



Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline

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Abstract

Spiritual leadership theory (SLT) is a causal leadership theory for organizational transformation designed to create an intrinsically motivated, learning organization. Spiritual leadership comprises the values, attitudes, and behaviors required to intrinsically motivate one's self and others in order to have a sense of spiritual survival through calling and membership—i.e., they experience meaning in their lives, have a sense of making a difference, and feel understood and appreciated. The effect of spiritual leadership in establishing this sense of leader and follower spiritual survival is to create value congruence across the strategic, empowered team, and individual levels to, ultimately, foster higher levels of organizational commitment, productivity, and employee well-being.

The primary purpose of this research is to test the SLT causal model that hypothesizes positive relationships among the qualities of spiritual leadership, spiritual survival, and organizational productivity and commitment using longitudinal data from a newly formed Apache Longbow helicopter attack squadron at Ft. Hood, Texas. The results provide strong initial support for SLT and its measures. A methodology was developed for establishing a baseline for future organizational development interventions as well as an action agenda for future research on spiritual leadership in general and Army training and development in particular. We conclude that spiritual leadership theory offers promise as a springboard for a new paradigm for leadership theory, research, and practice given that it (1) incorporates and extends transformational and charismatic theories as well as ethics- and values-based theories (e.g., authentic and servant leadership) and (2) avoids the pitfalls of measurement model misspecification.

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1. Introduction

In the new “Army of One” leaders must address the well-being (i.e. the physical, material, mental, and spiritual states) of soldiers, Army civilians, and their families, since well-being contributes to their ability to perform and support the Army’s mission. Army leaders must inspire soldiers to a higher sense of calling and membership, while providing the organizational and leadership environment of a learning organization. The Army has developed numerous programs in the last few years, including the new Army vision and values, (Office of the Chief of Staff, U.S. Army, Special Actions Branch, 2004; Plans And Policy Directorate, Army G-3, DAMO-SS (Attention: SSP), 2002), Caring QMB (Quality Management Board), and the Army’s Well-Being Strategic Plan, that are intended to change the overall culture of the Army to stress the critical nature of force well-being and to achieve a complete transformation of the United States Army (Morris, 2001). Critical to the leadership of the Army transformation effort is a requirement to institutionalize a learning organizational paradigm with intrinsic motivation through spiritual leadership (Fry, 2003).

Spiritual leadership is a causal leadership theory for organizational transformation designed to create an intrinsically motivated, learning organization. The purpose of spiritual leadership is to create vision and value congruence across the strategic, empowered team and individual levels and, ultimately, to foster higher levels of organizational commitment and productivity. Spiritual leadership comprises the values, attitudes, and behaviors that one must adopt in intrinsically motivating one’s self and others so that both have a sense of spiritual survival through calling and membership—i.e. they experience meaning in their lives, have a sense of making a difference, and feel understood and appreciated. Moreover, the Spiritual leadership paradigm provides an integrating framework for the Army’s transformation effort, especially as it relates to increasing levels of intrinsic motivation, commitment, productivity, and well-being.

The purpose of this research is to utilize a newly formed Longbow helicopter attack squadron at Ft. Hood, Texas to test and validate the hypothesized causal model hypothesizing positive relationships between the qualities of spiritual leadership, organizational productivity, and organizational commitment. In addition, a methodology is developed for establishing a baseline for future organizational development interventions as well as an action agenda for future research on spiritual leadership, in general, and Army training and development, in particular.

2. Organizational transformation through spiritual leadership

Organization transformation (OT), a recent extension of organizational development, seeks to create massive changes in an organization’s orientation to its environment, vision, goals and strategies, structures, processes, and organizational culture. Its purpose is to affect large-scale paradigm shifting change. “An organizational transformation usually results in new paradigms or models for organizing and performing work. The overall goal of OT is to simultaneously improve organizational effectiveness and individual well-being” (French, Bell, & Zawacki, 2000, p. vii).

Leaders attempting to initiate and implement organizational transformations face daunting challenges, especially in gaining wide-spread acceptance of a new and challenging vision and the need for often drastic and abrupt change of the organization’s culture (Cummins & Worley, 2005; Harvey & Brown, 2001). Although leadership has been a topic of interest for thousands of years, scientific research in this

area only began in the twentieth century. While space limitations in this article preclude a detailed review of the leadership literature, most definitions of leadership share the common view that it involves influence among people who desire significant changes. These changes reflect purposes shared by leaders and followers (Daft, 2001).

This study uses the definition and generic process of leadership developed by Kouzes & Pozner (1987, 1993, 1999)—Leadership is the art of mobilizing others to want to struggle for shared aspirations. From their perspective leadership entails motivating followers by creating a vision of a long-term challenging, desirable, compelling, and different future. This vision, when combined with a sense of mission of who we are and what we do, establishes the organization's culture with its fundamental ethical system and core values. The ethical system then establishes a moral imperative for right and wrong behavior which, when combined with organizational goals and strategies, acts as a substitute (Kerr & Jermier, 1977) for traditional bureaucratic structure (centralization, standardization and formalization). When coupled with a powerful vision, this substitute provides the roadmap for the cultural change to the learning organizational paradigm needed for organizational effectiveness in today's chaotic organizational environments. Thus, for the learning organization, leadership is about vision and values; it is the act of creating a context and culture that influences followers to ardently desire, mobilize, and struggle for a shared vision that defines the essence of motivating through leadership.

2.1. The army transformation challenge

To lead soldiers, a leader must have certain attributes such as courage, technical skill, the ability to provide vision, a sense of purpose, and inspiration. This establishes a higher sense of calling to fight for something larger than themselves with the knowledge that they are members to a winning team and are understood and appreciated in “An Army of One” (Hunt, Dodge, & Wong, 1999; Mitchell, 2001; Morris, 2001; Yukl, 1999).

Military organizations evolve over time, mostly to overcome changes in the complex environment in which they exist, and to accommodate new technologies and tactics to achieve their ultimate mission: win their country's wars. Military leaders must constantly initiate and adapt to change, while at the same time provide a clear vision and sense of direction (mission) for their organizations. Today's Army leadership is dealing with 9/11, the war on terrorism, and the aftermath of war in Iraq. Additionally, it is dealing with smarter, more technologically competent, and differently motivated soldiers, as well as industry/businesses seeking their services (Britt, Davison, & Bliese, 2004; Collins, Ulmer, & Walter, 2000; Dvir, Eden, Avolio, & Shamir, 2002; Griffith, 2002; Kane & Tremble, 2000).

2.2. Spiritual leadership

Our purpose is to sharpen the focus on these issues through the lens of Fry's (2003, 2005) recent work on spiritual leadership theory to gain further insight into the nature, process, and development of Army transformation. Spiritual leadership is a causal leadership theory for organizational transformation designed to create an intrinsically motivated, learning organization. The theory of spiritual leadership is developed within an intrinsic motivation model that incorporates vision, hope/faith, and altruistic love, theories of workplace spirituality, and spiritual survival. The purpose of spiritual leadership is to tap into the fundamental needs of both leader and follower for spiritual survival through calling and membership,

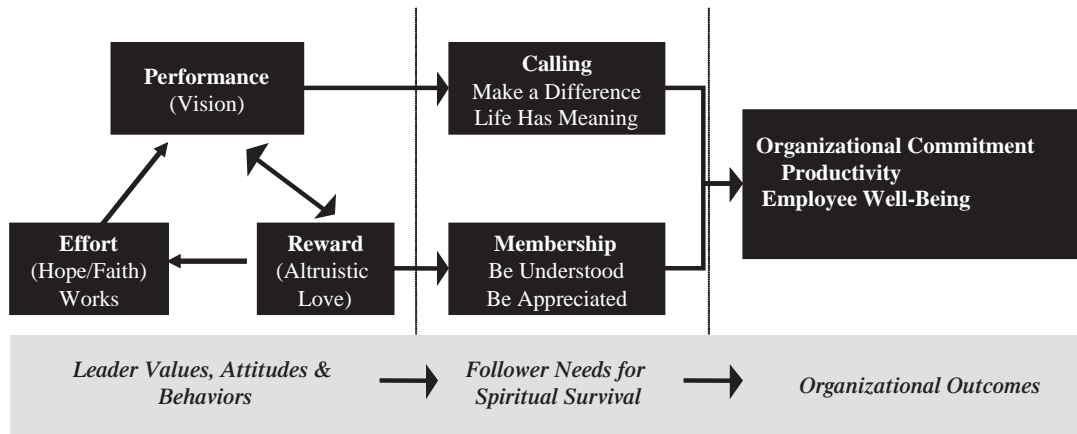


Fig. 1. Causal model of spiritual leadership theory.

to create vision and value congruence across the individual, empowered team, and organization levels and, ultimately, to foster higher levels of organizational commitment and productivity. Operationally, spiritual leadership comprises the values, attitudes, and behaviors that are necessary to intrinsically motivate one’s self and others so they have a sense of spiritual survival through calling and membership (See Fig. 1 and Table 1). This entails (Fry, 2003):

1. Creating a vision wherein leaders and followers experience a sense of calling in that life has meaning and makes a difference.
2. Establishing a social/organizational culture based on the values of altruistic love whereby leaders and followers have a sense of membership, feel understood and appreciated, and have genuine care, concern, and appreciation for *both* self and others.

Fry (2005) extended spiritual leadership theory by exploring the concept of positive human health and well-being through recent developments in workplace spirituality, character ethics, positive psychology and spiritual leadership. He then argued that these areas provide a consensus on the values, attitudes, and behaviors necessary for positive human health and well-being (See Table 1). Ethical well-being is defined as authentically living one’s values, attitudes, and behavior from the inside out in creating a

Table 1
Qualities of spiritual leadership

| Vision | Altruistic love | Hope/faith |
|-------------------------------------|----------------------------------|-------------------------------|
| Broad appeal to key stakeholders | Trust/loyalty | Endurance |
| Defines the destination and journey | Forgiveness/acceptance/gratitude | Perseverance |
| Reflects high ideals | Integrity | Do what it takes |
| Encourages hope/faith | Honesty | Stretch goals |
| Establishes standard of excellence | Courage | Expectation of reward/victory |
| | Humility | Excellence |
| | Kindness | |
| | Compassion | |
| | Patience/meekness/endurance | |

principled-center congruent with the universal, consensus values inherent in spiritual leadership theory (Cashman, 1998; Covey, 1990; Fry, 2003). Ethical well-being is then seen as necessary but not sufficient for spiritual well-being which, in addition to ethical well-being, incorporates transcendence of self in pursuit of a vision/ purpose/mission in service to key stakeholders to satisfy one's need for spiritual survival through calling and membership. Fry hypothesized that those practicing spiritual leadership at the personal level will score high on both life satisfaction in terms of joy, peace and serenity and the Ryff & Singer (2001) dimensions of well-being. In other words, they will:

1. Experience greater psychological well-being.
2. Have fewer problems related to physical health in terms of allostatic load (cardiovascular disease, cognitive impairment, declines in physical functioning, and mortality).

More specifically, those practicing spiritual leadership and their followers would have a high regard for one's self and one's past life, along with good-quality relationship with others. This in turn helps to create the sense that life is purposeful and meaningful, the capacity to effectively manage one's surrounding world, the ability to follow inner convictions, and a sense of continuing growth and self-realization.

To summarize the hypothesized relationships among the variables of the causal model of spiritual leadership (see Fig. 1), "doing what it takes" through faith in a clear, compelling vision produces a sense of calling—that part of spiritual survival that gives one a sense of making a difference and therefore that one's life has meaning. Vision, hope/faith adds belief, conviction, trust, and action for performance of the work to achieve the vision. Thus, spiritual leadership proposes that hope/faith in the organization's vision keeps followers looking forward to the future and provides the desire and positive expectation that fuels effort through intrinsic motivation.

According to the spiritual leadership theory, altruistic love is also given from the organization and is received in turn from followers in pursuit of a common vision that drives out and removes fears associated with worry, anger, jealousy, selfishness, failure and guilt and gives one a sense of membership—that part of spiritual survival that gives one an awareness of being understood and appreciated.

Thus, this intrinsic motivation cycle based on vision (performance), altruistic love (reward) and hope/faith (effort) results in an increase in one's sense of spiritual survival (e.g. calling and membership) and ultimately positive organizational outcomes such as increased:

1. Organizational commitment—People with a sense of calling and membership will become attached, loyal to, and want to stay in organizations that have cultures based on the values of altruistic love; and
2. Productivity and continuous improvement (Fairholm, 1998)—People who have hope/faith in the organization's vision and who experience calling and membership will "Do what it takes" in pursuit of the vision to continuously improve and be more productive.

2.3. *Spiritual leadership and the learning organization*

A learning organization creates a vision of what might be possible, however, it is not brought about simply by training individuals; it can only happen as a result of learning at all organization levels. Another factor of a learning organization is that it is an organization that facilitates the learning of all its members and continuously transforms itself (Senge, 1994). In learning organizations employees are

empowered to achieve a clearly articulated organizational vision. Quality products and services that exceed expectations also characterize learning organizations. This new networked or learning organizational paradigm is radically different from what has gone before: it is customer/client-obsessed, team-based, flat (in structure), flexible (in capabilities), diverse (in personnel make-up) and networked (working with many other organizations in a symbiotic relationship) in alliances with suppliers, customers/clients and even competitors (Ancona, Kochan, Scully, Van Maanen, & Westney, 2004; McGill & Slocum, 1992).

According to Peter Senge (1994, p3.), learning organizations:

...are where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together.

The employees of learning organizations are characterized by being open, generous, capable of thinking in group teams, and risk-takers with an innate ability to motivate others. Furthermore, they must be able to abandon old alliances and establish new ones, view honest mistakes as necessary to learning and “celebrate the noble effort”, and exhibit a “do what it takes” attitude versus a “not my job” attitude. People are empowered with committed leaders at all levels that act as coaches in a “learning organization” who constantly strive to listen, experiment, improve, innovate, and create new leaders. The major challenge for the learning organization is developing, leading, motivating, organizing, and retaining people to be committed to the organization’s vision, goals, and culture (Ancona et al., 2004).

This is especially true for the new “Army of One” whose recruiting campaign promotes the following:

1. Each individual can make a difference.
2. The Army and the individual soldier cannot be separated.
3. Soldiers who are strong in mind, body and soul.
4. The Army’s greatest strength is the united, physical, moral and mental character of America’s soldiers—teamwork in “An Army of one.”
5. Personal growth, opportunity, and pride.

Recently, there has been increasing criticism about worrisome signs of deterioration and decay of morale and commitment throughout the U.S. armed forces (Morris, 2001). Especially alarming is the growing difficulty the services face in filling their annual quota of new recruits and the mass exodus of its mid-career Captains. The solutions to these problems go beyond issues of extrinsic motivation such as pay and benefits. The primary challenge for Army leadership is to establish throughout the ranks the vision and values inherent in the role of intrinsically motivating professional warrior soldiers inspired to serve and esteemed for defending their country. By definition, professionals believe their chosen profession is valuable, even essential to society, and they are proud to be a member of it (Filley, House, & Kerr, 1976).

A major challenge for the army is to create a learning organizational paradigm within which the soldier’s professional commitment is also translated into organizational commitment and productivity. This means that soldiers must believe in their call of duty, instead of viewing their job as a temporary contract to be fulfilled. As independent professionals, soldiers may experience high levels of calling and low levels of membership. They may feel rewarded by community appreciation, yet, lack internal relationships and appreciation within their own organization or unit. Ideally, individuals/soldiers in

organizations should strive to feel part of a spiritually fit organization (Ashmos & Duchon, 2000; Duchon & Plowman, 2005). This type of organization contains both high calling and high membership with a sense of ethical and spiritual well-being that is experienced throughout all levels (Fry, 2005; Morris, 2001).

Our fundamental proposition is that the Spiritual leadership theory OT interventions, derived from our base line measures, will significantly increase the strength of the relationships among the model's variables, thereby, increasing value congruence across the strategic, empowered team, and individual levels through stronger linkages among the theory variables (i.e. increase SLT variable relationships to significantly increase average SLT levels, while also acting to reduce the variance in organizational commitment and productivity). The starting point for testing this proposition, which is the purpose of this paper, is to test and validate the SLT causal model as well as establish a baseline of SLT measures to set the stage for further organizational development and transformation change efforts.

3. Method

3.1. *Sample and procedures*

We report the initial results of establishing a baseline for research that focused on a newly formed Apache Longbow helicopter attack squadron of Army soldiers at Ft. Hood Texas. All troops in the squadron were surveyed in the beginning of the squadron development and then five months later at the end of their training before deployment. Thus, our sample period is representative of the critical formative stage for this unit before deployment for active duty.

The mission of this squadron is (Williams, 2001):

At its core, the success of the Squadron lives and dies on every soldier's ability to think and to take decisive action—to lead themselves and others. Fundamentally, the Squadron will protect all that the U.S. Constitution stands for. Each soldier will defend this to his/her last breath with Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage.

Initially 200 individuals located in the aviation squadron were to be surveyed. A total of 181 individuals surveyed, representing 91% of the target population, actually responded to the survey and provided the database for this study and responded to the initial baseline anonymous survey that was administered. Non-respondents were personnel that were TDY (temporary duty) or on leave.

A second survey was administered approximately 5 months later and combined with the first survey to test the SLT structural equation causal model. There were 189 respondents in the second survey. The second survey also focused on the qualities of vision/mission, altruistic love, hope/faith, meaning/calling, and membership as key components of spiritual survival to examine their impact on organizational commitment and productivity. A detailed description the initial (LB1) and final (LB2) demographic sample group researched is provided in Table 2.

3.2. *Measures*

The three dimensions of spiritual leadership, two dimensions of spiritual survival, and organizational commitment and productivity were measured using survey questions developed especially for SLT

Table 2
Sample demographics

| | <i>n</i> | Percentage |
|--|----------|------------|
| <i>Profile of initial Longbow sample</i> | | |
| Gender | | |
| Male | 168 | 92.8 |
| Female | 13 | 7.2 |
| Section | | |
| Staff | 34 | 18.8 |
| Ground maint. | 18 | 9.9 |
| 3/5 section | 33 | 18.2 |
| Flights/crews | 49 | 27.1 |
| Air maint. | 14 | 13.3 |
| Armament/shop | 23 | 12.7 |
| Age | | |
| 20 or under | 38 | 21 |
| 21 to 30 | 97 | 53.6 |
| 31 to 40 | 40 | 22.1 |
| 41 to 50 | 6 | 3.3 |
| Years in | | |
| 2 yrs or less | 72 | 39.8 |
| 3 to 5 years | 34 | 18.8 |
| 6 to 10 years | 38 | 21 |
| 11 to 15 years | 25 | 13.8 |
| Above 15 years | 12 | 6.6 |
| Rank | | |
| E1 to E4 | 100 | 55.2 |
| E-5 to E6 | 42 | 23.2 |
| E7 to E9 | 9 | 5 |
| WO1, WO2 or O1, O2 | 17 | 9.4 |
| WO3, WO4 or O3, O4 | 13 | 7.2 |
| <i>Profile of final Longbow sample</i> | | |
| Gender | | |
| Male | 160 | 84.7 |
| Female | 15 | 7.9 |
| Section | | |
| Staff | 64 | 33.9 |
| Ground maint. | 14 | 7.4 |
| Flights/crews | 39 | 20.6 |
| Air maint. | 59 | 31.2 |
| Age | | |
| 20 or under | 36 | 19 |
| 21 to 30 | 100 | 52.9 |
| 31 to 40 | 43 | 22.8 |
| 41 to 50 | 7 | 3.7 |
| Years in | | |
| 2 yrs or less | 97 | 51.3 |
| 3 to 5 years | 49 | 25.9 |
| 6 to 10 years | 13 | 6.9 |
| 11 to 15 years | 18 | 9.5 |

Table 2 (continued)

| | <i>n</i> | Percentage |
|--------------------|----------|------------|
| Years in | | |
| Above 15 years | 9 | 4.8 |
| Other | 3 | 1.6 |
| Rank | | |
| E1 to E4 | 2 | 1.1 |
| E-5 to E6 | 76 | 40.2 |
| E7 to E9 | 82 | 43.4 |
| WO1, WO2 or O1, O2 | 23 | 12.2 |
| W3, W4 or O3, O4 | 4 | 2.1 |
| No response | 2 | 1.1 |

research (see Table 3). The items were discussed with practitioners concerning their face validity, and have been pretested and validated in other studies and samples (Malone & Fry, 2003). The items measuring affective organizational commitment and productivity were also developed and validated in earlier research (Nyhan, 2000). In addition, the survey contained space for open-end comments to the question “Please identify one or more issues you feel need more attention.” These were content analyzed to validate the survey findings and to identify issues for future intervention. The questionnaire utilized a 1–5 (from strongly disagree to strongly agree) response set. Scale scores were calculated by computing the average of the scale items. The seven scales exhibited adequate coefficient alpha reliabilities between .83 and .93. Table 4 displays the means, standard deviations, correlations of the variables, and coefficient alphas for the scales and the means and standard deviations for the questions in each scale.

4. Results

4.1. Test of spiritual leadership causal model

The AMOS 4.0 SEM SPSS program was used with maximum likelihood estimation to test the Spiritual leadership theory causal model (Arbuckle & Wothe, 1999). One of the most rigorous methodological approaches in testing the validity of factor structures is the use of confirmatory (i.e. theory driven) factor analysis (CFA) within the framework of structural equation modeling (Byrne, 2001). Structural Equation Modeling (SEM) is particularly valuable in inferential data analysis and hypothesis testing. It differs from common and components (exploratory) factor analysis in that SEM takes a confirmatory approach to multivariate data analysis; that is the pattern of interrelationships among the spiritual leadership constructs is specified a priori and grounded in theory.

SEM is more versatile than most other multivariate techniques because it allows for simultaneous, multiple dependent relationships between dependent and independent variables. That is, initially dependent variables can be used as independent variables in subsequent analyses. For example, in the SLT model calling is a dependent variable for vision but is an independent variable in its defined relationship with organizational commitment and productivity. SEM uses two types of variables: latent and manifest. Latent variables are vision, Altruistic love, hope/faith, calling, membership, organizational commitment and productivity. The manifest variables are measured by the survey questions associated

Table 3
SLT survey questions

Vision—describes the organization’s journey and why we are taking it; defines who we are and what we do.

1. I understand and am committed to my organization’s vision. ____
2. My workgroup has a vision statement that brings out the best in me. ____
3. My organization’s vision inspires my best performance. ____
4. I have faith in my organization’s vision for its employees. ____
5. My organization’s vision is clear and compelling to me. ____

Hope/faith—the assurance of things hoped for, the conviction that the organization’s vision/purpose/mission will be fulfilled.

1. I have faith in my organization and I am willing to “do whatever it takes” to insure that it accomplishes its mission. ____
2. I persevere and exert extra effort to help my organization succeed because I have faith in what it stands for. ____
3. I always do my best in my work because I have faith in my organization and its leaders. ____
4. I set challenging goals for my work because I have faith in my organization and want us to succeed. ____
5. I demonstrate my faith in my organization and its mission by doing everything I can to help us succeed. ____

Altruistic love—a sense of wholeness, harmony, and well-being produced through care, concern, and appreciation for both self and others.

1. My organization really cares about its people. ____
2. My organization is kind and considerate toward its workers, and when they are suffering, wants to do something about it. ____
3. The leaders in my organization “walk the walk” as well as “talk the talk”. ____
4. My organization is trustworthy and loyal to its employees. ____
5. My organization does not punish honest mistakes. ____
6. The leaders in my organization are honest and without false pride. ____
7. The leaders in my organization have the courage to stand up for their people. ____

Meaning/calling—a sense that one’s life has meaning and makes a difference.

1. The work I do is very important to me. ____
2. My job activities are personally meaningful to me. ____
3. The work I do is meaningful to me. ____
4. The work I do makes a difference in people’s lives. ____

Membership—a sense that one is understood and appreciated.

1. I feel my organization understands my concerns. ____
2. I feel my organization appreciates me, and my work. ____
3. I feel highly regarded by my leadership. ____
4. I feel I am valued as a person in my job. ____
5. I feel my organization demonstrates respect for me, and my work. ____

Organizational commitment—the degree of loyalty or attachment to the organization.

1. I do not feel like “part of the family” in this organization. ____
2. I would be very happy to spend the rest of my career with this organization. ____
3. I talk up this organization to my friends as a great place to work for. ____
4. I really feel as if my organization’s problems are my own. ____

Productivity—efficiency in producing results, benefits, or profits.

1. Everyone is busy in my department/grade; there is little idle time. ____
 2. In my department, work quality is a high priority for all workers. ____
 3. In my department, everyone gives his/her best efforts. ____
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Table 4
Means, standard deviations, and correlations among Fort Hood Longbow attack squadron study variables^a

| Variable | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------------------|------|------|------------|------------|------------|------------|------------|------------|------------|
| 1. Vision | 3.66 | 0.72 | .86 | | | | | | |
| 2. Altruistic love | 3.53 | 0.84 | .80 | .93 | | | | | |
| 3. Hope/faith | 4.02 | 0.61 | .77 | .73 | .86 | | | | |
| 4. Meaning/calling | 4.13 | 0.56 | .64 | .58 | .65 | .87 | | | |
| 5. Membership | 3.63 | 0.90 | .76 | .84 | .71 | .61 | .93 | | |
| 6. Organizational commitment | 3.45 | 0.58 | .80 | .83 | .78 | .60 | .83 | .84 | |
| 7. Productivity | 3.55 | 0.82 | .67 | .65 | .56 | .56 | .63 | .63 | .83 |

^an=369; All correlations are significant at $p < .001$. Scale reliabilities are on the diagonal in boldface.

with each latent variable (see Table 3). The structural model depicts the linkages between the manifest and latent constructs. In AMOS 4.0 these relationships are depicted graphically as path diagrams and then converted into structural equations.

Fig. 2 shows the hypothesized causal model for this study. This model is a nonrecursive model in that intrinsic motivation theory has feedback loops (between vision and altruistic love and from vision to altruistic love to hope/faith and back to vision). For this model to be identified (Bollen, 1989b) we must specify one of the loop parameters and a path common to both loops. A multiple regression analysis was performed on altruistic love with hope/faith and vision as predictors. The beta weight for the vision to altruistic love path was .77. This value was then used to gain model identification.

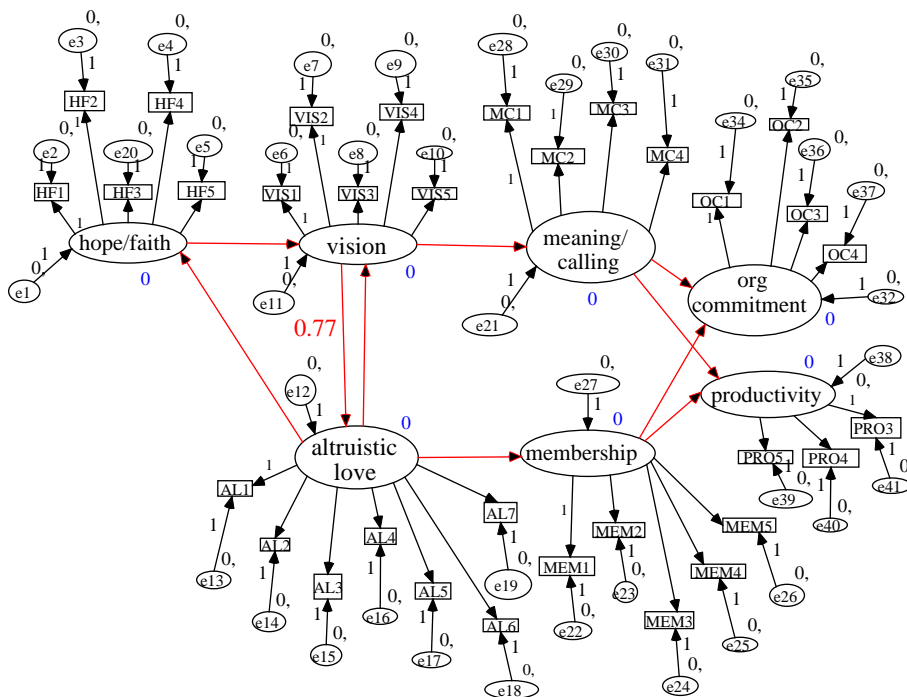


Fig. 2. Structural equation model for Fort Hood Longbow attack squadron data.

In addition, for our model to be identified the regression weight for one path leading away from each unobserved variable was fixed at unity as were all paths connecting the (unique) error components. Arbuckle & Wothe (1999, p.118) note that “every unobserved variable presents this identifiability problem, which must be resolved by imposing some constraint that will determine its unit of measurement.” Arbuckle & Wothe (1999) also state that the value of the regression weight when using this procedure is arbitrary and that changing the scale unit of the unobserved variable (say to 1/2 or 2) does not change the overall model fit.

Fig. 3 gives the result of the causal analysis using combined data from both the initial and final samples. The overall chi-square for the hypothesized model using the maximum likelihood estimation method is 1633.29 with 488 degrees of freedom and a p value less than .001. The goodness of fit was measured using three commonly used fit indices: The Bentler & Bonet (1980) normed fit index (NFI), the Bollen (1989a,b) incremental fit index (IFI), and the comparative fit index (CFI; Bentler, 1990) to compare the chi-square values of the null and hypothesized models using the degrees of freedom from both to take into account the impact of sample size. A value greater than .90 is considered acceptable (Bentler & Hu, 1995). For this model, the NFI is .959; the IFI is .971; and the CFI is .971 thereby providing support that the SLT causal model fit the data well.

Parameter estimates reflect the extent of the relationship between manifest and latent variables. Table 5 displays the individual parameter estimates. All parameter estimates are large and statistically significant. For ease of presentation, Fig. 3 shows a simplified structural model (parameters have been omitted for clarity) with path coefficients and squared multiple correlations giving the proportion of each variables variance that is accounted for by its predictors. Our results provide strong initial support for spiritual leadership theory’s causal model and its measures. The goodness of fit test and indices were all highly significant giving empirical support that, overall, the model fitted the data well.

As shown in Fig. 3, all standardized path coefficients in the hypothesized causal model with the exception of the Calling \rightarrow Org. Commitment beta are, as hypothesized by SLT, positive and significant. The model’s variable squared multiple correlations, which give the proportion of its variance that is accounted for by its predictors, range from .52 to .93. Interestingly, for this sample, nearly all of the variance for organization commitment is accounted for by membership. Membership also accounted for over twice as much variance for unit productivity as did meaning/calling.

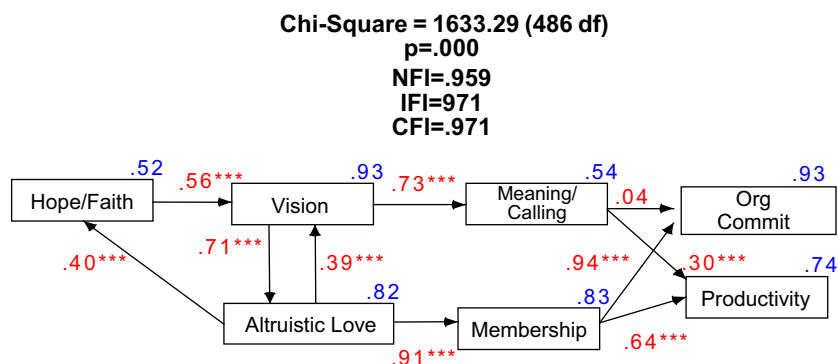


Fig. 3. Results of AMOS analysis^a for Fort Hood Longbow attack squadron. ^aParameters of each latent variable are omitted for clarity. *** $P < .001$.

Table 5
Standardized maximum likelihood error and parameter estimates

| | Parameter estimate | Z value for parameter estimate | Error estimate |
|------------------------|--------------------|--------------------------------|----------------|
| <i>Vision</i> | | | |
| Q18 | 0.924 | 18.309 | 0.319 |
| Q26 | 1 | | 0.426 |
| Q28 | 0.847 | 10.327 | 1.519 |
| Q30 | 0.958 | 18.26 | 0.347 |
| Q34 | 0.974 | 17.538 | 0.424 |
| <i>Altruistic love</i> | | | |
| Q1 | 0.939 | 18.328 | 0.463 |
| Q6 | 0.993 | 20.781 | 0.324 |
| Q10 | 1 | | 0.347 |
| Q12 | 0.954 | 19.895 | 0.356 |
| Q22 | 0.927 | 18.019 | 0.478 |
| Q24 | 0.984 | 15.217 | 0.893 |
| Q31 | 1.03 | 20.236 | 0.389 |
| <i>Hope/faith</i> | | | |
| Q8 | 0.924 | 16.853 | 0.379 |
| Q15 | 1 | | 0.3 |
| Q16 | 0.822 | 13.728 | 0.57 |
| Q27 | 0.994 | 17.871 | 0.351 |
| Q36 | 0.835 | 11.916 | 0.857 |
| <i>Meaning/calling</i> | | | |
| Q2 | 0.764 | 12.624 | 0.568 |
| Q14 | 1.068 | 19.863 | 0.226 |
| Q17 | 1 | | 0.273 |
| Q23 | 1.087 | 19.969 | 0.226 |
| <i>Membership</i> | | | |
| Q3 | 0.955 | 24.453 | 0.32 |
| Q9 | 1 | | 0.229 |
| Q13 | 0.943 | 24.614 | 0.305 |
| Q21 | 0.915 | 21.076 | 0.466 |
| Q32 | 0.866 | 21.719 | 0.382 |
| <i>Org. commitment</i> | | | |
| Q4 | 1 | | 0.439 |
| Q7 | 0.688 | 11.784 | 0.825 |
| Q11 | 1.088 | 18.448 | 0.512 |
| Q37 | 0.829 | 11.121 | 1.385 |
| <i>Productivity</i> | | | |
| Q19 | 1 | | 0.83 |
| Q29 | 1.143 | 8.374 | 0.688 |
| Q33 | 1.06 | 8.616 | 0.518 |

4.2. Common method variance issues

Common method variance (CMV) may be an issue for studies where data for the independent and dependent variable are obtained from a single source. In order to determine if the statistical and practical significance of any predictor variables have been influenced by CMV, Lindell & Whitney (2001) advocate the introduction of a marker variable analysis that allows for adjustment of observed variable correlations for CMV contamination by a single unmeasured factor that has an equal effect on all variables. However, marker variable analysis is most appropriate for research on simple independent–dependent variable relationships. It also is subject to a number of conceptual and empirical problems (Podsakoff, MacKenzie, Podsakoff, & Lee, 2003a).

SEM is more flexible than marker variable analysis because it is capable of testing unrestricted method variance (UMV) causal models since SEM allows the error terms to be intercorrelated without being fixed or constrained as in CMV. The AMOS 4.0 program has a modification indices (MI) option that allows one to examine all potential error term correlations and determine the changes in parameter and chi-square values. MI analysis for our data revealed the parameter changes due to latent variable error correlation to be less than .10. In addition a survey administration process was used that protected respondent anonymity (thereby reducing evaluation apprehension) and the order of the items were counterbalanced to control for priming effects, item-context-induced mood states, and other biases related to the question context or item embeddedness (Podsakoff et al., 2003a). Finally, Crampton & Wagner (1994) demonstrate that CMV effects seem to have been overstated, especially for studies such as this one that use self assessment of group performance with role, leader, and organizational characteristics and qualities. We therefore believe the effects of common method variance to be minimal for these measures.

4.3. Comparison of initial and final survey results

Table 6 gives the summary of the longitudinal survey results in the presentation format used to provide feedback to the squadron commander (a lieutenant colonel). The scale averages and standard deviations for the initial and final survey for the SLT variables are displayed in the lower right hand corner. An asterisk denotes a significant difference between the initial and final survey average for that variable. The bar graphs depict the dispersion for the seven spiritual leadership variables (SLT) for the Squadron's initial and final study. For ease of client interpretation but to still be able to depict not only the mean but also the dispersion, percentage of average scale responses between 1.00 and 2.99 are represented by the Disagree category. The Neither category gives the percentage of respondents with an average scale value between 3 and 3.99. The Agree percentage represents the percentage of scale values between 4.00 and 5.00. Ideally, organizations would want all their employees to agree (have scale scores above 4) or report high to moderately high (above 60%) levels for all SLT variables. Moderate or low levels (below 60%) of agreement on the theory variables indicate areas for possible organizational development intervention.

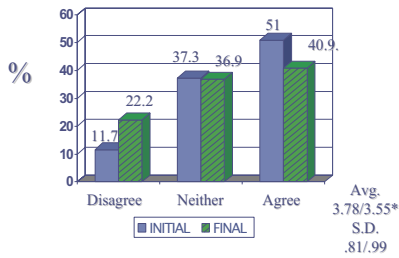
Referencing Table 6, the squadron as a whole initially reported final average values above 4 for hope/faith and meaning/calling as well as small percentages in the disagree category. The other model variables had averages between 3 and 4.

Results for the Longbow's initial study also revealed moderately high (60% to 79%) levels of agree responses for hope/faith, and meaning/calling. There were moderate (40% to 59%) levels of agree

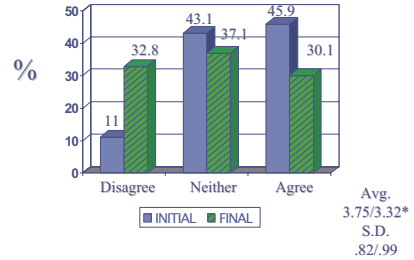
Table 6

Spiritual leadership variables

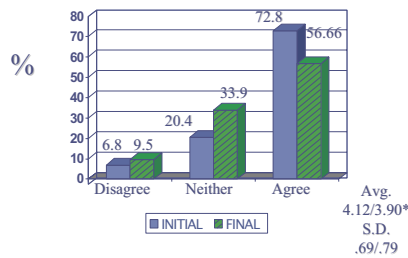
Vision



Altruistic Love

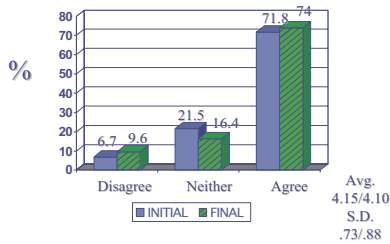


Hope/Faith

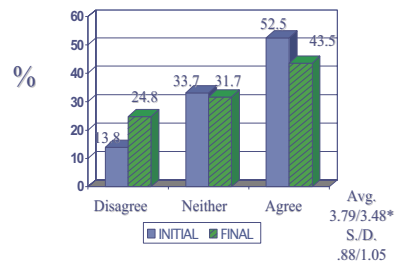


Spiritual survival variables

Meaning/Calling

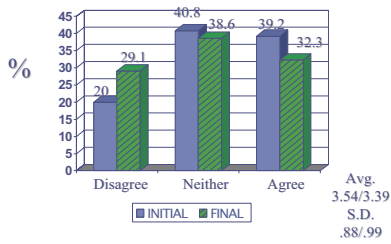


Membership

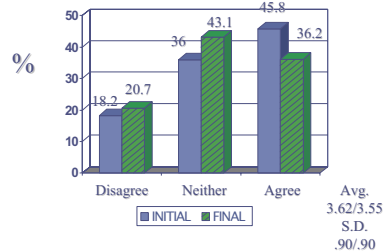


Organizational outcomes

Organizational Commitment



Organizational Productivity



responses for Vision, Altruistic love, Membership, and Organization Productivity. Organizational Commitment percentage of agree responses, however, was moderately low (20% to 39%).

Results from the Final Longbow study revealed that the mean levels for vision, altruistic love, hope/faith, and membership all significantly declined. The percentage of agree levels also dropped for all SLT variables except meaning/calling. While the soldiers in the final survey reported moderately high levels of meaning/calling (60% to 80%), the most problematic areas are the moderate percentage of agree results (40% to 60%) for vision, hope/faith, and membership, to moderately low (20% to 40%) percentage agreement for altruistic love, organizational commitment, and productivity. These findings are reinforced in the issues that surfaced from the open-ended comments summarized below.

4.4. Survey comments

An actual vision or goal was not visible to some soldiers and the need for involvement of enlisted soldiers in creating a mission was noted. Morale, respect, and attention to the needs of individuals striving for a common squadron goal were lacking as was recognizing soldiers for their hard work and dedication. Certain soldiers did not feel that there was any team building. Instead, they felt as though they were merely numbers that could be easily replaced. Planning and scheduling needed to be enhanced since some felt as though they were given little direction. Some commented that there could be more individual training. Some commented on the need for soldiers to realize the importance of their responsibility and obligation in completing tasks in a timely manner. Rules, regulations, standards, and training likewise needed improvement. Others appeared to have issues with needing more resources, distribution of information, and troop activities.

Soldiers also felt that they were not treated equally. When higher ranking enlisted noncommissioned officers (NCOs) made mistakes, they were seen as not being punished the same as lower ranking enlisted soldiers (rank E-4 and below), and lower level enlisted soldiers were punished for honest mistakes. Too many written counseling statements were seen as being given as formal reprimand when less formal verbal counseling would be more appropriate. Instead of giving soldiers Article 15s, the need to help them first was mentioned. Article 15's for little things were viewed as unnecessary. Soldiers' problems needed to be addressed, not used as an excuse for punishment.

In addition, soldiers felt that their leaders were too quick to punish them when they were trying to do their jobs as well as possible, without regard for the soldiers' and their families. There seemed to be a need for greater emphasis on a family atmosphere with more attention to family problems such as family support groups. Several soldiers commented on distribution of information to families and lack of family time.

The moderate levels of altruistic love and membership found in the study are supported by soldiers' survey and interview comments concerning low morale and little recognition. Family day, organization days, evening unit outings, and sponsored breakfasts and lunches were viewed as things that could improve troop and family morale. Some felt that soldiers needed to listen more to other soldiers while showing more care and consideration. Other soldiers felt that there was a need for more interaction between officers and enlisted soldiers. Certain soldiers felt that the dissemination of information needed to be improved along the chain of command. This included having top-level leaders working on their people skills instead of micromanaging their soldiers. Organization days were suggested as a way to build teamwork along with squadron activities for single soldiers.

The moderately low percentage of agree respondents for Organizational Productivity (36.2%) and Commitment (32.3%) may be due to some soldiers reporting that their leaders did not lead by example and were not technically qualified for their positions. The soldiers also felt that instead of showing recognition for hard work or outstanding efforts, leaders focused more on faults and mistakes. Instead of talking behind soldier's backs, NCOs needed to become more involved in planning processes for training that was to be conducted. Such planning included ensuring any changes were implemented quickly in order to be perceived as being proactive instead of reactive. Certain NCOs needed to be more considerate of individual problems versus only caring about pleasing someone else and getting promotions. There was a fear noted by soldiers that this unit was too obsessed with doing everything bigger and better than others, which could result in accidents.

Communication down the chain from the top was an issue that warranted more attention. For example, issues were seen as being handled at high levels when they could be solved at lower levels. Commanders were involved with too many issues that NCOs could handle. At the same time, leaders needed to respect and focus enlisted troops on work precision and pride instead of using threats as a means to make soldiers perform. These threats lowered morale instead of helping soldiers in their work. NCOs, according to comments, needed to provide soldiers with something to come to work for. Rank was seen as not being given when earned.

5. Discussion

This longitudinal research examining a newly formed Longbow helicopter attack squadron at Ft. Hood, Texas provides initial support for the causal model hypothesizing positive relationships between the qualities of spiritual leadership, spiritual survival, and organizational productivity and commitment. Moreover, the model and measures establish a baseline that can provide input for an action agenda for future research and Army training and development to increase Army soldier intrinsic motivation, organizational commitment, and productivity, and soldier well-being.

5.1. *Spiritual leadership as appreciative inquiry*

The vision/stakeholder effectiveness process that is central to spiritual leadership is based on appreciative inquiry which focuses on identifying and addressing key stakeholder issues, discovering what works well, why it works well, and how success can be extended throughout the organization (Malone & Fry, 2003). Hence, it is both the vision and the process for developing this vision that create the energy to drive change throughout the organization (Bushe, 1999; Johnson & Leavitt, 2001). Appreciative inquiry is premised on three basic assumptions. The first critical assumption is that organizations are responsive to positive thought and positive knowledge. Second, both the image of the future, and the process for creating that image produce the energy to drive change throughout the organization. By engaging employees in a dialogue about what works well based on their own experiences, employees recognize that there is much that works reasonably well already and, therefore, change is possible. Lastly, appreciative inquiry is based on a belief in the power of affirmations; if people can envision what they want, there is a better chance of it happening. This approach is suited to organizations that seek to be collaborative, inclusive, and genuinely caring for both the people within the organization and those they serve. By using an appreciative inquiry approach, organizations can

discover, understand, and learn from success, while creating new images for the future (Johnson & Leavitt, 2001).

This approach is most tenable when the organization has strategic leaders that are predisposed to embrace this approach. Traditional approaches to management are based in the command and control bureaucratic organizational paradigm which, by definition, focus on the negative and see the world as a glass half empty. Appreciative inquiry is an alternative process to bring about organizational change by looking at the glass as half full. Appreciative inquiry begins with the assumption that people have a choice and can consciously choose what they see and act upon. It is a generative process that gives us a way to bring possibilities to life and develop our capacities and allows individuals to have access to the kind of energy that can be transformative. Appreciative inquiry and change are not sequential, but simultaneous processes since change begins to happen with the very first question we ask (*Appreciative Inquiry and the Quest*, 2004). A process that has been adapted into appreciative inquiry is the realm of philanthropy, also known as “love of humanity.” This type of altruistic love allows for reflection of personal development in the workplace and enables individuals to create an ideal process for personal development, organization development, and social change. By placing more value on one’s capabilities and potential in an unselfish manner, individuals may become more effective and incorporate growth that is positive for themselves and those stakeholders around them (*Appreciative Inquiry and the Quest*, 2004).

An Organizational Development (OD) strategy is defined as the plan for relating and integrating the different organizational improvement activities engaged in over a period of time to accomplish objectives (Harvey & Brown, 2001). Of particular interest in the baseline findings are the “Agree” and “Neither” categories. If OD interventions are to be successful, units with the highest agree percentages should become the initial targets for the visioning intervention discussed later. The “Neither” responses can be viewed as being on the fence as they have the potential of being more easily moved to the “Agree” category (than the respondents in the “Disagree” categories). When based on appreciative inquiry, target OD strategies for improvement should be identified for these groups, rather than the more problematic high percentage “Disagree” units. These units are more likely to have performance challenges and/or be so disaffected that change is difficult.

5.2. Implications for military leadership

The basic process for the Army transformation through spiritual leadership activities for the Longbow squadron would include a visioning process to foster a strong vision with a “mental model” focused on selfless service (calling). Further, team building activities with an emphasis on managing conflict, collaborative decision making (especially during training phases for the military), and managing and overcoming resistance to change should be targeted to change the Longbow’s culture to one more centered in Army values to create higher morale and esprit d’ corps or membership (Also see Malone & Fry, 2003 for an example of this intervention).

As described earlier, spiritual leadership taps into the fundamental needs of both leader and follower for spiritual survival through calling and membership so both become more organizationally committed and productive. Following Fry (2003, 2005) and Fig. 4 spiritual leadership would utilize an appreciative inquiry process. Beginning with high percentage “Agree” units, it would be initiated by the squadron commander and the executive team developing a vision/mission. This vision must vividly portray a journey which, when undertaken, will give one a sense of calling, of one’s life having meaning and

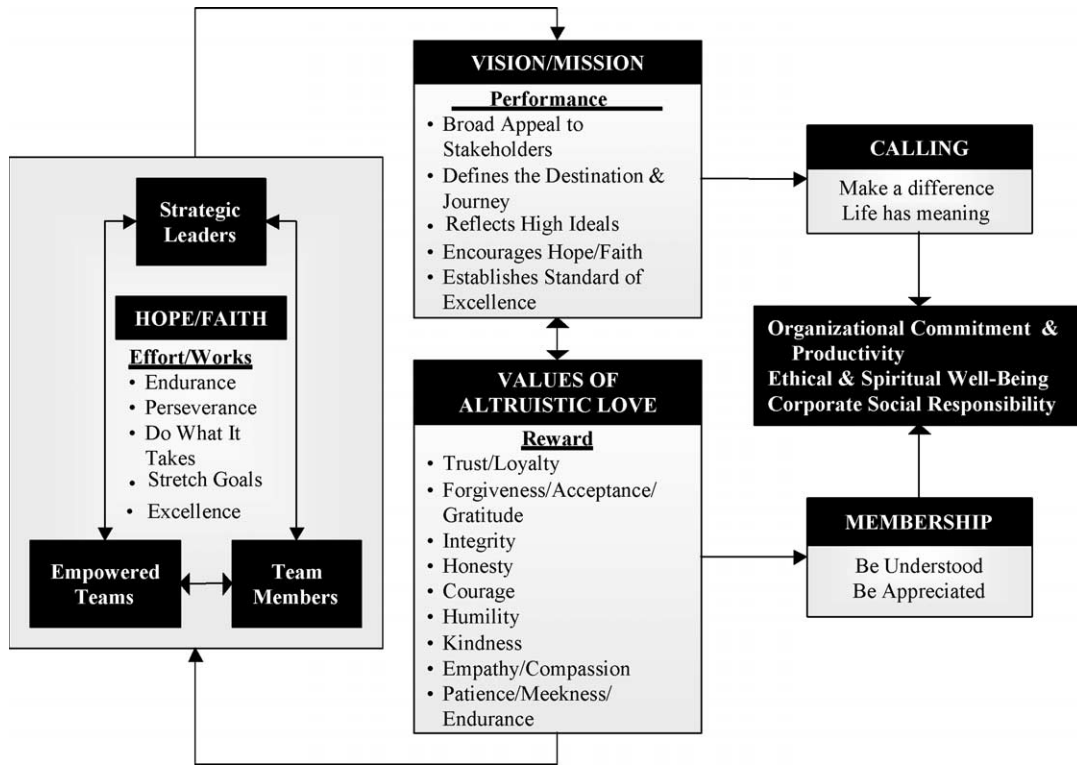


Fig. 4. Spiritual leadership as intrinsic motivation through hope/faith, and altruistic love.

making a difference. This visioning process, by engaging other squadron leaders and soldiers, then forms the basis for the social construction of the organization’s culture as a learning organization and the ethical system and values underlying it.

In spiritual leadership these values are prescribed and form the basis for altruistic love. Strategic leaders and followers, having acquired key conflict, decision making, and change management skills, then embody and abide in these values through their everyday attitudes and actions. In doing so, they create empowered teams where participants are challenged to persevere, be tenacious and pursue excellence by doing their best in achieving challenging goals through hope/faith in the vision, their leaders, and themselves. Through participating in these teams, soldiers through recognition and celebration experience a sense of membership and feel understood and appreciated.

During this experience soldiers also begin to develop, refine and practice their own personal leadership that will embody a vision for their own lives that has meaning, makes a difference and that incorporates the values and attitudes of altruistic love in social interaction with others to positively impact the final work product. It is through this process that individual, team, and organizational vision and values are integrated and become one.

5.2.1. *Army transformation through spiritual leadership*

The United States Army already has many of the attributes of the spiritual leadership model. To use the metaphor of a picture frame, current Army initiatives such as its vision (An Army of One), the Army

values, summarized by LDRSHIP and carried by all Army soldiers (Loyalty, Dedication, Respect, Selfless Service, Honesty, Integrity, Personal Courage), and its Strategic Well-being Plan (which includes four dimensions: physical, mental, material, and spiritual well-being) are like unconnected pieces in a puzzle. Fig. 5 illustrates how the SLT Model provides a frame for these pieces that allows one to fit them together holistically to provide focus and direction for the Army’s transformation effort (Mitchell, 2001; Morris, 2001; Williams, 2001).

The military is closer than most businesses in achieving the positive results of the spiritual leadership model. To see the results of spiritual leadership theory in action in the form of organizational commitment, all one must do is study the military. The military is a human laboratory for testing different methods of leadership, and one that has adopted the majority of the spiritual leadership model components but under different terms.

What are some of the things that the United States Army could do to further facilitate its transformation efforts in light of the spiritual leadership model? Many of the ideas require decisions that high-level Army leadership would have to make in order to be successful in its transformation effort. We offer some possible approaches to the Army issues, as they exist today, in maintaining a “go to war” mentality, which could be researched for possible implementation through the spiritual leadership paradigm.

Our extensive experience with the Fort Hood environment gives the authors a unique perspective to further support the recommendations which follow. Two of the three authors primarily teach graduate business courses at the Soldier Development Center at Fort Hood. The third researcher has worked with education for two years at the Soldier Development Center at Fort Hood testing soldiers for different colleges and universities, and, likewise, is an instructor for undergraduate courses at Tarleton State University and Central Texas College. Additionally, one researcher worked for the Army as a systems



Fig. 5. Army transformation through spiritual leadership (Morris, 2001, p.12).

engineer for several years and another, a graduate of the United States Military Academy, spent twenty years as a commissioned officer serving in Divisional and Non-divisional units.

The backgrounds of all three authors enable them to contribute unique insights and perspectives. Also, nearly a third of the students are Army mid-level officers and senior NCOs. Every semester these students do projects that focus on problems with their military experience and offer potential solutions based on the theories and concepts covered in their classes on ethics and leadership, organizational behavior, organization design, and organizational change and development. Exposure to these projects and our initial base line work at Fort Hood offer several general potential research issues that could be addressed by the spiritual leadership organizational transformation paradigm.

One of the serious shortcomings of the military is its hierarchical nature due to an extended chain of command (the major obstacle to overcome in becoming a learning organization). Decisions need to be made at the squadron (battalion), troop (company), platoon, and section level. Operation Iraqi Freedom has shown that combat requirements of the 21st century will dictate that units must be able to respond quickly to intelligence and that tactical and strategic decisions must be made quickly at the lowest possible level. Small units will have to be capable of operating on their own, quite often deep within enemy territory.

The Army has downsized considerably yet like most nonprofit organizations, it is probably too top-heavy for a learning organization. What would a learner command structure look like? A cultural revolution in the military would emphasize transformation to a learning organization through a further downsized, leaner command structure coupled with the increased importance of committed, empowered units (lack of micromanagement), and selfless service (Morris, 2001).

Although flattening the structure of the military is to some degree an option, there are some things that are done in other countries and have been discussed by some of the revolutionary thinkers in the United States Army today, such as modifying its three-year rotation system. For instance, the British use a regimental system in which soldiers sign up for a unit and stay with that unit for the duration of their time in the Army. Consideration needs to be given to moving the Army to a regimental system. This system allows the soldiers to remain in one culture without changing units every three years as the United States Army does. Although the United States Army has a set of values that is known Army wide, the constant change in culture from unit to unit due to its rotation system takes away from the United States Army's ability to create a strong unit culture that fosters organizational commitment and productivity.

Army families are an integral part of the Army team. They must be made to feel like they are part of this team. Taking care of their families and health, as well as recognizing the need for personal time away from any work organization, are important to most individuals and will foster commitment and maximum productivity. Moving every few years dramatically affects the well-being of soldiers and their families and creates much turbulence in their lives. This is an important factor in decreasing retention and recruitment rates. If the United States Army allowed soldiers to enlist in a particular unit and stay with that unit longer, it would greatly affect the commitment of soldiers to their parent unit and allow them to clearly internalize the values, customs, and culture of a unit which would enhance esprit d' corps, organizational commitment, meaning, calling, and membership, resulting in an overall increased productivity for the unit (Morris, 2001).

A mentoring or sponsorship program for soldiers entering their first duty station would insure that the new (often foreign) Army values obtained during initial training would be reinforced. Army units with strong cultures based on Army values would then become a self-policing empowered unit that

promotes those who have truly internalized the unit's vision, mission, and values, and dismisses those who do not. Through this empowerment process, we propose that a much stronger bond between Army leaders, soldiers, and their families would be created thereby facilitating the Army in its transformation efforts.

Although these longitudinal results may seem to cast a negative light on the squadron's initial formation effort, it must be noted that having a squadron commander with all new personnel that would handle the initial training only to then turn the unit over to the commander that would then take the squadron into active duty is by its very nature highly stressful. The unit was faced with the assembling of soldiers and new apache longbow helicopters as well as the challenge of establishing organizational standards with an emphasis on building team cohesion and unit confidence. In addition, the initial survey was conducted when the squadron was less than 20 days old before much equipment had arrived and operations actually began. One possible explanation of the initial survey results is that soldier anticipation and expectations were high due to the normally high esprit d' corps inherent in forming new combat units. While not made available for this study, the actual performance data of the unit during this training phase were judged by the squadron's chain of command to be acceptable and, despite the tone of the survey comments, this unit was certified as combat ready and deployed for duty in Germany on schedule. It has since then gone on to serve as a key combat unit in the war on Iraq.

5.3. Implications for leadership theory and research

Fry (2003) argued that spiritual leadership theory is not only inclusive of major extant theories of leadership (e.g., transformational, charismatic, servant, authentic, path-goal), but that it is also more conceptually distinct, parsimonious, and less confounded. Recent work by Podsakoff, MacKenzie, Podsakoff, & Lee (2003b) and these findings provide evidence that this is also true empirically. Podsakoff et al. (2003b) examined the potential problems caused by measurement model misspecification of theories in the field of leadership. In particular they note the distinction between exploratory and confirmative factor measurement models (discussed earlier) and in whether the measures are viewed as reflections of an underlying latent factor or determinants of it. Reflective indicator models are considered to be "reflections of" or "effects" of the underlying latent construct. The latter are called formative indicator models because the measures are viewed as coming together to "cause" or "form the construct."

For reflective indicators:

1. The *direction of causality* for the construct is viewed as the cause of changes in the measures.
2. Each of the indicators is assumed to be sampled from a pool of *interchangeable items* that are all equally valid measures of an underlying unidimensional construct.
3. The underlying construct is viewed as the independent variable that should *covary* with the indicators, which are viewed as independent variables.
4. All indicators reflect the same underlying construct, are assumed to be interchangeable, and all have the same antecedents and consequences.

For formative indicators:

1. The indicators are considered the causes or defining characteristics of the latent variable and, therefore, the *direction of causality* flows from the measures to the construct.

2. The *items need not be interchangeable*, each of the indicators may represent a unique part of one of the aspects or facets of the construct, and dropping an indicator from the measurement model may alter the conceptual meaning of the latent variable.
3. Since the latent construct is the dependent variable and the indicators are the independent variables, it is not necessary or even implied that they *covary*.
4. There is no reason to expect the indicators to have the same *antecedents and consequences* because the measures do not necessarily capture the same aspects of the construct's domain and are therefore not necessarily interchangeable.

“This is an important theoretical distinction that has major implications for the estimation, interpretation, and psychometric assessment of the construct (Podsakoff et al., 2003b, p. 617).” Measurement model misspecification can significantly bias effects on structural parameter estimates—perhaps by as much as 90% when the focal construct is endogenous, as much 300% to 500% when in the exogenous position, and as much as of 300% to 500% of the effects of the misspecified construct on other constructs (Jarvis, MacKenzie, & Podsakoff, 2003). Spiritual leadership theory was formulated as a confirmatory as a confirmatory factor model with reflective indicators. As such it avoids the theoretical and measurement model misspecification problems of formative models such as the widely accepted and extensively researched theories of charismatic and transformational leadership.

Most significant from a theoretical perspective for formative theories is the nature of the theoretical construct. Transformational leadership, for example, is really conceptualized as a second-order construct comprised of a first-order subdimensions (charisma, idealized influence, inspirational leadership or motivation, intellectual stimulation, and individualized consideration) that should be modeled using formative indicators (Podsakoff et al., 2003b). To date, there is no agreement on how these indicators should combine to create this second-order construct. Nor is there agreement on how all the first-order subdimensions and second-order constructs combine to positively influence important organizational effectiveness criteria, such as organizational commitment and productivity. This is a classic example of “unrationalized categorization”—a state of confusion which is caused by the tendency to assume homogeneity within definitions of categories of variables while failing to elaborate explicitly the relationships between them (Fry & Smith, 1987; Stanfield, 1976). Add to this the measurement model misspecification problems with current research and there are significant challenges for future research on transformational and charismatic leadership. The results of the present study provide support that spiritual leadership offers an avenue that avoids these thorny issues.

5.4. *Implications for workplace spirituality theory and research*

This special issue, as well as a growing body of research, is testimony to the increasing evidence that leader emphasis on spiritual needs in the workplace produces beneficial personal and organizational outcomes (Eisler & Montouri, 2003; Giacalone & Jurkiewicz, 2003a; Malone & Fry, 2003; Mitroff & Denton, 1999; Zinnbauer, Pargament, & Scott, 1999). Spiritual leadership theory was built upon Giacalone & Jurkiewicz's (2003a,b p. 13) definition of workplace spirituality:

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 in a way that provides feelings of compassion and joy.

This sense of transcendence—of having a sense of calling through one’s work—and the need for membership or social connection are central to the causal model of spiritual leadership and provide the necessary foundation for any theory of workplace spirituality and spiritual leadership.

Furthermore, Giacalone & Jurkiewicz (2003a,b) posit that the greater the value congruence across levels, the more individuals will experience transcendence through their work. Thus, if we are to gain a systemic understanding of how workplace spirituality—through transcendence and value congruence among organizational, team, and individual values—impacts organizational effectiveness, a focus on the interconnectedness and interplay across these levels is required. Spiritual leadership theory explicitly incorporates this focus (Fry, 2003, 2005).

The results of this study also provide strong initial support for spiritual leadership theory and evidence that those followers who have hope/faith in a transcendent vision within a context of the values of altruistic love have a higher sense of calling and membership, are more committed to their organization, and describe their work units as more productive. Of particular interest is the finding that the meaning/calling and organization commitment relationship was negligible and that membership accounted for over twice as much variance for unit productivity as did meaning/calling. These findings for meaning/calling and membership are similar to those of Malone & Fry (2003) who, in a longitudinal field experiment of elementary schools, found similar support for the causal model and roughly similar differences in the variance accounted for by these two spiritual survival variables on commitment and unit productivity. However, the percentages of agreement on the study variables (See Table 6) in that study were much higher and the meaning/calling relationship was significant, although small at .24.

This differential impact of calling and membership on organizational commitment and productivity is noteworthy and warrants further investigation. Much emphasis has been put on the importance of vision in current leadership research. However, it is argued that employee commitment is a central variable for quality and continuous improvement, customer satisfaction, and, ultimately, financial performance (Matherly, Fry & Ouimet, 2005; Kaplan & Norton, 1992, 1996, 2004). If membership is indeed a primary driver of organizational commitment, then a culture of altruistic love (where there is care, concern and appreciation for both organizational and employee needs) will satisfy followers’ needs for membership. Current theories of leadership have not addressed these membership linkages, yet, they are central to spiritual leadership theory.

6. Summary and conclusion

Spiritual leadership theory (SLT) offers promise as a springboard for a new paradigm for leadership theory, research, and practice given that it (1) incorporates and extends transformational and charismatic theories as well as ethics- and values-based theories that have little empirical research to date, e.g., authentic and servant leadership and (2) avoids the pitfalls of measurement model misspecification.

The results of this study, plus those of Malone & Fry (2003), provide strong initial support for the reliability and validity of the SLT measures and the causal model of spiritual leadership. In one sense we have come full circle and returned to the beginnings of initial theorizing on leadership as motivation (Fry, 2003). Almost thirty years ago House & Mitchell (1974) initiated this area of leadership research with path-goal theory. Shortly thereafter House (1977) moved on to become the founder of charismatic leadership theory that was followed by Burns’ (1978) work that set the stage for Bass’s (1985) and

Conger & Kanungo's (1988) theoretical and empirical work on transactional, transformational, and charismatic leadership. Yet, they did not build on path-goal theory's use of motivation theory (House, 1996). Nor did they incorporate specific follower and organizational outcomes as fundamental to their theories. The lack of clearly defined follower and task characteristics, such as those identified in path-goal theory, has also led to a haphazard search for relevant intervening, moderator, and organizational effectiveness variables within a correlation rather than causal framework and serious measurement model misspecification.

Regarding workplace spirituality, Giacalone & Jurkiewicz (2003a,b) identify four major weaknesses that must be addressed if this newly emerging paradigm is to achieve acceptance within the scientific community: (1) the lack of an accepted, conceptual definition; (2) inadequate measurement tools; (3) limited theoretical development; and (4) legal concerns. To address these weaknesses and to advance as a workplace spirituality paradigm rooted in science, three critical issues will need to be addressed: levels of conceptual analysis; conceptual distinctions and measurement foci; and clarification of the relationship between criterion variables (Giacalone, Jurkiewicz, & Fry, 2004).

One area that seems to have been effectively addressed in the Army but is still problematic in most other organizations is the role of religion in the workplace and its relationship to spirituality (Fry, 2003). Viewing workplace spirituality through the lens of religious traditions and practice can be divisive in that, to the extent that religion views itself as the only path to God and salvation, it excludes those who do not share in the denominational tradition and often conflicts with the social, legal, and ethical foundations of business and public administration. Thus, religion can lead to arrogance that a company, faith, or society is "better", morally superior, or worthier than another (Nash, 1994). Translating religion of this nature into workplace spirituality can foster zealotry at the expense of organizational goals, offend constituents and customers, and decrease morale and employee well-being (Giacalone & Jurkiewicz, 2003a).

Research on several fronts must be conducted for spiritual leadership theory to establish that it is indeed inclusive of other widely accepted leadership theories, and that it extends this basic work through a valid causal model that incorporates relevant spiritual, cultural, follower, and organizational effectiveness variables. First, the conceptual distinction between spiritual leadership theory variables and other leadership theories, constructs, and their relationship to extrinsic and intrinsic motivation must be refined. Based on these results, a natural beginning point would be to conduct research on the role of organizational culture in creating a sense of employee membership and its ultimate effect on important organizational and personal outcomes. Second, more longitudinal studies are needed to test for changes in key variables over time. Last, studies are needed that incorporate more objective performance measures from multiple sources Podsakoff et al. (2003a).

Spiritual leadership theory is an model of organizational/professional development that fosters systemic organizational transformation from the bureaucratic to the learning organizational paradigm that seems to be required for organizations to be successful in today's chaotic, global, Internet age environment. Past research has clearly shown that increased organizational commitment strengthens motivation and reduces absenteeism and turnover (Meyer & Allen, 1997; Mowday, Porter, & Steers, 1982) and that continuous improvement, which is at the heart of the total quality movement (TQM), is related to firm productivity, customer satisfaction, and profitability (Baldrige National Quality Program, 2004; Matherly et al., 2005; Kaplan & Norton, 2004). The causal model of spiritual leadership and its relationship to spiritual survival and other individual and organizational outcomes for these and other effectiveness variables (e.g., customer satisfaction and objective measures of performance) in

production/service organizations should be researched and validated before this approach is widely applied. Also, outcomes across organizational, team, and individual levels hypothesized to be affected by spiritual leadership (e.g., positive human health, ethical and spiritual well-being, and corporate social responsibility) need to be validated for spiritual leadership theory (Fry, 2005).

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