company grade officer's attributed charisma. No significant interaction was found between leader self-sacrifice and combat. This study indicated that the self-sacrificial leadership model may have broad applicability across organizations and provides strong support for the Army's emphasis on selfless service. This research can spur positive social change by fostering a more aspirational form of leadership within the Army that builds the psychological resilience of soldiers and results in stronger teams.

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Dedication

This dissertation is dedicated to my beloved wife and daughter. Angie, you were asked to give far more than is just and to bear a burden few could hope to fathom. You have been and will remain my deepest love. Avery, I love you more than I can easily express in our clumsy and slipshod language. I see in you a hope for a far better world than the careworn one you are inheriting. Mommy and I will always love you and be there for you.

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Chapter 1: Introduction to the Study

There are few domains where the consequences of leadership are as irrevocable as combat, an arena where faulty decisions are paid for with fire and blood and can echo across the world stage. The enduring consequences of these brief and violent episodes have fascinated generations of historians and military theorists, resulting in countless attempts to understand the complex constellation of insight, experience, and personality characteristics that allow military leaders to successfully motivate soldiers in combat. With the advent of modern social science, these efforts gained significant momentum, resulting in a wealth of military research aimed at identifying quantifiable aspects of military leadership that enhanced the performance of combat formations. As the larger organizational literature moved from models rooted in contingent reinforcement to theories focused on inspiring subordinates and fostering adaptable organizations, a large body of organizational research developed with the potential to inform both military and civilian organizations (Bernard M. Bass, 1998). One concept that emerged from this cross-disciplinary collaboration is the theory of leader self-sacrifice. The theory of self-sacrificial leadership posits that when leaders willingly place the good of the organization over their own self-interest they positively influence their followers' perceptions and attitudes, specifically their attributions of the leader's charisma (Choi & Mai-Dalton, 1998). This in turn increases subordinates' level of inspiration and their willingness to exert extra effort.

While empirical research into the impact of leader self-sacrifice is relatively recent, the concept of selfless service has served as a core concept of U.S. military

doctrine since before the Revolutionary War (Resch, 1999). The enduring value of the concept of self-sacrifice is reflected by the degree to which it is woven into developmental training (United States Army, 2006) and its inclusion in the core doctrine of the United States Army (United States Army, 2005). Given the importance the Army places on inculcating the concept of self-sacrifice, there is a gap in the research literature on self-sacrifice within the military domain. The paucity of studies on the impact of leader self-sacrifice in military populations is notable because the U.S. Army is not a proportional sample of the nation, suggesting that many of the findings grounded in the civilian populations may have limited applicability.

Problem Statement

The U.S. Army is one of the few institutions that invest the authority to make life or death decisions in early career professionals. Nowhere is this more evident than in lethal environments like combat, where company grade officers are asked to lead platoons and companies into ground tactical engagements. Previous research has concluded that self-sacrificial leadership can be effective when organizations experience crisis, but these research studies have been limited to academic and industrial settings (e.g., Choi & Mai-Dalton, 1999; Halverson, Holladay, Kazama, & Quinones, 2004). The current investigation expanded on existing work by exploring whether these findings can be duplicated with a military population. Therefore, the focus of this research was on examining whether self-sacrificial military leaders are perceived as having higher levels of attributed charisma and whether the stress of combat alters these perceptions in ways

that are analogous to other crisis situations found in the organizational literature (e.g., corporate restructuring).

Purpose of the Study

The purpose of this study was to understand the role of self-sacrifice and shared risk in military environments and whether the in-extremis environment of direct fire combat alters how subordinates view their leaders. These insights could help shape future military leadership training and foster a deeper awareness of the importance of authenticity and genuineness in leadership. Additionally, this research helped illuminate how subordinates attribute charisma to their leaders, which the research literature suggests might be able to increase unit performance and provide some psychological insulation from the corrosive effects of combat (Shamir, Zakay, Breinin, & Popper, 1998).

Nature of the Study

This investigation examined leader self-sacrifice utilizing a quantitative experimental research design. Creswell (2009) described quantitative research methodology as rooted in an epistemology that argues that reality can be objectively measured and that these measurements can be understood utilizing the deductive process. The quantitative research methodology is appropriate for testing a theory composed of variables that can be represented numerically. By numerically expressing variables, this method of inquiry allows researchers to employ statistical techniques to analyze the data for evidence of whether the null hypothesis should be rejected. This study extended existing research on self-sacrificial leadership by examining this style of leadership in a

military population whose variables have been expressed numerically and scrutinized utilizing statistics. For these reasons the appropriate methodology for this study is quantitative. According to Creswell (2009) an experiment is defined as a research design where participants are randomly assigned to conditions where a variable is manipulated in order to discern whether this influences a specific outcome. As the participants in this research study were randomly assigned into one of four conditions, the requirements for an experiment are satisfied. The conceptual design and instruments for this study were rooted in the existing literature in self-sacrificial leadership, which have utilized vignette based methodology to analyze this topic in non-military settings.

Research Questions and Hypotheses

The following research questions and hypotheses were based on theory found in a review of the literature in self-sacrificial leadership, transformational leadership, and military psychology (Bernard M. Bass, Avolio, Jung, & Berson, 2003; Choi & Mai-Dalton, 1998; De Cremer & Knippenberg, 2004; Hater & Bass, 1988) .

Research Question 1: Will soldiers perceive Company Grade officers exhibiting self-sacrificial behavior as having increased levels of attributed charisma in comparison to Company Grade officers who do not exhibit self-sacrificial behavior?

H_01 : There is no difference in perceptions of attributed charisma between a Company Grade officer exhibiting self-sacrificial behavior and a Company Grade officer not exhibiting self-sacrificial behavior.

H₁1: Soldiers will perceive a self-sacrificial Company Grade officer as having higher levels of attributed charisma than a Company Grade officer who does not engage in self-sacrificial behavior.

Research Question 2: Will soldiers perceive Company Grade officers as having greater levels of attributed charisma in a direct fire combat scenario versus a scenario without direct fire combat?

H₀2: Soldiers will not perceive greater levels of attributed charisma to a Company Grade officer in a direct fire combat scenario versus a Company Grade officer in a scenario without direct fire combat.

H₁2: Soldiers will perceive greater levels of attributed charisma to a Company Grade officer in a direct fire combat scenario versus a Company Grade officer in a scenario without direct fire combat.

Research Question 3: Will soldiers perceive Company Grade officers who engage in self-sacrificial behavior in a direct fire combat scenario as having more attributed charisma than Company Grade officers who engage in self-sacrificial behavior in a scenario without direct fire combat?

H₀3: Soldiers will not perceive higher levels of attributed charisma to a self-sacrificing Company Grade officer in a direct fire combat scenario than to Company Grade officers who engage in self-sacrificing behavior in a scenario without direct fire combat.

H₁3: Soldiers will perceive higher levels of attributed charisma to a self-sacrificing Company Grade officer in a direct fire combat scenario than to Company

Grade officers who engage in self-sacrificing behavior in a scenario without direct fire combat.

Research Objectives

This study examined the role of leader self-sacrifice in platoon size Army units to better understand whether it influences attributions of a leader's charisma. This research builds on existing literature by extending leader self-sacrifice research to a unique population and examining the influence of an environment defined by a high degree of threat or risk. Specific research objectives included exploring whether leaders who engage in self-sacrifice were perceived as having more attributed charisma than leaders who did not act in self-sacrificial ways. Additionally, this study manipulated situational variables to examine whether attributions of a leader's charisma increase when they engage in self-sacrifice in a direct fire combat environment versus when leader's engage in self-sacrifice in an environment absent direct fire combat. Each of these objectives will be explored in greater depth in Chapter 2.

Conceptual Framework

Self-sacrifice appears in the literature of numerous academic disciplines, including sociology, public administration, philosophy, and biology (Cronin & Monnin, 2010; Kateb, 2008; Litwa, 2009; Pask, 2005; Routledge & Arndt, 2007). Although all these fields have contributed to the current understanding of self-sacrifice, the two theories that have most shaped self-sacrificial leadership are transformational leadership and charismatic leadership. Both theories postulate that leadership self-sacrifice

influences subordinates by triggering norms of reciprocity, showing commitment to a cause, and providing a motivating role model (Choi & Mai-Dalton, 1999).

To better articulate the impact of leader's self-sacrificial behavior on follower's perceptions and attitudes Choi and Mai-Dalton (1999) created and empirically tested a model of self-sacrificial leadership (see Figure 1). Their findings suggested that leaders who engaged in self-sacrificial behavior are perceived as legitimate and charismatic, which in turn increases the likelihood that their subordinates will reciprocate this behavior. Although Choi and Mai-Dalton hypothesized that situational variables (e.g. uncertainty over whether the organization would fail) moderated the effects of self-sacrifice, they found that organizational uncertainty had no significant impact. Halverson, Holiday, Kazama, and Quinones (2004) wanted to expand this model by reexamining how organizational crisis (e.g. a company's key supplier went out of business) interact with leader self-sacrificial behavior. In their experiment, college students were randomly assigned to one of four experimental conditions where both leader self-sacrifice and organizational crisis were manipulated. The results indicated for college students that there was an interaction between leader self-sacrifice and crisis, suggesting that self-sacrificial leaders are perceived as more charismatic in crisis scenarios but not in the absence of crisis. The results of this study suggest that self-sacrificial leadership could play a particularly important role in the high stress environment of combat.

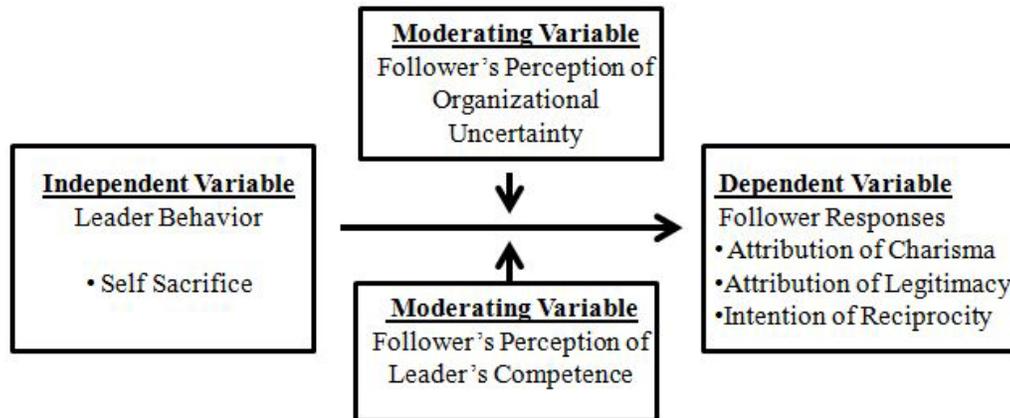


Figure 1. The model of Follower's Response to Self-Sacrificial Leadership (Choi and Mai-Dalton, 1999).

Operational Definitions

Attributions of Charisma: are defined as the extent to which one perceived a leader as being motivating, visionary, and deserving of respect (Choi & Mai-Dalton, 1999).

Charismatic Leadership: is an attribution based on follower perceptions of their leader's behavior. Charismatic leaders differ from other leaders by their ability to formulate and articulate an inspirational vision and behaviors and actions that foster an impression that they and their mission are extraordinary (Conger & Kanungo, 1987).

Combat: is defined as engaging an enemy with individual or crew-served weapons while being exposed to direct enemy fire and a high probability of direct physical contact with the enemy's personnel. (DoD, 2009).

Combat Exposure: measures the extent and severity of exposure to active combat (Keane et al., 1989).

Commissioned Officer: refers to officers serving under a presidential commission in the rank of Chief Warrant Officer 2 through General (U.S. Army, 2006).

Company Grade Officers: are junior Army officers in the ranks of Second Lieutenant, First Lieutenant, and Captain (U.S. Army, 2006).

Direct Fire Combat: takes place while closing in with the enemy by fire, maneuver, or shock effect in order to destroy or capture, or while repelling assault by fire, close combat or counterattack (U.S. Army, 2008).

Leader: is anyone who by virtue of assumed role or assigned responsibility inspires and influences people to accomplish organizational goals. Army leaders motivate people both inside and outside the chain of command to pursue actions, focus thinking, and shape decisions for the greater good of the organization (U.S. Army, 2006).

Leadership: is a process in which an individual influences a group of individuals to achieve a common goal (Northouse, 2001). As defined by the United State Army leadership is the process of influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving the organization” (U.S. Army, 2006).

Non-combat: refers to operations involving the use of military capabilities across a range of operations that fall short of war (U.S. Army, 2001).

Non Commissioned Officer is defined as an enlisted man appointed in pay grade E-4 or higher, excluding specialist, normally to fill positions wherein the qualities of leadership are required (U.S. Army, 2008).

Self-sacrifice is defined as the total/partial abandonment, and/or permanent/temporary postponement of personal interests, privileges, or welfare in the (a) division of labor, (b) distribution of rewards, and (c) exercise of power (Choi & Mai-Dalton, 1998).

Self-sacrificial leadership: is demonstrated when a leader exhibits self-sacrificial behavior in the service of their organization and employees (Choi & Mai-Dalton, 1998).

Soldier: describes a uniformed member of the U.S. Army who has taken the oath of enlistment and stands ready to defend the United States against its enemies (U.S. Army, 2010).

Transformational leadership: refers to the leader moving the follower beyond immediate self-interests through idealized influence, inspiration, intellectual stimulation, or individualized consideration (Bass, 2008).

Assumptions

Throughout this research endeavor, it was assumed that participants taking part in the research are a representative sample of the Army and that the subject matter did not prevent participation from soldiers with combat experience. Additionally, the instruments were presumed to be adequate and appropriate means of measuring the variables of interest.

Limitations

In this study, online vignettes designed by the researcher were used to manipulate the independent variables. Soldiers were required to imagine they were experiencing the scenarios and then responded to a questionnaire. Campbell (1977) discussed the use of

what he termed “paper people” and raised validity issues related to the construct validity and external validity of scenario-based research. In contrast, Murphy, Herr, Lockhart, and Maguire (1986) conducted a meta-analysis on the difference between studies using behavioral observation and research using paper people found that the reported differences in effect size were inconsistent. Murphy et al. described the difference between the methodologies as a signal to noise issue, with scenario-based experiments producing stronger signals (e.g. experimental manipulations) than behavioral observation while simultaneously removing excess noise (e.g. irrelevant information). Despite the limitations of scenario-based research, this methodology is appropriate due to the risk inherent in combat situations and a vignette’s unique ability to collect data without causing an ethical dilemma (Ludwick et al., 2004). It should be noted that the existing research literature on self-sacrificial leadership in the business and academic spheres have extensively utilized scenario-based studies as their dominant methodology. Lastly, because this study focuses on an exclusively military sample, the outcome of this experiment had limited generalizability.

Scope and Delimitations

The scope of the study consisted of currently serving men and women in the California Army National Guard. The study included commissioned officers, noncommissioned officers, and enlisted soldiers. It specifically focused on attributions of leader charisma across a range of experimental scenarios. This study was hosted on the internet and was limited to soldiers with access to the survey website.

Significance of the Study

This study contributes to the field of military psychology by identifying that research findings in the field of self-sacrificial leadership can be replicated in a military population. The benefit that will stem from understanding the impact of leader self-sacrifice goes farther than to simply reify the Army's core documents. Leaders who engage in self-sacrifice may inspire their subordinates to perform at peak levels in combat situations and, in doing so, increase the chances their subordinates will emerge from combat alive and whole.

Identifying the impact of leader's self-sacrificial behavior in combat and noncombat situations has the potential to effect positive social change in three important ways. The first is by providing insight into a leadership style that may increase the mental resilience of soldiers in combat environments (Bartone, 2006; Schaubroeck, et al., 2011). Post traumatic stress disorder has been referred to as one of the signature wounds of recent conflicts (Card-Mina, 2011), and reducing the incidence would save countless hours of lost productivity, improve quality of life, and potentially lower the rate of soldier suicides. Second, this research could help to shape the future training and development of military leaders by providing evidence for the utility of self-sacrificial behavior. Some of history's most powerful agents for social justice personified self-sacrifice (e.g., Mahatma Gandhi, Dr. Martin Luther King Jr.) and inculcating these behaviors into the next generation of leaders has the potential to ripple these shifts throughout the larger culture. Finally, this research could provide an institutional impetus for a more equitable and transformational style of leadership at the tactical level. Over the last decade the

soldiers of the U.S. Army have frequently been the sole agents of U.S. foreign policy. If self-sacrificial behaviors can foster stronger and more adaptable teams this could positively impact the patterns of relationships these soldiers create with the citizens of other nations and bring about a more lasting peace.

Summary

Chapter 1 provided a broad review of self-sacrificial leadership within the field of organizational psychology. Although there has been a steady increase in this research area, there is still a gap in the research pertaining to the impact of self-sacrificial leadership on a military population. The following chapter, Chapter 2, will examine recent work on self-sacrificing behavior, leadership, charisma, and performance in dangerous environments. The literature review will also include an examination of factors that contribute to effective military units. A more detailed review of the research design, participant selection procedure, ethical considerations and statistical analysis are covered in Chapter 3. The results of the proposed research will be discussed at length in Chapter 4. The study will conclude with Chapter 5, with a discussion about the results and suggestions for future research.

Chapter 2: Literature Review

Introduction

This literature review will establish the need for research on the impact of self-sacrificial leadership behaviors on a separate and distinct subculture, the U.S. Army. Transformational and charismatic leadership theories have played important roles in crafting the military doctrine that has instructed a generation of Army leaders on how to exercise influence over their soldiers, and self-sacrificing behavior is a relatively unexplored facet of these leadership models (Sweeney, Thompson, & Blanton, 2009). Although self-sacrifice is only one aspect of these theories, research conducted in the academic (Choi & Mai-Dalton, 1998; van Knippenberg & van Knippenberg, 2005) and business (Choi & Mai-Dalton, 1999; Yoon, 2008) spheres suggest it could have a significant and positive effect on soldiers in combat.

Strategy for Literature Review

To conduct a thorough literature review multiple sources of information were utilized. The starting point for gathering applicable research was PsychInfo, PsycBOOKS, ScienceDirect, and the Management & Organizational Studies database. These online databases were queried using the broad search terms *leadership*, *sacrifice*, and *self-sacrifice*. A review of the references cited in these articles provided additional sources that weren't included in the initial search. A parallel examination was conducted utilizing the Military and Government Collection using the terms *leadership* and *combat*. The reference sections of the articles from this search were also examined for additional sources. The Walden University Library, University of California library system, the

California State University library system, and the Army Research Lab all provided valuable assistance with gathering resources. An extensive review of the literature failed to uncover research examining the role of self-sacrificial leadership in a military context. This literary review will focus on the theories underpinning the self-sacrificial leadership model, current research on military leadership, and reviews of leadership in combat and analogous environments. To better frame the unique challenges of studying self-sacrifice in military samples this literature review will now turn to an examination of the unique characteristics of the Armed Services of the United States, and more specifically the United States Army.

Background on the Profession of Arms

An organized and trained class of warriors fighting in the service of their tribe, kingdom, or nation appears to be one of humanity's oldest institutions (Nash, 2011). Within the anthropological canon there are numerous references to clashing armies whose empires have long since been reduced to dust (Guilaine, 2008; Keely, 1996). While modern military forces utilize technology and tactics that would be incomprehensible to these ancient forces, one of the central tenants of military service continues to endure through the ages. This enduring thread binding together ancient and modern military forces is the unchanging nature of warfare itself, which despite radical shifts in equipment remains a distinctly human endeavor (Keegan, Wheatcroft, & Porter, 1986). If history can provide insight into modern challenges, then one of the lessons is that military forces will continue to defend the state and secure their nations interests in the world through the threat or the actual use of force (Owens, 2008).

Tracing that ancient martial thread forward into the present age will lead to the Pentagon (Krepinevicii, 1994). It is this oddly shaped office building on the banks of the Potomac River that serves as the home of the United States Department of Defense. The Department of Defense is the organization responsible for protecting the national security of the United States, as well as training, equipping, and maintaining all branches of the armed forces. The legal basis of the Department of Defense can be traced back to the Continental Congress of June 14, 1775, which called for the creation of the Continental Army to coordinate the military actions of the Thirteen Colonies (D. of the Army, 2005). At the conclusion of the Revolutionary War the majority of the Continental Army disbanded and Congress drafted a resolution moving the remaining forces into the United States Army (Segal & Segal, 2004). In addition to these shifts, the act recognized that members of the fledgling defense establishment carried special responsibilities. The Founder's articulated this important distinction by providing members of the armed forces with a unique status under the law (D. of the Army, 2005). The two most obvious examples of this special legal status is the authority to wear uniforms and appurtenances of rank, and the responsibility to faithfully execute the legal orders of superior officers. It should be noted that these are only two dimensions of military service; Seagal and DeAngelis (2007) noted that in the modern era the military is a "greedy institution" that subsumes nearly every aspect of member's lives.

The Department of Defense is broken into three distinct professions: army, maritime, and aerospace (Snider & Watkins, 2002), which are represented by the Department of the Army, the Department of the Navy, and the Department of the Air

Force. In 1973 all three professions made a dramatic shift in military personnel policies and removed compulsory enlistment (commonly referred to as the draft), and focused on building a professional military staffed by volunteers (Congressional Budget Office, 2007). At its inception there was a great deal of debate concerning the sustainability of an all volunteer force because enlistees needed to be willing to accept long separations, voluntarily restrict their liberties, and exhibit a level of discipline rarely found in modern American society (Congressional Budget Office, 2007). These concerns proved to have little basis in fact, with the resulting force widely regarded as the most professional force in U.S. history (Fitzgerald, 2010).

The Department of Defense's ability to recruit qualified enlistees in an era of persistent conflict is surprising given that all potential military recruits are required to enter in a contract with unlimited liability (Mileham, 2010). The obligations of service are so profound that federal statute requires all new enlistees to swear a sacred oath of allegiance placing their assigned duties over their individual welfare (Jordan, 2007). This oath is the dividing line between the civilian realm and the military profession and is the point at which recruits are legally bound to faithfully execute their superior officers' orders (United States Army, 2005). These orders can include the requirement to stand their ground to the point of death in the service of the nation, a requirement unique to the armed services (Wilson, 2007). In return for this fidelity the men and women volunteering their lives expect, and deserve, strong leadership (United States Army, 2006). This has been especially true for soldiers entering the United States Army, which

has borne the brunt of injuries and casualties in the wars in Afghanistan and Iraq over the last decade (Dao & Lehren, 2012) .

The United States Army is the oldest military branch, as well as the largest component of the Department of Defense. In 2011 the Army's end strength was 561,437 soldiers on Active Duty, and 566,604 soldiers assigned to the Army National Guard and Reserve Component (Army, 2011). These forces are currently stationed at more than 800 installations in 135 countries across the globe, including an active combat zone. If the Army were viewed as a U.S. corporation it would rank as the second largest employer in the nation (Segal & Segal, 2004). Although comparisons can help frame the immense size of the Army, the Army has a unique culture and mission that cleaves it from civilian professions (Wilson, 2007). The Army culture is shaped first and foremost by the organization's core commitment: "to serve the American people, protect enduring national interests, and fulfill the Nation's military responsibilities" (Army, 2005, para. 2-13). Additional factors that play a role in shaping the Army's culture include: the Army's operational history, an unwavering commitment to U.S. law, strict accountability to civilian authorities, and evolving military doctrine (Army, 2006).

U.S. Army Demographics Background

Although the organizational aspects of the Army have always cleaved soldiers from civilians, in recent years there has been a growing awareness that the insular nature of the Army, combined with the geographic isolation of soldiers deployed to combat zones, has created a significant and increasing gap between soldiers and their civilian counterparts (Feaver & Kohn, 2001). In a monograph on the Civil-Military gap Szayna et

al. (2007) argued that the role of socialization had to be considered as a proximal cause. According to their research, a significant majority of new enlistees view the sudden immersion in the Army's organizational culture as a formative experience, and this influence was magnified by powerful group norms. This socialization occurs formally through professional military education (PME) and is later reinforced by strict sanctions against violations of these standards (Rosen, Knudson, & Fancher, 2003). One example of this formal socialization process is Basic Training, where new recruits are exposed to rigorous physical and psychological challenges in order to imbue them with new norms and values (Cobb et al., 2011). Basic Training exposes recruits to sleep deprivation (Gold & Friedman, 2000) and intense physical exercise routines (Jones & Knapik, 1999), which when coupled with high instructor expectations (Gold & Friedman, 2000) provides a climate where soldiers can be instilled with selfless reactions and strong group loyalty. In recent years the curriculum for Basic Training has been revised to emphasize combat leadership skills and to instill a warrior ethos (Cheeseborough, 2009). Once a soldier leaves basic training the organizational standards for appropriate behavior and personal discipline are reinforced by their respective chain of command, which is empowered to sanction breaches in conduct by the Uniform Code of Military Justice.

Although the unique social norms within the Army powerfully shape behavior, Lowther (2010) argued the differences between the civilian population and the Army population run deeper than socialization and can be traced back to the unique demographic makeup of the Army. According to this perspective when the Army moved from conscription based force to an all-volunteer force the process of self-selection

started in earnest, fundamentally altering the composition of the force. The shifts were magnified by deliberate Army policy changes aimed at addressing many of the perceived shortcomings of the Vietnam era enlistees (Riker-Coleman, 1997). For instance, to address personnel issues that had been exacerbated by drafting soldiers during an unpopular war, the Army created a number of stringent enlistment requirements (Laurence, 1984). Under these tough new guidelines, potential enlistees were considered unfit for service if they had a history of drug use, a criminal background, or if they failed to meet minimum intellectual and physical requirements. These policies resulted in the Army tripling the number of quality recruits (from 18.3% to 61.4%) it accessed into military service between the years 1973 and 2010 (Department of Defense, 2012). In recent years it has been estimated that up to 75% of 17 to 24-year-olds would fail to meet these minimum requirements (Christeson, Taggart, & Messner-Zidell, 2009).

The result of these recruiting and personnel policies is an Army that is not a representative sample of the nation at large. On average, members of the service are slightly better educated than the population, with 99% of members holding at least a high school diploma versus a national average of 75% (Department of Defense, 2006). To ensure the quality standards for aptitude and educational background are standardized, the Department of Defense (DoD) requires all recruits to complete the Armed Forces Qualification Test (AFQT). The AFQT is a nationally normalized test of mathematical and verbal skills intended to predict a recruit's training and performance capabilities (Orme, Brehm, & Ree, 2001). The average score on the AFQT increased over the last decade (Kane, 2005), suggesting that despite the pressures of two simultaneous wars the

Army continues to attract intelligent and educated enlistees. In Fiscal Year (FY) 2010 over 72% of enlistees scored above the 50th percentile in the AQFT (Department of Defense, 2012).

There are two other significant demographic differences between the larger U.S. population and the population of the Army germane to this review. Despite concerns that the rise of the all-volunteer force would dramatically overrepresent the United States urban poor, enlistment data suggests the polar opposite has occurred over the last 4 decades (Congressional Budget Office, 2007; Department of the Army, 2011). The majority of new enlistees into the Army are comprised of the sons and daughters of the U.S. middle and upper middle class, with lower-income households significantly underrepresented (Kane, 2006). Additionally, the demographics of new recruits into the Army significantly underrepresent urban areas, with the largest disproportionate share of enlistees coming from rural and suburban areas (DoD, 2012; Lutz, 2008). Given the unique characteristics of a military population it is hardly surprising that the leaders within the Army differ in significant ways from their civilian counterparts.

Military Leadership Background

Military leadership has long been a topic of interest to scholars, as evidenced by its explicit reference in ancient works like the *Bhagavad Gita*, Sun Tzu's *Art of War*, and Homer's epic poems *The Iliad* and *The Odyssey*. Military leadership continues to be a subject of intense interest to academics and military professionals because in military settings leadership plays a unique role that cannot be substituted by any other means (Kaiser, Hogan, & Craig, 2008; Wong, Bliese, & McGurk, 2003). Despite decades of

intense research focused on better understanding leadership, or perhaps because of it, there are a number of competing theories of how to best conceptualize the concept. For purposes of clarity the Army's current definition of Army leaders, articulated in doctrine and practice, will now be examined.

The Army describes a leader as

Anyone who by virtue of assumed role or assigned responsibility inspires and influences people to accomplish organizational goals. Army leaders motivate people both inside and outside the chain of command to pursue actions, focus thinking, and shape decisions for the greater good of the organization.

(Department of the Army, 2006, p. 1-1).

This description emphasizes that any member of the Army can be called to be a leader regardless of rank, experience, or training. This perspective differs widely from trait based leadership theories that suggest that leadership relies on personality traits and provides insight into why the Army invests so much time and resources on leader development.

One of the beneficiaries of this intense focus on leadership development is the Army's commissioned officers (Cortina et al., 2004). Commissioned officers are members of the highest ranks in the Army, ranging from Warrant Officer 2 through General whose rank has been granted by a Presidential commission with the consent of the U.S. Senate. This commission provides officers with the legal right to exercise lawful authority over subordinates, as well as charging them with the obligation to faithfully execute the duties of their office (Riker-Coleman, 1997). Prior to receiving a

commission, prospective officers are required to complete specific civilian educational requirements as well as complete rigorous military training in one of the Army's commissioning sources (DoD, 2012). The three primary commissioning sources for the Army (the United States Military Academy, the Reserve Officer Training Program, and Officer Candidate School) all include extensive coursework in leadership development.

The Army views leadership as a core element of combat power that is capable of multiplying the effects of other warfighting functions—among them maneuver intelligence, fires, sustainment, command and control, and protection (Army, 2011). As World War II came to a close the United States conducted a comprehensive review of the most effective (Burns, 1978) combat divisions in the European Theatre to ascertain what qualities resulted in battlefield success. Their findings suggested that combat leadership proficiency had the greatest single effect on battlefield effectiveness (Taylor & Rosenbach, 2005).

The Army Field Manual (FM) on leadership, FM 6-22 (2006), provides a leadership framework that emphasizes a tripartite model, described as the “Be-Know-Do” model. The Be-Know-Do model encapsulates the Army conceptualization of leadership, while simultaneously providing an aspirational goal for Army leaders (U.S. Army, 2002). The first component of the framework, the “Be,” refers to internal characteristics like core beliefs and world-views of the leader. The “Know” aspect of the model refers to understanding gleaned from education as well as skills honed through hard won experience. The final aspect, “Do,” refers to the behaviors and actions leaders engage in (U.S. Army, 2002). There are several notable aspects to this leadership framework. This

model emphasizes that leadership is a complex interaction of characteristics that mutually reinforce one another (Surface, 2004). It suggests that training and understanding alone cannot make a successful leader unless they are first reinforced by personal example (U.S. Army, 2006). Similarly, it implies that traits are only a part of leadership and that leaders are ultimately required to execute actions that will be viewed as reflections of their skill and values (U.S. Army, 2012).

This definition closely parallels the Army's formal definition of leadership, which is described as "the process of influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving the organization" (Department of the Army, 2006, p. 1-2). Implicit in this definition is the understanding that leadership is a process that can be developed through experience and training (Fallesen, Keller-Glaze, & Curnow, 2011). This form of leadership development is especially critical to the Army as an organization because of two unique personnel policies. The first policy is referred to as "up or out" and describes the Army's stringent promotion procedures that require personnel who are not progressing in rank to leave the service (RAND, 2005). The second reason leadership development is especially critical to the Army is the fact that leaders cannot be drawn from outside the organization, future leaders must be cultivated from within (Henning, 2006). Given the central role of leadership in military doctrine and these unique restrictions, it is hardly surprising that the Army has developed extensive frameworks for Army leaders to use to develop, hone, and maintain their leadership skills.

The Army leadership requirements model provides a comprehensive roadmap to leadership development that allows soldiers at all levels to better understand gauge and refine their leadership skills (Fallesen et al., 2011). The Army leadership requirements model identifies eight competencies and 12 attributes that can be used to benchmark progress and develop the ability to lead others in military environments. The 12 leadership attributes describe personal aspects of an individual that have a bearing on leadership and are broken into three broad categories: character, presence, and conceptual ability (Horey et al., 2004). Character describes internal standards and includes values, empathy, and the warrior ethos. Presence includes competencies focusing on how a leader is perceived by others and includes military bearing, physical fitness, confidence, and resilience. The final category, conceptual ability, includes the following attributes: mental agility, sound judgment, innovation, interpersonal trust, and domain knowledge. Many of the 12 attributes outlined in this model may be present in an individual prior to joining the Army, but the reason they are clearly articulated in doctrine is to allow leaders to identify and develop specific weaknesses after self-reflection (U.S. Army, 2006).

The eight leadership competencies differ from the 12 leader attributes because they describe the Army's expectations and can be used to benchmark performance (U.S. Army, 2012). The eight leadership competencies are further broken into three subcategories: leads, develops, and achieves. The four aspects of the lead subcategory include: leading others, extending influence beyond the chain of command, leading by example, and communication. The three aspects of the develop subcategory include: creates a positive environment, prepares self, and develops leaders (Steele, 2011). The

achieve subcomponent describes the final leadership competency, the ability to get results. The Army's competency framework was empirically tested and the resulting analysis indicated that the competencies were positively correlated with measures of leader effectiveness (Horey, Curtin, Keller-Glaze, & Fallesen, 2007). Although there is a general lack of agreement within the literature as to how to best evaluate leadership the Army leadership parallels many of the aspects of two influential leadership theories: transformational leadership and charismatic leadership (Fallesen et al., 2011).

Transformational and Charismatic Leadership

The genesis of the transformational leadership model was Burns's groundbreaking book *Leadership*. Burns's (1978) Pulitzer Prize winning volume argued that leadership could be best understood by examining the relationship between leaders and followers. According to Burns there were two basic styles of leadership: transactional and transforming. Leaders engaging in transactional leadership attempt to exert influence by extending valued things to subordinates in exchange for completing specific tasks. This style of leadership emphasizes the power differential between the leader and follower, and Burns argued that this disparity frequently fails to bind the teams together toward a common purpose. This type of leadership would ensure subordinates completed delegated assignments in order to receive a material benefit, but it failed to build a strong and adaptive team. Burns argued that transforming leaders take a radically different approach to leadership, focusing on the relationship between the leader and the subordinate instead of any particular task. According to Burns, transformational leaders attempt to understand their follower's motives and find ways to support those higher

needs. This would ultimately result in a relationship where both parties increase their motivation and sense of purpose, leading to an organizational renaissance. Burns further argued that both leaders and followers were moral agents, and that transforming leaders recognize the importance of the moral aspect of leadership by training their own subordinates to become leaders. In his characterization of transforming leadership, Burns laid the groundwork for future research on leader self-sacrifice by suggesting that sacrifice was a means for leaders to influence followers to undergo positive change.

Bass (1985) expanded on Burns's theoretical conceptualization of transforming leadership and refined it into the theory of transformational leadership. Bass's perspective on transactional leadership revolved around the concept of contingent reinforcement, which he described as a system of rewards or threats aimed at shaping a followers' performance. Bass contrasted this model of leadership with a leadership style that moved followers to exceed expectations and create synergistic teams. Bass referred to this leadership style as transformational.

Transformational leadership as conceptualized by Bass involved a constellation of factors that collectively work to inspire followers to focus on more than their own self-interest. A review of the literature on a military setting indicated that transformational leadership behaviors increased leader effectiveness, job motivation, and affective commitment (Bycio, Hackett, & Allen, 1995; Thomas Kane & Tremble, 2000). These beneficial outcomes may explain in part their increased frequency in higher military ranks (Ivey & Kline, 2010). The factors thought to contribute to this form of leadership

included idealized influence, providing inspirational motivation, creating intellectual stimulation, and individual consideration of subordinates (Bass & Avolio, 1990).

Idealized influence describes actions that allow the leader to be perceived as a role model, as well as behaviors that provide subordinates with a common organizational vision to guide them forward. Conger and Kanungo (1988) suggested that actions where the leader voluntarily engaged in high levels of personal risk and sacrifice exemplified this aspect of transformational leadership. This aspect of transformational leadership appears to closely align with current work on self-sacrificial leadership. Inspirational motivation describes a leader's ability to communicate their expectations to others in a way that ensures their full commitment. Bass and Avolio (1994) suggested that a transformational leader would exercise inspirational motivation by exuding confidence that the organizational goal could be realized. By sharing authentic enthusiasm for a larger group goal transformational leaders were able to overcome inertia and inspire their subordinates. Intellectual stimulation was the third attribute, and involves a leader's ability to foster the creative spark resident within all of their followers. Yammarino et al. (1993) suggested that transformational leaders could impart this new insight by encouraging subordinate's imagination and working to hone their ability to make decisions. The final factor, individual consideration, describes the ability to foster an environment that provides individual support to each subordinates personal needs. This frequently requires a leader to serve as both a coach and a mentor (Yammarino et al., 1993). These dual roles can be accomplished by providing timely feedback to subordinates and by pushing followers to expand their abilities.

In his descriptions of transformational leadership Bass (1985) implied transformational leaders might engage in self-sacrifice as a means to transform subordinates individual needs into the larger organizational goals, a perspective echoed by other contemporaries (Gardner & Cleavenger, 1998). This focus on the leader-follower dynamic is evocative of another influential leadership theory focusing on charisma. The charismatic leadership model mirrors transformational leadership theory in several important ways, including its emphasis on the relationship between leaders and subordinates and the role of vision and inspiration (Hoyt & Ciulla, 2004). Given the significant overlap between charismatic leadership theory and transformational leadership theory, it is hardly surprising that Bass's perspective on self-sacrifice was quickly subsumed into the charismatic leadership literature (Yukl, 1996).

Charismatic leadership theory is rooted in Weber's early attempts at understanding charisma, a term that was used to encapsulate leader characteristics that could not be described by ordinary means (Conger & Kanungo, 1988; Weber, 1947). This early attempt to understand the qualities of inspirational leaders gave way to charismatic leadership theory, which attempted to better understand how charismatic leaders influenced their subordinates. Conger (2005) suggested that part of the answer could be found in impression management techniques that united followers by articulating a common vision. One of the impression management techniques suggested by Conger and Kanungo (1987) was leader self-sacrifice. Sashkin (1988) expanded on this concept, suggesting that when leaders make sacrifices they demonstrate the leader's dedication to the objective and to the group as a whole. Shamir et al. (1993) extended

these findings, suggesting that when leaders engage in personal sacrifice their standing within the group is raised, thereby increasing the potential that they will be perceived as a role model.

Self-Sacrificial Leadership

Although self-sacrifice was cited as a beneficial leadership technique by researchers studying both transformational and charismatic leadership, more than a decade passed before empirical work was conducted. Choi and Mai-Dalton (1998) conducted early work on understanding how sacrifices on the part of the leader influenced subordinates, describing their line of research as the study of self-sacrificial leadership. Choi and Mai-Dalton's work on self-sacrificial leadership was influenced by prior work in charismatic and transformational leadership theories, as well as management studies in South Korea and Japan. The theory of self-sacrificial leadership articulated by Choi and Mai-Dalton suggested that the phenomenon functioned at multiple levels within an organization. At the macro level leader self-sacrifice was thought to create a catalyzing effect on followers by motivating subordinates to accept a leader's vision for the organization. This would result in higher levels of organizational unity, thereby increasing an organizations ability to adapt to rapid change. The micro level effects of leader self-sacrifice were theorized to function by increasing followers perceptions of their leader's charisma, increasing attributions of the leader's legitimacy, and increasing subordinates reciprocal behavior. Choi and Mai-Dalton further posited that the effects of leader self-sacrifice were moderated by the leader's competence and

organization crises. In their discussion of self-sacrificial leadership the authors noted that certain organizational cultures sanctioned and nurtured self-sacrifice, citing the military as an example where this quality is frequently perpetuated.

Choi and Mai-Dalton (1999) expanded on their theoretical conceptualization of self-sacrificial leadership by conducting empirical research aimed at identifying whether leader self-sacrifice influenced followers perceptions and attitudes. Their model of follower's response to self-sacrificial leadership analyzed the influence of self-sacrificial behaviors on attributions of charisma, legitimacy and reciprocity. In addition to these factors their model examined whether environmental factors and leader competence moderated these attributions. After sampling university students and members of industry, Choi and Mai-Dalton reported mixed support for their model. The research suggested that leader's who exhibited self-sacrifice were seen as having more legitimacy and charisma than those who did not. The respondents also reported that when leaders engaged in self-sacrificial behavior they were more likely to engage in reciprocal behavior. Finally, the study failed to find consistent evidence that a leader's level of competence or changes in organizational stress altered these attributions.

Yorges et al. (1999) pursued a different technique to understand the utility of leader self-sacrifice, contrasting it with self-benefiting leadership to identify significant differences between the two leadership styles. By exploring the inverse of Choi and Mai-Dalton's (1998) leadership model Yorges et al. believed they would be able to highlight the contributions of perceived charisma. Their experimental results indicated that when a leader suffered a personal loss for engaging in a behavior they were seen as more

influential and charismatic by their subordinates. Further review suggested that this increase in influence could be wholly credited to attributed charisma. The researchers also found evidence that the predicted relationship between leader sacrifice and influence was mediated by attributions of the leaders' motives. When a leader suffered a personal loss after expressing an opinion the participants believed that the leader in question was motivated by organizational vision. When the leaders received a reward for their opinion the participants viewed the leader's motivation as rooted in corporate pressure. These findings provide significant theoretical overlap with Conger and Kanungo's (1987) emphasis on impression management.

De Cremer (2004) continued to expand empirical research on self-sacrifice within the charismatic leadership literature by examining how self-sacrifice could influence decisions in a public goods dilemma. De Cremer expanded on Choi and Mai-Dalton's (1997) work and theorized that self-sacrificing leaders would be perceived as more charismatic, which would in turn positively influence followers. De Cremer integrated Yorges et al.'s (1999) work on self-interested orientation, by examining self-interested leaders and self-interested followers. The results confirmed Yorges et al.'s findings suggesting that self-sacrificing leaders were perceived as more charismatic when compared with self-interested leaders. However, De Cremer also found there was a significant increase in the cooperation levels of pro-social participants, suggesting that self-sacrificing behavior could play a broad role in increasing organizational collaboration.

De Cremer et al. (2004) continued with this research thread by examining whether leader self-sacrifice and leader self-confidence increased the effectiveness of leadership and attributions of a leader's charisma. As hypothesized, the participants viewed self-sacrificing leaders as more charismatic and effective than their non-sacrificing counterparts. Leaders high in self-confidence were also found to have higher perceived charisma and organizational effectiveness when compared to leaders who lacked self-confidence, a repeated finding in transformational leadership theory (Bass, 1985; 1999; Bycio et al., 1995). Additionally, while self-sacrificing leaders were consistently rated as more charismatic and effective than their self-benefiting counterparts, this relationship was magnified when leaders were also perceived as being self-confident. The research found that these relationships were partially mediated by the respondent's collective identification, providing a potential model for the interaction. According to this perspective self-sacrifice works by emphasizing the importance of the collective (Swann, Gómez, Huici, Morales, & Hixon, 2010), while self-confidence projects the likelihood that the collective would succeed. This theoretical model suggests that self-sacrifice could play a particularly powerful role in the Army, owing to the emphasis placed on collective identification (Griffith, 2002)

Van Knippenberg and Van Knippenberg (2005) expanded the empirical literature on self-sacrificial leadership by integrating self-sacrificial leadership into the social-identity analysis of leadership. Social-identity analysis theory suggests that individuals tie their self-identity to their membership in a group (Abrams, Hogg, Hinkle, & Otten, 2005), and that each individual carries with them a cognitive representation of that group.

According to this leadership theory these group prototypes describe the values, norms, attitudes, and belief of the group (Hogg, 2001). From this perspective leaders are seen first as members of the group, and social-identity analysis argues that the degree to which a leader represents the group influences their overall effectiveness. Van Knippenberg and Van Knippenberg attempted to better understand how self-sacrificial leadership and social-identity leadership theory influenced one another, and conducted research manipulating both the leader's prototypicality and the impact of a leader's self-sacrifice. They hypothesized that when leader engages in personal sacrifice for the group, their followers would perform at a higher level than they would with a leader who did not make a personal sacrifice. They further hypothesized that when leaders do not represent the norms and values of their group, these effects are magnified. The results of their research provided support for their hypothesis, suggesting that self-sacrificial leaders were viewed as more effective by their subordinates. Additionally, the results showed that self-sacrificial prototypical leaders had a smaller effect on subordinate's perceptions of effectiveness than their self-sacrificial non-prototypical leader. The findings also showed that subordinates appear more willing to perform at higher levels for self-sacrificial leaders as measured by the number of new ideas generated. As with the measure of effectiveness, subordinates disproportionately increased the number of ideas for non-prototypical leaders. Given the behavioral homogeneity in Army leaders (Gailbreath, Wagner, Moffett, & Hein, 1997) Van Knippenberg and Van Knippenberg suggested that self-sacrificial leadership could have a minimal effect in a military population.

DeCremer, Van Knippenberg, Van Dijke, and Bos (2006) extended this research by examining the degree to which follower collective identification moderated the impact of leader self-sacrifice. The researchers hypothesized that when followers strongly identified with an organization their self esteem was more likely to be positively influence by a self-sacrificing leader. The study found that subordinates reporting high levels of collective identification reported higher levels of self esteem when their leaders exhibited self-sacrificial behavior. This pattern did not appear when participants were only weakly affiliated with the organization. Based on these results, De Cremer (2006) conducted another experiment assessing whether a leader's self-sacrificial behaviors would positively influence followers when they exhibited an autocratic leadership style. Prior research (Cicero, Pierro, & Van Knippenberg, 2007) suggested leader prototypicality emphasized collective identification in small groups, and that this benefited higher stress teams. The results reinforced these findings, suggesting that self-sacrificing leaders fostered a greater willingness to work together while autocratic leaders triggered fewer positive emotional reactions and a reduced level of teamwork.

Although the literature surrounding the impacts of self-sacrificial leadership continued to expand, Choi and Mai-Dalton's (1999) hypothesis that self-sacrifice was moderated by organizational uncertainty remained unexplored. This gap in the literature was addressed when Halverson et al. (2004) examined the impact of leadership self-sacrifice on subordinates while manipulating the level of organizational crisis. The researchers predicted that participants would view self-sacrificial leaders as more charismatic, and would report higher levels of group cohesion when their leaders engaged

in self-sacrificing behaviors in line with prior work conducted by Choi and Mai-Dalton (1999). Halverson et al. further posited that when the organization was undergoing a crisis that these attributions would be amplified, leading to higher ratings of leader charisma and increased levels of group cohesion. The findings indicate that leader self-sacrifice increased perceptions of a leader's charisma and group cohesion, and that crisis situations magnified these factors. In contrast to Choi and Mai-Dalton's original findings, the researchers found that sacrificing leaders in crisis situations were perceived as particularly charismatic.

Importance of Charisma

The term charisma can trace its roots back to the Greek word *charismata*, which translates to “gift of the gods” (Conger & Kanungo, 1987). Weber stripped the word of its mystical connotations and used it to describe a trait that distinguished exceptional leaders from ordinary people (Eatwell, 2006). Despite Weber's attempts to quantify charisma, early studies continued to depict charisma as an almost magnetic quality that leaders used to earn the devotion of their followers (Levine, Muenchen, & Brooks, 2010). During this period charisma was seen an innate quality that was the exclusive domain of a few rare and exceptional leaders (Gibson, Cooper, & Conger, 2009). Although the term has been stripped of its otherworldliness, there is still no general agreement on how best to define the phenomenon within the organizational leadership literature (Halpert, 1990; Levine, Muenchen, & Brooks, 2010). In the absence of a common definition researchers have attempted to describe the phenomenon by focusing on the behaviors associated with charismatic leaders. The qualities associated with charisma include: the ability to inspire

subordinates (Bernard M. Bass, 1985), provide a vision of the organization's future (J. A. Conger & Kanungo, 1994), achievement (Peters, 2010), the display of exemplary behaviors (Shamir, House, & Arthur, 1993) and the ability to articulate high standards (Javidan, 1991).

Although the majority of research focuses on the behavioral dimensions of charisma (Conger, Kanungo, & Menon, 2000), the literature provides several studies that link charisma to positive subordinate and organizational outcomes. Research suggests that charisma is strongly correlated with several measures of employee wellbeing (Nandal & Krishnan, 2000) and that it is positively associated with subordinates positive affect. Additionally, charisma has been linked with values congruence (Brown & Treviño, 2009), unit effectiveness (Shamir et al., 1998), higher performance ratings from superiors (Hater & Bass, 1988), work engagement (Babcock-Roberson & Strickland, 2010), and subordinates trust (Conger, Kanungo, & Menon, 2000).

Choi and Mai-Dalton (1997) utilized House's (1977) description of charisma as a starting point for their operational definition of charisma, arguing that the phenomenon was best understood by examining its impact on subordinates. This philosophical orientation mirrors scholarship building on Conger and Kanungo's (1994) model of charismatic leadership. Conger and Kanungo's model argues that charismatic leadership isn't dependent on a personality type; it is rooted in a subordinate's perception of their leader's behavior. According to this perspective charisma doesn't reside in the leader, it emerges from a subordinate's interpretation of a leader's actions. This model received support in the military literature, where it was reinforced by Keithly and Tritten (1997)

analysis of charisma in the armed forces. According to Keithly and Tritten charisma in a military setting can only be understood by examining how followers perceive their leaders.

There are a number of studies within the military literature addressing the potential impact of leader charisma. Examinations of Israeli soldiers in direct ground combat suggested that combat stress reactions (and therefore posttraumatic stress disorder) were linked to the soldiers relationship with their officers (Solomon, Mikulincer, & Hobfoll, 1986, 1987), a factor heavily influenced by charisma. The importance of charisma in combat situation was further highlighted by research suggesting that when individuals were primed with higher levels of stress they preferred charismatic leaders to task-oriented leaders or relationship-oriented leaders (Erez, Misangyi, Johnson, LePine, & Halverson, 2008). Taken together these studies suggest that assessments of a leader's charisma influence military group dynamics on a regular basis, and that these assessments could increase in importance in combat situations. Choi and Mai-Dalton (1999) used these observations to create an attributed charisma scale that determined a leader's charisma by soliciting their subordinate's appraisals. The new scale integrated the theoretical work of Bass (1985) and Conger and Kanungo (1988) and defined attributed charisma as the ability to motivate, provide vision, and elicit respect. All three of these qualities are viewed as absolute requirements for the successful implementation of the Army's new doctrine of mission command.

Auftragstaktik, commonly referred to as mission command, is the Army and Marine Corps new command doctrine. Mission command is a command philosophy that

was developed in the early 19th Century to allow the Prussian Army to adapt to revolutionary social and technological shifts (Shamir, 2010). At its core, mission command is about empowering subordinate leaders to adapt to developing scenarios in a fluid manner (Storr, 2003). Mission command provides junior leaders with a clear understanding of what needs to be accomplished and then provides them with the opportunity to exercise their own initiative to successfully execute the operation (U.S. Army, 2012). Although the concept has been around for centuries and has proven itself repeatedly, the U.S. Army has only recently integrated this strategy into professional education. Part of this organizational reticence was rooted in the Army's cultural fixation with utilizing business techniques and managerial controls (Vandegriff, 2002). Although mission command became part of the Army's lexicon prior to Operation Desert Storm, the doctrine was all but ignored during combat operations (Macgregor, 2008) in favor of the more traditional centralized approach. This philosophical orientation changed when the Army struggled to meet the needs of the asymmetric battlefields of Iraq and Afghanistan. The key to these complex environments was small unit leaders to decipher ambiguous activities and become keen observers of sociocultural cues. The Army's Field Manual on counterinsurgency (2007) codified this new reality by noting that mission command was "ideally suited for counterinsurgency operations" (p. 1-26). Since the publication of the counterinsurgency field manual the Army has continued to reinforced the importance of mission command through a series of doctrinal publications (Caslen, 2011).

Leadership in Combat and Analogous Environments

The Army exists to serve the American people, to protect their enduring interests, and to fulfill the Nation's military responsibilities (Department of the Army, 2010). At many times in the past this unlimited liability has resulted in American soldiers being deployed to combat zones throughout the globe. Indeed it is this very contingency, and the inevitable consequences of violent conflict that drive the Army to continually refine its leader development process. Although there is a robust literature aimed at understanding how the environment can influence leadership, there are relatively few studies examining the impact of dangerous environments on leadership (Campbell, Hannah, & Matthews, 2010). Part of this gap in the literature is due to the corrosive nature of dangerous environments, whose defining aspects serves as an anathema to many behavioral scientists (Bateman, 2008).

Despite the methodological complexities inherent in understanding combat scenarios, a growing number of researchers are attempting to understand leadership in dangerous environments. Part of the renewed interest in viewing combat leadership is driven by the expectation that the excessive environmental stimulus in dangerous environments would more clearly articulate how contextual factors can influence leadership (Campbell et al., 2010; Hannah, Uhl-Bien, Avolio, & Cavarretta, 2009). Some leadership theorists have even argued that in highly skilled teams leadership is only critical in crisis situations (Alberts & Hayes, 2003; Yammarino, Mumford, Connelly, & Dionne, 2010). This perspective has been clearly articulated in both the transformational leadership literature (Bernard M. Bass, 1990) and the charismatic leadership literature

(House, Spangler, & Woycke, 1991) and is rooted in historical observations of the connections between powerful leaders and difficult scenarios (Bernard M. Bass, 1998; Yammarino et al., 2010).

In response to these entreaties there is an ever growing literature addressing the role of leadership in dangerous environments. Campbell, Hannah, and Matthews (2010) define dangerous environments as “environments where leaders or their followers are personally faced with highly dynamic and unpredictable situations where the outcomes of leadership may result in severe physical or psychological injury (or death) to unit members” (para. 4). In addition to combat operations this broad conceptualization covers peacekeeping operations, law enforcement, and firefighting. In an attempt to better quantify the extreme conditions military teams are exposed to Yammarino et al. (2010) described several contextual factors that were atypical of nonmilitary work scenarios. These conditions included

Disparate missions, both traditional (e.g. combat) and nontraditional (e.g., fighting terrorism, peace-keeping, and humanitarian aid efforts), place military personnel in harm’s way, under stressful and demanding environmental conditions (e.g., too wide-open or too confined spaces, extreme temperatures, poor air quality, submersion to low depths, armed combatants) often for long periods of time. (pp. 22-44)

Yammarino’s definition is sufficiently expansive to cover the breadth of missions assigned to members of the DoD, while simultaneously emphasizing the hardships present in all aspects of military service. A review of training deaths in peacetime

(Leland & Oboroceanu, 2010) confirms that even in the best of circumstances military service is inherently dangerous. Leland and Oborocenu's review of the historical mortality statistics also emphasizes that these already significant risks are magnified during a subset of operations unique to the armed forces, combat operations.

Combat Operations

Although combat operations are viewed as a subcategory of dangerous environments, it is important to note that the term combat is frequently used to refer to an variety of military operations. The DoD has no clearly articulated definition of combat because each of the service branches engages in unique forms of conflict. The nearest approximation of a universal definition is the statutory definition of a combat mission, which is defined as "A task, together with the purpose, which clearly requires an individual unit, naval vessel or aircraft to individually or collectively seek out, reconnoiter and engage the enemy with the intent to suppress, neutralize, destroy or repeal that enemy" (Herres, 1992, p. 1.5). Although this definition lacks operational utility, it serves as a basis for the definition of a combat zone, which is "the area required by combat forces for the conduct of operation" (DoD, 2011, p. 64). To avoid the ambiguity surrounding the concept of combat the scope of this paper will focus on a specific, kinetic aspect of combat operations.

The Army has expanded on the Department of Defense definition of combat by describing the aspect of combat ground maneuver units are responsible for, labeling them direct ground combat. The Army defines direct ground combat as "engaging an enemy with individual or crew-served weapons while being exposed to direct enemy fire, a high

probability of direct physical contact with the enemy's personnel, and a substantial risk of capture" (U.S. Army, 1992, p. 5). Although this definition addresses the linear nature of traditional combat operations, it fails to address many of the realities of asymmetric warfare evident in recent operations in Iraq and Afghanistan. On these borderless battlefields the unconventional nature of conflict blurs the lines delineating combat (Henriksen, 2007). The current research will utilize the Army's definition of direct ground combat as representative of combat operations, keeping in mind Hannah, Campbell and Matthews (2010) admonition that dangerous contexts are dimensional constructs and that findings from one typology cannot be generalized to another.

One of the key findings in this emerging literature on combat leadership is the central role of both subordinate trust and leader competence in dangerous environments (Fisher, Hutchings, & Sarros, 2010; Sweeney et al., 2009; Sweeney, 2010). Fisher et al. (2010) analyzed the archival reports of Australian military advisors to Vietnam to better understand what leadership attributes provided the greatest benefit in combat situations. The resulting analysis highlighted 10 leadership competencies that were correlated with positive follower outcomes in combat scenarios. These included: physical courage, risk taking, learning orientation, a caring ethos, leading by experience, stamina, expertise, self-reliance, and humor. The research also suggested that trust, training, and social support played critical roles in insulating soldiers from the debilitating effects of stress. The centrality of trust in combat environments was reinforced by research conducted to ascertain whether soldiers reassess their trust in leaders prior to combat operations. Sweeney (2010) analyzed seventy-two soldiers preparing for the initial phases of

Operation Iraqi Freedom and found that subordinates did reconsider their trust in leaders prior to combat. According to the research the two indicators soldiers used in their reassessment of whether they could trust their leader was the leader's competence and character. Soldiers reevaluated these factors by examining their leader's actions, specifically their ability to handle stress, respond to problems, be open, take care of soldiers needs, demonstrate technical acumen, and show tactical skill. One technique that has been linked to all of these factors is self-sacrificial leadership (Choi & Mai-Dalton, 1999).

Women in Combat

The roles of females in the U.S. Armed Forces has grown dramatically over the last decade; of the 2.2 million service members deployed to Iraq and Afghanistan over 299,000 have been female (Burrelli, 2013). This marks the Iraq and Afghanistan Wars as the single largest deployment of women to a combat theater (Holder, 2010). Despite the fact that women in these asymmetric conflicts were increasingly finding themselves in direct fire engagements with insurgent force, the DoD continued to enforce the Direct Ground Combat exclusion policy (Sheppard, 2007). This policy prevented women from being assigned to combat units, but made a number of exceptions when it was deemed expedient to do so. One example is the elite female soldiers assigned to the Cultural Support Program assisting Special Operations units in Afghanistan (Holliday, 2012). The soldiers taking part in this program fill a critical niche by working alongside special operations soldiers and serving as a liaison to female Afghans (U. S. Army, 2011). These roles are especially critical due to the Islamic cultural norms that prevent males speaking

to females outside their household (Pottinger, Jilani, & Russo, 2011). In light of these experiences and the dozens of females who made the ultimate sacrifice on the battlefield, the Army commissioned a think tank to examine their increasingly porous policy (Harrell et al., 2007).

The RAND National Defense Research Institute was commissioned to examine the Army's assignment policies and found numerous issues with this (Harrell et al., 2007). These included a failure to properly define collocation and an inability to differentiate assigning versus employing. The RAND study highlighted that the Army policy was rooted in a Cold War mentality that failed to accurately reflect the realities of an asymmetric battlefield. In early 2012 the Military Leadership Diversity Commission addressed the issue in *From Representation to Inclusion Diversity Leadership for the 21st-Century Military*. Among other recommendations in the commission's report was a pointed recommendation that the combat exclusion rule be repealed.

On January 24, 2013 Secretary of Defense Leon E. Panetta acknowledged the indispensable role women played in the DoD and announced that the Direct Ground Combat exclusion policy would be repealed (Burrelli, 2013). This shift in policy will open thousands of new positions to women throughout the force (Panetta, 2013). The degree to which this policy will be implemented will depend in part on the development and validation of gender-neutral standards based on the specific requirements for the job (Parker, 2013). This assessment period may lead to specific specialties and ratings remaining closed to women, but these will require the personal approval of the Secretary of Defense. The Department of the Army has been directed to provide detailed

implementation plans by May 15, 2013 with the policy to be fully enacted no later than January 1, 2016 (Panetta, 2013).

Implications of Past Research on Present Research

To address the complex challenges that define the operational environment in asymmetric conflicts the Army has turned to the doctrine of mission command (Caslen, 2011). This command philosophy maximizes the tactical advantages of small and agile combat formations by empowering small unit leaders, but it also creates the need for versatile leaders who can adapt their leadership skills to multiple scenarios (Brown & Treviño, 2009). This creates a unique challenge for the Army, because small unit leaders usually lack the extensive experience found in the more senior ranks of the service. To address these challenges the Army has created a leadership development program that provides small unit leaders with the framework they will need to be successful leaders (Sticha et al., 2003). The Army's current leadership doctrine integrates components of both charismatic and transformational leadership theories, which have been shown to play important roles in military leadership (Dvir, Eden, Avolio, & Shamir, 2002; Hardy et al., 2010; Masi & Cooke, 2000) . One important and unexplored aspect of both these theories is the role of self-sacrificial leadership.

Summary

Self-sacrificial leadership has been viewed as a critical component of both transformational and charismatic leadership theory (Conger & Kanungo, 1987). Choi and Mai-Dalton's model of self-sacrificial leadership (1999) suggested that one of the ways that leader sacrifice influenced followers was by increasing attributions of the

leader's charisma, a finding that received support in the empirical literature (Yorges, Weiss, & Strickland, 1999). Further research on self-sacrificing behavior in a professional sports league provided evidence that perceptions of sacrifice resulted in elevated levels of group cohesion (Prapavessis & Carron, 1997), a factor that Van Der Dennen (2005) argued is the most critical aspect of combat motivation.

A number of studies have linked charisma to positive outcomes for small military units, suggesting that better understanding the impact of leader self-sacrifice in a military environment might provide a path toward improving small unit performance (Henderson, 1985; Kirkpatrick & Locke, 1996; Shamir et al., 1998). This research thread is even more pertinent to the Army in light of Halverson et al. (2004) research on the interaction between organizational crisis and self-sacrificial leadership. When Halverson et al. examined self-sacrificial leadership under different levels of organizational crises, they found that self-sacrificial leaders were seen as more charismatic, and that organizational crisis magnified this perception. The emerging literature on leadership in dangerous environments suggests there may be parallels between the combat scenarios and other crisis situations, creating the intriguing possibility that these findings may be replicated in a combat environment (Kolditz, 2007). The findings of this study will extend the existing self-sacrificial research thread into a new population with distinct demographic and cultural patterns and in doing so provide valuable insight into a potential technique for fostering stronger units.

Chapter 3: Research Method

Introduction

The inherent risk of combat operations combined with the chaotic choreography that defines U.S. ground operations precluded a leadership study among the jagged spires of Afghanistan. This research study overcame this significant hurdle by using a vignette-based study to analyze leader self-sacrifice in the crucible of combat operations. The following chapter will examine the research design in detail and describe the sample, instrumentation, and the ethical concerns stemming from the research. Specifically, the chapter begins with a review of the experimental research methodology including the research design, population, method, and instruments. The chapter will conclude with a review of the statistical procedures that was used to analyze the research data.

Research Design and Approach

The methodological approach that was utilized to investigate the impact of self-sacrificial leadership was a quantitative experimental research design. Creswell (2009) describes quantitative research as rooted in a postpositivist worldview, which is deterministic, reductionist, and confirmatory. According to Creswell, a true experiment and a quasi-experiment are research designs where a variable is manipulated in order to discern whether it influences a specific outcome. This study employed an experimental research design utilizing analysis of variance (ANOVA). The independent variables in this study were a leader's self-sacrificial behavior and direct fire combat, both of which were manipulated through the use of a written vignette.

The dependent variable in this research was attributed charisma, which was measured utilizing the Attributed Charisma Scale (ACS; Bass & Avolio, 1995). A 2 X 2 between-groups factorial ANOVA was utilized to assess both main effects of leader self-sacrifice and combat scenario independently, as well as the interaction effect. Additionally, observed power and effect size (eta-squared) was obtained from the ANOVA output. These analyses were chosen as appropriate for testing the hypotheses given the proposed study design.

Setting and Sample

The participants in this research were comprised of male and female soldiers currently serving in the California Army National Guard. Prior to soliciting the convenience sample meetings were held with the Commanding General of the California National Guard, the National Guard Bureau, and the Department of the Army explaining the nature of the study and requesting permission to solicit volunteers from within the California Army National Guard. This sample was utilized because of their accessibility, the experience they have accrued in training rotations and combat deployments, and the diversity in age and ethnicity within the California Army National Guard. All enlisted soldiers in the ranks of Private (E-1) through First Sergeant (E-8) and Commissioned Officers in the ranks of Second Lieutenant (O-2) through Colonel (O-6) who were current members of the California Army National Guard were eligible to take part in the study. The senior most ranks of the NCO corps (Command Sergeant Major) and officer corps (Brigadier General and Major General) were omitted from the study because their ranks were not represented at the unit level where the sampling occurred. Due to the inclusion

of unit's belonging to the combat arms branches (Infantry, Armor, Artillery), which currently prohibit the assignment of females, the sample was comprised of a disproportionate number of males. With the approval of the California National Guard an invitation letter providing a brief explanation of the research was sent out to the military email addresses of all current members. As having access to an Army Knowledge Online (AKO) email address is a requirement for all currently serving members of the National Guard, this email had a wide distribution throughout the state.

Data Collection and Analysis

An experimental design study was used with self-sacrificial behavior (self-sacrifice, no self-sacrifice) as the first independent variable and combat situations (combat, no combat) as the second independent variable. The dependent variable was attributed charisma as measured by the ACS (Choi & Mai Dalton, 1999). All experimental data was collected utilizing the SurveyMonkey web hosting platform. Participants were provided with the link to the survey, and when they opened the link they were provided with an informed consent form as well as detailed instructions on how to complete the experiment. When participants completed the informed consent they were asked to complete a short demographic survey that was used to compare the demographics of the study sample with that of the Army National Guard. Once subjects completed this survey the SurveyMonkey site randomly assigned each participant to one of four vignettes (no self-sacrifice/no combat, no self-sacrifice/combat, self-sacrifice/no combat no, self-sacrifice/combat) written for the research study. After reading their

assigned vignette each participant completed the ACS. All responses were loaded directly into my password encrypted SurveyMonkey account.

A 2 X 2 between-groups factorial ANOVA was conducted to assess the three hypotheses. Hypothesis 1 was tested through an examination of the main effect of leader self-sacrificial behavior with two groups: self-sacrifice and no self-sacrifice. Hypothesis 2 was tested through an examination of the main effect of scenario type with two groups: combat and no combat. Hypothesis 3 was tested through an examination of the interaction term between the two levels of leader self-sacrificial behavior and two levels of scenario type. After data cleaning and evaluation of parametric assumptions, the analysis procedure was conducted using the Statistical Package for the Social Sciences (SPSS) software program, Version 20.0.

When calculating study sample size estimates, there are several factors that must be taken into consideration. These factors include the intended power of the study, the effect size of the phenomena under investigation, and the level of significance to be used in rejecting the null hypotheses (α). A 2 X 2 between-groups factorial ANOVA was used to test the three hypotheses.

A formal power analysis was conducted to statistically determine the number of participants needed to conduct the current study. To assess a priori sample size, power was set at .80 and the expected effect size was set at .25. An effect size of .25 was chosen because this is considered a medium effect size for an ANOVA type of analysis (Cohen, 1992). Degrees of freedom for a main effect are equal to the number of groups less one. The degrees of freedom for an interaction term are equal to the product of the

number of groups less one for each variable included in the interaction. As degrees of freedom for a 2 X 2 design is equal to 1 for both main effects and the interaction term, this value was used in the power analysis. Accordingly, the sample size necessary to likely determine a statistical difference is 180 participants where $\alpha = .05$ and degrees of freedom = 1. This means that there is an 80% probability that 180

Table 1

Variables and Planned Statistics Associated with Each Hypothesis

Hypothesis	DV	IV	Level of Measurement (DV/IV)	Statistics
1	Perceived Charisma	Leader Self-Sacrificial Behavior (Self-Sacrifice, No Self-Sacrifice)	Interval/Nominal	ANOVA (Main Effect)
2	Perceived Charisma	Scenario Type (Combat, No Combat)	Interval/Nominal	ANOVA (Main Effect)
3	Perceived Charisma	Leader Self-Sacrificial Behavior \times Scenario Type	Interval/Nominal	ANOVA (Interaction)

participants was sufficient to find a statistical relationship (effect size of .25) between variables where $\alpha = .05$ (Faul, Erdfelder, Lang, & Buchner, 2007).

Procedure

Respondents were provided with an invitation to take part in the research via an email with a direct link to the online research study (See Appendix A). The research was hosted by the website SurveyMonkey, a professionally maintained website dedicated to hosting surveys. The site utilizes modern encryption standards to safeguard all data, and

has the ability to randomly assign participants to one of the four conditions (leader self-sacrifice/no combat, leader self-sacrifice/combat, no leader self-sacrifice/no combat, no leader self-sacrifice/combat).

When respondents arrived on the SurveyMonkey website they were provided with an overview of the research project and an informed consent. By continuing past the informed consent all participants provided their implied consent to continue with the research. After the informed consent form participants were asked to complete a series of demographic questions (See Appendix B).

After participants completed the demographic questionnaire they were randomly assigned by the SurveyMonkey website to one of four vignettes (See Appendix C), which they were then asked to read. Once participants finish reading their assigned vignette they were asked to fill out the ACS (See Appendix D). All participants completely filled out the ACS and then they were asked to complete manipulation checks on both combat and leader self-sacrifice. A copy of the manipulation check for self-sacrifice is included in Appendix E and the manipulation check for combat is provided in Appendix F. After completing the manipulation checks each participant received a written study debrief (See Appendix G) providing detailed information on the experiment. Any participants that were interested in receiving the results of the study were provided an email address they could use to request the final results. Results were disseminated to all individuals who expressed interest in the study via email.

Instrumentation and Materials

The research manipulated leader self-sacrifice and combat scenarios by providing each participant with one of four vignettes designed by the researcher for the experiment. A vignette is a brief, concise description of an event or person that uses a systematic combination of distinctive characteristics that serve as covariates (Atzmüller & Steiner, 2010). The first paragraph of all four vignettes provides a broad overview of the unit's mission and provided background information on the platoon leader. To remove potential confounds related to the platoon leader's ability to successfully lead, biographical data was included describing the leader's military education. This biographical information was reinforced by assessments of NCOs within the unit who described the platoon leader as experienced and technically proficient. This paragraph also includes depictions of the unit, which was described as having successfully completed a prior combat deployment.

The second paragraph described a routine patrol being conducted by the platoon leader and included the experimental manipulations (self-sacrifice/no self-sacrifice and combat/no combat). The situational manipulation (combat/no combat) was altered by describing two different critical events. In the combat scenarios the patrol was forced to engage enemy forces after an improvised explosive device (IED) was triggered next to the platoon. In the noncombat scenarios the platoon was faced with an urgent situation requiring the platoon to engage in a temporary halt.

Self-sacrifice was manipulated by describing the platoon leader's actions following a critical incident. Self-sacrificial leadership was typified by having the

platoon leader place themselves in a situation where they incurred significantly greater personal risk for the good of the unit. In the combat scenarios this included personally leading members of the patrol to the damaged vehicle while under fire. In the noncombat scenario this involved accepting greater risk by personally handling a leader engagement in an uncertain environment.

During the design of the vignettes several measures were taken to ensure the reliability and validity of the instruments. The consistent wording in the first paragraph of all four vignette's follows Landsman and Copps-Hartley's (2007) admonition to use consistency to reduce interpretive bias. Similarly, the descriptions of the situational environment in the noncombat vignettes and the descriptions of the combat scenarios mirror one another to increase external validity (Taylor, 2006). In an effort to remove potential confounds related to professional competence the platoon leader in all four vignettes was described as engaging in the doctrinally appropriate actions for each scenario. Special care was taken while drafting to ensure that the platoon leader's actions across all scenarios was in keeping with standard rules of engagement and Army doctrine. Finally, to address Choi and Mai-Dalton's (1999) suggestion that leader competence could serve as an experimental confound, the researcher added language to each vignette that described the platoon leader as proficient while designing the vignette.

To check the content validity of each of the vignette's an expert panel composed of one Lieutenant Colonel and two Colonels in the combat arms were asked to provide detailed feedback on each of the vignettes. Each member of the expert panel had multiple deployments to Afghanistan, including combat rotations where they served as

senior tactical commanders. Additionally, each member of the expert panel had 20 or more years of experience rating subordinate officers on a variety of criteria including values, leadership, and potential for future promotion. The purpose of the expert panel review was to analyze the scenarios depiction of Army operations in Afghanistan, ensure that the platoon leaders in each scenario executed current Infantry doctrine and tactics, and confirm that the description of the leader's action reflected the intended meaning of the vignettes.

The expert panel was asked to review each of the four vignettes and provide written feedback on whether each situation described in the vignettes provided accurate representations of the current operational conditions in Afghanistan, in keeping with research emphasizing the importance of designing plausible scenarios (Paddam, Barnes, & Langdon, 2010; Seguin & Ambrosio, 2002). Each member of the expert panel agreed that the scenario provided in the vignettes accurately portrayed a potential mission set in Afghanistan. The panel was also asked to provide feedback on whether the leader's actions described in each vignette were in keeping with current military doctrine, in keeping with Hughes and Huby, (2002) admonition to reduce unwarranted assumptions that might arise from deviations from standard military practice. Two members of the expert panel stated that the leaders described in each of the four vignettes performed their duties in line with current doctrine. One member of the panel suggested an alteration to the no combat/no self-sacrifice vignette that was incorporated into the final draft. After this addition was made there was unanimous agreement that the actions of the lieutenant in each of the four vignettes represented current military doctrine.

To ensure that efforts to reduce experimental confounds related to leadership competence, the expert panel was asked to review the first paragraph of each of the vignettes:

1LT Koble is the Platoon Leader for Alpha Company's 1st Platoon. He is a recent graduate of a prestigious university, and was the distinguished honor graduate of his officer basic course. NCOs throughout Alpha Company feel that 1LT Koble's experience fits well with the Company's current mission. He is extremely thorough when planning missions, and possesses outstanding technical expertise.

Each member of the expert panel agreed that the lieutenant described in the vignette was an excellent officer, ensuring that the description of the officer projected a competent leader.

To ensure the validity of each vignette every member of the expert panel was asked whether the lieutenant described in each vignette exemplified self-sacrifice and whether the scenario described reflected combat. Each member of the panel was able to clearly identify whether the vignette represented direct fire combat, and whether the leader described engaged in self-sacrifice. A copy of each of the four vignettes is included in Appendix C.

Participant's charismatic attributions will be assessed using the Scale of Attributed Charisma. The Scale of Attribute Charisma is based on theoretical work (Bass, 1985; Conger & Kanungo, 1988) and empirical studies (Bass, 1985; Bass & Avolio, 1995). The items were all adapted by Choi and Mai-Dalton from the Multifactor Leadership Questionnaire (Bass, 1985) whose Cronbach's alpha was 0.83. The scale

consists of six questions. The first three items denoting attributions of charisma (“his/her behavior shows vision for the company,” “he/she is charismatic,” and “he/she is not honorable.” The second three items are intended to measure the effects of charisma (“I respect him/her,” “he/she motivates me to be loyal to the company,” and “he/she makes me proud to be associated with him/her”). In their empirical study on self-sacrifice Choi and Mai-Dalton reported a Cronbach's alpha of 0.87 for their charisma scale. Typically, scales with alpha coefficients that range from .70-.90 and higher are considered reliable. Scales with alpha coefficients between .60-.70 are moderately reliable and those less than .50 may not be reliable (Cortina, 1993).

Participant Rights

Respondents' participation in the study was strictly voluntary and did not present any significant risks or benefits resulting from participation. The informed consent form provided information concerning the rationale for the study, the participants' role in the study, the participant's rights, the reason participant was asked to volunteer, and the limits of confidentiality (Lindsay, 2006). The form was written in simple and straightforward language designed to ensure respondents understand the research project and their role in it. Participants had the option to read the informed consent form at their own speed to ensure they could make an informed decision, and the form included a contact number to use if they had any additional questions not addressed in the form. To mitigate the potential that my role in the Army National Guard would create undue pressure to join in the experiment the informed consent explicitly stated that participation in the study was strictly voluntary and that the participant could leave the experiment at

any time without any repercussions of any kind. Additionally, the use of an online survey format allowed soldiers to take part in the experiment without undue coercive effects that may have been present in a military setting. To provide all possible safeguards for participants the informed consent form ensured participants preserved their legal rights and include contact information for the researcher and Walden University's Research Participant Advocate. Finally, the consent form clearly stated that the participant should print and retain a copy of the consent form

Ethical Considerations

To ensure the ethical protection of all participants the Walden University Institutional Review Board (approval #12334456) and the DoD (See Appendices I and J) reviewed all measures prior to any data collection efforts. To ensure that all participants fully understood the purpose, length and measures that occurred during the experiment they were required to review an informed consent form prior to taking part in the research. The informed consent addressed each participant's rights and addressed the confidentiality of the data in keeping with American Psychological Association guidance (2002). By continuing the survey participants provided implied consent to take part in the study.

To ensure participant's information remained confidential the experiment was hosted on SurveyMonkey, a site that utilizes SSL encryption to protect all transmitted data. No individually identifiable information was disclosed or published, and all results were presented as aggregate, summary data. The information was kept confidential and secure by design. All aggregate data will be stored in a secured data file for a minimum

of five years and then permanently destroyed. If any content is published, the results will be reported in summary form and will not link any specific data point to individual participants.

All participants received a full disclosure on the nature of the study. These included the disclosure that I am a Ph.D. candidate at Walden University as well as an Officer in the California Army National Guard and that the survey is limited to current service members. To mitigate the power differential that may have existed due to my role as a member of the California Army National Guard all participants were recruited from units that have no affiliation with me. To further ameliorate ethical concerns stemming from my multiple roles, the survey instrument was only available online. This collection technique allowed soldiers the opportunity to take part in the research free from any organizational or situational pressure that may have occurred in a traditional military setting. Participants were informed that the research being conducted addresses leadership in combat environments and that they could discontinue the experiment at any time if the descriptions of combat were distressing.

Summary

This chapter provided a detailed discussion of the methodology that was undertaken to investigate the relationship between leader charisma, group cohesion, and leader self-sacrificial behavior. The research design and approach was discussed, after which a presentation of the research questions and hypotheses followed. The discussion of the population and sampling procedures for this quantitative study were then presented. Finally, the instrumentation, materials, data collection procedures and analysis

were provided along with the consideration of informed consent and confidentiality statements.

Chapter 4: Results

Introduction

This study quantitatively examined whether self-sacrificial leadership and the experience of direct ground combat altered perceptions of leader charisma. Three hypotheses were tested utilizing a vignette based experiment and 2x2 between-groups factorial ANOVA was used to analyze the results. This chapter provides an overview of respondents' demographic information, the analytical techniques that were utilized, the statistical findings, and a summary of the results.

Order of Analyses

Following the completion of the data collection phase of the research, all survey responses were downloaded from the SurveyMonkey hosting platform into SPSS version 20.0 (see Appendix H). The analysis started by examining the initial sample of 252 soldiers for missing data and outliers. All cases including missing data were dropped from the study, resulting in a sample of 218 soldiers. An outlier analysis was conducted on the remaining sample of 218 participants and no outliers were found. This was followed by an evaluation of normality and homogeneity of variance to ensure parametric assumptions were met. Next, demographic data was analyzed to construct a profile of the sample population. Finally, ANOVA analyses were used to test *H1*, *H2*, and *H3* to determine if relationships existed between the stated variables.

Profile of Sample

In February 2013, soldiers throughout the California Army National Guard received research invitations in their military email inboxes containing a link to the

survey. Over the course of 3 weeks, 252 soldiers followed a link to SurveyMonkey, read the implied consent form and completed the research study. Of the 252 soldiers who completed the research study 218 fully completed all questions in the survey and were retained for analysis. As anticipated, the inclusion of units belonging to the combat arms branches (Infantry, Armor, Artillery) resulted in the sample including a disproportionate number of males. The sample consisted of 207 (95%) male and only 11 (5%) female respondents.

The majority of the research participants (64%) were younger than 29 years of age, consistent with the demographics of the larger California Army National Guard force and reflective of the relative youth of the Army's junior enlisted soldiers. The smallest numbers of participants (4.6%) were within the age bracket of 38-41, an age where many field grade officers and senior NCOs become eligible for retirement from the Army. Additionally, the study sample reflected the ethnic diversity resident within the California Army National Guard, with 48% of the participants characterizing themselves as non-European American (Table 4). In comparison to the overall Army demographics, both Asians and Hispanics were slightly overrepresented (Army, 2011).

Among the respondents, 186 (85.3%) were enlisted soldiers, 31 (14.2%) were military officers and 1 (0.5%) was a warrant officer, closely mirroring the overall rank demographic of the Army (U.S. Army, 2012). The largest rank represented in the sample was Specialist (E4) which accounted for 104 (47.7%) respondents, followed by Sergeant (E5) with 27 respondents (12.4%), Private First Class (E3) with 17 respondents (7.8%), and Staff Sergeant (E6) with 14 respondents (6.4%). Notably, over 83.5% of the samples

were Platoon Sergeants and below, corresponding to the ranks of soldiers that would be under the direct command and control of company grade officers.

Table 2

*Demographic Characteristics of Study Sample (N=218)**

Ethnicity/Race	N	%
Spanish/Hispanic/Latino	66	30.3
American Indian or Alaska Native	4	1.8
Asian (e.g. Asian Indian, Chinese, Philippino, Japanese, Korean)	21	9.6
Black or African American	6	2.8
Native Hawaiian or other Pacific Islander (e.g., Samoa, Guam)	3	1.4
White or Caucasian	130	59.6
Other	3	1.4

* Column frequencies do not sum to 218 due to multiple responses.

The majority of the participants were in the midst of their first enlistment in the Army National Guard with 33 respondents (15.1%) reporting 1-2 years of service, 48 respondents (22%) reporting 3-4 years of service and 47 respondents (21.6%) reporting 5 – 6 years of service. The respondents reflected a broad range of military occupational specialties, with the infantry branch contributing the largest portion of the sample (162 soldiers, 74.3%), followed by signal branch (eight soldiers, 3.7%) and the armor branch (6, 2.8%). An analysis of whether participants had prior deployments outside the Continental United States (OCONUS) showed that the majority of participants (59.6%)

had completed an overseas deployment. As there are numerous overseas rotations in support of DoD missions that do not involve combat (Kosovo, Bosnia-Herzegovina, Guantanamo Bay, Republic of Korea) participants were also asked about their prior overseas combat rotations to gauge their experience with combat environments. A slight majority of participants (116, 53.2%) reported having deployed at least one time to a combat theater of operation. When viewed together these demographics suggest that a significant majority of participants have served as deployed members of the Active Duty Army in addition to serving as a National Guard soldier.

Manipulation Checks

A manipulation check was conducted to explicitly measure whether the experimental manipulations were perceived by the respondents. The manipulation check for self-sacrificial behavior consisted of three items adapted from Choi and Mai-Dalton's (1999) measure of self-sacrifice. The questions included "1LT Koble set an example of sacrifice," "1LT Koble has voluntarily given up his legitimate privileges," and "1LT Koble has voluntarily given up his benefits" and soldiers rated each question on a scale from 1 (strongly disagree) to 7 (strongly agree) on a Likert scale. The effect for self-sacrificial behavior was significant, $F(1, 220)=55.77, p<0.001$, with participants in the self-sacrifice condition ($M=14.54, SD=3.32$) viewing sacrificial behavior as occurring at a much higher rate than respondents in the no self-sacrifice conditions ($M=11.00, SD=3.67$).

The manipulation check for combat scenario consisted of four questions ($\alpha=0.818$; "1st Platoon was engaged in direct combat," "1st Platoon repelled the enemy

assault,” “1st Platoon was exposed to hostile fire,” and “there was a high probability that 1st Platoon could have engaged in direct physical contact with the enemy”). A univariate ANOVA with combat scenario as the independent variable revealed significant differences in participants’ perceptions of combat, $F(1, 222) = 151.77, p < .001$, with participants in the direct fire combat conditions perceiving more combat exposure ($M = 21.20, SD = 5.32$) than those in the noncombat scenario ($M = 13.14, SD = 4.47$). The results of these manipulation checks indicates that the vignette’s experimental manipulations were able to successfully alter perceptions of a leader’s degree of personal sacrifice and whether a scenario involved combat operations.

Outliers

A test for univariate outliers was conducted utilizing SPSS to determine if any cases should be excluded from the sample collected. To detect outliers, case scores were converted into z-scores and compared to the critical value of $\pm 3.29, p < .001$ (Tabachnick & Fidell, 2008). There were no cases exceeding this value, therefore no cases were excluded.

Missing Data

All cases were analyzed for missing data by running frequency counts in SPSS on demographic variables as well as measures of the dependent variables and manipulations checks. If a respondent failed to fully complete any of these questions their data was removed from the study. Of the 252 soldiers who completed the experiment only 218 had a 100% completion rate and were retained for analysis.

Parametric Assumptions

Assumptions of normality and homogeneity of variance were evaluated to detect any violation of parametric assumptions. Normality assumptions were evaluated using the technique recommended by Tabachnick and Fidell (2007). This technique involves dividing skew coefficients and kurtosis coefficients by skew standard error and kurtosis standard error, respectively. This results in z-skew and z-kurtosis values for each continuously scaled variable (in *H1-H3*, charisma). If z-skew or z-kurtosis are higher or lower than critical values (± 3.29 , $p < .001$), the distribution is deemed to be significantly skewed or kurtotic, and thus non-normally distributed (Tabachnick & Fidell, 2007). Homogeneity of variance was assessed by evaluating the outcome of Levene's Test of Homogeneity of Variance. If Levene's test was significant, it would imply that there is significant heterogeneity of variance between groups and the assumption of homogeneity of variance has been violated. Levene's test of homogeneity of error variances was not significant, $F(3, 214) = 1.68$; $p > 0.05$, implying that the error variances were equal across groups and that the assumption of homogeneity of error variances was also met. As there were no violations of assumptions the requirements for the ANOVA were met (Tabachnick & Fidell, 2007) and further analysis commenced.

Test of Hypotheses

In order to conduct the analysis, obtained scores on the items of the Scale of Attributed Charisma were summed for each respondent to create a scale score for attributed charisma, which was then used as the dependent variable. Next, the measure of internal consistency for the attributed charisma scale was calculated using a reliability

test known as Cronbach's Alpha (Tabachnick & Fidell, 2007). The attributed charisma scale had an ($\alpha = 0.90$) value indicating that the scale had high internal consistency since it was higher than the ($\alpha = .70$) rule of thumb (Tabachnick & Fidell, 2007). Table 3 provides a review of the descriptive statistics, including the means, standard deviation and number of participants across all of the experimental conditions.

Table 3

Descriptive statistics of the dependent variable, attributed charisma score, across the categories of independent variables

Scenario Type	Self-Sacrificial Behavior	Mean	Max	Min	Std. Deviation	N
No Combat	No Self-sacrifice	24.56	42	6	7.18	73
	Self-sacrifice	29.51	42	24	4.82	43
	No Combat Condition	26.40	42	6	6.82	116
Combat	No Self-sacrifice	29.65	42	9	6.66	49
	Self-sacrifice	31.68	42	23	6.34	53
	Combat Condition	30.71	42	9	6.54	102
Total	No Self-sacrifice	26.61	42	6	7.38	122
	Self-sacrifice	30.71	42	23	5.78	96
	Overall	28.41	42	6	7.01	218

Hypothesis 1

The first hypothesis predicted that company grade officers who exhibited self-sacrificial behavior would be perceived as having higher levels of attributed charisma. A 2x2 factorial ANOVA revealed that a leader's self-sacrificial behavior (self-sacrifice, no self-sacrifice) had a significant main effect on perceptions of the leader's attributed charisma $F(1, 214) = 15.35, p < 0.001, \eta^2 = 0.07$. Based on these findings the null hypothesis was rejected. The results of the 2x2 factorial ANOVA are presented in Table

4. An error bar plot (Figure 2) presents the mean attributed charisma scores (with 95% CI) across self-sacrificial behavior categories, highlighting the impact of self-sacrificial behavior.

Table 4

2x2 factorial ANOVA of the dependent variable, attributed charisma score, across the categories of independent variables

Effects	Dependent Measures	<i>F</i>	<i>p</i> -value	η^2
Scenario Type	Attributed Charisma	16.62	0.00	0.07
Self-sacrificial Behavior		15.35	0.00	0.07
Scenario Type \times Self-sacrificial Behavior		2.70	0.10	0.01

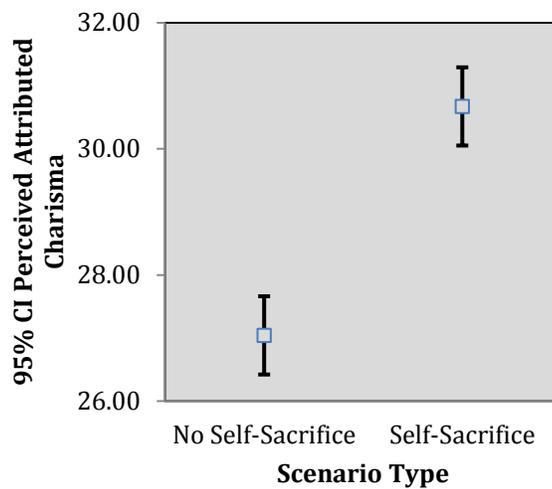


Figure 2. Error bar plot of attributed charisma. This figure illustrates attributed charisma scores in self-sacrificial categories.

Hypothesis 2

The second hypothesis predicted that during a direct fire combat scenario a company grade leader would be perceived as more charismatic. The results of the 2x2 ANOVA showed a significant main effect of scenario type (noncombat, combat) on the attributed charisma of company grade leaders, with company grade officers in combat scenarios perceived as more charismatic than company grade leaders in noncombat scenarios $F(1, 214) = 16.62, p < 0.001, \eta^2 = 0.07$. These results reveal a significant effect of scenario type, resulting in a rejection of the null hypothesis. An error bar plot (Figure 3) portrays the mean attributed charisma scores (with 95% CI) across scenarios categories, highlighting the impact of combat on the perception of attributed charisma.

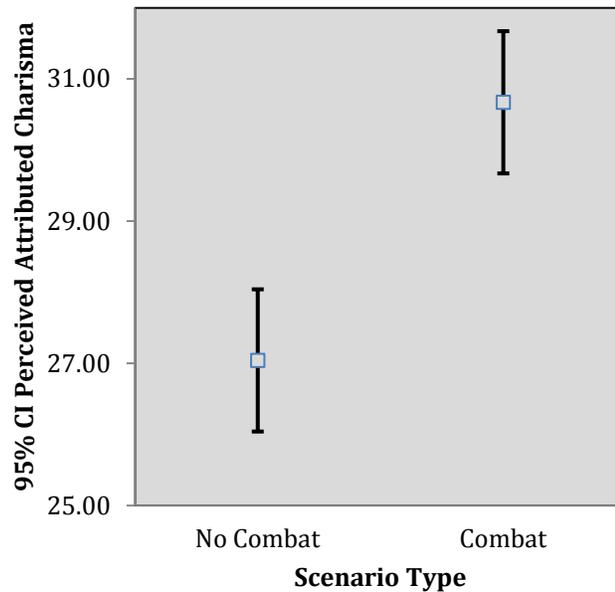


Figure 3. Error bar plot of attributed charisma. This figure illustrates attributed charisma scores in combat scenarios.

Hypothesis 3

The third hypothesis predicted that a company grade officer in a combat scenario who exhibited self-sacrificial behavior would be perceived as having higher levels of attributed charisma than company grade officer who did not exhibit self-sacrificial behavior. The ANOVA showed no significant interaction between the scenario type and self-sacrificial behavior $F(1, 214) = 2.70, p < 0.10, \eta^2 = 0.01$ as shown in Figure 4.

Although the results of the univariate analysis indicate that company grade leaders who exhibit self-sacrifice in combat scenarios are reported to have the highest overall levels of attributed charisma, the difference did not reach statistical significance. These findings fail to reject the null hypothesis and indicate that soldiers perceive a leader as more charismatic when they exhibit self-sacrificial behavior regardless of situational variables like combat.

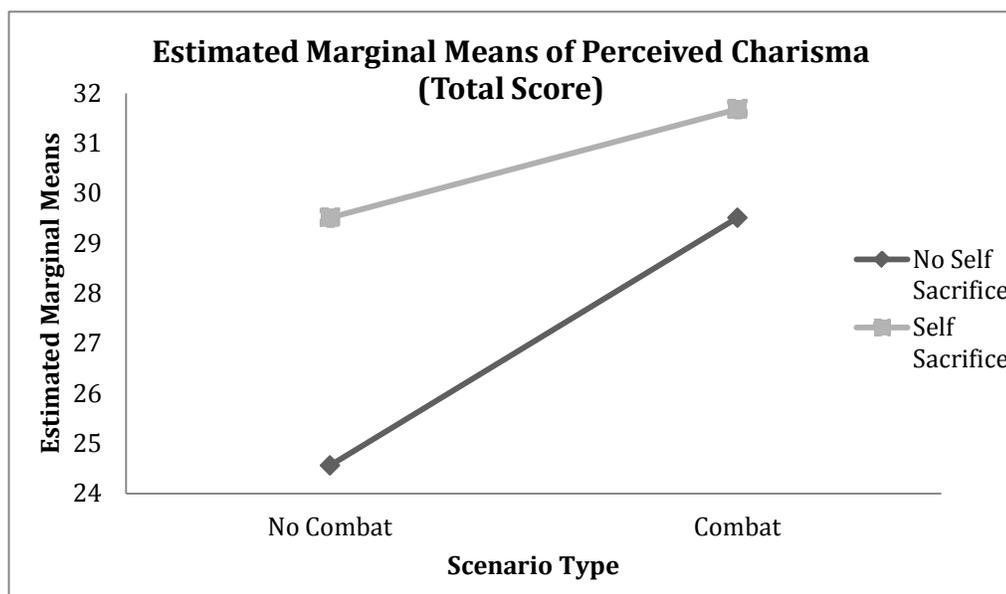


Figure 4. Depiction of the Interaction Effects of Scenario Type x Self-Sacrifice

Summary

This chapter provided a detailed review of the experimental results. Sampling procedures were reviewed, followed by an examination of the manipulation checks for the independent variables and a detailed analysis of respondent demographics. A review of the assumptions of an ANOVA and a confirmation that these criteria were met was then discussed before examining the results of the ANOVA. Finally, the ANOVA and univariate analysis were analyzed together to examine whether they supported the three directional hypotheses.

Chapter 5: Discussion

Introduction

This chapter provides a broad overview of the purpose of the study, reviews the theoretical underpinnings of the research, and addresses the existing gap in the literature that this study attempts to fill. This will be followed by a brief review of the research questions, the research procedure, the sample demographics, and a summary of the key findings. The results will then be examined and integrated with existing work in this research thread in order to provide context to the findings. Next, this chapter will review the implications of the current research to the Army. Finally, this chapter will look at the study's implications for social change and make recommendations for future actions.

Review of the Purpose and Design

The study was designed to empirically examine whether a maxim of military leadership, one emphasizing the criticality of placing the mission and the welfare of soldiers before self-interest, altered perceptions of small unit leaders. Although Choi and Mai-Dalton (1999) illustrated the utility of self-sacrificial behavior in part by relaying stories of military officers who inspired their subordinates through personal sacrifice, their research exclusively sampled undergraduate students and junior employees in the United States and Korea. This research study addressed this gap in the literature by examining whether the theoretical findings could be replicated in a sample of soldiers currently serving in the California National Guard. Based on prior work in the field it was anticipated that company grade officer's would be perceived as more charismatic by their

subordinates when they exhibited self-sacrificial behavior when compared to company grade officers who didn't exhibit this behavior.

Summary of Findings

The results mirrored the work of prior researchers focused on self-sacrificial leadership (Campbell et al., 2010; Choi & Mai-Dalton, 1999; Yorges et al., 1999), with self-sacrificial company grade officers being perceived as being more charismatic by their subordinates. The findings suggest that the positive influence of self-sacrificial leader behaviors could have broad applicability, with evidence accumulating in several nations across multiple industries and career fields. The consistency and breadth of these findings also suggest that Choi and Mai-Dalton's (1999) belief that leader self-sacrifice might play an important role in transformational leadership may bear further investigation.

Bass's (1985) conceptualization of transformational leadership argued that transformative leaders relied on specific techniques to motivate their subordinates, one of which included serving as a role model. Bass referred to this strategy as idealized influence, and suggested that by modeling exemplary behavior transformational leaders served as an inspiration to their subordinates. Choi and Mai-Dalton pointed out that when leader's engage in sacrifice for a group goal their behavior explicitly reinforces the importance of the objective and serves as an inspirational example. The contextual similarity of attributed charisma and Bass's concept of idealized influence provide further evidence that self-sacrifice might play a significant role in transformational leadership. The current finding not only reinforces possible connections between transformational

and self-sacrificial leadership theories, it also provides insight into why self-sacrifice has long been a part of military tradition.

Self-Sacrificial Leadership

There can be little argument that the concept of selfless service is central to Army life; the concept has long been codified in the Army's central doctrine. The marked increases in perceptions of leader charisma when a leader engaged in self-sacrificial behavior provide insight into the roots of this longstanding tradition. De Cremer and Tyler (2005) argued that creating intrinsic motivation to pursue an organizational goal is vital to the long term success of organizations, and charisma has been found to play an important role in building this motivation. Studies on surface warfare officers in the United States Navy (Bass & Yammarino, 1988) and the British Royal Navy (Young & Dulewicz, 2006) provide further support for the importance of perceived charisma, closely linking it to measures of a subordinate's overall satisfaction and a superior's performance appraisals.

It should be noted that all soldiers attend a strictly regimented training program upon entering the service and they continue to be exposed to the importance of self-sacrifice at every major leadership school they attend. An argument could be made that this constant reinforcement elevates selfless service to an aspirational goal, which in turn could cause self-sacrificial leader behavior to be perceived as more charismatic. While this explanation makes intuitive sense this explanation fails to account for why similar findings have appeared in academic and business settings that lack the formal emphasis on values like self-sacrifice. The breadth of research findings instead suggests that self-

sacrificial leadership might be seen as an authentic indicator of a leader's charisma, and that the Army's emphasis on this factor is an attempt to reinforce an established leadership tactic.

Although the research literature suggests that self-sacrificial behavior appears across organizational boundaries, there are unique aspects to the military environment that may serve to amplify the effects of self-sacrificial behavior. De Cremer et al. (2006) found that collective identification interacted with self-sacrifice to increase self-esteem in participants, with higher levels of identification resulting in higher levels of self-esteem. Given that members of the Army tend to share strong formal and informal bonds (Kirke, 2010) it is possible that the respondents increased sense of collective identification helped account for the strength of the results.

The results support the theory that when levels of competence are held constant, leader's who engage in self-sacrificial acts are perceived as more charismatic than those who do not. This supports the emphasis the Army places on the concept of selfless service and affirms that subordinates make assessments of their tactical leaders utilizing their actions as well as their words. Ultimately these findings, in combination with the Army's utilization of the 360 degree evaluation tools, could provide future officers with a technique for building stronger and more adept units.

Combat Scenarios

Choi and Mai Dalton's (1999) model of self-sacrifice argued that situational crisis within an organization would amplify positive attributions about a self-sacrificial leader, but their empirical studies failed to find support for this supposition. Halverson et al.

(2004) were strong supporters of contingency based leadership models and argued that the lack of significant findings in relation to crisis might be due in part to methodological errors. Prior research provides support for this line of reasoning, with prior studies identifying transformational leadership (of which self-sacrifice is a component) more strongly linked to encounters requiring maximum performance than to day to day measures (DuBois, Sackett, Zedeck, & Fogli, 1993).

To provide support for a contingency based leadership model Halverson et al. (2005) reexamined whether the existence of an organizational crisis altered how a leader was perceived. Their findings suggested that crisis and self-sacrificial leadership interacted, with self-sacrifice significantly amplifying the charismatic attributions of leaders in crisis situations. Halverson et al.'s interpretation of these findings centered on a subordinates attempt to attribute meaning to a leader's self-sacrificial acts. According to their hypothesis, when leaders engage in personal sacrifice in the pursuit of a worthy cause subordinate's attribute the act to self-sacrifice and beneficial to the group. When no situational crisis is present subordinates are unable to identify a clear need for the leader to commit self-sacrifice, leading them to believe that the leader is motivated by self-interest and the act as inherently manipulative.

The current study examined whether Halverson et al.'s (2004) contingency based findings could be replicated in a military population with direct fire combat substituting for organizational crisis. Although combat has been viewed within the larger rubric of crisis situations, this research was guided in part by Yammarino et al.'s (2010) admonition that the contextual factors present in military operations like combat are

conceptually distinct from non-military environments. It was predicted that the experience of combat would lead to higher attributions of leader's charisma, and the experimental results provided support for this hypothesis. The manipulation of the combat environment resulted in significantly higher attributions of a platoon leader's charisma regardless of the platoon leader's behavior.

These findings provide support for research indicating that the experience of crisis itself increases perceptions of charisma (House et al., 1991) and suggest that the contextual factors present in combat environments may prove to be a subset of crisis situations. This study also provides support for the argument that troubling and difficult times can result in leaders being viewed as exceptionally powerful (Bass, 1990, 1998; Yammarino et al., 2010). Roberts and Bradley (1988) reported a field study that found that a charismatic leader was no longer viewed as charismatic when the crisis ended, a finding that was bolstered when Pillai and Meindl (1998) found that crisis increased whether a leader was viewed as charismatic. The current research provided similar findings to both these studies, reinforcing the concept that crisis situations can increase charismatic leader attributions.

Moskos's (1975) examination of the combat motivations of soldiers in the Vietnam War provides one potential explanation for this phenomenon. According to Moskos the extreme challenges present in combat environments force soldiers to link their personal survival with the maintenance of reciprocal bonds between members of the unit. Following this line of reasoning charismatic perceptions could reflect a soldiers

attempt at insulating themselves from the chaos of the battlefield by reinforcing their belief in their tactical leader.

One hypothesis that was not supported in this research study was that self-sacrifice and combat environments would interact such that self-sacrificial leaders in combat scenarios would be viewed as especially charismatic. Prior research on this interaction has been mixed. Choi and Mai-Dalton (1999) anticipated finding an interaction between crisis and self-sacrificial leadership, believing that the unique demands of a crisis situation would lead subordinates to believe that self-sacrificial behavior was of increased importance. Ultimately, Choi and Mai-Dalton's later research failed to find support for this hypothesized relationship.

Later work by Halverson et al. (2005) reexamined this proposed relationship and found support for an interaction, with self-sacrificial leadership increasing attributions of a leader's charisma only when appearing in conjunction with a crisis situation. Halverson et al. expanded on this finding by suggesting that in the absence of a clear threat to the group participants might assume the selfless action was inherently self-serving. Halverson et al. postulated that the differences between the two studies manipulations of organizational crisis could play a role in the difference between their work and prior research, arguing that Choi and Mai-Dalton's crisis manipulation might have been too powerful. Since combat is an extreme example of an organization crisis, this argument could also be made for the current study. Although this argument has intuitive appeal, it fails to address the fact that combat scenarios are not considered an unusual environment to soldiers. Unlike civilian organizations that are structured to best facilitate routine day

to day events, the Army is designed and organized to facilitate the rigors of combat operations (Army, 2011). The practical realities of this organizational design function are reflected in the study demographics, which indicate that the majority of the respondents reported one or more overseas combat rotations.

Another explanation for these findings stems from work in the leadership literature indicating that charismatic and transformational leadership are not uniformly successful in all situations (Bass & Riggio, 2006). Yammarino et al. (2010) suggested that one factor that could influence how situational variables alter perceptions of leadership style rests in individual sensemaking which is thought to play a particularly important role in ambiguous environments. Keller-Glaze et al. (2008) found support for this concept by conducting research that concluded that sensemaking in a counterinsurgency environment was linked to subordinates overall performance. Yorges et al. (1999) found data suggesting that leader self-sacrifice resulted in different outcomes based on perceptions of the leader's intent. When the sacrifice was perceived as helping the leader, even indirectly, the action was viewed as self-serving.

Another potential explanation for these findings is rooted in causal attributions linked to self-sacrifice. Prior research has indicated that when a self-sacrificial behavior is interpreted as being rooted in a sincere belief it is more likely to be viewed as self-sacrificial (Petty & Wegener, 1998). As soldiers have a common understanding of the rigors of military operations and share a common core of training experiences they may interpret a leader's self-sacrificial actions as aimed at helping the unit. It could be argued that there are far fewer common ties between business associates and even fewer

common experiences shared by undergraduate students. This lack of shared experience could lead to widely oscillating perceptions of why a leader is engaging in a behavior and explain why the inclusion of an unambiguous situational cue (crisis) might disproportionately influence civilian respondents

Implications

Taken as a whole the findings of this research study indicate that self-sacrificial leadership alters soldiers perceptions of their leaders charisma, and that the in extremis environment of combat can also lead to increased attributions of charisma. Prior research has indicated that increased attributions of charisma could provide leaders with increased levels of commitment and lead to increases in reciprocal behavior. Both of these factors are fundamental to the successful completion of military operations, where even fractional advantages can prevent ruination. Empirical research has indicated that self-sacrifice plays an important role in transformational leadership (De Cremer, Mayer, Van Dijke, Bardes, & Schouten, 2009). An extensive body of research has highlighted the importance of transformational leadership in civilian organizations, with studies showing a strong positive correlation between transformational leadership and employee satisfaction, employee commitment, pro-social behavior and organizational performance (Bass, 1998; Bycio, Hackett, & Allen, 1995; De Cremer et al., 2009; De Cremer & van Knippenberg, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996). This body of work has also included multiple research studies illuminating the positive impact of transformational leadership in military organizations, where it has been correlated with

small unit performance, increased efforts from subordinates, and increased motivation (Bass et al., 2003; Dvir et al., 2002).

When viewed holistically, these findings suggest that the longstanding military tradition of leading by personal example and engaging in personal sacrifice play an integral role in how a leader is perceived. It should be noted that these findings make it clear that a leader's intentions aren't enough to trigger these causal attributions, the ultimate measure of whether a leader is willing to engage in self-sacrifice is the very act of sacrifice itself. While the Army inculcates all future leaders with a sense that selfless service is an organizational ideal that all leaders should aspire to, the current research provides evidence that actually engaging in self-sacrificial behavior changes how leaders are perceived by their subordinates. The current findings provide the schoolhouses responsible for teaching the Army's PME with additional tools for reinforcing the importance of self-sacrificial behavior to new company grade officers assessing into military service. While the Army has relied on a professional all-volunteer force for three decades, this pattern of recruitment is a historical aberration when compared to the majority of our country's history. If the Army finds itself reverting to another pattern of recruitment due to a deliberate design or as the natural response to an operational contingency, this research provides another technique for emphasizing the importance of selfless service that doesn't exclusively rely on convincing new leaders that they should subscribe to a longstanding tradition for traditions sake.

The findings also suggest that self-sacrificial leadership might play an important role in the Army's shift to *Auftragstaktik*, commonly referred to as mission command.

Mission command emphasizes the importance of allowing leaders to use their initiative to develop tactical situations, a factor which has enabled small units to maintain a high operational tempo in modern asymmetric battlefields. Although mission command emphasizes the mental agility required for leaders to succeed in complex and rapidly shifting environments it makes the implicit assumption that a leader can successfully execute their strategies. This is no small oversight because the primary advantages of mission command are faster response times and the ability to improvise in ambiguous environments. If a small unit leader is able to properly assess the situation, devise a strategy, but unable motivate their soldiers to rapidly execute the plan they result may be tragic. The current findings suggest that by engaging in self-sacrificial behaviors leaders can help overcome some of this potential friction by increasing positive attributions about the leader.

The results of this study could be further bolstered by empirical data that suggests that leaders that are viewed as charismatic by their subordinates receive better performance evaluation reports from their superiors (Hater & Bass, 1988; Waldman, Bass, & Einstein, 1987). Although the argument can be made that emphasizing the practical utility of engaging in self-sacrifice runs counter to the very spirit of selfless service, this is largely a semantic argument that fails to address that the coin of the realm in combat situations is soldier's very lives. If even a small number of officers who would be resistant to traditional appeals include this behavior as part of their leadership repertoire it could ultimately save lives and allow the unit to successfully complete their assigned mission.

Limitations and Future Recommendations

There were two primary limitations to the current research revolving around the population sample and the research design. The sample was composed of currently serving members of the California National Guard, whose population demographics differ from the overall composition of the regular Army in several ways. More significantly, members of the National Guard generally live and work in civilian communities across the nation. This is a sharp contrast to members of the regular Army who tend to live in and around major bases and training areas in both CONUS and overseas. The relatively small number of Army postings fosters insular communities that some have argued has disconnected the larger American public from a better understanding of the rigors of military life. The geographic dispersion of the citizen-soldiers of the National Guard prevents these findings from being generalized to the larger Army. The second sample limitation is the underrepresentation of females in the Army. The majority of the sample was comprised of members of the combat arms branches, which skewed the gender profile of the sample.

Another limitation of the current research stems from the inherent difficulty in accurately portraying the inherent chaos of a combat environment. As experimental manipulations of military leadership would be ethically unsound due to the catastrophic risks involved, the current study relied on written vignettes. This technique has been widely used within the self-sacrificial leadership literature because it allows for the precise manipulation of both leadership characteristics and environmental variables. The disadvantage of this method is that a written vignette may not address salient aspects of

the natural environment that play a prominent role in how soldiers would actually perceive an actual combat environment. This is a limitation inherent in the design of this study. One way to address this issue in the future would be the use of a more detail rich stimuli like a video vignette or immersive computer simulation. Another method might include longitudinal studies of company grade officers throughout their early careers to see if those that exhibit self-sacrificial behaviors are perceived differently by their subordinates. Although care was taken in the design of this study to protect anonymity, there is the potential that participants provided answers they perceived as socially acceptable (Moorman & Podsakoff, 2011).

This study utilized a contingency model of leadership that examined the ways in which self-sacrificial leadership and a situation variable (combat) altered soldier's perceptions of a company grade officer. Although the findings extended existing research to a new and distinct population, to more fully examine these topics future research is needed to explore the boundaries of the phenomenon. There are several directions this research might take. For instance, other situational factors could be examined to see if they moderate the effect of self-sacrificial behavior on soldier's perceptions of their leaders. These could include the impact of salient factors like time pressure, ambiguous environments, and situations involving ethical dilemmas. Furthermore, research is needed to explore how leader attributes like gender influence the results. Van Knippenberg and Van Knippenberg (2005) reported a main effect of self-sacrifice that was replicated in this study, but the current research didn't examine Van Knippenberg's hypothesized relationship between leader's prototypicality and self-sacrifice. Given the

recent repeal of the combat exclusion policy this line of research could provide important insights into the utility of self-sacrificial behavior and provide a means for overcoming longstanding biases against women in combat.

To enhance the external validity of the findings future experimental studies could include higher fidelity experimental stimuli. This could be accomplished by using a video vignette or computer simulation to better capture self-sacrificial behavior and the nuances of the combat environment. These studies could be further reinforced by the use of field studies. Field research examining company grade officers in field training exercises could provide insight into whether self-sacrificial leadership alters soldier's behaviors and better organizational outcomes.

Implications for Social Change

The transformative power of sacrifice is a uniquely potent theme that resonates across cultures and time, appearing in the myths and cultural imperatives of societies stretching back into the ancient past. In the modern age the singular power of self-sacrifice to bring about a more just and moral destiny for entire nations has been demonstrated by figures like Mahatma Gandhi, Dr. Martin Luther King Jr., and Mother Theresa. The current study's implications for social change are all rooted in the fundamental and long held truth that the very act of engaging in a personal sacrifice in the service of others is a powerful and noble act regardless of where it appears. There are a number of practical ways this study can assist with fostering an awareness of the importance of self-sacrifice and thereby assist with the revitalization of this important facet of moral leadership. The first is by bringing about an awareness of how self-

sacrifice in company grade officers can help insulate soldiers from the psychological traumas of the battlefield. Platoon leaders and company commanders are the first line leaders responsible for planning and leading operations in an environment that is deeply, even monstrously cruel.

Recent advances in technology have provided the illusion that war can be performed with almost aseptic precision, but for the soldier on the battlefield the hallmarks of battle are waste, desolation, and death. This is reflected in part by the Army's ongoing struggle against suicide within the ranks, as well as rates of post traumatic stress disorder that have been called the defining wound of the Iraq and Afghanistan conflicts (Card-Mina, 2011). Charismatic leader attributions have been shown to increase soldier's resistance to the psychological harm that lies in wait in combat environments (Harben, 2009). By providing a practical, realizable technique for increasing these attributions the current research provides another bulwark to protect soldiers from the traumas of war.

The current research could also provide positive social change by helping to shape the curriculum and future training of the next generation of military leaders. By identifying self sacrifice as an organizational imperative these behaviors can be reinforced in the next generation of leaders. This can have a significant impact on the larger culture in two ways. The first relates to the natural turnover rate within the Army officer corps. The largest commissioning source for officers in the Army is the Reserve Officer Training Program (ROTC), which pays a college student's tuition and affiliated costs in exchange for a multi-year service commitment. At the end of this service

commitment many officers choose to reenter the civilian workforce, where their combination of leadership skills and practical experience frequently make them extremely marketable to industry. This natural turnover rate provides a means for the concept of self-sacrifice to cross pollinate a wide swath of U.S. corporations. The other way these findings can influence the larger culture is rooted in one of the foundational principles of the United States Armed Forces, the inviolate doctrine of civilian control of the military. Simply stated this doctrine places the sole responsibility for defining the proper use of military forces firmly within the hands of duly elected political leaders.

Due in part to a lack of personal military experience many recent civilian leader have had to rely on the expertise of their senior military advisors in order to make informed policy decisions. By fostering the importance of self-sacrificial leaders this research could help shape the future military leaders that will in turn inform the decisions of future political leaders. As the gap between the civilian and military spheres continues to grow it is increasingly vital that military leaders be willing to provide honest recommendations about the proper use of force and the irrevocable consequences that flow from these actions, even if it risks their careers.

Conclusion

Combat exists in a world eternally separated from the thousands of years of humanity's slow march toward order, civility and human dignity. It has always been, and will likely always remain a singularly pitiless environment defined by chaos, uncertainty, and misery. Despite the unbearable costs, war has continued unabated across the globe. Despite their lack of military experience it is company grade officers that are invariably

tasked with leading soldiers into these lethal environments. The current investigation explored whether company grade officers would be perceived as more charismatic when they exhibit self-sacrificial behaviors and whether the experience of combat alters these perceptions. Charisma was used as a measure because it has been shown to play an important role in military units, increasing esprit de corps, ethical behavior, and small unit performance. The results indicate that both self-sacrifice and the experience of combat increase attributions of a leader's charisma. These findings are significant because they support existing work in the field and reinforce the Army's longstanding traditions of service. More importantly, these findings provide an impetus for continuing to refine the ways in which the Army trains its junior leaders and the ways in which these ground tactical leaders should execute their responsibilities on the battlefield. The soldiers who have dedicated their lives in the service of this nation deserve no less.

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Appendix A: Invitation Script to Request Soldiers Take Part in the Project

You are invited to take part in a research study on military leadership in a combat environment. All enlisted soldiers in the ranks of Private (E-1) through First Sergeant (E-8) and officers in the ranks of Second Lieutenant (O-1) through Colonel (O-6) who are current members of the California Army National Guard are invited to take part in this study. This research study is not officially endorsed by the California National Guard, the Department of the Army, or the Department of Defense and participation is completely voluntary. This study is available online and will take less than 15 minutes to complete. This research study will protect the anonymity of all participants, the researcher and all other interested parties will not know who elected to participate or how they chose to respond. If you would like to take part in this study please follow this link:

<https://www.surveymonkey.com/s/7R8DMKD>

Appendix B: Demographic Questionnaire

PLEASE BE SURE TO ANSWER THE QUESTIONS SO THAT YOU ARE ROUTED TO THE RIGHT FOLLOW-UP QUESTIONS. The information provided below will not be used to identify you. It is used by a computer to identify groups of people (e.g., Male, Female, Officer, Enlisted, etc.). All of these records will remain confidential. Any reports that may be published will not include any identifying information on the participants in this study. Please click on the appropriate category.

1. I am

1 = Male 2 = Female

2. Are you Spanish/Hispanic/Latino?

1 = Yes 2 = No

3. What is your race? Mark one or more to indicate what you consider yourself to be.

1 = American Indian or Alaska Native

2 = Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)

3 = Black or African American

4 = Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

5 = White or Caucasian

6 = Other (a text box will be provided to capture their response)

4. My age is

1 = 18 - 21

2 = 22 - 30

3 = 31 - 40

4 = 41 - 50

5 = 51 or over

5. I am a(n):

1 = Military officer

2 = Warrant officer

3 = Enlisted

6. What is your pay grade (for example; E4-E5, O4-O5)?

1 = 1 - 2

2 = 3 - 4

3 = 5 - 6

4 = 7 - 8

5 = 9 - 10

7. How many years of service have you completed in the Army National Guard (including enlisted, warrant officer, and/or commissioned officer time)?

Less than 1 yr

1 yr

2 yrs

3 yrs

4 yrs

5 yrs

6 yrs

7 yrs

8 yrs

9 yrs

10 yrs

11 yrs

12 yrs

13 yrs

14 yrs

15 yrs

16 yrs

17 yrs

18 yrs

19 yrs

20 yrs

21 yrs

22 yrs

23 yrs

24 yrs

25 yrs

26 yrs

27 yrs

28 yrs

29 yrs

30 yrs

8. Have you deployed OCONUS (Outside the Continental United States)?

1 = I have not deployed OCONUS

2 = I have deployed once OCONUS

3 = I have deployed twice OCONUS

4 = I have deployed OCONUS three or more times

9. Have you been deployed to a combat theater (Iraq/Afghanistan/Horn of Africa/Trans-Sahara)?

1 = I have NOT deployed to a combat theater.

2 = I have deployed to a combat theater.

10. My primary Military Occupational Specialty (MOS) is:

- Armor
- Artillery
- Aviation
- Engineer
- Infantry
- Military Police
- Military Intelligence
- Quartermaster
- Transportation
- Other and a text box will be provided to capture their response

Appendix C: Vignettes

No-Combat/No Self-Sacrifice Vignette 1

Alpha Company is currently deployed to Camp Phoenix, Afghanistan and tasked with conducting combat logistics patrols throughout the Kandahar region. Alpha Company has a strong reputation, and was awarded numerous citations for performance under fire during their last deployment. 1LT Koble is the Platoon Leader for Alpha Company's 1st Platoon. He is a recent graduate of a prestigious university, and was the distinguished honor graduate of his officer basic course. NCOs throughout Alpha Company feel that 1LT Koble's experience fits well with the Company's current mission. He is extremely thorough when planning missions, and possesses outstanding technical expertise.

On your first mission with the platoon, you are assigned a seat in 1LT Koble's MRAP during a combat patrol. The patrol moves out on time, and the first part of the mission is uneventful. Although the temperature is close to 100 degrees, the MRAP air conditioner keeps the cabin relatively cool. As the convoy passes a small collection of homes, you hear radio traffic from the lead vehicle commander advising 1LT Koble that an Afghanistan local is attempting to flag down the convoy. 1LT Koble picks up the radio and orders all vehicles in the convoy to come to a security halt and conduct local security. Once the convoy sets in security 1LT Koble orders your team to dismount and find out why the local Afghani flagged down the convoy. Your team moves to the site of the Afghani and your team leader and the interpreter converse with the Afghani. Your team leader radios back to 1LT Koble and reports that the Afghan is a member of the Afghani Police Force and would like to speak with the commander. 1LT Kolbe tells your team

leader that he is going to stay in the MRAP, and to copy down any pertinent information so the convoy can continue mission. After a heated discussion between your team leader and the Afghani that lasts several more minutes your team moves back to the MRAP and remounts the vehicle. Once everyone reports that they are “up” 1LT Koble instructs the convoy to continue movement to the patrol base.

No-Combat/Self-Sacrifice Vignette 2

Alpha Company is currently deployed to Camp Phoenix, Afghanistan and tasked with conducting combat patrols throughout the Kandahar region. Alpha Company has a strong reputation, and was awarded numerous citations for performance under fire during their last deployment. 1LT Koble is the Platoon Leader for Alpha Company’s 1st Platoon. He is a recent graduate of a prestigious university, and was the distinguished honor graduate of his officer basic course. NCOs throughout Alpha Company feel that 1LT Koble’s experience fits well with the Company’s current mission. He is extremely thorough when planning missions, possesses outstanding technical expertise, and recently turned down a promotion in order to complete the combat rotation with his platoon. On your first mission with the platoon, you are assigned a seat in 1LT Koble’s MRAP during a combat patrol. The patrol moves out on time, and the first part of the mission is uneventful. Although the temperature is close to 100 degrees, the MRAP air conditioner keeps the cabin relatively cool. As the convoy passes a small collection of homes, you hear radio traffic from the lead vehicle commander advising 1LT Koble that an Afghanistan local is attempting to flag down the convoy. 1LT Koble picks up the radio

and orders all vehicles in the convoy to come to a security halt and conduct local security. Once the convoy sets in security 1LT Koble orders your team to follow him, exits the MRAP and moves towards the Afghani with the platoon interpreter. Once you reach the Afghani who flagged down the convoy you pull local security, while 1LT Koble starts conversing with the Afghani Policeman. After a heated discussion between 1LT Koble and the Afghani that lasts several more minutes your team moves back to the MRAP and remounts the vehicle. Once everyone reports that they are “up” 1LT Koble instructs the convoy to continue movement to the patrol base.

Combat/No Self-Sacrifice Vignette 3

Alpha Company is currently deployed to Camp Phoenix, Afghanistan and tasked with conducting combat patrols throughout the Kandahar region. Alpha Company has a strong reputation, and was awarded numerous citations for performance under fire during their last deployment. 1LT Koble is the Platoon Leader for Alpha Company’s 1st Platoon. He is a recent graduate of a prestigious university, and was the distinguished honor graduate of his officer basic course. NCOs throughout Alpha Company feel that 1LT Koble’s experience fits well with the Company’s current mission. He is extremely thorough when planning missions, and possesses outstanding technical expertise. On your first mission with the platoon, you are assigned a seat in 1LT Koble’s MRAP during a combat patrol. The patrol moves out on time, and the first part of the mission is uneventful. Although the temperature is close to 100 degrees, the MRAP air conditioner keeps the cabin relatively cool. As the convoy passes a small collection of homes, you

hear radio traffic from the lead vehicle commander advising 1LT Koble that an Afghanistan local is attempting to flag down the convoy. 1LT Koble picks up the radio and orders all vehicles in the convoy to come to a security halt and conduct local security. As the convoy slows the lead vehicle is engulfed by a large explosion and is pushed into a ditch on the side of the road. As 1LT Koble attempts to raise the vehicle on the radio the convoy is hit with small arms fire from a nearby hilltop. 1LT Koble orients the patrols gunners onto the enemy's position and sends up a contact report. After failing to reach the lead vehicle on the radio he orders your team to move to the lead vehicle to check on the soldiers while he continues to send up situation reports. Your team dismounts the vehicle and moves to the damaged MRAP to check on the soldiers, who are shaken but unhurt. Once the convoy gains fire supremacy, the enemy breaks contact and disappears into the rugged terrain. 1LT Koble orders the trail vehicle to pull the damaged vehicle out of the ditch and remains in his MRAP to call up situation reports. Once the damaged MRAP is back on the road he orders the convoy to quickly move out of the area.

Combat/Self-Sacrifice Vignette 4

Alpha Company is currently deployed to Camp Phoenix, Afghanistan and tasked with conducting combat patrols throughout the Kandahar region. Alpha Company has a strong reputation, and was awarded numerous citations for performance under fire during their last deployment. 1LT Koble is the Platoon Leader for Alpha Company's 1st Platoon. He is a recent graduate of a prestigious university, and was the distinguished

honor graduate of his officer basic course. NCOs throughout Alpha Company feel that 1LT Koble's experience fits well with the Company's current mission. He is extremely thorough when planning missions, possesses outstanding technical expertise, and recently turned down a promotion in order to complete the combat rotation with his platoon.

On your first mission with the platoon, you are assigned a seat in 1LT Koble's MRAP during a combat patrol. The patrol moves out on time, and the first part of the mission is uneventful. Although the temperature is close to 100 degrees, the MRAP air conditioner keeps the cabin relatively cool. As the convoy passes a small collection of homes, you hear radio traffic from the lead vehicle commander advising 1LT Koble that an Afghanistan local is attempting to flag down the convoy. 1LT Koble picks up the radio and orders all vehicles in the convoy to come to a security halt and conduct local security. As the convoy slows the lead vehicle is engulfed by a large explosion and is pushed into a ditch on the side of the road. As 1LT Koble attempts to raise the vehicle on the radio the convoy is hit with small arms fire from a nearby hilltop. 1LT Koble immediately orients the patrols gunners onto the enemy's position and sends up a contact report. After failing to reach the lead vehicle on the radio he orders your team to follow him. 1LT Koble dismounts the vehicle and personally moves to the damaged MRAP to check on his soldiers, who are shaken but unhurt. Once the convoy gains fire supremacy the enemy breaks contact and disappears into the rugged terrain. 1LT Koble orders the trail vehicle to pull the damaged vehicle out of the ditch and returns to his MRAP to call up situation reports. Once the damaged MRAP is back on the road he orders the convoy to quickly move out of the area.

Appendix D: Scale Of Attributed Charisma

The questions in this scale ask you about your feelings about 1LT Koble's the Platoon Leader described in the preceding vignette.

1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree

4 = Neither Disagree or Agree

5 = Slightly Agree 6 = Agree 7 = Strongly Agree

His behavior shows vision for the Company	1	2	3	4	5	6	7
He is charismatic	1	2	3	4	5	6	7
He is not honorable	1	2	3	4	5	6	7
I respect him	1	2	3	4	5	6	7
He motivates me to be loyal to the Company.	1	2	3	4	5	6	7
He makes me proud to be associated with him.	1	2	3	4	5	6	7

Appendix E: Self-Sacrifice Manipulation Check

The questions in this scale ask you about the preceding vignette.

1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree

4 = Neither Disagree or Agree

5 = Slightly Agree 6 = Agree 7 = Strongly Agree

1LT Koble set an example of sacrifice 1 2 3 4 5 6 7

1LT Koble has voluntarily given up their
legitimate privileges 1 2 3 4 5 6 7

1LT Koble has voluntarily given up their
benefits and bonuses 1 2 3 4 5 6 7

Appendix F: Combat Manipulation Check

The questions in this scale ask you about the preceding vignette.

1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree

4 = Neither Disagree or Agree

5 = Slightly Agree 6 = Agree 7 = Strongly Agree

1 st Platoon was engaged in direct combat	1	2	3	4	5	6	7
1 st Platoon repelled the enemy assault	1	2	3	4	5	6	7
1st Platoon was exposed to hostile fire	1	2	3	4	5	6	7
There was a high probability that 1st Platoon1 could have engaged in direct physical contact with the enemy		2	3	4	5	6	7

Appendix G: Research Proposal Concurrence – Director, Behavioral Health

REPLY TO
ATTENTION OFDEPARTMENTS OF THE ARMY AND AIR FORCE
JOINT FORCE HEADQUARTERS, CALIFORNIA NATIONAL GUARD
9800 GOETHE ROAD - P.O. BOX 269101
SACRAMENTO, CALIFORNIA 95826-9101

NGCA-JSD-MD

16 January 2013

MEMORANDUM FOR DIRECTOR, CALIFORNIA NATIONAL GUARD JOINT STAFF

SUBJECT: Research Proposal Concurrence

1. I have reviewed MAJ Danjel Bout's dissertation research proposal entitled "The Impact of Company Grade Officer Self-Sacrificial Behavior on Subordinates Assessments of Leader Charisma" and I believe the research could provide potential benefits to the California National Guard.
2. I recommend the California National Guard provide preliminary approval for MAJ Bout's research to move forward to the Army National Guard Office of the Chief Surgeon and the Army Human Research Protections Office for further approval.
3. Point of contact for this memorandum is LTC Eric Frye at (916) 854-3019.

A handwritten signature in black ink, appearing to read "Eric Frye".

ERIC FRYE
LTC, MS CAARNG
Director, Behavioral Health

Appendix H: Research Proposal Concurrence – Chief of Staff



DEPARTMENTS OF THE ARMY AND THE AIR FORCE
JOINT FORCE HEADQUARTERS
OFFICE OF THE ADJUTANT GENERAL – CALIFORNIA NATIONAL GUARD
9800 GOETHE ROAD - P.O. BOX 269101
SACRAMENTO, CALIFORNIA 95826-9101

NGCA-COS

16 October 2013

MEMORANDUM FOR Army National Guard Office of the Chief Surgeon

SUBJECT: Research Proposal Concurrence

1. This memorandum serves as approval for MAJ Danjel Bout, a Doctoral Student in Walden University's Organizational Psychology program to move forward with the Army National Guard extramural proposal evaluation process for his research entitled "The Impact of Company Grade Officer Self-Sacrificial Behavior on Subordinates Assessments of Leader Charisma".
2. The California National Guard reserves the right to withdraw support from this study at any time if circumstances warrant a shift in policy.
3. Final approval to conduct this research is contingent on the researcher successfully gaining approval from the Army Human Research Protections Office.
4. Point of contact for this memorandum is Lt Col Noel Lipana at (916) 854-3500.

LAURA L. YEAGER
COL, AV CAARNG
Chief of Staff, Joint Staff

Appendix I: SPSS Syntax

**** Profile of Sample

```
FREQUENCIES VARIABLES = Gender Hispanic Native Asian Black
Hawaiian White Other Age OffEnl OffGrade EnlGrade WGrade YrsService
OCONUS CMBT MOS MOSOther
/ORDER = ANALYSIS.
```

*** Manipulation Check for self-sacrificial behavior

```
RELIABILITY
/VARIABLES=Sacrifice1 Sacrifice2 Sacrifice3
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE CORR
/SUMMARY=TOTAL.
```

```
ONEWAY SacrificeT BY sacrifice
/STATISTICS DESCRIPTIVES HOMOGENEITY
/MISSING ANALYSIS.
```

*** Manipulation Check for combat scenario

```
RELIABILITY
/VARIABLES=Combat1 Combat2 Combat3 Combat4
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE CORR
/SUMMARY=TOTAL.
```

```
ONEWAY CombatT BY scenario
/STATISTICS DESCRIPTIVES HOMOGENEITY
/MISSING ANALYSIS.
```

*** Reversing the Charisma Item 3

```
RECODE Charisma3Rev (7=1) (6=2) (5=3) (4=4) (3=5) (2=6) (1=7)
INTO Charisma3.
VARIABLE LABELS Charisma3 'Koble is Honorable'.
EXECUTE.
```

*** Reliability Analysis

```
RELIABILITY
/VARIABLES=Charisma1 Charisma2 Charisma3 Charisma4 Charisma5
Charisma6
/SCALE('ALL VARIABLES') ALL
```

```

/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE CORR
/SUMMARY=TOTAL.

**** Construction of Dependent Variable (Perceived Charisma)

COMPUTE charismaT = Charisma1 + Charisma2 + Charisma3 + Charisma4
+ Charisma5 + Charisma6.
EXECUTE.
VARIABLE LABELS charismaT 'Perceived Charisma Total Score'.
EXECUTE .

**** Checking for Outliers

DESCRIPTIVES VARIABLES=charismaT
/SAVE
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.

**** Checking Parametric Assumptions

DESCRIPTIVES VARIABLES=ZcharismaT
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.

**** Observing Missing Data

FREQUENCIES VARIABLES=charismaT
/ORDER=ANALYSIS.

*** Test of Hypothesis through Factorial ANOVA

UNIANOVA charismaT BY scenario sacrifice
/METHOD=SSTYPE(3)
/INTERCEPT=INCLUDE
/PLOT=PROFILE(scenario*sacrifice sacrifice*scenario)
/EMMEANS=TABLES(OVERALL)
/EMMEANS=TABLES(scenario)
/EMMEANS=TABLES(sacrifice)
/EMMEANS=TABLES(scenario*sacrifice)
/PRINT=OPOWER ETASQ HOMOGENEITY DESCRIPTIVE
/CRITERIA=ALPHA(.05)
/DESIGN=scenario sacrifice scenario*sacrifice.

*** Error Bar Plots

GRAPH
/ERRORBAR(CI 95)=charismaT BY scenario.

GRAPH
/ERRORBAR(CI 95)=charismaT BY sacrifice.

```

Danjel Bout

3230 Ahwahnee Way

Cool, CA 95614

[916.678.1184](tel:916.678.1184)

danjel.bout@waldenu.edu

EDUCATION

PhD Organizational Psychology2013

Walden University, Minneapolis, Minnesota

Dissertation Topic: The Impact of Company Grade Officer Self-Sacrificial Behavior on Subordinate Assessments of Leader Charisma

Dissertation Advisor: Dr. Kizzy Parks

Master of Arts - Psychology2006

University of California, Davis, California

Dissertation Topic: The Effect of Threats to the Attachment System on Physical Risk Assessments

Dissertation Advisor: Dr. Albert Harrison

Bachelor of Arts – Psychology1999

California State Polytechnic University, Pomona, California

OTHER EXPERIENCE

Deputy State Military Coordination Officer2012

Serves as the primary point of contact between the California Office of Emergency Services (Cal OES) Secretary and the California National Guard (CNG) Commanding General for purposes of strategic coordination on major interagency initiatives. Responsible for coordinating with appropriate Cal OES Division leadership on major projects, including but not limited to, catastrophic planning, intelligence analysis enhancement, development of Emergency Functions, communication protocols, operational continuity planning and other factors relative to the CNG response to assigned and potential Civil Support operations during emergencies and disasters.

Battalion Operations Officer2010-2013

Battalion Operations Officer (S3) for a 812 Soldiers Infantry Rifle Battalion, consisting of 3 Infantry Rifle Companies, 1 Weapons Company, 1 Forward Support Company, and 1 Headquarters and Headquarters Company capable of world-wide deployment, and of conducting combat and counterinsurgency (COIN) operations upon arrival. Responsible for assisting the commander in the training and tactical employment of the battalion in full spectrum and COIN operations with a focus on urban, limited visibility, precision as well as combined operations with Host Nation Security Forces. Principal staff officer responsible for the planning and execution of all operations, task organizing the force, operational security and supervising the execution of the

Battalion training strategy. Key staff officer in driving the development and execution of the Battalion's civil support responsibilities.

COMMUNITY SERVICE

	2006-Present
Ride to Recovery	2010-Present
Wounded Warriors Foundation	

PROFESSIONAL AFFILIATIONS

	1997-Present
Member, Psi Chi	2008-Present
Member, American Psychological Association	2008-Present
Member, Society for Industrial and Organizational Psychology	2008-Present
Member, Division 19 Military Psychology	

REFERENCES

Secretary Mark Ghilarducci
Secretary, Governors Office of Emergency Services
Mather, CA 95655
[\(916\) 845-3345](tel:9168453345)

Brigadier General Matthew P. Beevers
Deputy Adjutant General
Sacramento, CA 95758
[\(916\) 854-3500](tel:9168543500)