Assessing the spiritual leadership effectiveness: The contribution of follower's self-concept and preliminary tests for moderation of culture and managerial position ☆

Chin-Yi Chen [a,*], Chun-I Li [b]

[a] National Yunlin University of Science and Technology, Department of Business Administration, 123 University Road, Section 3, Touliu City, Yunlin County 640, Taiwan
[b] TransWorld University, Department of Marketing Management, 1221, Zhennan Rd., Douliu City, Yunlin County 640, Taiwan

ARTICLE INFO

ABSTRACT

This research examines several determinants considered to influence the spiritual leadership (SL) effectiveness, including one motivational mediating factor of follower's self-concepts, and two conditional factors, i.e., culture (as a macro-level factor) and managerial position (as a micro-level factor). The construct of SL was validated using a sample comprising 591 employees from various profitable organizations in two major Chinese societies: China and Taiwan ($n = 372; 219$). A second sample of 122 military police in the army was also recruited for validation purpose. We integrated the follower's transcendental self-concepts into the existing SL framework, and validated their substantiality to leadership effectiveness. In addition, the results showed that culture differs on the SL effectiveness, while position hierarchy (managerial vs. non-managerial positions) does not moderate between the intrinsic motivations of SL and in-role/extra-role performance.

© 2012 Elsevier Inc. All rights reserved.

1. Introduction

1.1. Spiritual leadership: an emerging construct and research focus

The field of leadership is evolving towards a more value-based approach of leadership. In contrast to the traditional leadership models mostly based on the "economic cost–benefit assumptions" that described leader behavior in terms of leader–follower exchange relationships, setting goals, providing direction and support, and reinforcement behaviors (Bass, 1985), the new-genre leadership, or the "value-based, spirit-centered" leadership models are the transformational leadership schools which emphasized symbolic leader behavior; visionary, inspirational messages; emotional feelings; ideological and moral values; individualized attention; and intellectual stimulation (Avolio, Walumbwa, & Weber, 2009). Spiritual leadership (SL) has recently been acknowledged as a more value-oriented new-genre leadership theory, as well as an emerging area of leadership research (Avolio et al., 2009). Conceptually defined by Fry (Fry, 2003; Fry, Vitucci, & Cedillo, 2005), spiritual leadership is rooted in an intrinsic motivation model that incorporates "vision," "hope/faith," and "altruistic love" to portray an effective leader. SL comprises the values, attitudes, and behaviors of a leader to intrinsically motivate the self and others through spiritual well-being, "calling" and "membership," from which followers experience meaning in their lives and feel capable of making a difference, being understood, and being appreciated by the leaders (Fry et al., 2005).

---

* Corresponding author. Tel.: +886 5 5342601x5220.
E-mail address: cycmich@gmail.com (C.-Y. Chen).

Fry's pioneering work is inspiring and serves as the basis for future leadership research. However, as a new paradigm of research, spiritual leadership theory relies more on empirical validations (Chen, Chen, & Li, 2011), particularly the validation of its effectiveness and the enhancement and situational factors to its effectiveness. For instance, in addition to the spiritual well-being of meaning/calling and membership explored by Fry's original research, more followers' mediating mechanisms need to be examined. And more leadership outcomes as well as the external generalizations are also important issues in the SL research focus.

2. Literature review

2.1. Main components and theoretical foundations of SL

Fry (2003) incorporated spirituality (internal psychological characteristics of individuals) into leadership (external behavior to effectively accomplish organizational goals through collective force), and proposed a cause-and-effect model of spiritual leadership (i.e., the spiritual leadership theory; SLT), in which the three leaders' spiritual factors are mediated by the two followers' characteristics to influence organizational outcomes. The three leaders' spiritual factors include: (1) 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); (2) hope/faith: refers to "the source for the conviction that the organization's vision/purpose/mission will be fulfilled" (Fry, 2003, p. 713), thus it "adds belief, conviction, trust, and action for performance of the work to achieve the vision" (Fry, 2003, p. 714); and (3) altruistic love: refers to leaders and followers having "a sense of wholeness, harmony, and well-being produced through care, concern, and appreciation for both self and others. Underlying this definition are the values patience, kindness, lack of envy, forgiveness, humility, selflessness, self-control, trust, loyalty, and truthfulness" (Fry, 2003, p. 712). The two followers' characteristics are: (1) meaning/calling: "the experience of transcendence or how one makes a difference through service to others and, in doing so, derives meaning and purpose in life" (Hannah, Walumba, & Fry, 2011); and (2) membership: the feeling of being understood and appreciated.

Spiritual leadership is defined by Fry as: comprising "the values, attitudes, and behaviors that one must adopt in intrinsically motivating one's self and others so that both have a positive increase in the sense of spiritual well-being through calling and membership, that is, they experience meaning in their lives, have a sense of making a difference, and feel understood and appreciated" (Fry et al., 2005, p. 836). When leaders share meaningful visions with employees, and show concern for their values and behavior, the employees feel that their jobs and lives are special and meaningful, resulting in membership. The leaders create a culture of mutual care and guide the employees to work toward the visions.

Fry's theory of spiritual leadership is fundamentally rooted in a motivation-based aspect, similar to that of transformational and charismatic leadership, which both emphasize intrinsic motivation. Fry's theory also encompasses the religious-based aspect (religion and spirituality both value care and love), the ethics-based aspect (such as treating the organizational stakeholders and customers with responsibility), and the value-based aspect (such as developing an organizational culture that values the work, meaning, and positive interpersonal relationships of employees).

2.2. Prior research on SLT effectiveness

Reave (2005) has reviewed over 150 studies and concluded that spiritual values and practices are connected to leadership effectiveness. Similarly, the empirical studies of SL model also showed success in leadership outcome variables. Fry et al. (2005) used a total of 369 U.S. military soldiers as the study sample, and empirically validated the theory proposed in 2003. They demonstrated the reliability, validity, and the fit of the theoretical SL model, and proved the influence of spiritual leadership on subsequent employee productivity and organizational commitment.

The SL causal model has also been confirmed applicable to the profit organizations. Using a sample of 347 workers employed in 43 wholesale companies and 388 workers at home office, Fry and Slocum (2008) found that the SLT explained 13% of the distributor sale growth, 94% of an employee's commitment to the company, and 73% of the distributorship productivity.

To date, the only SL model developed, tested, and validated in a variety of settings can be attributed to Fry (2003, 2005, 2009). Empirical validation studies "have been conducted in over 100 organizations including schools, military units, cities, police, and for profit organizations (sample sizes ranged from 10 to over 1000)" (Fry and Cohen, 2009, p. 269). The SLT has been demonstrated to exhibit high effectiveness on a variety of outcome variables at individual and/or team levels, including employee productivity, organizational commitment, employee life satisfaction, and sales growth (Fry & Matherly, 2006; Fry & Slocum, 2008; Fry et al., 2007a, 2007b, 2005, 2011; Malone & Fry, 2003). In addition, individual and organizational outcomes such as financial performance, corporate social responsibility, employee well-being, and workaholic behavior, have been addressed to be influenced by the SLT (Fry & Cohen, 2009; Fry & Slocum, 2008).

2.3. Motivational mechanisms in the SL model

Although the SL model is promising, additional mediating variables among followers exist and are considered important for SL. Leadership literature generally recognizes two different clusters of motivational mechanisms through which transformational leaders exert influence on followers. The first set of variables relates to followers' attitudes toward their leaders (Bono & Judge, 2004; Jung & Avolio, 2000; Podsakoff, MacKenzie, Moorman, & Fetter, 1990), while the second set of variables relates to followers' self-concepts (Lord & Brown, 2001; Shamir, 1990; Sosik & Dworakivsky, 1998). The SL theory basically captures (1) the followers'

source of motivation toward the leader (membership) and (2) the followers' source of motivation toward the work (meaning/calling); however, the followers' source of motivation related to self-concepts seems neglected. One aim of this study is to include the source of motivation toward a follower's inner self, or the follower's self-concept based spirituality, for example, heightened self-esteem and self-efficacy (Pierce & Gardner, 2004; Shamir, House, & Arthur, 1993a,b; Spreitzer, 1995), as the third source of a follower's motivational attributes of SL, and to test for its incremental validity in leadership effectiveness.

H1. The positive relationship between spiritual leadership and organizational outcomes (performance, organizational citizenship behavior, and organizational commitment) is fully mediated by follower's motivational mechanisms, calling/meaning and membership.

2.4. Follower's self-concepts as motivational mechanisms in the SL model

Many researchers have suggested self concept as a multifaceted construct (Marsh & Yeung, 1998; Shavelson, Hubner, & Stanton, 1976; Song & Hattie, 1985). Researchers have measured "global" self concept in reference to an overall perception of self, "role-specific" self concept as the self-perception that arises from many roles in one's life (parent, student, spouse, etc.), and "task/situation-specific" self concept as the self-perception that results from behavior in a specific situation or in a task performed (Pierce, Gardner, Cummings, & Dunham, 1989). It has been reported that specific self-concepts are more important than general self-concepts in determining subsequent achievement (Dickhäuser & Reinhard, 2006). Considering the work-related contextual characteristic defined by the SLT, as well as that work-specific content is the most probable outcome that will occur in the SL relationship, we used "OBSE" and "work-related self-efficacy" to represent the work-specific "self esteem" and "self-efficacy".

Heightened self-esteem has long been identified as a motivation mechanism in mediating leader's behavior and leadership outcomes (Shamir et al., 1993a,b; p. 581). Self-esteem refers to an individual's overall evaluation of his/her competencies (Rosenberg, 1965). Pierce et al. (1989) has particularly introduced the concept of organization-based self-esteem (OBSE), defined as a self evaluation of ones' personal adequacy, or a person's belief to be capable, significant, and worthy, as an organization member. It reflects an individual's self-esteem around work. OBSE has its theoretical background in self-enhancement motivation and self-consistency motivation (see Korman, 2001; Pierce & Gardner, 2004, for reviews). It was demonstrated an antecedent of employee intrinsic motivation (Pierce & Gardner, 2004) and a mediator between leader–follower relationships (Aryee, Budhwar, & Tan, 2003; Shamir et al., 1993a,b). Thus, to include self-esteem as a follower's mediating mechanism in the SL process is reasonable.

Self-efficacy has its theoretical background in Social Cognitive Theory (Bandura, 1986, 1997, 2000). Self-efficacy is defined as a person's belief in their own competence of performing in a certain manner to attain certain goals (Bandura, 1988). People with high self-efficacy in a task are more likely to make more of an effort, and persist longer, than those with low efficacy. The theory of charismatic/transformational leadership (e.g., Bass, 1985; Shamir et al., 1993a,b) as well as empirical studies (e.g., Judge and Piccolo, 2004; Kark, Shamir, & Chen, 2003; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005; Walumbwa, Wang, Lawler, & Shi, 2004) suggest that efficacy beliefs would mediate the relationship of transformational leadership with work-related attitudes, performance, and followers' affective well-being (Nielsen, Yarker, Randall, & Munir, 2009).

Spiritual leaders can raise follower's self-esteem and self-efficacy (Aryee et al., 2003; Shamir et al., 1993a,b), both by personal and collective influences. On the one hand, spiritual leaders nurture followers by expressing confidence, care, and respect in followers and by providing training, coaching, and development opportunities (Conger & Kanungo, 1998; Shamir et al., 1993a,b), so that follower self-esteem and self-efficacy are enhanced. On the other hand, altruistic love is the spiritual leader's care and concern for others, so as to create an environment of joy, peace and serenity and drives out fear and anxiety. SL therefore creates a warm and caring environment which increases the intrinsic motivation of followers to expend effort. Fry et al. (2005) described this collective process as "organization transformation" (OT). It is an extension of organizational development which leads to "massive changes in an organization's orientation to its environment, vision, goals and strategies, structures, processes, and organizational culture" (Fry et al., 2005, p. 836).

This culture, in turn, heightens follower self-esteem and self-efficacy. Spiritual leaders seek to affect the self-concepts of subordinates (Conger & Kanungo, 1998; Shamir et al., 1993a,b), so that they would internalize the values and visions of the organization which would then transform to their own system of values. When the subordinates recognize the goals of the organization and accomplish the goals, the needs for organizational recognition or self-worth (Pierce & Gardner, 2004) as well as the sense of self-competence (Walumbwa et al., 2005, 2004) are then fulfilled.

The following hypothesis is thus proposed:

H2. The positive relationship between spiritual leadership and organizational outcomes (performance, organizational citizenship behavior, and organizational commitment) is fully mediated by follower's transcendental self-concepts.

As shown in Fig. 1, the research framework summarizes the literature review and hypotheses of the three leader spiritual factors and the influence of the three types of follower's motivational mediators on organizational outcomes.

2.5. SL and leader effectiveness: the need to enquire into moderations

Scholars suggest that determining the causal mechanisms that link leadership to outcomes will be a priority for future leadership studies (Avolio et al., 2009). Jung, Yammarino, and Lee (2009) also call for research to identify the boundary conditions where leadership styles might become relatively effective (Dickson, Den Hartog, & Michelson, 2003). Leadership effectiveness and its intermediary mechanisms have become the focus of researchers. This study examines two plausible boundary conditions in
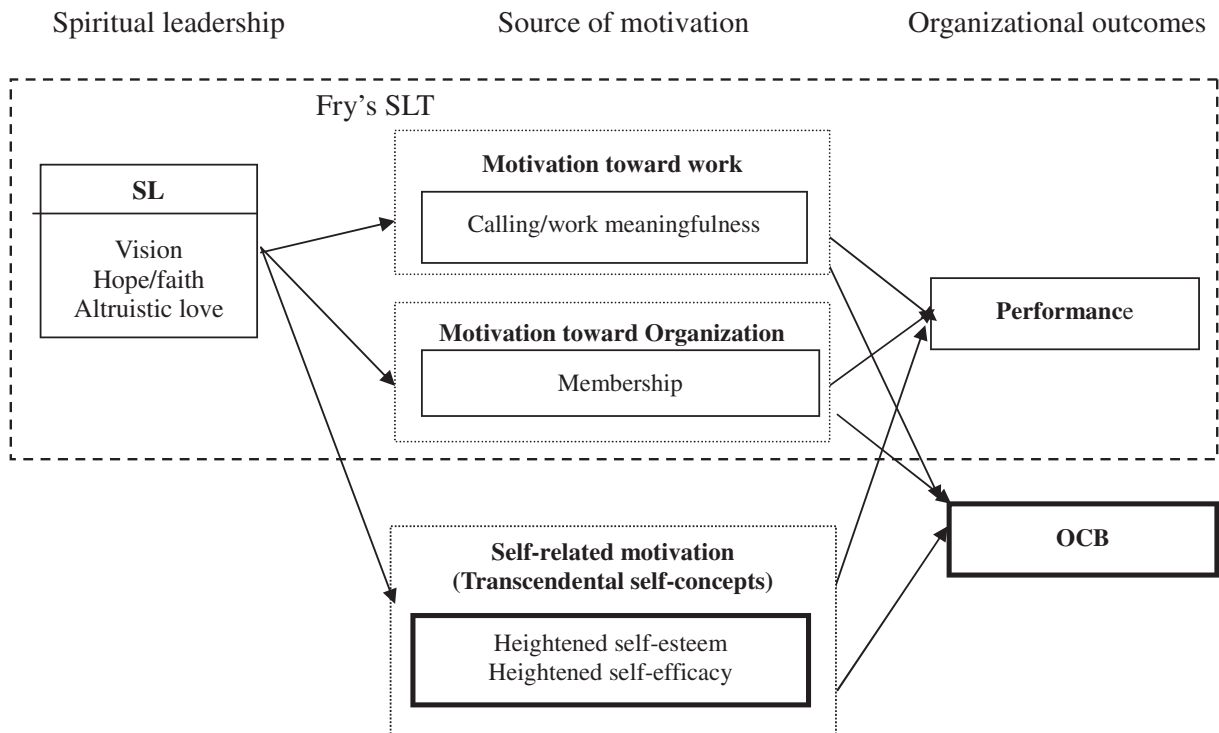
Spiritual leadership   Source of motivation   Organizational outcomes

Fig. 1. Conceptual research framework of this study.

the SL process and their impact on leadership effectiveness, including one micro-level factor, the position hierarchy, and one macro-level factor, the culture.

2.6. Culture as moderation

The first boundary condition for SL effectiveness is culture. Fry's cause-and-effect model calls for further studies involving cultural validation.

2.6.1. Variform functional universality across cultures

Bass (1997) proposed the concept of "variform functional universality" to describe the cultural influence on transformational leadership effectiveness, that is, when the relationship between two variables is found across cultures, the magnitude of that relationship differs (Bass, 1997; Dickson, Hanges, & Lord, 2001; Lonner, 1980). This "variform functional universality" concept is supported by empirical findings. Certain studies indicated that transformational leadership has a more profound influence on work outcomes in "collectivistic" cultural values.

2.6.2. Some examples of cultural values to moderate leader effectiveness

After studying a group of Korean samples, Jung et al. (2009) argued that "since subordinates are highly motivated to accomplish organizational goals, willing to put extra effort, and share common goals… transformational leaders in collectivistic cultures are more likely to motivate followers to work for transcendental goals instead of immediate self interests" (Jung, Bass, & Sosik, 1995, p. 11). Jung et al. (1995) argued that collectivistic orientation plays a facilitating role in the transformational leadership process, "in collectivistic cultures, a strong tendency to confirm organizational values…there is a high level of value agreement between followers and leaders and between followers and the organization. Thus, a transformational leader's idealized influence may be effectively transmitted into followers' work attitude and values in collectivistic cultures." (Jung et al., 1995, p. 11) Bass (1997) also agreed that transformational leadership may be far more pervasive in collectivistic societies than in individualistic ones for the same reason. The above rationale about collectivistic culture may apply to the spiritual leaders as well, that the spiritual leaders' idealized influence may be effectively transmitted into followers' work attitude and values in collectivistic cultures.

However, other studies examining the mediating mechanisms of cultural values of "traditionality" (measured by "respect for authority/hierarchy") revealed that transformational leadership is less effective in traditional Eastern culture (Spreitzer, Perttula, & Xin, 2005). While Bass (1997) refers to research supporting the generalizability of transformational leadership effectiveness in New Zealand, India, Japan, and Singapore, the research by Yu, Leithwood, and Jantzi (2002) indicated that the effects of transformational

leadership on teachers' commitment to change operated similarly in both North America and Hong Kong; however, the effects were significantly less in Hong Kong. There is still no academic reconciliation of this evidence.

Den Hartog et al. (1999, p. 225) provided the reason why hierarchy/power distance matters to an effective leader: "In some cultures, one might need to take a strong decisive action in order to be seen as [an effective] leader, whereas in other cultures consultation and a democratic approach may be a prerequisite. And, following from such different conceptions, the evaluation and meaning of many leader behaviors and characteristics may also strongly vary in different cultures. For instance, in a culture that endorses an authoritarian style, leader sensitivity might be interpreted as weak, whereas in cultures endorsing a more nurturing style, the same sensitivity is likely to prove essential for effective leadership." According to Hofstede's (2001) research, large cultural differences exist between U.S. and Asian countries, particularly a typical Asian country like Taiwan. The Chinese share a culture grounded in Confucian-based values which emphasize "a strong respect for hierarchy whether in work or family, preserving interpersonal harmony, and exhibiting personal modesty (Spreitzer et al., 2005, p. 209)." People with traditional values believe that relationships should be hierarchically maintained and that harmony is highly important. "Those with traditional values believe that conflicts with authority should be prevented even at the expense of less productive performance (Spreitzer et al., 2005, p. 210)." If culture moderates the effectiveness of positive human qualities in transformational leadership such as individual caring and motivational inspiration in a way that Spreitzer et al. (2005) have described, it is reasonable for researchers to consider culture as a plausible source to moderate the effectiveness of positive human qualities in the SLT such as vision, hope/faith, and altruistic love. Spiritual leaders are caring, warm, and concerned for employee needs. While in a workplace that values hierarchy and authority, leaders' positive qualities might be negatively perceived and interpreted by higher leaders, colleagues, or even followers so that it is very likely to moderate the SL effectiveness.

To summarize, the Chinese are characterized by multiple cultural values, including the "collectivistic" and "traditional" cultural values (Hofstede, 2001; Hofstede, Wedel, & Steenkamp, 2002). However, these two cultural values seem to be associated with contradictory research results regarding leadership effectiveness, not to mention research results associated with other Chinese cultural values. Before endeavors are made to investigate each of the individual culture values, collecting more data is essential in order to verify the existence of the "variform functional universality" and to clarify whether cultures (as an overall entity) differ in the SL effectiveness. The purpose of this study is to explore whether SL is more or less effective on the performance in two major Chinese societies: China and Taiwan, as compared to North American societies, to compensate for the other two Chinese samples (Singapore and Hong Kong) having been studied in prior research. This study proposes the following:

H3. Culture moderates between the SLT and the two leadership effectiveness variables, productivity and organizational commitment.

2.7. Managerial position (vs. non-managerial position) as moderation for leader effectiveness

The second plausible boundary condition suggested and first tested by Huang, Iun, Liu, and Gong (2010) is that managerial position is a moderator between participant leadership and types of performance (the in-role and extra-role performance). In contrast to lower level employees, managers are different in several task contexts: for example, environmental uncertainty, degree of autonomy, accountability, and resource availability (Johns, 2006). Empirical studies examining the role of context to facilitate leadership theory development and the understanding of organizational behavior are vital.

Past studies have indicated that employees with higher level positions, such as managerial positions, tend to value the sense of control and autonomy more (the motivational model), while lower level employees, such as first-line employees, tend to focus more on their relationships with colleagues and supervisors (the exchange-based model) (Cohen, 1992; Kalleberg & Griffin, 1978; Ronen, Lingoes, & Aranya, 1979; Ronen & Sadan, 1984), as well as on the trustworthiness of their superiors (Kramer, 1995). In addition, based on research of attribution theory and social information processing theory, Huang et al. (2010) proposed that, due to different values and needs, managers and employees may interpret and react differently to the same organizational practice (Cha & Edmondson, 2006; Kelley, 1967; Kramer, 1995; Lord & Smith, 1983; Shetzer, 1993). In their view, participative leadership behavior is linked to work performance through different mechanisms for employees at various hierarchical levels. They suggested that participative leadership behavior may be more likely to trigger motivational mechanisms for managerial subordinates, yet trigger exchange-based mechanisms for non-managerial subordinates.

Huang et al. (2010) sampled 527 employees from a large Fortune 500 company in China and found that the link between participative leadership and subordinates' task performance and OCB is mediated by psychological empowerment (the motivational mechanism) of the managerial group, while the same link is mediated by trust in the supervisor (the exchange-based mechanism) for the non-managerial group. They concluded that managerial positions moderate the participative leadership effectiveness. This study follows Huang's hypothesis by analyzing whether differences in the two performance types influenced by SL exist between managerial and non-managerial positions using employee samples from a variety of work settings. Specifically, this study examines the motivational mechanisms of meaning/calling, membership, and self-concepts, linking SL and subordinates' task performance and OCB between the managerial and non-managerial groups, and the impact of SL on the leadership effectiveness between these two groups to determine whether the influence of managerial positions on these motivational mechanisms differ to establish a boundary condition in the process of SL effectiveness. Thus, we propose the following:

H4. Managerial positions moderate between the SLT and the two leadership effectiveness variables, productivity and organizational commitment.

3. Method

3.1. Participants

3.1.1. The Chinese profitable organization sample
This study was conducted through a convenience sampling of two major Chinese societies: Taiwan and China. Employees from a variety of work settings were recruited. There were 591 employees of enterprises who provided valid responses. The respondents in Taiwan ($n = 372$) included: (1) retail service industries; (2) financial/banking industries; and (3) manufacturing industries. Approximately 20 companies were selected for the questionnaire survey. Most respondents were sampled from manufacturing industries ($n = 289$), and a few from service industries ($n = 83$). The analyzed characteristics of these samples and their background information are as follows: (1) mean age was 33.64 with a standard deviation of 7.82 and a range from 19 to 60 years old; (2) the samples comprised 176 males (47.8%) and 192 females (52.2%); and (3) the mean work experience was 9.55 with a standard deviation of 6.70 and a range from 0.2 to 30 years.

In the China sample, 219 employees from approximately 12 companies provided valid responses. All respondents worked in manufacturing industries invested in by Taiwanese people. The background information for the China sample is: mean age was 24.61 with a standard deviation of 3.91 and a range from 18 to 38 years old. Gender: 126 males (57.5%), 85 females (38.8%). Work experience: mean was 3.24 with a standard deviation of 3.49 and a range from 0.1 to 40 years. Questionnaires were collected from the respective industries and enterprises using a convenient sampling method. The valid response rate was 74.1% for Taiwan and 75.8% for China.

3.1.2. The Chinese military sample (the validation sample)
The same questionnaires were delivered to a military police base in Mid Taiwan. A convenience sampling of 150 military police soldiers was recruited and 122 gave valid responses (a valid response rate of 81.3%). The respondents' background information are as follows: (1) mean age was 22.87 with a standard deviation of 3.73 and a range from 18 to 46 years old; (2) the samples comprised 118 males (98.3%) and 1 female (0.8%); (3) the mean work experience was 27.78 months with a standard deviation of 33.82 and a range from 1 to 210 months; (4) the samples included 65 from voluntary military service (54.2%) and 55 from obligatory military service (45.8%); and (5) there were 30 holding a managerial position (24.6%) and 92 holding a non-managerial position (75.4%). Because the sample size is small for females ($n = 1$) and for managerial positions ($n = 30$), these two variables, gender and position hierarchy, will not be included in the subsequent regression and multivariate analyses.

3.1.3. The U.S. Army sample (the comparative sample)
The 369 U.S. Army samples reported by Fry et al. (2005) were used as a secondary data source for cultural comparison purpose. The background characteristics of this U.S. sample can be found in Fry's original article (Fry et al., 2005, p. 842, Table 2).

3.2. Measures

3.2.1. Spiritual leadership
This construct was measured using 17 items from the Likert five-point Spiritual Leadership Scale developed by Fry et al. (2005). The reliability and validity of this scale were verified by the original authors. An example item for the dimension of "vision" was "I understand and am committed to my organization's vision;" for the dimension of "hope/faith," "I always do my best in my work because I have faith in my organization and its leaders;" and for the dimension of "altruistic love," "My organization really cares about its people."

3.2.2. Meaning/calling
The measurement included 4 items from Spiritual Leadership Scale by Fry et al. (2005), and was designed using a five-point Likert scale (from "completely agree" to "completely disagree"). An example item was "The work I do is very important to me".

3.2.3. Membership
The measurement comprised 5 items from the Spiritual Leadership Scale by Fry et al. (2005). An example item was "I feel that my organization understands my concerns."

3.2.4. Organizational commitment
The four-item "Organizational Commitment Scale" adopted from Fry's article (Fry et al., 2005) was also utilized in this study. This measure was developed and validated in earlier research (Nyhan, 2000), and was reported having a reliability of 0.84 by Fry et al. (2005).

3.2.5. Productivity
This measurement comprised 3 items which was also developed by Nyhan (2000) and used by Fry et al. (2005). An example item was "Everyone is busy in my department; there is little idle time."

3.2.6. Self esteem

This 10-item measurement was based on the Organization-Based Self-Esteem (OBSE) scale designed by Pierce et al. (1989) using a five-point Likert scale (from "completely agree" to "completely disagree"). The original authors provided efficient reliability and validity for this measure. Sample items included "I count around here," "I am taken seriously around here," and "I can make a difference around here."

3.2.7. Self-efficacy

This measurement comprised 3 items of "competence" (or "self-efficacy") abstracted from the Psychological Empowerment Scale developed by Spreitzer (1995). The original scale comprised 4 dimensions and 12 items, including the 3 items of work-related self-efficacy. Spreitzer (1995) has reported good psychometric properties of this scale. This measurement also used a five-point Likert scale. An example item was "I am confident about my ability to do my job."

3.2.8. Altruism (organizational citizenship behavior)

The "altruism" dimension was extracted from the Chinese Organizational Citizenship Behavior Questionnaire by Farh, Earley, and Lin (1997). The authors have provided sound validity for this questionnaire. A sample item for the dimension of "altruism toward others" is "willing to assist new colleagues to adjust to the work environment."

3.2.8.1. Measures in the U.S. sample. Inter-correlation matrix with descriptive statistics of the above seven measures (the five SPL measures, productivity, and organizational commitment) were obtained from the analytic results of the 369 U.S. Army soldiers originally provided by Fry et al. (2005, p. 845), Table 4).

3.2.9. Back translation and inter-rater reliability

All of the research measures in this study have undergone the procedure of "back translation," and were verified to achieve a 0.70 or above inter-rater reliability value. Firstly, the scales were translated from English into Chinese by an organizational psychology professor and two industrial/organizational doctoral students. A senior language expert (with many years of work experience in English translation) then translated the Chinese text back into English. Two language experts (with Master's degrees in English as an Applied Foreign Language) were then invited to rate the consistency between the "original English questionnaire" and the "translated English questionnaire." They were instructed to judge the percentage of similarity between the two English versions on each item. When any of the two raters' similarity judgment fell below 70% for a single item, they were instructed to revise that item in the Chinese version until an agreement was reached to produce a greater-than-0.70 similarity rating for both raters. The procedure concluded when all ratings (for all items) exceeded the level of 0.70 to ensure that all items in the scale achieve a translation validity and inter-rater reliability of at least 0.70.

4. Results

4.1. Analysis 1: within construct validation in the Chinese culture and test of the SL motivational model

4.1.1. Reliability and construct validity

The descriptive statistics of the research variables are presented in Table 1. It can be noted that all variables in each of the two Chinese samples were significantly correlated with each other. The reliability coefficients, Cronbach's alphas, are within an acceptable to very good levels. Confirmatory factor analyses were then performed to validate the spiritual leadership construct. In Table 2, the analytic result for each dimension of spiritual leadership indicates that GFI and NNFI are greater than 0.88 (0.88 to 0.97), with residuals (RMR) less than or close to 0.05, indicating a good fit for each spiritual leadership dimension.

4.1.2. Convergent validity and discriminant validity

Convergent validity of the model can be validated using the following criteria: a larger estimation value of normalized parameters in all constructs, and all average variance extracted exceeding 0.5 (Fornell & Larcker, 1981). According to the analytic results of AVE and component reliability (CR) shown in Table 2, all of the AVEs are larger than 0.5 (0.65 to 0.83), and CRs exceed 0.6 (0.87 to 0.95). In addition, Table 2 shows that all factor loadings are greater than 0.5. These results reveal that the convergent validity of the research variables in this study is satisfactory.

Regarding discriminant validity, this study follows the criterion suggested by Anderson and Gerbing (1988), namely that the square of average variance extracted of the intended construct compares with the square of its correlations with other constructs. When the average variance extracted of the construct is higher than the inter-correlation squares, it indicates the independency of the construct. According to the correlation matrix shown in Table 1 and the AVEs in Table 2, AVEs are higher than the inter-correlation squares of the three leadership constructs. Therefore, the discriminant validity of the three leader spiritual constructs is verified. Based on the AVE analysis of the four mediating variables (meaning/calling, membership, self-esteem, and self-efficacy) shown in Table 2, and the correlation analysis shown in Table 1, AVEs of the four mediating variables are also higher than their inter-correlation squares. Therefore, the discriminant validity of four mediators is verified.

Table 1
Means, standard deviations, correlations and reliabilities for the Chinese samples.

	Mean	SD	Vision	Hope/ faith	Altruistic love	Meaning/ calling	Membership	Self-esteem	Self-efficacy	Productivity	Organizational commitment	OCB (altruistic)
Profitable organization sample (N = 591)												
Vision	3.54	.79	(.88)									
Hope/faith	3.84	.78	.74**	(.91)								
Altruistic love	3.46	.81	.65**	.71**	(.85)							
Meaning/calling	3.81	.76	.49**	.54**	.42**	(.87)						
Membership	3.47	.75	.60**	.61**	.71**	.62**	(.77)					
Self esteem	3.88	.62	.38**	.44**	.38**	.52**	.55**	(.90)				
Self-efficacy	4.07	.69	.28**	.33**	.20**	.44**	.35**	.63**	(.85)			
Productivity	3.72	.83	.28**	.40**	.35**	.34**	.33**	.38**	.29**	(.77)		
Organizational commitment	3.49	.78	.52**	.64**	.54**	.52**	.56**	.53**	.34**	.36**	(.80)	
OCB (altruistic)	4.26	.66	.27**	.43**	.27**	.44**	.31**	.50**	.47**	.43**	.39**	(.90)
Military sample (N = 122)												
Vision	3.03	.82	(.94)									
Hope/faith	3.18	.76	.88**	(.91)								
Altruistic love	3.15	.76	.75**	.752**	(.90)							
Meaning/calling	3.09	.87	.72**	.739**	.70**	(.91)						
Membership	2.98	.80	.74**	.745**	.78**	.81**	(.92)					
Self esteem	3.32	.63	.52**	.636**	.63**	.71**	.70**	(.94)				
Self-efficacy	3.28	.73	.49**	.585**	.43**	.56**	.61**	.71**	(.89)			
Productivity	3.07	.79	.47**	.482**	.36**	.43**	.49**	.48**	.49**	(.65)		
Organizational commitment	2.86	.64	.58**	.612**	.51**	.61**	.67**	.51**	.44**	.44**	(.62)	
OCB (altruistic)	3.48	.76	.38**	.478**	.44**	.41**	.36**	.50**	.45**	.48**	.29**	(.88)

Diagonals are reliability coefficients.
 * $p \leqq 0.05$.
** $p \leqq 0.01$.

4.1.3. Criterion-related validity

An important question for any construct being validated is how it relates to existing independent constructs, and how it predicts other constructs that have a causal relationship with it. Therefore, the associations between SL and the three existing related/cause-and-effect measures, "organizational commitment," "productivity," and "altruism," were measured. Table 1 shows that the five SL factors and the two self-concept factors are highly correlated with the three criterion variables (all correlational coefficient significance tests $p < 0.01$).

4.1.4. Second-order confirmatory factor analysis of spiritual leadership

Anderson and Gerbing (1988) suggested that a higher level of co-factors must be extracted when the level of correlation between the co-factors is high. According to Fry, the three leader's dimensions are considered to form a higher-order SL factor practically (Hannah et al., 2011). The second-order confirmatory factor analyses of spiritual leadership indicates that the fit of the second-order factor model of SL is acceptable (all GFIs > 0.91; all CFIs > 0.94). The chi-square ratio of the second-order model compared to that of the first-order model is close to 1.0 (i.e., 1.10). The result is consistent with the findings of previous research (Fry et al., 2005; Hannah et al., 2011), that the SL dimensions are not redundant, but an interactive composite that constitutes a latent construct, termed by Fry, as a "formative construct" (Hannah et al., 2011). This indicates that, to reduce the number of multiple-parameter estimation, the second-order factor of spiritual leadership can be used as a substitute for the first-order factors of SL in the subsequent analyses.

Table 2
Confirmatory factor analysis on constructs of spiritual leadership (N = 591).

	χ^2	df	GFI	AGFI	NNFI	CFI	RMR	Extracted factor	Variance accumulation	Factor loading	AVE	CR
Vision	236.94	5	0.92	0.75	0.88	0.94	0.048	1	67.67%	All > 0.78	0.67	0.91
Hope/faith	44.25	5	0.97	0.91	0.97	0.99	0.018	1	74.49%	All > 0.81	0.75	0.94
Altruistic love	211.48	14	0.91	0.81	0.93	0.96	0.046	1	65.20%	All > 0.64	0.65	0.93
Meaning/calling	17.16	2	0.99	0.93	0.96	0.99	0.018	1	70.20%	All > 0.71	0.70	0.90
Membership	17.00	5	0.99	0.97	0.99	0.99	0.016	1	66.94%	All > 0.77	0.67	0.91
Self-esteem	130.46	9	0..93	0.84	0.94	0.96	0.027	1	67.38%	All > 0.75	0.67	0.93
Self-efficacy	0.00	0	Saturated model					1	77.16%	All > 0.85	0.77	0.91
Altruism	54.84	2	0.96	0.78	0.93	0.98	0.012	1	83.04%	All > 0.87	0.83	0.95
Productivity	0.00	0	Saturated model					1	69.30%	All > 0.73	0.69	0.87

4.1.5. SEM test of the SL motivational model

The SL mediation model was tested by using the structural equation modeling (SEM). To avoid possible multicollinearity resulting from the high correlations among the SL research variables, so that some individual paths in the conceptual model in Fig. 1 may show less power, we used latent factors for these variables, as shown in Fig. 2. Note in Fig. 2, a single latent construct of the SL (the second-order SL) is used as a substitute for the first-order factors, as discussed earlier. Besides, in his recent study, Fry has described that the two mediators, "meaning/calling" and "membership" represent a "spiritual well-being" concept (Hannah et al., 2011). This notion is supported by the empirical data in the present study. We performed a factor analysis to the two variables, and obtained a one-factor solution. The explained variance for the one-factor "spiritual well-being" is 81.11%. Whereas from a motivational aspect, the common factor underlying employee's "meaning/calling" and "membership" can be better termed as "transcendental motivation toward work/organization" rather than "spiritual well-being"; therefore we used this single factor to represent the concept of "meaning/calling" and "membership". Likewise, we extracted a common underlying factor from the two self-concept variables (the heightened self-esteem and self-efficacy). The explained that variance for the one-factor "transcendental self-concept" is 81.48%. Thus, to simplify our model structure, we used the "one-factor" construct of these variables in our full model test.

Results showed a good fit of the proposed model to the data ($\chi^2 = 103.66$, $df = 4$, $p < .00$; GFI $= .94$; NFI $= .93$; CFI $= .93$; IFI $= .93$; RMR $= .056$; SRMR $= .056$). All of the path coefficients in the model are significant ($p < .001$), indicating the mediation effect by "transcendental self-concept" and by "transcendental motivation toward work/organization", between the SL and the leadership outcomes.

4.2. Analysis 2: mediation effect of the motivational mechanisms in the SLT and incremental validity of followers' inner-self spiritual factors

According to Table 1, the two follower's self-concepts are positively related to the two organizational outcomes, productivity and altruism. The correlation coefficients range from .29 to .50, all reached a very significant level. As the hierarchical regression analyses shown in Table 3, the incremental explained variance ($\triangle R^2$ in Model 2) of the leaders' spiritual factor (SL) in predicting productivity is 13.4%, and 11.7% and 27.7% for predicting OCB and organizational commitment respectively, having all reached a statistically significant level ($p \leq 0.001$). This indicates that leader's spiritual behavior significantly predicts productivity, OCB, and organizational commitment. When the spiritual factors (meaning/calling and membership) of the two followers were entered into the regression, the incremental explained variance ($\triangle R^2$ in Model 3 for productivity, OCB, and organizational commitment) was also significant. The β's of the single "SL" factor in Model 3 were noticeably reduced in magnitude compared to those in Model 2, demonstrating the mediation of the two factors, meaning/calling and membership, between the SL and organizational outcomes according to Baron and Kenny's (1986) mediation test criteria. Thus, H1 is supported by the results.

Upon including the follower's inner-self factors (self-esteem and self-efficacy) in the hierarchical regression (Model 4), $\triangle R^2$ increased to 4.0% for productivity, and 15.8% and 3.9% for OCB and organizational commitment respectively, with all coefficients having reached a significant level. The β's of the five spiritual factors in Model 4 were noticeably reduced in magnitude compared to those in Model 3, demonstrating the mediation of inner-self spiritual factors between spiritual leadership and organizational in-role/ ex-role performance (productivity and OCB). According to the procedures of mediation testing by Baron and Kenny (1986), these results provide evidence that spiritual leadership influences productivity and OCB through the mediation of followers' self-esteem and self-efficacy beyond the effect of meaning/calling and membership. Thus, H2 is supported by the results.

4.3. Analysis 3: test for culture and managerial position as moderations in the leadership effectiveness

4.3.1. Culture as moderation

4.3.1.1. The Chinese profitable organization sample compared to the U.S. sample. To address the question of whether spiritual leadership results in varying effectiveness across cultures, this study used a secondary data source, i.e., an existing U.S. database (Fry et al.,
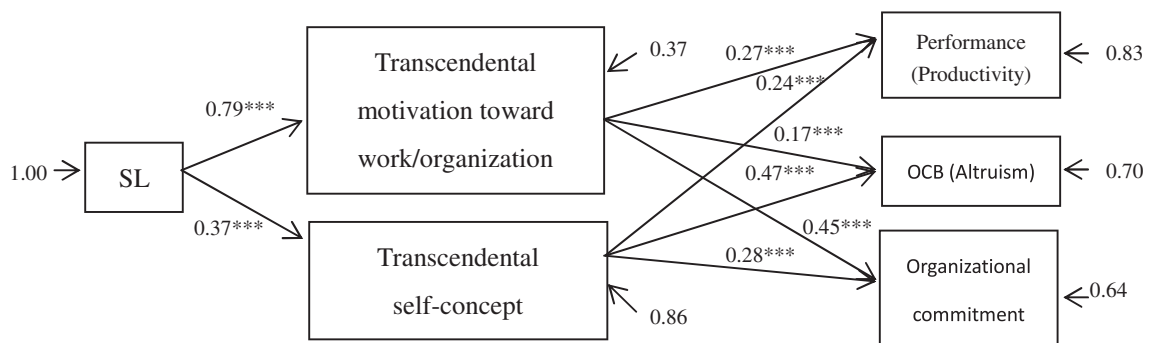

Fig. 2. SEM test of the SL motivational model.

Table 3
Hierarchical regression analysis of the mediating effects for the profitable organization sample ($N = 591$).

Independent variable	Dependent variable: altruism (OCB)				Dependent variable: productivity				Dependent variable: organization commitment			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Tenure	.195[*]	.244[*]	.175[*]	.117	−.051	.023	−.010	−.032	−.101	−.002	−.023	−.045
Age	−.099	−.143	−.157	−.134	.088	.032	.014	.023	.252[**]	.154[*]	.131[*]	.161[*]
Gender	−.065	−.020	−.013	.010	.020	.058	.067	.080	−.077	−.025	−.015	−.004
Education	−.153[***]	−.043	−.042	−.053	−.152[***]	−.024	−.026	−.039	−.288[***]	−.122[**]	−.129[***]	−.144[***]
Position	.102[*]	−.009	.007	−.027	.101[*]	−.031	−.049	−.070	.200[***]	.076[*]	.053	.031
SL		.371[***]	.200[**]	.191[***]		.398[***]	.247[***]	.237[***]		.572[***]	.380[***]	.372[***]
Meaning/ calling			.365[***]	.224[***]			.165[*]	.099			.171[***]	.120[*]
Membership			−.017	−.171[*]			.094	.008			.146[**]	.047
Self-esteem				.312[***]				.206[*]				.282[***]
Self-efficacy				.234[***]				.066				−.062
ΔR^2	.056[***]	.117[***]	.084[***]	.158[***]	.030[**]	.134[***]	.028[***]	.040[***]	.155[***]	.277[***]	.038[***]	.039[***]
R^2	.056[***]	.169[***]	.262[***]	.420[***]	.030[**]	.158[***]	.186[***]	.227[***]	.155[***]	.436[***]	.477[***]	.517[***]
Significant F change	6.414	74.052	29.194	69.640	3.401	84.063	8.719	13.207	19.999[***]	258.258	18.821	20.554

Coefficients are beta.
[*] $p \leqq 0.05$.
[**] $p \leqq 0.01$.
[***] $p \leqq 0.001$.

2005) as our comparison sample. Comparative analyses were performed to test for equivalence of leadership effectiveness across the two cultural groups, i.e., the Chinese and the U.S., since the five SLT measures, productivity, and organizational commitment measures are equal in measurement between our sample and Fry's 2005 sample (Fry et al., 2005).

Though recent research suggests that the concept of "culture" involves multiple cultural values and/or polycontextual characteristics (Tsui, Nifadkar, & Ou, 2007), this study defined culture as "a globally shared property", which is reflected by our samples. This study did not examine specific cultural values or the configural and polycontextual dimensions of culture since it is a pioneer exploration of spiritual leadership effectiveness across two distinct cultural samples. Therefore, a general definition of culture was used in this study.

This study performed a couple of traditional multiple regression analyses by entering the five SLT measures into the regression simultaneously to predict "productivity." The overall variance accounted for (R^2) by the five SLT measures in predicting "productivity" was 74% for the U.S. sample, and 19.5% for the Chinese sample. The overall explained variance of "organizational commitment" was 80% for the U.S. sample, and 48.2% for the Chinese sample. Although the first sight at the explained proportion of variance (R^2) in the two leadership effectiveness variables is seemingly different between the two cultural groups (74% vs. 19.5%, and 80% vs. 48.2%), we need further statistical techniques to substantially test for the significance of the differences across groups.

This study then performed a multi-sample LISREL test for the equality of regressions to examine the cross-cultural leadership effectiveness equivalence (Table 4). The "equal regressions" method (or the "parallel regressions" method) in structural equation modeling (SEM) is a statistical technique of testing whether a single regression equation is the same across two or more populations. The method can be used to assess the equivalence of specific regression coefficients, the equivalence of specific error variances, and the equivalence of specific variable means between two or more different populations (Joreskog & Sorbom, 1993).

The research question of whether the impact of the five-factor SL on leadership outcomes (the explained variance of the leadership outcomes) is equivalent across the two cultures can be examined by testing the equality of the error variances of the leadership outcomes across the two cultural groups. This can be accomplished by comparing two models in SEM: the baseline model (with all parameters set equal across the two groups), and the research model (or the "error variance-free" model with all other regression parameters constrained equally, while only the error variance of the outcome variables are free to be estimated across the two groups). The comparison of the fit indices between the research model and the baseline model yielded a significant

Table 4
Multi-sample test through equal regressions on productivity and organizational commitment across the Chinese profitable organization sample and the U.S. Sample.

Test	χ^2	df	$\Delta\chi^2$ (df)
Organizational commitment			
Baseline model	150.34	6	
Parallel regressions	33.72	5	116.62[***] (1)
Productivity			
Baseline model	61.78	6	
Parallel regressions	47.53	5	14.25[***] (1)

[***] $p \leqq 0.001$.

result of chi-square difference (for productivity, $\Delta \chi^2 = 116.62$, $df = 1$, $p < .000$; and for organizational commitment, $\Delta \chi^2 = 14.25$, $df = 1$, $p < .000$), indicating that the two cultural samples differ in the overall explained variance of these two leadership effectiveness variables. Thus, H3 is hereby demonstrated by the results.

4.3.1.2. The Chinese military sample (the validation sample) compared to the U.S. sample. The respondents so far were all sampled from profitable organizations, while those in the research by Fry et al. (2005) were army samples. Though the leadership effectiveness measures in this study were seemingly appropriate for both samples, profitable organizations actually differ from the army in numerous aspects, including work characteristics, goal orientations, and organizational structure (Borman, 1987). The army possesses several unique characteristics for practicing organizational development, including its social structure, total immersion environment, personnel rotation, military–civilian dichotomy, and organizational objectives (Turney & Cohen, 1978). These differences may confound the SL effectiveness tests across cultures.

To remedy the problem stated above, the use of a different source of data is important. Thus, the researchers recruited military police soldiers as a validation sample to further validate the results from the previous analyses.

Multiple regression analyses were performed by entering the five SLT measures into the regression simultaneously to predict "productivity" and "organizational commitment". The overall variance explained (R^2) by these variables in predicting "productivity" was 28.5%, and 49.6% in predicting "organizational commitment".

This study then examined the leadership effectiveness equivalence across the Chinese and U.S. army samples by performing the multi-sample LISREL model test for equal regressions, the same statistical technique as performed previously for the profitable organization sample. The results showed cultural difference (significant chi-square discrepancy) for each of the two leadership effectiveness variables, productivity and organizational commitment (for productivity, $\Delta \chi^2 = 105.69$, $df = 1$, $p < .000$; and for organizational commitment, $\Delta \chi^2 = 9.37$, $df = 1$, $p < .01$). This indicates that the military validation sample from Taiwan is also different from the U.S. military sample in the overall explained variance of the leadership effectiveness.

4.3.2. Test for managerial position as moderation

Although the t tests for mean differences between the managerial and non-managerial groups on the research variables have all reached statistical significance ($p < .01$), in which the managerial group reported higher scores than the lower-level employee group for each research variable, including leadership behavior, motivational mediators, productivity, and OCB; the SEM test for "equal regressions" however, revealed no group difference (i.e., non-significant chi-square discrepancy) for the two leadership effectiveness variables (for productivity, $\Delta \chi^2 = 0.00$, $df = 1$, not significant; and for OCB, $\Delta \chi^2 = 0.23$, $df = 1$, not significant). The results indicate that the contribution of spiritual leadership and mediating mechanisms to the leadership effectiveness does not differ across work position groups. Therefore, managerial/non-managerial positions do not moderate spiritual leadership effectiveness. Thus, H4 is not supported.

5. General discussions

5.1. Within-construct and universality validation of SL in the Chinese societies

This study validated the cross-cultural universality of the construct "spiritual leadership" to employees in Taiwan and China. The internal reliabilities and validities of the construct of spiritual leadership are proved efficient for samples from the two Chinese societies. The convergent validity and discriminant validity, as well as the criterion-related validity, have also been verified. The findings of this study demonstrated a good fit for both the first-order and the second-order factor structures of spiritual leadership. The three factors of spiritual leadership: vision, hope/faith, and altruistic love; and the two follower mediating factors: meaning/calling and membership make a very significant contribution to the employee in-role/extra-role performance, thus, are proven to be applicable to Chinese organizational settings.

The present study has significant implications for profitable organizations investing in China, including both local and multi-national corporations. It is important for the organization leaders to practice spiritual leadership in the Chinese culture, as well as to actively create/maintain a positive environment for promoting employee self-concept in order to enhance positive organizational outcomes and leadership effectiveness.

5.2. The salient importance of inner-self spirituality as a source of mediation

One of the contributions of this research is to validate the incremental validity of the self-concept related attributes beyond the two followers' spiritual survival factors (meaning/calling and membership) in the SL process. The inner-self spirituality is demonstrated as a third intrinsic motivational mechanism to mediate between spiritual leadership and organizational in-role/extra-role performance in addition to meaning/calling and membership.

The reason why employee's inner-self motivation (self-concepts) is more important than motivation toward their work (meaning/calling) and toward their organization (membership) can be found in Maslow's (1943) need hierarchy theory. Maslow suggested that the need for respect (including self esteem) and the need for self-actualization (including personal growth, self-accomplishment and creativity), are high-level human psychological needs which transcend the social needs (including membership, affiliation, love, friendship, etc.). Moreover, self-concepts as a salient and unique source of influential factor for the Chinese population in the process of their social/organizational interactions have been discussed by other scholars (e.g., Yang, 1995,

2004, 2006). The cross-cultural psychology and the indigenous psychology aspects suggest Chinese culture as a "collectivistic" type of culture, in which individuals seek for interpersonal harmony and social identification. It is common that individuals repress self to comply with social norms (Yang, 2004). Thus, the socially-oriented self esteem (OBSE in this study) dominates individual's behavior in the organizations. Employees' pursuit for heightened self-esteem (Shamir et al., 1993a,b) is commonly seen in their social organizational life. Therefore, employee inner-self related motivations contributed beyond organization/work-related motivations in explaining organization outcomes.

It has to be pointed out that our findings suggest a partial (not a full) mediation by self-concepts in the SL process. In addition to the indirect effect through the mediators, SL has its direct effect on the two organizational outcomes. This can be observed from the significant Beta weights of at least one of the three SL factors in Model 4's, Table 3, after the self-concepts having been entered into the regressions. This indicates that SL not only has its impact by enhancing inner-self, but also directly promotes the organizational outcomes.

Generally, this study extends Fry's SLT by theoretically integrating and empirically validating the two different clusters of motivational mechanisms: followers' attitudes and followers' self-concepts, addressed in prior leadership literature (Pierce & Gardner, 2004; Shamir et al., 1993a,b; Spreitzer, 1995), into the SL framework. Future studies are encouraged to inquire further into the content of the inner-self spirituality, or the transcendental self-concepts. In this study, heightened self-esteem and self-efficacy are assumed to account for the spiritual transformation of follower's inner-self, however, as self-concept is hierarchical and multifaceted (Pierce & Gardner, 2004), there may be other underlying dimensions that are important in the spiritual transformation process. For example, Parameshwar (2005) has proposed the "ego transcendence" concept underlying the processes how leaders, when facing challenging circumstances, "defuse ego threats by transcending their ego and by enlarging their commitment to their higher purpose rather than by protecting their ego and shortchanging their higher purpose" (Parameshwar, 2005, p. 703). It will be interesting likely to look into how followers are motivated by the leaders' ego-transcendental actions and to act in ego-transcendental ways. As the world becomes more globalized, change and challenges in work being unavoidable, the exploration of the self-transcendental motivational systems, other than the self-protective motivations (Korman, 2001), is essential.

5.3. Variform functional universality of SL

Although universality of the concept of SL from West to East was supported in this research, different magnitudes of the leadership effectiveness were found across the Chinese and U.S. cultural samples. SL was found to explain less variance of employee performance in the Chinese samples. There are several plausible explanations regarding this finding. One explanation is the concept of "variform functional universality."

Recently, Dickson et al. (2001) and Spreitzer et al. (2005), following Bass (1997) and Lonner (1980), suggested the variform universality of cross-cultural leadership studies (when a general principle holds across cultures but the enactment of that principle differs across cultures). While research on the variform universality of transformation leadership does not exist, the work of Farh et al. (1997) provides evidence for the construct of organizational citizenship as variform universal (the construct of organizational citizenship exists across different cultures, but its enactment is different in an Asian context).

Farh et al. (1997) described that the process of OCB may vary by people's cultural values, for example, employees who held traditional Chinese collectivistic values, may not regard "justice" as associated with OCB. In other words, a person's perceptions of justice or injustice do not enter into their choice to perform citizenship behaviors, but they would perform OCB as a matter of culture. Their study found that traditional values moderate the relationship between employee justice perceptions and OCB. They also developed a Chinese version of the OCB measure, which included the original dimensions of altruism, conscientiousness, and civic virtue, but replaced the more western-specific dimensions of "sportsmanship" and "courtesy" with "interpersonal harmony" and "protecting company resources." The latter two factors are considered to be more closely related to the Chinese culture.

This implies, likely in the present study, that the five factors of spiritual leadership process (vision, hope/faith, altruistic love, meaning/calling, and membership) may hold true in the leader–follower relationship across the East and West, yet the enactment of these factors is possibly different in the Asian context (as what was found in Farh et al. study). To begin with, this research identified a third mediating dimension, transcendental self-concepts, important to the Chinese in the process between the SL and employee outcomes. Other dimensions may also exist, for example, transcendental motivation toward the organizational harmony (Vallejo, 2008; Yang, 2004), etc. In the future, researchers may require creating more contextually valid items or new measures of dimensions to capture the variform enactment content of the spiritual leadership in Eastern cultures. The incorporation of more Eastern cultural-specific values into the SL is encouraged. In the present study, the SL of vision, hope/faith, and altruistic love is fundamentally rooted in "Christianity" values. These values are demonstrated to be core SL values and are universal from West to East. Yet, drawn from the workplace spirituality literatures, there are other dimensions/content rooted in the Eastern cultures to be explored as the specific enactment of spiritual leadership, for example, "Wu wei" (effortless doing; man must place his will in harmony with the natural universe and when in leading subordinates) originated from the "Daoism" values (Cheung & Chan, 2005), and positive human/leader spiritual qualities such as "mindfulness", "selflessness", "compassion", "wisdom", "loving kindness", and "equanimity" originated from the "Buddhism" values (Avey, Wernsing, & Luthans, 2008; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Brown, Ryan, & Creswell, 2007; Buddha Dharma Education Association, 2010; Kabat-Zinn, 2000; Kernochan, McCormich, & White, 2007). Future development in SL with more holistic perspectives to integrate the eastern cultural values into the SL leader–follower relationships is called for.

5.4. The need to examine specific cultural values and their interactions on SL effectiveness

The findings of this study are consistent with previous research of transformational leadership effectiveness on Chinese samples (Hong Kong), namely that leadership effectiveness was found to be less in Chinese societies (Yu et al., 2002). This finding supports the argument by researchers (Spreitzer et al., 2005) that the cultural values of "traditionality/respect for hierarchy" would decrease the effectiveness of transformational leadership. However, the findings of this study are incongruent to the argument that "collectivistic" cultural values would enhance the effectiveness of transformational leadership (Jung et al., 2009). Future studies are required to clarify whether certain cultural values dominate some work behaviors, and under what circumstances. A refined research design to investigate the main effect and interaction of cultural values on leadership effectiveness may be helpful. In addition, the distinction between individual values and group values is vital, meaning that more multilevel analyses across individuals, teams, units, and organizations are necessary.

5.5. Additional evidence for cultural difference

One note to support for the cultural difference should also be pointed out. As mentioned earlier in the literature, the SPL model has also been applied to employees of the profitable organizations in the U.S. (Fry & Slocum, 2008), which can provide an additional source of information comparable to the findings in this study. Although Fry and Slocum (2008) did not report the correlational and descriptive statistics in their article so that the equivalence test between databases is not applicable, they presented the results that the five SPL measures explained 94% of the variance in employee's commitment, and 73% of the variance in productivity for this U.S. sample. Comparing to the 48.2% and 19.5% variance explained among the Chinese employees in this research, it seems the cultural difference is also very likely to be found among the profitable organizations across the Chinese and U.S. samples, given that both cultural samples share similar industrial/organizational characteristics. However, future studies should investigate further, with appropriate research designs, to cautiously differentiate "organizational" variations from "cultural" variations in the SPL effectiveness.

5.6. Managerial positions not moderating the motivational model of SL

The results in this study revealed that managerial and non-managerial employees do not differ on the impact of motivational mechanisms on leadership effectiveness. The *t*-test results showed that managers tend to report higher scores for all of the research variables compared to those with lower positions. This can be interpreted that managers may have higher perceptions regarding all of the research variables, and lower-level employees may be more conservative in rating these variables. Nevertheless, the impact of the SL and its motivational mediating mechanisms on the subsequent leadership outcomes was found to be similar across managerial and non-managerial position groups. This study concludes that the proposed motivational model of SL in this study fits both managerial and non-managerial groups.

The explanation why these two position groups do not differ on the impact of leadership effectiveness is probably that, through the SL, it is the intrinsic types of motivation being inspired by the leaders. According to the Self-Determination Theory (SDT; Deci & Ryan, 2000), intrinsic motivation initiates an activity (e.g., performing a job) for its own sake because it is interesting and satisfying in itself. Recent studies have indicated that intrinsic motivation is the intermediary (moderator/mediator) between job autonomy and employee performance (Dysvik & Kuvaas, 2011; Galletta, Portoghese, & Battistelli, 2011; Joo, Jeung, & Yoong, 2010). In other words, employees may have higher job autonomy (such as managers) than lower-position employees (such as the non-managerial employees), yet, only employees high in intrinsic motivation exhibit better employee outcomes. The findings in this research is consistent to the above studies, that SL initiates three types of employee intrinsic motivation to influence work performance for both the managerial and non-managerial employees, therefore, both position groups demonstrated low discrepancy on the impact of the employee outcomes.

To integrate the findings from this research into the existing literatures, past studies have predominantly treated transformational leadership behavior as a source of intrinsic motivation (Lee & Koh, 2001; Quinn & Spreitzer, 1997; Spreitzer, 1996). Huang et al. (2010) suggested that participative leadership may influence work performance through different mediating mechanisms, that is, empowerment (motivation-based) for managerial subordinates and trust (relationship-based and exchange-based) for non-managerial subordinates. This study showed that for SL, the overall effect of the intrinsic motivational mechanisms of social identification (membership), work meaning, and self-concepts do not result in different work performances between managerial and non-managerial subordinates. Managerial positions are considered not a boundary condition between intrinsic type of motivation and performance.

One plausible explanation to reconcile the findings from this study and those from Huang's study is that, according to the self-determination theory (SDT), different motivational orientations (intrinsic vs. extrinsic motivation) may lead to different behavior outcomes (Baker, 2004; Gagne & Deci, 2005). That position groups are equivalently motivated by intrinsic types of motivation to performance is possible, while position groups may differ when it involves extrinsic types of motivation to performance (Gagne & Deci, 2005), for example, the exchange-based motivation. Lower-level employees are more likely to be motivated by extrinsic incentives to perform better (more extrinsic-motivation oriented) compared to managerial employees, who are considered to be mature and less motivated by extrinsic types of incentives to performance. Future studies should further examine the differences among motivational mechanisms and their effect on leadership outcomes. The findings of this study provide additional contributions to the existing knowledge of the motivational process in leadership effectiveness.

5.7. Implications for leadership research

Our findings suggest that examining the mechanisms and boundary conditions through which various leadership behaviors influence the work behavior of subordinates is worthwhile. For example, transformational leadership has been found to be associated with the work behavior of subordinates by inducing intrinsic motivation (Shin & Zhou, 2003) and self-concepts (Lord & Brown, 2001; Shamir, 1990; Sosik & Dworakivsky, 1998). However, the relative strength of these two mechanisms, how they operate with each other and with other mechanisms, and the functioning of other motivational mechanisms on various leadership outcomes, is insufficiently addressed. In addition, the conflict and interaction among different cultural values of various levels (individuals, teams, units, and organizations) to influence leadership effectiveness requires further investigation.

6. Limitations

This study has three limitations. Firstly, though this paper proposes a process model in which spiritual leadership behavior leads to meaningfulness, membership, and self-concepts, which consequently result in productivity and OCB, the relationships found in this study are correlational and provide no evidence of the direction of the relationships. A possible solution to examining the causality of the model for future research is to perform a cross-lagged panel analysis in a longitudinal study (see Bateman & Strasser, 1984). Secondly, that the performances were measured via self-report may inflate the relationship among research variables. Regarding the followers' outcome variables, objective measures (objective performance indicators and ratings from peers/supervisors) rather than subjective measures (self-report) will increase the explaining efficacy of the SL impact or effectiveness. Finally, because the samples were collected from a variety of different enterprises from Chinese industries, multiple research methods conducted to data sources with various organizational characteristics are needed in the future for carrying the enquiry deeper. For instance, it would be interesting to longitudinally observe how SL is applied to a single large enterprise where organizational culture is more consistent and employees share common values. In addition, a meta-analysis will give a better insight into the questions before more replication studies are conducted.

References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and preferences. *Journal of Consumer Research*, *27*(2), 233–248.
Aryee, S., Budhwar, P., & Tan, H. H. (2003). Leader–member exchange and contextual performance: An examination of the mediating influence of organization-based self-esteem. *A paper presented at the annual meeting of the Academy of Management, Seattle* [August].
Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organization change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *The Journal of Applied Behavioral Science*, *44*, 48–70.
Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, *60*, 421–449.
Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*, 27–45.
Baker, S. (2004). Intrinsic, extrinsic, and amotivational orientations: Their role in university adjustment, stress, well-being, and subsequent academic performance. *Current Psychology*, *23*, 189–202.
Bandura, A. (1986). *Social foundations of thought and action: A social cognitive view.* Englewood Cliffs, NJ: Prentice Hall.
Bandura, A. (1988). Organizational application of social cognitive theory. *Australian Journal of Management*, *13*(2), 275–302.
Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.
Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, *9*, 75–78.
Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Religion and Social Psychology*, *51*, 1173–1182.
Bass, B. M. (1985). *Leadership and beyond expectations.* New York: Free Press.
Bass, B. M. (1997). Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? *American Psychologist*, *52*, 130–139.
Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. *Academy of Management Journal*, *27*, 95–112.
Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, *89*, 901–910.
Borman, W. C. (1987). Personal constructs, performance schemata, and "Folk Theories" of subordinate effectiveness: Explorations in an army officer sample. *Organizational Behavior and Human Decision Processes*, *40*, 307–322.
Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, *18*, 211–237.
Buddha Dharma Education Association (2010). Retrieved August 20, 2010, from http://www.buddhanet.net/e-learning/buddhism/bs-s15.htm
Cha, S. E., & Edmondson, A. C. (2006). When values backfire: Leadership, attribution, and disenchantment in value-driven organization. *The Leadership Quarterly*, *17*, 57–78.
Chen, C. Y., Chen, C. H., & Li, C. I. (2011). The influence of leader's spiritual values of servant leadership on employee motivational autonomy and eudaemonic well-being. *Journal of Religion and Health* (in press).
Cheung, C. K., & Chan, A. C. (2005). Philosophical foundations of eminent Hong Kong Chinese CEOs' leadership. *Journal of Business Ethics*, *60*, 47–62.
Cohen, A. (1992). Antecedents of organizational commitment across occupational groups: A meta-analysis. *Journal of Organizational Behavior*, *13*, 539–558.
Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations.* Thousand Oaks, CA: Sage.
Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *4*, 227–268.
Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., et al. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, *10*(2), 219–256.
Dickhäuser, O., & Reinhard, M. A. (2006). Factors underlying expectancies of success and achievement: The influential roles of need for cognition and general or specific self-concepts. *Journal of Personality and Social Psychology*, *90*(3), 490–500.
Dickson, M., Den Hartog, D., & Michelson, J. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The Leadership Quarterly*, *14*, 729–768.
Dickson, M. W., Hanges, P. J., & Lord, R. G. (2001). Trends, developments and gaps in cross-cultural research on leadership. *Advances in Global Leadership*, *2*, 75–100.
Dysvik, A., & Kuvaas, B. (2011). Intrinsic motivation as a moderator on the relationship between perceived job autonomy and work performance. *European Journal of Work and Organizational Psychology*, *20*(3), 367–387.
Farh, J. L., Earley, P. C., & Lin, S. C. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, *42*, 421–444.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable and measurement errors. *Journal of Marketing Research*, *18*, 39–50.

Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly*, *14*, 693–727.

Fry, L. W. (2008). Spiritual leadership as a paradigm for organizational transformation and recovery from extended work hours cultures. *Journal of Business Ethics*, *84*, 265–278.

Fry, L. W., & Cohen, M. P. (2009). Spiritual Leadership as a Paradigm for Organizational Transformation and Recovery from Extended Work Hours Cultures. *Journal of Business Ethics*, *84*, 265–278.

Fry, L. W., & Kriger, M. (2009). Towards a theory of being-centered leadership: Multiple levels of being as context for effective leadership. *Human Relations*, *62*(11), 1667–1696.

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., Nisiewicz, M., Vitucci, S., & Cedillo, M. (2007a). 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. (2007b). 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). Spiritual leadership and army transformation: Theory, measurement, and stabling a baseline. *The Leadership Quarterly*, *16*, 835–862.

Gagne, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*, 331–362.

Galletta, M., Portoghese, I., & Battistelli, A. (2011). Intrinsic motivation, job autonomy and turnover intention in the Italian healthcare: The mediating role of affective commitment. *Journal of Management Research*, *3*(2), 1–19.

Hannah, S., Walumba, F., & Fry, L. (2011). Leadership in action teams: Team leader and members' authenticity, authenticity strength, and team outcomes. *Personnel Psychology*, *64*, 771–802.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). London: Sage Publications.

Hofstede, F. T., Wedel, M., & Steenkamp, J. B. (2002). Identifying spatial segments in international markets. *Marketing Science*, *21*, 160–177.

Huang, X., Iun, J., Liu, A., & Gong, Y. (2010). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, *31*, 122–143.

Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, *31*, 286–408.

Joo, B. K., Jeung, C. W., & Yoong, H. J. (2010). Investigating the influences of core self-evaluations, job autonomy, and intrinsic motivation on in-role job performance. *Human Resource Development Quarterly*, *21*(4), 353–371.

Joreskog, K. G., & Sorbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language.* Chicago: Scientific Software.

Judge, T., & Piccolo, R. F. (2004). Transformational andtransactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, *89*, 755–768.

Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, *21*, 949–964.

Jung, D. I., Bass, B. M., & Sosik, J. J. (1995). Bridging leadership and culture: a theoretical consideration of transformational leadership and collectivist cultures. *Journal of Leadership Studies*, *2*, 3–18.

Jung, D., Yammarino, F. J., & Lee, J. K. (2009). Moderating role of subordinates' attitudes on transformational leadership and effectiveness: A multi-cultural and multi-level perspective. *The Leadership Quarterly*, *20*, 586–603.

Kabat-Zinn, J. (2000). Participatory medicine. *Journal of the European Academy of Dermatology and Venereology*, *14*, 239–240.

Kalleberg, A. L., & Griffin, L. J. (1978). Position source of inequity in job satisfaction. *Sociology of Work and Occupation*, *5*, 371–400.

Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, *88*, 246–255.

Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation and emotion*, *Vol. 15*. (pp. 192–238)Lincoln, NE: University of Nebraska Press.

Kernochan, R. A., McCormich, D. W., & White, J. A. (2007). Spirituality and the management teacher: Reflections of three Buddhists on compassion, mindfulness, and selflessness in the classroom. *Journal of Management Inquiry*, *16*, 61–75.

Korman, A. K. (2001). Self-enhancement and self-protection: Toward a theory of work motivation. In M. Erez, U. Kleinbeck, & H. Thierry (Eds.), *Work motivation in the context of a globalizing economy* (pp. 121–130). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Kotter, J. P. (1996). *Leading change.* Boston: Harvard Business School Press.

Kramer, R. M. (1995). Divergent realities and convergent disappointments in the hierarchic relation: Trust and the intuitive auditor at work. In R. M. Kramer, & R. M. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 216–245). Thousand Oaks, CA: Sage.

Lee, M., & Koh, J. (2001). Is empowerment really a new concept? *International Journal of Human Resource Management*, *12*, 684–695.

Lonner, W. J. (1980). The search for psychological universals. In H. C. Triandis, & W. W. Lambert (Eds.), *Handbook of cross-cultural psychology: Vol. 1. Perspectives* (pp. 143–204). Boston: Allyn & Bacon.

Lord, R. G., & Brown, D. J. (2001). Leadership, values, and subordinate self-concepts. *The Leadership Quarterly*, *12*, 133–152.

Lord, R. G., & Smith, J. E. (1983). Theoretical, information processing, and situational factors affecting attributional theory models of organizational behavior. *Academy of Management Review*, *8*, 50–60.

Malone, P. F., & Fry, L. W. (2003). Transforming schools through spiritual leadership: A field experiment. *Paper presented at the Academy of Management, Seattle, WA.*

Marsh, H. W., & Yeung, A. (1998). Top-down, bottom-up, and horizontal models: The direction of causality in multidimensional, hierarchical self concept models. *Journal of Personality and Social Psychology*, *75*(2), 509–527.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*, 370–396.

Nielsen, K., Yarker, J., Randall, R., & Munir, F. (2009). The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, *46*, 1236–1244.

Nyhan, R. C. (2000). Changing the paradigm: Trust and its role in public sector organizations. *American Review of Public Administration*, *30*, 87–109.

Parameshwar, S. (2005). Spiritual leadership through ego-transcendence: Exceptional responses to challenging circumstances. *The Leadership Quarterly*, *16*, 689–722.

Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, *30*, 591–622.

Pierce, J. L., Gardner, D. G., Cummings, L. L., & Dunham, R. B. (1989). Organization-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal*, *32*, 622–648.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, *1*, 107–142.

Quinn, R. E., & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, *26*, 37–49.

Reave, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly*, *16*, 655–687.

Ronen, S., Lingoes, J. C., & Aranya, N. (1979). A nonmetric scaling approach to taxonomies of employee motivation. *Multivariate Behavioral Research*, *14*, 387–401.

Ronen, S., & Sadan, S. (1984). Job attitudes among different occupational status groups. *Work and Occupations*, *11*, 77–97.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Shamir, B. (1990). Calculation, values, and identities: The sources of collectivistic work motivation. *Human Relations*, *43*, 313–332.

Shamir, B., House, R. J., & Arthur, M. A. (1993a). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, *4*, 577–594.

Shamir, B., House, R. J., & Arthur, M. (1993b). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, *4*, 1–17.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validations of construct interpretations. *Review of Educational Research*, *46*, 407–441.

Shetzer, L. (1993). A social information processing model of employee participation. *Organizational Science*, 4, 252–269.

Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, 46, 703–714.

Song, I. -S., & Hattie, J. (1985). Relationships between self-concept and achievement. *Journal of Research in Personality*, 19, 365–372.

Sosik, J. J., & Dworakivsky, A. C. (1998). Self-concept based aspects of the charismatic leader: More than meets the eye. *The Leadership Quarterly*, 9, 503–526.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: dimensions, measurement, and validation. *Academy of Management Journal*, 38, 1442–1465.

Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, 39, 483–504.

Spreitzer, G. M., Perttula, K. H., & Xin, K. (2005). Traditionality matters: An examination of the effectiveness of transformational leadership in the United States and Taiwan. *Journal of Organizational Behavior*, 26, 205–227.

Tsui, A. S., Nifadkar, S., & Ou, A. Y. (2007). Cross-national cross-cultural organizational behavior research: Advances, gaps, and recommendations. *Journal of Management*, 33, 427–478.

Turney, J. R., & Cohen, S. L. (1978). Organization implications for practicing OD in the army. *Personnel Psychology*, 31, 731–738.

Vallejo, M. (2008). Is the culture of family firms really different? A value-based model for its survival through generations. *Journal of Business Ethics*, 81, 261–279.

Walumbwa, F. O., Lawler, J. J., Avolio, B. J., Wang, P., & Shi, K. (2005). Transformational leadership and work-related attitudes: The moderating effects of collective and self-efficacy across cultures. *Journal of Leadership & Organizational Studies*, 11, 2–16.

Walumbwa, F. O., Wang, P., Lawler, J. J., & Shi, K. (2004). The role of collective efficacy in the relations between transformational leadership and work outcomes. *Journal of Organizational and Occupational Psychology*, 77, 515–553.

Yang, K. S. (1995). Chinese social orientation: An integrative analysis. In W. S. Tseng, T. Y. Lin, & Y. K. Yeh (Eds.), *Chinese societies and mental health* (pp. 13–39). Hong Kong, Hong Kong: Oxford University Press.

Yang, G. S. (2004). Theoretical analysis and empirical study of the Chinese ego: Social-oriented and individual-oriented. *Indigenous psychological research in Chinese societies*, 2004(22), 11–80.

Yang, K. S. (2006). Indigenized conceptual and empirical analyses of selected Chinese psychological characteristics. *International Journal of Psychology*, 41, 298–303.

Yu, H., Leithwood, K., & Jantzi, D. (2002). The effects of transformational leadership on teachers' commitment to change in Hong Kong. *Journal of Educational Administration*, 40, 368–389.