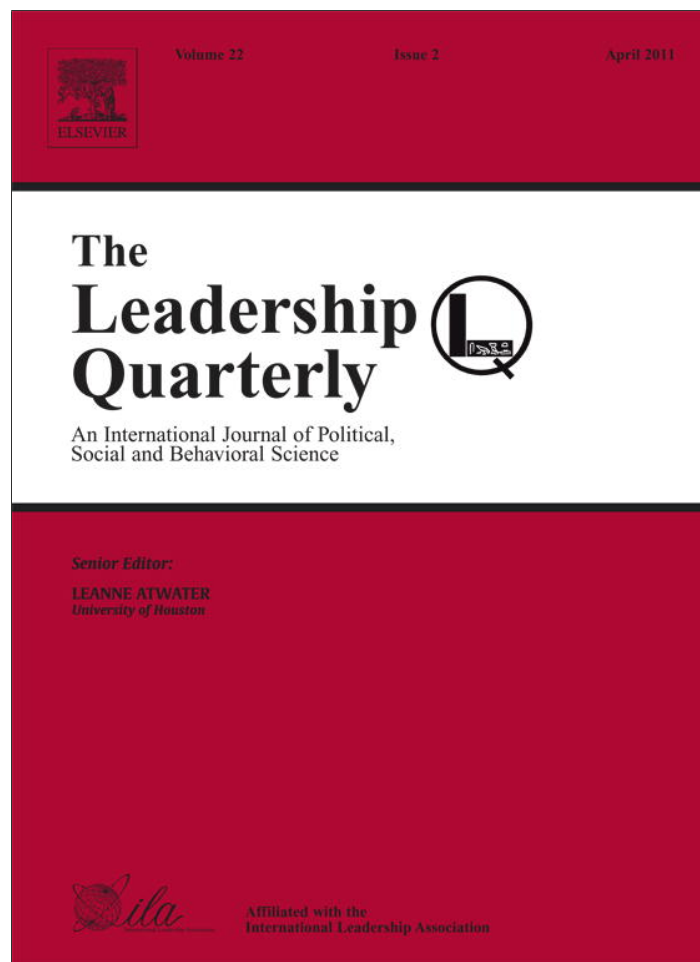




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Impact of spiritual leadership on unit performance

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ABSTRACT

Issues regarding workplace spirituality have received increased attention in the organizational sciences. The implications of workplace spirituality for leadership theory, research, and practice make this a fast growing area of new research and inquiry by scholars. The purpose of this research was to test a dynamic relationship between spiritual leadership and spiritual well-being (i.e., a sense of calling and membership), and key organizational outcomes in a sample of emerging military leaders. Using structural equation modeling (SEM), results revealed a positive and significant relationship between spiritual leadership and several unit-level outcomes, including organizational commitment and four measures of performance. These relationships were explained or mediated by spiritual well-being. Implications for research and practice are discussed.

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1. Introduction

A person's spirit is the vital principle or animating force traditionally believed to be the intangible, life affirming energy in oneself and all human beings (Anderson, 2000). It denotes a striving for values and beliefs that transcend physical existence (Maddock & Fulton, 1998). Now people, as part of their spiritual journey, are struggling with what this force means for their work (Mitroff & Denton, 1999). Some are calling this a megatrend or 'a spiritual awakening in the American workplace' (Aburdene, 2005; Garcia-Zamor, 2003). Many question why this interest in spirituality is occurring. Although there are many arguments, one viable reason is that society seeks spiritual solutions to ease tumultuous social and business changes (Cash, Gray, & Road, 2000). Others propose that global changes have brought a growing social spiritual consciousness (Duchon & Plowman, 2005; Inglehart, 1997). Indeed, Duchon and Plowman (2005, p. 825) state that ignoring the spirit at work may mean "ignoring a fundamental feature of what it means to be human". Fry and Slocum (2008) argue that a challenge facing organizations today is the need to develop new business models based on spiritual leadership that accentuate employee well-being, sustainability and social responsibility without sacrificing performance.

As the interest in workplace spirituality and its relationship to leadership grows, research is needed to understand the ramifications of spiritual leadership and its relationship to key unit-level outcomes. Specific to the current study, the military has recently intensified its efforts to investigate the role of the human spirit in military leadership and its influence on soldier moral and character development and their implications for unit success (Brinsfield & Baktis, 2005; Sweeney, Hannah, & Snider, 2007). The purpose of this research is to aid in investigating this critical link by studying spiritual leadership at a military academy. We

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explore the basic proposition that spiritual leadership positively influences cadets' organizational commitment and various performance domains at the unit level. On the basis of our findings, we offer suggestions for spiritual leadership theory, research, and practice.

2. Theory and hypothesis development

2.1. Workplace spirituality

Giacalone and Jurkiewicz (2003) defined workplace spirituality as “a framework of organizational values evidenced in the culture that promotes employees' experience of transcendence through the work process, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy” (p. 13). This sense of transcendence—of having a sense of meaning or being called (vocationally) through one's work—and a need for social connection or membership are seen as necessary for providing the foundation for any theory of workplace spirituality. Workplace spirituality and spiritual leadership must therefore be comprehended within a holistic or system context of interwoven cultural and personal values. Also, to be of benefit to leaders and their organizations, any definition of workplace spirituality must demonstrate its utility by impacting performance, turnover, productivity and other relevant effectiveness criteria (Sass, 2000).

Scholars have noted a rising interest in workplace spirituality (e.g., Giacalone & Jurkiewicz, 2003; Pfeffer, 2003). This interest is not surprising as it is well established in other disciplines in the social and physical sciences that, almost universally, people have the intrinsic drive and motivation to learn and find meaning in their work, and to be a member of a group in which they feel valued in return for their contribution to the group's performance (Giacalone & Jurkiewicz, 2003). Indeed, people who work for organizations that they consider as being spiritual are less fearful, more ethical, and more committed (Eisler & Montouri, 2003).

There is also evidence that workplace spirituality programs not only lead to beneficial personal outcomes such as increased joy, peace, serenity, job satisfaction and commitment; but that they also deliver improved productivity, reduce absenteeism and turnover, and promote higher levels of organizational performance (Duchon & Plowman, 2005; Elm, 2003; Fry, 2005a; Garcia-Zamor, 2003; Giacalone & Jurkiewicz, 2003; Reder, 1982).

2.2. Religion versus spirituality

It is important, however, to note that there is a distinction between spirituality and religion. Religion is concerned with a theological system of beliefs, ritual prayers, rites and ceremonies and related formalized practices and ideas. Spirituality, instead, is concerned with qualities of the human spirit. This includes positive psychological concepts, such as love and compassion, patience, tolerance, forgiveness, contentment, personal responsibility, and a sense of harmony with one's environment (Snyder & Lopez, 2008). Spirituality is the pursuit of a vision of service to others; through humility as having the capacity to regard oneself as an individual equal but not greater in value to other individuals; through charity, or altruistic love; and through veracity, which goes beyond basic truth-telling to engage one's capacity for seeing things exactly as they are, thus limiting subjective distortions. From this perspective, spirituality is necessary for religion, but religion is not necessary for spirituality. Consequently, workplace spirituality can be inclusive or exclusive of religious theory and practice (Fry, 2003).

2.3. The military and the human spirit

We propose that spiritual leadership may be particularly important in promoting effectiveness in military units. This importance stems from the need for building spiritual well-being for the unit to bear the physical and psychological burdens of military service, often austere conditions, separation from family, and other physical and psychological strains (Brinsfield & Baktis, 2005; Sweeney et al., 2007). In his treatise based on extensive personal observations of combat leadership in World War II, military historian SLA Marshall discusses the important role of the human spirit in fostering unit cohesion and effectiveness a total of 71 times (Department of the Army, 1950). For example, he states “For the group to feel a great spiritual solidarity, and for its members to be bound together by mutual confidence and the satisfactions of a rewarding comradeship, is the foundation of great enterprise” (p. 70).

The army understands the importance of developing the human spirit in soldiers and their leaders. For example, West Point's formal leader development system includes six domains of development, one of which is specifically called the *human spirit* (West Point, 2002). This document states that, “A cadet's spirituality—that vital, energizing force or essence at the core of each person's self—serves as a well-spring of individual identity, as the core of personal values and ethics, and provides meaning to an evolving worldview” (p. 27). In presenting a model of the human spirit for the military, Sweeney et al. (2007, p. 59) state that, “Soldiers' who have strong, indomitable spirits can face the unimaginable dangers, horrors, and hardships of combat and still persevere to complete the mission. Indeed, it is the human spirit that drives soldiers to self-sacrifice and to prevail.” Further, the Army's future concept for developing soldiers and teams includes the human spirit as a specific facet of development (DA, 2008b).

2.4. Spiritual leadership theory

A special issue on spiritual leadership in 2005 in *The Leadership Quarterly* served as a vehicle for advancing the field of spiritual leadership as a focused area of inquiry within the broader context of workplace spirituality (Fry, 2005b). In that issue, Dent, Higgins, and Wharff's (2005) qualitative review of 87 articles led them to propose that there is a clear consistency between

spiritual values and practices and leadership effectiveness. In a second review, Reave (2005) argues that values that have long been considered spiritual ideals, such as integrity, honesty, and humility, have an effect on leadership success.

A theme emerged from the special issue suggesting that workplace spirituality is nourished by *calling or transcendence of the self* within the context of a *community* based on the values of altruistic love. This collection of articles suggested that satisfying these spiritual needs in the workplace positively influences human health and psychological well-being and forms the foundation for spiritual leadership. Further, this literature suggested that by tapping into these basic needs, spiritual leadership can produce follower trust, intrinsic motivation, and commitment that is necessary to optimize human well-being, social responsibility, and organizational performance.

Spiritual leadership can thus be viewed as an emerging construct within the broader context of workplace spirituality that taps into organization members' needs for transcendence and connection, to intrinsically motivate oneself and others and satisfy fundamental needs for spiritual well-being through calling and membership. Based on the prior work of Fry (2003, 2005a), a general model of spiritual leadership is given in Fig. 1. As shown, spiritual leadership emerges from the interaction of altruistic love, vision, and hope/faith in organizational members. The emergence of spiritual leadership then taps into the fundamental needs of both leader and followers for their spiritual well-being through enhancing their sense of calling toward the unit and its goals and vision and a sense of membership with the group. As shown, spiritual well-being (i.e., calling and membership) then serves to foster higher levels of organizational commitment, productivity, and performance.

2.4.1. Spiritual leading versus spiritual leadership

An important distinction we make in theorizing spiritual leadership is in differentiating leading and leadership. In the case of leader development, the emphasis is typically on individual knowledge, and skills and abilities associated with a formal leadership role, as well as the directional influence of leaders on followers (Day, 2000). In theorizing spiritual *leadership*, we focus on the collective social influence process that engages everyone and enables groups of people to work together in meaningful ways (Day, 2000). Spiritual leadership emphasizes this less leader-centric approach, focusing on engaging all group members to meet spiritual needs and enhance organizational commitment and performance. In this way, each person exercising positive influence enhancing the group's calling, membership, and performance is considered a leader. Spiritual leadership is thus both a cause and effect as group members interact and various formal and informal leaders in the group emerge (Drath & Palus, 1998).

2.4.2. Emergence and unit level of analysis

Based on the distinction of leadership from leading, we consider spiritual leadership to be an emergent construct in groups. Indeed, based on the work of Rousseau (1985) and Klein, Dansereau, and Hall (1994), and more recently by Yammarino, Dionne, Chun, and Dansereau (2005), there is a growing understanding that leadership is a multilevel influence process including followers, leaders, peers, and emergent collective dynamics. Consistent with this multilevel approach, we extend prior spiritual leadership research conducted at the individual level (e.g., Fry, Vitucci, & Cedillo, 2005) to the group level of analysis. A central tenet of spiritual leadership is that group members are intrinsically motivated by fostering a shared vision and altruistic values that (1) creates hope/faith in the vision and (2) taps into the group's fundamental spiritual needs for purpose or calling and interconnection or membership (Fry, 2003, 2005a, 2008). It is through these positive group interactions that an emergent process occurs where *individual perceptions* of spiritual leadership can over time form *group perceptions* of spiritual leadership.

Kozlowski and Klein (2000, p. 55) state that "a phenomenon is emergent when it originates in the cognition, affect, behaviors, or other characteristics of individuals, is amplified by their interactions, and manifests as a higher-level, collective phenomenon." Concerning spiritual leadership, over time these individuals would begin to form shared or compatible mental models (Klimoski & Mohammad, 1994; Kozlowski & Klein, 2000) of altruistic love, vision, and hope/faith of the group, thereby increasing the group's sense of calling and membership, and ultimately influence each other toward increasingly greater levels of commitment and performance. For example, as members approach each other with patterns of altruistic love, over time they would increase each

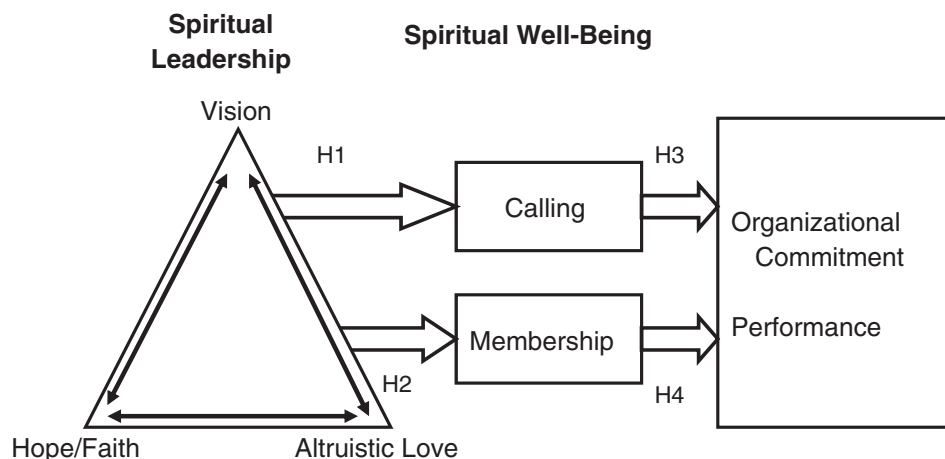


Fig. 1. Model of spiritual leadership.

member's sense of membership as well as reinforce future altruism in others. Altruism would likely become a shared mental model and 'the way we treat people around here'. Indeed such actors serve as prototypes that represent a form of idealized behavior that members of the organization would come to identify with over time (Hogg, 2001; Shamir, House, & Arthur, 1993). This process would support Duchon and Plowman's (2005) position that nurturing the human spirit increases a collective climate of trust.

In sum, spiritual leadership is an emergent phenomenon occurring in a group of which formal leaders are part. As leadership is multi-directional where followers influence their leader as well as each other (e.g., Dvir & Shamir, 2003; Gardner & Avolio, 1998; Lord, Brown, & Freiberg, 1999; Shamir et al., 1993), we submit that examining spiritual leadership properly requires examining its mechanisms at the unit level of analysis. We suggest this to be especially true in studying spiritual leadership in highly interdependent military units.

2.5. Spiritual leadership dimensions

Having set the foundations of this collective process, we now briefly discuss each of the spiritual leadership dimensions and their relationships shown in Fig. 1. We refer interested readers to Fry (2003, 2008) for more elaborate discussions of these constructs.

2.5.1. Vision

Vision became an important topic in the leadership literature in the 1980s as leaders were forced to pay greater attention to the future direction of their organizations due to intense global competition, shortened development cycles for technology, and strategies becoming more rapidly outdated by competition (Conger & Kanungo, 1998). Vision refers to "a picture of the future with some implicit or explicit commentary on why people should strive to create that future" (Kotter, 1996, p. 68). Vision serves the three important functions of clarifying the general direction of change, simplifying the multitude of more detailed decisions, and helping to quickly and efficiently coordinate actions. A powerful vision has broad appeal, defines the unit's destination and journey, reflects high ideals, gives meaning to work, and encourages hope and faith (Daft & Lengel, 1998; Nanus, 1992). In small military units that must have high levels of task cohesion, vision is central to achieving unity of effort (DA, 2008a).

2.5.2. Altruistic love

For spiritual leadership, altruistic love is defined as a sense of wholeness, harmony, and well-being produced through care, concern, and appreciation for both self and others (Fry, 2003). There are great emotional and psychological benefits from separating love, or care and concern for others, from need, which is the essence of giving and receiving unconditionally. Both the medical and positive psychology fields have found that love has the power to overcome the negative influence of destructive emotions such as fear and anger (Allen, 1972; Jones, 1995; Seligman & Csikszentmihalyi, 2000). Underlying this definition are values such as integrity, patience, kindness, forgiveness, acceptance, gratitude, humility, courage, trust, loyalty, and compassion. As a component of organizational culture, altruistic love defines the set of values, assumptions, and ways of thinking considered to be morally right that are shared by group members and taught to new members (Klimoski & Mohammad, 1994; Schein, 2004). The military has a tradition of intensely strong bonds forged between soldiers in small units (DA, 1950). Noting this, the Army Human Dimension concept states that "Service to the Nation alone is seldom compelling enough to build and sustain such faith [to sacrifice]. Indeed it is more often a commitment to fellow Soldiers that encourages a Soldier to risk everything" (p. 59).

2.5.3. Hope/faith

Hope is a desire with expectation of fulfillment. Faith adds certainty to hope. It is a firm belief in something for which there is no empirical evidence. It is based on values, attitudes, and behaviors that demonstrate certainty and trust that what is desired and expected will come to pass. People with hope/faith possess clarity of where they are going, how to get there, and are willing to face opposition and endure hardships in order to achieve their goals (MacArthur, 1998). Hope/faith is thus the source for the conviction that the organization's vision, purpose, and mission will be fulfilled. Often the metaphor of a race is used to describe faith working or in action, comprised of the vision and expectation of reward or victory and the joy of the journey of preparing for and running the race itself (MacArthur, 1998). Discussing the importance of faith in soldiers, Sweeney et al. (2007) state that "faith is critical because it provides the direction and will to persist in the continuous, often arduous, journey of life and the trust and hope that the journey will produce a life worth living" (p. 33).

2.5.4. Spiritual leadership as a formative construct

Based on the collective emergent processes of *leadership* discussed earlier, spiritual leadership emerges through building altruistic love between group members in pursuit of a common vision. We propose that altruistic love creates the belief and trust necessary for hope/faith and is the source of self-motivation for doing the work; and from which active faith in a vision is fueled. Hope/faith adds belief, conviction, trust, and action for performance of the work to achieve the unit vision. The mechanisms of this complex system in producing spiritual leadership in a group, however, cannot be adequately deconstructed, lending toward a formative versus reflective construct. In a formative construct, causal action flows from the indicators to create the composite variable (Bollen & Lennox, 1991).

We suggest the mechanisms driving the interaction of spiritual leadership variables comprise an emergent intrinsic motivation process. Intrinsic motivation is defined as interest and enjoyment of an activity for its own sake and is associated with active engagement in tasks that provide an individual's basic need for competence, autonomy, and relatedness (Ryan & Deci, 2000; Valas & Slovik, 1993). Intrinsic motivation at work can also occur through goal identification where individuals have internalized into

their own value systems the vision and values of the unit (Galbraith, 1977). We propose that it is through this interactive process in spiritual leadership that behaviors based in altruistic love and perceived to be instrumental to vision and goal attainment acquire value and become intrinsically rewarding.

Beyond the theoretical associations, prior research showed that the three core dimensions are highly correlated (Fry et al., 2005). These findings suggest that a higher order factor could be extracted from the correlations among the three dimensions, and that this common factor could be an important positive predictor of organizational commitment and various performance indicators. However, as a formative construct, the three spiritual leadership dimensions are not redundant, but rather compose a latent construct due to “latent commonality underlying the dimensions” (Law, Wong, & Mobley, 1998, p. 747).

2.6. Spiritual well-being

As shown in Fig. 1, the manifestation of spiritual leadership is higher group spiritual well-being; specifically the level of group calling and membership. Fleischman (1994), Maddock and Fulton (1998), and Giacalone and Jurkiewicz (2003) present two primary aspects of workplace spiritual well-being: 1) a sense of transcendence, calling or being called (vocationally), and 2) a need for social connection or membership. We propose that these elements are interlocked, universal, and common to the human experience; and as suggested by Brinsfield and Baktis (2005), to the military profession.

2.6.1. Calling

Calling refers to the experience of transcendence or how one makes a difference through service to others and, in doing so, derives meaning and purpose in life. People seek not only competence and mastery through their work but also a sense that work has some social meaning or value (Pfeffer, 2003). The term calling has long been used as one of the defining characteristics of a professional. Professionals in general have expertise in a specialized body of knowledge, ethics centered on selfless service to clients/customers, an obligation to maintain quality standards within the profession, calling to their field, dedication to their work, and a strong commitment to their careers (Filley, House, & Kerr, 1976). The challenge for organizational leaders is how to develop this same sense of calling in its workers through task involvement and goal identification (Galbraith, 1977). Related to military units, SLA Marshall (DA, 1950) states that in successful units, “There would be no possibility of achieving an all-compelling unity under conditions of utmost pressure if no man felt any higher call to action than what was put upon him by purely material considerations” (p. 13). Indeed soldiers take oaths which makes clear that the military is not a job; it is total commitment (DA, 2008b).

2.6.2. Membership

Membership encompasses the cultural and social structures we are immersed in and through which we seek, what William James, the founder of modern psychology, in his classic *The Varieties of Religious Experience* (James, 2002) determined to be man's most fundamental need – to be understood and appreciated. A sense of being understood and appreciated largely stems from interrelationships and connections through social interaction with and membership in groups. In discussing levels of membership and cohesion required in military units, “based on observations of combat troops, military historian SLA Marshall (Department of the Army, 1950) stated...” that “Esprit, at all times, is what the unit gives the man, in terms of spiritual force translated into constructive good” (p. 90). Indeed in organizations, people value their affiliations and sense of interconnection or belonging to part of a larger community (Pfeffer, 2003), which in the military manifests in *esprit de corps*.

Spiritual leadership positively influences spiritual well-being as group members model the values of altruistic love to one another as they jointly develop a common vision, which generates hope/faith and a willingness to “do what it takes” in pursuit of a vision of transcendent service to key stakeholders (Fry, 2003, 2005a). This in turn produces a sense of calling which gives one a sense that one's life has meaning, purpose and makes a difference. Concurrently, as leaders and followers engage in this process and gain a sense of mutual care and concern, members gain a sense of membership and feel understood and appreciated. We suggest the following hypotheses:

Hypothesis 1. Spiritual leadership positively predicts calling.

Hypothesis 2. Spiritual leadership positively predicts membership.

2.7. The mediating role of spiritual well-being

This positive increase in the group's sense of spiritual well-being, as discussed earlier, is based in an emergent process that reflects shared experiences of group members that ultimately produces positive organizational outcomes such as increased organizational commitment, because group members with a positive sense of calling and membership will become more attached, loyal, and committed to the unit (Fry, 2003). By tapping into these basic spiritual needs, spiritual leadership facilitates the emergence of unit trust, intrinsic motivation, and organizational commitment which is necessary to positively influence unit performance. This is because units that have hope/faith in the organization's vision and who experience calling and membership will expend extra effort and levels of cooperation necessary to continuously improve productivity and other key performance metrics (Fry, 2003, 2005a; Fry & Slocum, 2008). In the military context, this means living the *Warriors Ethos*, which states, “I will always place the mission first, I will never accept defeat, I will never quit, I will never leave a fallen comrade” (DA, 2008b, p. 55).

The predictive validity of the spiritual leadership construct was demonstrated in a study of a newly formed Army helicopter attack squadron (Fry et al., 2005). The results of this study showed that meaning/calling significantly predicted productivity while membership significantly predicted both organizational commitment and productivity; replicating results in an earlier unpublished study conducted in a police department (e.g., Fry, Nisiewicz, Vitucci, & Cedillo, 2007b). Another study of a municipal government (e.g., Fry, Nisiewicz, Vitucci, & Cedillo, 2007a) revealed that both calling and membership predicted both commitment and productivity. Our theorizing and these prior results lead to our final hypotheses:

Hypothesis 3. The positive relationship between spiritual leadership and organizational commitment and performance is fully mediated by calling/meaning and membership.

With the exception of an unpublished study (Fry & Matherly, 2006) which found a positive relationship for calling and unit sales growth, prior spiritual leadership research utilized self-ratings of perceived productivity. This study advances prior research by analyzing spiritual leadership at the unit level and in relation to multiple externally rated performance measures.

3. Methods

3.1. Sample and procedures

The participants for this study were cadets at the United States Military Academy. The mission of the academy is "To educate, train, and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of Duty, Honor, Country, and prepared for a career of professional excellence and service to the Nation as an officer in the United States Army." The academy curriculum is a rigorous 47 month leader development process focusing on six essential domains of growth: intellectual, military, physical, ethical, social—and most central to this study—spiritual. This academy describes "officership" as a matter of competence and character, where the first three domains of development emphasize leader competence, while the final three emphasize character (West Point, 2002).

This sample was selected because it provided a setting where intact groups interacted over time under stressful and challenging conditions, and where a rich set of multi-source performance ratings would be made available. Further, we sought to provide practical findings for the Academy to improve their efforts in the human spirit domain of cadet leader development.

Cadets enter the Academy from high school, college, a preparatory school, or the active military. The Academy has a diverse demographic population, as cadets are proportioned across every state in America and represent most demographic groups. Eighty-four percent of the respondents were male. The mean age for our sample was 20.15 years. Ethnicity composition of the sample was 2% African-American/Black, 80% Caucasian, 6% Hispanic, 6% Mixed, and 6% other.

The Corps of Cadets is organized into a cadet-led chain of command. There are 4 regiments with 1,000 cadets per regiment with each regiment organized into eight companies. A company has approximately 120 cadets organized into 4 platoons, with each platoon consisting of 4 squads of 8 cadets. For this study we focused on the squad level of analysis to assess spiritual leadership and its effects in small units who have high levels of direct social interactions. Squads are comprised of squad members (followers) who are freshmen and sophomore cadets, and a squad leader who is a junior cadet. As all squad members are cadets, and command authority is maintained by officers at company level, a peer form of leadership in squads is typical.

To represent the population of the corps of cadets at the Academy, we solicited a sample from one of the four regiments of cadets. Two hundred forty-eight cadets completed the surveys, yielding data for 62 of the 128 squads in the regiment, representing 49%. Importantly, the sample included squads from all eight companies in the regiment. Time 1 surveys were administered through an online internal email service. Cadets were asked to take these surveys by the Academy, and were informed that the survey was completely anonymous and was optional, but encouraged their participation noting that the study would help inform leader development at the Academy. In order to assess a sufficient period of longitudinal performance, we chose to schedule Time 1 to occur six weeks before the academy's standardized periodic performance measures were collected on each cadet in the sample from two sources in their chain of command.

3.2. Measures

3.2.1. Spiritual leadership and spiritual well-being

The measures for spiritual leadership and spiritual well-being were adapted to military terminology for this study from Fry et al. (2005). Sample items for spiritual leadership include "The leaders in my squad walk the walk as well as talk the talk"; "The leaders in my squad are honest and without false pride"; "My squad's vision is clear and compelling to me"; and "I demonstrate faith in my squad by doing everything I can to help us succeed" ($\alpha = .92$). Sample calling items are "The work I do makes a difference in people's lives" and "The work I do is meaningful to me" ($\alpha = .86$). Sample items for membership are "I feel my squad appreciates me and my work" and "I feel highly regarded by my leaders" ($\alpha = .84$).

3.2.2. Organizational commitment

Organizational commitment was measured using five items adapted from the measure of affective organizational commitment developed by Allen and Meyer (1990). Sample items include "I really feel as if my squad's problems are my own" and "I talk up my squad to my friends as a great place to work for" ($\alpha = .81$).

3.2.3. Productivity

Productivity was measured using the group productivity scale developed by Nyhan (2000) plus an additional item, “My squad is very efficient in getting maximum output from the resources (money, people, equipment, etc.) we have available.” Sample items include “In my squad everyone gives his/her best efforts” and “In my squad, work quality is a high priority for all workers” ($\alpha = .82$).

All the above scales utilized a 1–5 (from strongly disagree to strongly agree) response set. Individual scores were calculated by computing scale averages for each dimension.

3.2.4. Military performance

We used the academy's standard periodic performance rating system. This rating is given to every cadet at the end of each academic semester and is given based entirely on their military performance such as demonstrated leadership ability, discipline and appearance, professionalism, peer leadership, organizational citizenship behaviors, performance during tactical training, and similar events. Cadets receive other ratings not used in this study for academic and physical performance. The ratings used in this study were issued six weeks after Time 1 data was collected. For squad members, the ratings are a compilation of input from three levels of each cadet's chain of command who observed their performance: squad leader, platoon sergeant, and the Tactical Officer for the cadet's company. Where the squad leader and platoon sergeant are cadets senior to the rated cadet, the tactical officer is an active duty military officer. The academy weights the input from each rater to determine the final, composite grade; where the tactical officer determines 55%, the platoon sergeant 20%, and the squad leader 25% of the grade. This assessment is based on a letter grade, which we converted to a 10 point interval scale: (A+ = 10, A = 9, A- = 8...C- = 2, D = 1, F = 0).

The second performance measure used was the Academy's Periodic Development Review (PDR). Each cadet is rated on the PDR at the end of each academic semester, again six weeks after Time 1 spiritual leadership data was collected. Whereas the military performance grade is focused on performance and is an aggregation of three raters, the PDR is focused on assessing cadets' level of growth and leader development during the rated period by their immediate supervisor. The PDR contains two dimensions of development: 1) a *character dimension* that measures cadets' demonstrated moral, ethical, social, and spiritual growth, and 2) a *competence dimension* which assesses cadets' growth on knowledge, skills and abilities related to becoming an officer and leader. The PDR includes 48 items, 27 assessing character and 21 assessing competence. These variables rated frequency of behaviors utilizing a 1–7 (from “never” to “always”) response set. Scale scores were calculated by computing averages for each of the two dimensions.

3.4. Data aggregation and analysis

We have theorized spiritual leadership as an emergent, group level phenomenon and proposed hypotheses targeted at the squad level of analysis, consistent with other research showing agreement in followers' perceptions of leadership in work groups (e.g., Brown & Trevino, 2006b; Herold, Fedor, Caldwell, & Liu, 2008; Judge & Bono, 2000). Various techniques are available to justify aggregation, each with their own limitations. In the present study, we utilized two commonly used tests to justify aggregation: the within-group similarity or agreement indices: r_{wg} (James, Demaree, & Wolf, 1993) and the intraclass correlations (ICCs: Bliese, 2000).

We calculated an r_{wg} value for each scale within the 62 squads, using the procedure outlined by James et al. (1993). Results showed that between 80% and 90% of the r_{wg} values for all spiritual leadership survey scales fell above the .70 cutoff suggested by James et al. (1993). Specifically, the mean r_{wg} results were as follows: spiritual leadership (.84), calling (.80), membership (.84), organizational commitment (.78), and productivity (.70). The ICC (1) values, which indexes the amount of variance in a given variable that can be attributed to group membership ranged from .12 to .46, indicating that the within-squad variances were smaller than between-squad variances.

The ICC(2) values, which provides an estimate of the reliability of the group means and is typically estimated with the use of mean squares from a one-way random-effects ANOVA (Kozlowski & Klein, 2000), ranged from .25 to .69. Although these ICCs are relatively low, we proceeded with aggregation on the basis of theory, high r_{wg} and significant between group variance (Chen & Bliese, 2002; Kozlowski & Hattrup, 1992). We, however, acknowledge that the relationships between the aggregated measures with low ICC(2) and the other study variables might be underestimated.

4. Results

Table 1 displays the means, standard deviations, and correlations of the variables for the squad level, and coefficient alphas for the scales. We used AMOS with maximum likelihood estimation (Arbuckle & Wothke, 1999) to conduct a confirmatory factor analysis on the three spiritual leadership variables to examine whether a second order spiritual leadership factor existed and whether it explained the relationships among the three lower order factors. To assess whether the observed covariance matrix fit our hypothesized model, we used the comparative fit index (CFI), normed fit index (NFI), incremental fit index (IFI), and the standard root-mean square error of approximation (RMSEA). Results showed that the hypothesized three factor model fit the data well and that the higher order spiritual leadership construct could be used for hypothesis testing ($\chi^2 = 176.58$; $df = 63$; $p < .01$; CFI = .95; NFI = .92; IFI = .95; RMSEA = .07).

Table 1Squad level means, standard deviations, and correlations^a.

Variable	Mean	s.d.	1	2	3	4	5	6	7	8
1. Spiritual leadership	3.60	.39	.92							
2. Meaning/Calling	3.78	.44	.64	.86						
3. Membership	3.52	.50	.78	.56	.84					
4. Organizational Commitment	3.38	.47	.79	.63	.65	.81				
5. Productivity	3.28	.52	.66	.58	.56	.52	.82			
6. Military grade	6.10	.92	.31	.28	.35	.23	.30	–		
7. PDR character	6.20	.65	.32	.14	.29	.15	.36	.42	.99	
8. PDR competence	6.16	.61	.29	.15	.30	.18	.36	.43	.99	.99

^a n = 62; Correlations $\geq .24$ are significant at $p < .05$. Scale reliabilities are on the diagonal in boldface. PDR is periodic development review.

4.1. Test of the spiritual leadership model

Once again, we used AMOS with maximum likelihood estimation to assess the hypothesized model shown in Fig. 1 (Arbuckle & Wothe, 1999). Results showed a good fit to the data ($\chi^2 = 233.11$; $df = .16$, $p < .01$; CFI = .96; NFI = .94; IFI = .96; RMSEA = .08). Note that as our variables are represented by single observed variables, we corrected for measurement error by setting an error variance equal to: $([1 - \alpha] \times s.d.^2)$ (see Bono & Judge, 2003).

Hypothesis 1 predicted that spiritual leadership would be positively related to calling whereas Hypothesis 2 suggested that spiritual leadership would be positively related to membership. Referencing Fig. 2, the results show that the spiritual leadership paths to meaning/calling and membership are both positive and significant. Thus, Hypotheses 1 and 2 are supported by our data.

Hypothesis 3 predicted that the positive relationship between spiritual leadership and organizational commitment and performance would be fully mediated by calling/meaning and membership. Our mediation hypothesis would be supported if the fit of the model would not be improved by the addition of direct paths from spiritual leadership to various outcome measures (e.g., spiritual leadership $\rightarrow$ organizational commitment + productivity + squad military performance + PDR character + PDR competence). Consistent with our expectation in Hypothesis 3, the addition of direct paths from spiritual leadership to our outcome variables resulted in a relatively poor fit to the model ($\chi^2 = 203.54$; $df = 11$, $p < .001$; CFI = .49; NFI = .51; IFI = .52; RMSEA = .54), and the difference in fit was statistically significant ($\chi^2[5] = 29.37$, $p < .0$), compared to a model with no direct paths from spiritual leadership to outcome variables shown in Fig. 2. Moreover, the paths from spiritual leadership to squad military performance, PDR character, and PDR competence were not significant. Similarly, the paths from both meaning/calling and membership to

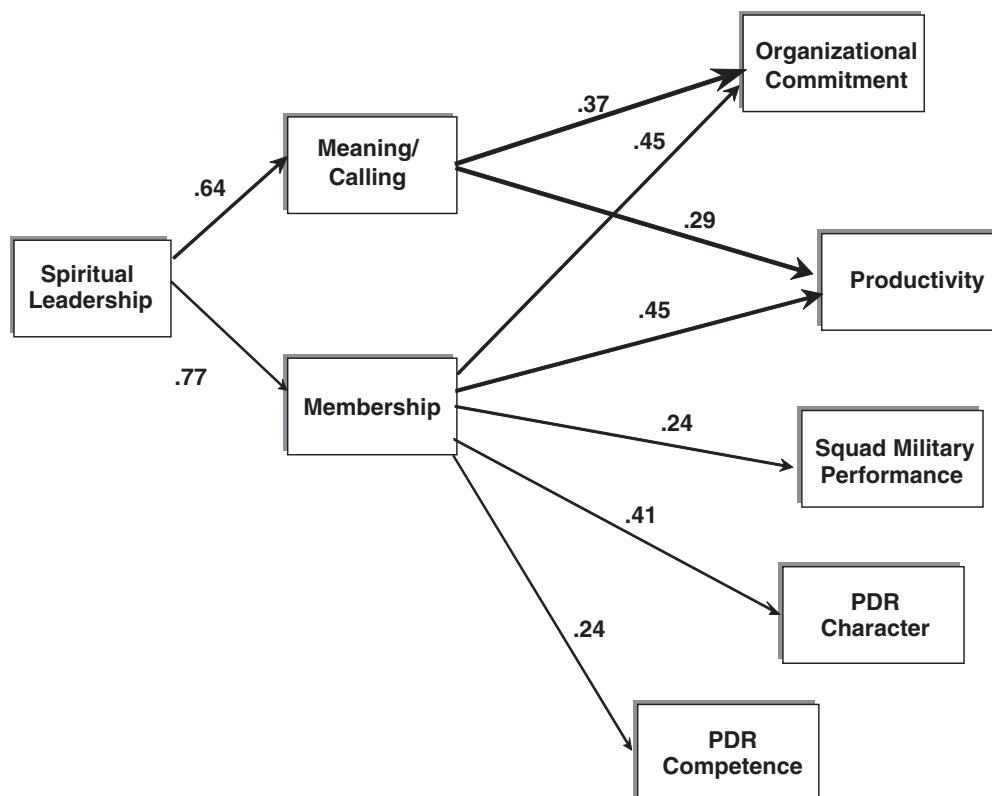


Fig. 2. Results of SEM analysis for Squad data. Note. n = 62; Only significant betas are shown (betas greater than .24 are significant at $p < .05$). Betas are on arrow links. PDR is the Periodic Development Review Report.

organizational commitment, productivity, squad military performance, PDR character, and PDR competence were also not significant. Therefore, under rules of model parsimony, Fig. 2 displays a more parsimonious model that best fit our data. We concluded that meaning/calling and membership fully mediated the relationships between spiritual leadership and organizational commitment and various performance measures, providing support for Hypothesis 3.

4.2. Supplementary analysis

We also assessed the effect of changing construct ordering. For example, it may be possible that the direction is reversed in that when meaning/calling and membership are both high, groups may be more inclined to exhibit spiritual leadership behaviors. This model is not nested with the above two models. Instead, we hypothesized that the effect of meaning/calling and membership on organizational commitment, productivity, squad military performance, PDR character, and PDR competence will be mediated by spiritual leadership. This model demonstrated a very poor fit to the data ($\chi^2 = 224.62$; $df = 21$, $p < .001$; CFI = .46; NFI = .45; IFI = .48; RMSEA = .40), providing support for the hypothesized model presented in Fig. 2.

5. Discussion

The purpose of spiritual leadership is to create vision and value congruence across the individual, empowered team, and organization levels and, ultimately, foster higher levels of spiritual well-being whereby organizational commitment and organizational performance can not only coexist, but be maximized (Fry, 2005a; Fry & Slocum, 2008). This study examining emerging leaders at a military academy found general support for the model of spiritual leadership at the unit level. The high degree of fit for the overall spiritual leadership model provides support for the hypothesis that together the variables comprising spiritual leadership (i.e., hope/faith, vision, and altruistic love) form a higher order formative construct that positively influences spiritual well-being in groups (i.e., calling and membership). The high degree of model fit and significant coefficients further show that there is a positive and significant link from spiritual leadership, mediated through group membership and meaning/calling, to key outcome variables, including organizational commitment, productivity and, most importantly, three measures of squad performance taken from two separate external rating sources. These findings provide additional evidence that leadership that emphasizes spiritual well-being in the workplace produces beneficial personal and organizational outcomes (Eisler & Montouri, 2003).

5.1. Practical and theoretical implications

First, the large positive relationship found between spiritual leadership and meaning/calling has great implications for squad effectiveness. These findings suggest that leadership that establishes and articulates a compelling vision within a group that is based in the values of altruistic love generates hope/faith in the vision that then serves to help unit members find meaning in their experiences can positively influence attitudes. Moreover, the positive relationships found between meaning/calling and organizational commitment and perceptions of group productivity further attest to the practical importance of spiritual leadership in establishing a strong sense of meaning/calling in groups. The strong relationship found between spiritual leadership and membership is also important. The results suggest that spiritual leadership can help reaffirm groups' perceptions of self-worth, which produces group confidence and a connection with the other members of the group (Fry, 2003). Displays of altruistic love inherent in spiritual leadership would be consistent with a deep and genuine form of individually considerate behaviors as proposed in transformational leadership theory (Avolio, 1999). We suggest that when group members personify the values, attitudes and behaviors of altruistic love that result in group members' feeling understood and appreciated, as well as a sense of calling that their job makes a difference, it will tap into an intrinsic motivation cycle resulting in high levels of well-being, organizational social responsibility, and organizational performance (Fry, 2005a; Ryan & Deci, 2000).

The positive relationships found between membership and organizational commitment, perceptions of group productivity, and all three measures of performance attest to the practical importance of establishing membership in groups through spiritual leadership. Indeed, we know that high quality relationships can serve to facilitate learning and action in groups (Balkundi & Kilduff, 2005). We also believe that the findings here suggest that instilling a sense of calling and membership in groups will foster high levels of team-member social exchanges. These recurring positive group interactions would have both individual and emergent collective effects, as demonstrated, on performance outcomes. We know that leaders and followers *reciprocally* affect each other's affect, cognitions, and behaviors (e.g. Dvir & Shamir, 2003; Gardner & Avolio, 1998; Lord et al., 1999; Shamir et al., 1993). Through these relational effects, we would expect to see within-group homogeneity yet between-group heterogeneity over time on spiritual leadership as well as key outcome variables. Indeed our findings support this pattern.

5.2. Suggestions for future directions

A common military colloquialism is that there are no atheists in foxholes. Beyond any religious overtones, the heart of this statement is that when one's life is threatened they are highly prone to look inward and seek to come to grip with their spirituality, their human spirit and find meaning and membership in their lives, and for some the need to draw on a higher power. As the cadets in our sample face the grim probability of future combat, they are likely grappling with issues of spirituality as it relates to transcendence and their community of fellow soldiers—the essence of both workplace spirituality and spiritual leadership. It has been said that “all Soldiers have human needs and most have spiritual needs broadly defined, and converting these needs into

strengths of will and character is an important part of combat leadership" (Brinsfield & Baktis, 2005, p. 464). Our findings suggest that when military units set the conditions where spiritual needs arise and are nourished by hope and faith in a vision of selfless service to others within the context of a community based on the values of altruistic love, they will positively impact unit commitment and performance.

Clearly the pattern shown in Fig. 2, wherein meaning/calling predicts perceptions of performance while membership predicts both perceptions as well as externally rated performance, warrants further investigation. Such further analysis may determine whether membership may serve as an overriding factor, thereby reducing the effects of meaning/calling, or whether meaning/calling does not directly predict, and is instead mediated in its effects on performance, at least not in this unique sample. Membership factors such as cohesion have indeed been noted as perhaps the most important factor influencing military small unit performance (Brinsfield & Baktis, 2005; Little, 1964; DA, 1950, 2008b).

The within-squad agreement found in our aggregation analyses also warrants further attention. The findings suggest that the levels of spiritual leadership within each squad over time permeated those units. Further, the high levels of within-group agreement on the outcome variables of meaning/calling, membership, and performance suggest that the effects of spiritual leadership, through emergent processes, are fairly consistent in their positive effects across the group and may create a leveling or homogenizing effect that serves to reduce variance around the group mean. These results may be indicative that spiritual leadership tends to set an overall climate within the group that sponsors inclusiveness, shared values, and serves to provide meaning and vision for the unit to pursue. Indeed, Giacalone and Jurkiewicz (2003) pose that the greater the value congruence across levels, the more individuals will experience transcendence through their work. This process may create empowered teams where the squad members are challenged to pursue excellence in achieving goals through hope and faith in the shared vision. Further, shared assessments of membership and meaning/calling might be the result of high quality relationships built within the teams that then serve, through role modeling, to evoke normative influence and other social processes that promote further displays of hope/faith, vision, and altruistic love in the leadership of all members. Indeed, leadership is a multilevel phenomenon (e.g., Yammarino et al., 2005), and relationship quality has been conceptualized at the team (Boies & Howell, 2006; Susskind, Behfar, & Borchgrevink, 2006) and social network levels (Mayer & Piccolo, 2006; Sparrowe & Liden, 1997) to describe the aggregate relationship qualities that exist at collective levels. For example, Duchon and Plowman (2005) suggested that nurturing the human spirit in groups increases a climate of trust in the group.

Research on several fronts is necessary to further establish the validity of the emerging spiritual leadership construct. Additional longitudinal studies across a variety of sample types are needed to test for changes in key variables over time, particularly as relating to a broader range of performance domains. Studies are also needed that incorporate objective measures from a wider span of performance domains. Other individual outcomes (e.g., life satisfaction, psychological well-being) hypothesized to be affected by spiritual leadership should also be studied.

Finally, due to sample access limitations, we were not able to use measures of alternative leadership theories as control measures in this research. Although some conceptual work has been conducted in this area, empirical investigation of the discrimination and incremental effects of spiritual leadership and other related leadership theories, such as transformational leadership (Avolio, 1999), authentic leadership (e.g., Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), ethical leadership (e.g., Brown and Trevino, 2006a; Brown, Treviño, & Harrison, 2005), and servant leadership (e.g., Ehrhart, 2004; Liden, Wayne, Zhao, & Henderson, 2008) is needed. For example, Fry (2003) proposed that the dimensions of transformational leadership do not, as in the case of spiritual leadership, have conceptually distinct dimensions that relate directly to the effort, performance, and reward components of motivation theory.

Similarly, Fry and Whittington (2005) and Fry, Matherly, Whittington, and Winston (2007) argue that spiritual leadership addresses four key areas that servant and authentic leadership research has yet to examine: 1) the specific cultural values that are necessary for servant and authentic leadership; 2) the role of servant and authentic leadership in achieving value congruence across organizational levels; 3) the personal outcomes of servant and authentic leadership; and 4) the apparent contradiction for organizational performance in the servant leadership model, which places the highest priority on the needs and purposes of individual followers above the goals and objectives of the organization. Therefore, further research might investigate if these theories are perhaps mutually reinforcing or serve to moderate the effects of one another.

5.3. Limitations of research and conclusions

As the study was optional, and was collected at an extremely busy time of the year in the cadet schedule, the response rate was less than desired. This low response rate leaves the potential that the data sample may not fully represent the population. The 62 squads in the sample do however represent 49% of the squads in the regiment, and come from each of the eight companies in the regiment, which ensures some level of representation across the regiment. Further, this being a military sample may normally limit its application to non-military samples. Indeed, given the interdependencies of military units and the requirements both for high levels of unit cohesion as well as the capability to find or make meaning out of extreme contexts outlined earlier, military units may be particularly sensitive to aspects of spiritual leadership.

Further, we have focused on the effects of spiritual leadership within the squad (intragroup) and effects on commitment, productivity, and performance in a garrison/training environment. Extreme contexts can place unique influence on leadership processes (Hannah, Uhl-Bien, Avolio, & Cavarretta, 2009). Therefore, while the research we reference suggests that the human spirit is a critical factor in combat, this study would certainly need to be replicated under such extreme conditions. Also, we did not assess any intergroup variables. We do suggest, subject to empirical testing, that soldiers that have a higher sense of calling and can

make meaning out of complex social situations, and who feel a secure sense of attachment and membership, may be more effective in dealing with a diverse set of social complexities—both with friendly and hostile groups. For example, West Point's leader development doctrine states that "Spiritually fit officers also demonstrate an appreciation and respect for the beliefs of others, regardless of potential differences with their own personal faith or belief systems" (p. 27). Such social complexity may be a critical factor as the Army's recently revised capstone operational doctrine states, "Winning battles and engagements is important but alone may not be decisive. Shaping civil conditions (in concert with civilian organizations, civil authorities, and multinational forces) is just as important to campaign success. In many joint operations, stability or civil support are often more important than the offense and defense" (DA, 2008a).

In sum, this study suggests that the tenets of hope/faith, altruistic love, and vision within spiritual leadership comprises the values, attitudes, and behaviors required to intrinsically motivate oneself and others to have a sense of calling and membership—spiritual well-being. This creates value congruence across the empowered team to foster increased levels of organizational commitment, productivity, and performance. Thus, this study helps advance a potential new framework for workplace spirituality and the importance of incorporating the human spirit in existing and new models for leadership theory, research, and practice. Specifically, this study extends prior research by elevating spiritual leadership to the group level and linking it to various externally rated performance outcomes in military units. This is not trivial as former General of the Army (1939–1945) George Marshall stated "It is the spirit we bring to the fight that decides the issue. The Soldier's heart, the Soldier's spirit, the Soldier's soul are everything" (DA, 2008b, p. 55).

References

- Aburdene, P. (2005). *Megatrends 2010*. Charlottesville, VA: Hampton Roads Publishing Co.
- Allen, C. L. (1972). *The miracle of love*. Old Tappan, New Jersey: Fleming H. Revell.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.
- Anderson, P. (2000). This place hurts my spirit! *Journal for Quality and Participation*, 23, 16–17.
- Arbuckle, J. L., & Wothe, W. (1999). *Amos 4.0 user's guide*. Chicago, IL: SmallWaters Corporation.
- Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*. London: Sage Publications.
- Balkundi, P., & Kilduff, M. (2005). The ties that lead: A social network approach to leadership. *The Leadership Quarterly*, 16, 941–961.
- Bliese, P. D. (2000). Within-group agreement, non-interdependence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S.W. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349–381). San Francisco: Jossey-Bass.
- Boies, K., & Howell, J. M. (2006). Leader-member exchange in teams: An examination of the interaction between relationship differentiation and mean LMX in explaining team-level outcomes. *The Leadership Quarterly*, 17, 246–257.
- Bollen, K. A., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin*, 100, 305–314.
- Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46, 554–571.
- Brinsfield, J. M., & Baktis, P. A. (2005). The human, spiritual, and ethical dimensions of leadership in preparation for combat. In D. M. Snider & L. Matthews (Eds.), *The future of the Army Profession* (pp. 464–485). (2nd Ed.). Boston: McGraw Hill.
- Brown, M. E., & Trevino, L. K. (2006a). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17, 595–616.
- Brown, M. E., & Trevino, L. K. (2006b). Socialized charismatic leadership, values congruence, and deviance in work groups. *Journal of Applied Psychology*, 91, 954–962.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117–134.
- Cash, K. C., Gray, G. R., & Road, S. A. (2000). A framework for accommodating religion and spirituality in the workplace. *Academy of Management Executive*, 14, 124–134.
- Chen, G., & Bliese, P. D. (2002). The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology*, 87, 549–556.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks: Sage Publications.
- Daft, R. L., & Lengel, R. H. (1998). *Fusion leadership: Unlocking the subtle forces that change people and organizations*. San Francisco, CA: Berrett-Koehler.
- Day, D. V. (2000). Leadership development: A review in context. *The Leadership Quarterly*, 11, 581–613.
- Department of the Army (2008a). *Field Manual 3-0: Operations*. Washington DC.
- Department of the Army (2008b). *TRADOC Pamphlet 525-3-7-01: The Human dimension in the future 2015–2024*. Fort Monroe, VA.
- Department of the Army (1950). *DA Pamphlet 600-2: The Armed Forces Officer*. Washington DC.
- Dent, E., Higgins, M. E., & Wharff, D. (2005). Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. *The Leadership Quarterly*, 16, 625–653.
- Duchon, D., & Plowman, D. A. (2005). Nurturing the spirit at work: Impact on work unit performance. *The Leadership Quarterly*, 16, 807–833.
- Drath, W. H., & Palus, C. J. (1998). Approaching the future of leadership development. In C. D. McCauley, R.S., & E. Van Velsor (Eds.), *The center for creative leadership handbook of leadership development* (pp. 403–432). San Francisco: Josey-Bass.
- Dvir, T., & Shamir, B. (2003). Follower developmental characteristics as predicting transformational leadership: A longitudinal field study. *The Leadership Quarterly*, 14, 327–344.
- Ehrhart, M. G. (2004). Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Personnel Psychology*, 57, 61–94.
- Eisler, R., & Montouri, A. (2003). The human side of spirituality. In R. A. Giacalone & C.L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 546–556). New York: M. E. Sharp.
- Elm, D. R. (2003). Honesty, spirituality, and performance at work. In R. A. Giacalone & C.L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 277–288). New York: M. E. Sharp.
- Filley, A. C., House, R. J., & Kerr, S. (1976). *Managerial processes and organizational behavior*. Glenview, IL: Scott, Foresman and Company.
- Fleischman, P. R. (1994). *The healing spirit: Explorations in religion & psychotherapy*. Cleveland: Bonne Chance Press.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly*, 14, 693–727.
- Fry, L. W. (2005a). Toward a theory of ethical and spiritual well-being, and corporate social responsibility through spiritual leadership. In R. A. Giacalone & C.L. Jurkiewicz (Eds.), *Positive psychology in business ethics and corporate responsibility* (pp. 47–83). Greenwich, CT: Information Age Publishing.
- Fry, L. W. (2005b). Introduction: Toward a paradigm of spiritual leadership. *The Leadership Quarterly*, 16, 619–622.
- Fry, L. W. (2008). Spiritual leadership: State-of -the-art and future directions for theory, research, and practice. In J. Biberman & L. Tishman (Eds.), *Spirituality in business: Theory, practice, and future directions* (pp. 106–124). New York: Palgrave.
- Fry, L. W., & Matherly, L. (2006). Spiritual leadership and organizational performance: An exploratory study. *Paper presented at the Academy of Management, Atlanta, Georgia*.

- Fry, L. W., Matherly, L. L., Whittington, J. L., & Winston, B. (2007a). Spiritual leadership as an integrating paradigm for servant leadership. In S. A. Singh-Sengupta & D. Fields (Eds.), *Integrating Spirituality and Organizational Leadership* (pp. 70–82). Delhi: Macmillan India Ltd.
- Fry, L. W., Nisiewicz, M., Vitucci, S., & Cedillo, M. (2007b). Transforming city government through spiritual leadership: Measurement and establishing a baseline. *Paper presented at the Academy of Management, Philadelphia, Pennsylvania.*
- Fry, L. W., Nisiewicz, M., Vitucci, S., & Cedillo, M. (2007c). Transforming police organizations through spiritual leadership: Measurement and establishing a baseline. *Paper presented at the Academy of Management, Philadelphia, Pennsylvania.*
- Fry, L. W., & Slocum, J. (2008). Maximizing the triple bottom line through spiritual leadership. *Organizational Dynamics*, 37, 86–96.
- Fry, L. W., Vitucci, S., & Cedillo, M. (2005). Transforming the Army through spiritual leadership. *The Leadership Quarterly*, 16, 835–862.
- Fry, L. W., & Whittington, J. L. (2005). In search of authenticity: Spiritual leadership theory as a source for future theory, research, and practice on authentic leadership. In B. J. Avolio, W. L. Gardner, & F. Walumbwa (Eds.), *Authentic leadership: Origins, development and effects* (pp. 183–200). New York: Elsevier Ltd.
- Galbraith, J. R. (1977). *Organization design*. Reading, MA: Addison-Wesley.
- Garcia-Zamor, J. C. (2003). Workplace spirituality and organizational performance. *Public Administration Review*, 63, 355–363.
- Gardner, W. L., & Avolio, B. J. (1998). The charismatic relationship: A dramaturgical perspective. *Academy of Management Review*, 23, 32–58.
- Giacalone, R. A., & Jurkiewicz, C. L. (2003). Toward a science of workplace spirituality. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 3–38). New York: M. E. Sharp.
- Hannah, S. T., Uhl-Bien, M., Avolio, B. J., & Cavarretta, F. (2009). A framework for examining leadership in extreme contexts. *The Leadership Quarterly*, 20, 897–919.
- Herold, D. M., Fedor, D. B., Caldwell, S., & Liu, Y. (2008). The effects of transformational leadership and change leadership on employees' commitment to a change: A multilevel study. *Journal of Applied Psychology*, 93, 346–357.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184–200.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic and political change in 43 societies*. Princeton: Princeton University Press.
- James, W. (2002). *The varieties of religious experience*. Mineola, NY: Dover Publications.
- James, L. R., Demaree, R. G., & Wolf, G. (1993). Rwg: An assessment of within group interrater agreement. *Journal of Applied Psychology*, 78, 306–309.
- Jones, L. B. (1995). *Jesus, CEO: Using ancient wisdom for visionary leadership*. New York: Hyperion.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85, 751–765.
- Klein, K. J., Dansereau, F., & Hall, R. J. (1994). Levels issues in theory development, data collection and analysis. *Academy of Management Review*, 19, 195–229.
- Klimoski, R., & Mohammad, S. (1994). Team mental model: Construct or metaphor? *Journal of Management*, 20, 403–437.
- Kotter, J. P. (1996). *Leading change*. Boston: Harvard Business School Press.
- Kozlowski, S. W., & Hattrup, K. (1992). A disagreement about within-group agreement: Disentangling issues of consistency versus consensus. *Journal of Applied Psychology*, 77, 161–167.
- Kozlowski, S. W., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 3–90). San Francisco: Jossey-Bass.
- Law, K., Wong, C., & Mobley, W. (1998). Toward a taxonomy of multi-dimensional constructs. *Academy of Management Review*, 23, 741–755.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *Leadership Quarterly*, 19, 161–177.
- Little, R. W. (1964). Buddy relations and combat performance. In M. Janowitz (Ed.), *The military: Changing patterns of organizations* (pp. 195–223). New York: Russell Sage Foundation.
- Lord, R. G., Brown, D. J., & Freiberg, S. J. (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational Behavior and Human Decision Processes*, 78, 167–203.
- MacArthur, J. F. (1998). *In the footsteps of faith*. Wheaton, IL: Crossway Books.
- Maddock, R. C., & Fulton, R. L. (1998). *Motivation, emotions, and leadership: The silent side of management*. Westport, CT: Quorum Books.
- Mayer, D. M., & Piccolo, R. F. (2006). Expanding the scope: Social network and multilevel perspectives on leader-member exchange. In G. Graen (Ed.), *Sharing network leadership*. Greenwich, Connecticut: Information Age Publishing.
- Mitroff, I. I., & Denton, E. A. (1999). *A spiritual audit of corporate America: A hard look at spirituality, religion, and values in the workplace*. San Francisco, CA: Jossey-Bass.
- Nanus, B. (1992). *Visionary leadership*. San Francisco: Jossey-Bass.
- Nyhan, R. C. (2000). Changing the paradigm: Trust and its role in public sector organizations. *American Public Review of Administration*, 30, 87–109.
- Pfeffer, J. (2003). Business and the spirit: Management practices that sustain values. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 29–45). New York: M. E. Sharp.
- Reave, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly*, 16, 655–687.
- Reder, M. W. (1982). Chicago economics: Permanence and change. *Journal of Economic Literature*, 20, 1–38.
- Rousseau, D. M. (1985). Issues of level in organizational research: Multi-level and cross-level perspectives. *Research in Organizational Behavior*, 7, 1–38.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Sass, J. S. (2000). Characterizing organizational spirituality: An organizational communication culture approach. *Communication Studies*, 51, 195–207.
- Schein, E. H. (2004). *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.
- Shamir, B., House, R. J., & Arthur (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organizational Science*, 4, 1–17.
- Snyder, C. R., & Lopez, S. (Eds.). (2008). *Handbook of positive psychology* (2nd ed). Oxford, UK: Oxford University Press.
- Sparrowe, R. T., & Liden, R. C. (1997). Process and structure in leader-member exchange. *Academy of Management Review*, 22, 522–552.
- Susskind, A. M., Behfar, K., & Borchgrevink, C. P. (2006). An exploration of the relationship between communication network structures, team-member exchange quality, and teamwork. In G. B. Graen's (Ed.), *Sharing network leadership*. Greenwich, Connecticut: Information Age Publishing.
- Sweeney, P., Hannah, S. T., & Snider, D. M. (2007). The Domain of the human spirit. In D. M. Snider & L. J. Matthews (Eds.), *Forging the warriors character* (pp. 23–50). New York: McGraw-Hill.
- Valas, H., & Slovnik, N. (1993). Variables affecting students' intrinsic motivation for school mathematics: Two empirical studies based on Deci's and Ryan's theory of motivation. *Learning and Instruction*, 3, 281–298.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34, 89–126.
- West Point (2002). *USMA Circular 1–101: The Cadet Leader Development System*. West Point, NY.
- Yammarino, F., Dionne, S., Chun, J., & Dansereau, F. (2005). Leadership and levels of analysis: A state of the science review. *The Leadership Quarterly*, 16, 879–919.