

Spiritual Leadership, Follower Mediators, and Organizational Outcomes: Evidence From Three Industries Across Two Major Chinese Societies¹

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Spiritual leadership process was investigated across 2 major Chinese societies (China and Taiwan) and 3 major Chinese industries (manufacturing, financial/banking, and retailing service industries). The leader's factors of spiritual leadership, vision, hope/faith, and altruistic love by Fry (2003) were found to be mediated by 3 types of follower's factors to influence organizational outcomes; namely, (a) employee spiritual attribute toward work—*meaning/calling*; (b) employee spiritual attribute toward organization/team—*membership*; and (c) employee spiritual attribute toward inner self—*self-esteem* and *self-efficacy*. The inner-self aspect of spirituality was found, over and above the other 2 types of follower's factors, to impact on the organizational outcomes, including self-career management behavior and productivity. This pattern was consistent across all Chinese samples and industries.

Spirituality is an emerging area of organizational research. Workplace spirituality is addressed as the important trend of enterprises in the 21st century (Shellenbarger, 2000). Scholars have begun to pay attention to the associations between spirituality and leadership (Fairholm, 1998; Fry, 2003; Strack, Fottler, Wheatley, & Sodomka, 2002) with a variety of organizational outcomes, such as absence rate, productivity, employee turnover, morality, workplace stress, and health (Giacalone & Jurkiewicz, 2003). These studies and practices have initiated the development of this new line of research.

Fry (2003), who was among the first few scholars to integrate the notion of workplace spirituality and leadership, developed the theory of spiritual leadership (SL) on related leadership literatures and early studies. Fry's

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spiritual leadership theory (SLT) suggests that there is a positive relationship between workplace spirituality and leaders' values and attitudes. Spiritual leadership theory is rooted in an intrinsic motivation model that incorporates vision, hope/faith, and altruistic love in portraying an effective leader. Spiritual leadership aims to satisfy employees' basic psychological needs of spiritual survival by one's calling and membership; creating vision and consistent values among cross-organization empowered groups and individuals; and finally developing higher levels of efficiency–profit, human growth, and well-being (Fry, Vitucci, & Cedillo, 2005).

Fry et al. (2005) validated the spiritual leadership model with a sample of members of the U.S. Air Force. Fry et al. presented evidence of the fitted model that spiritual leadership significantly influences employees' organizational commitment and productivity. Fry et al.'s study is inspiring and serves as the basis for future organizational intervention and methodological research of spiritual leadership. However, for being a new paradigm of research, SLT relies on more empirical validations (Editorial, 2005). For instance, more organizational behaviors, in addition to organizational commitment and productivity, need to be examined as well; and more mediating mechanisms, as well as cross-cultural generalizations, are important research issues.

Despite Fry et al.'s (2005) inspiring pioneer work, there still remain questions to be answered, particularly regarding the universality–generalizability of spiritual leadership and related processes. Fry et al.'s cause-and-effect model calls for further studies involving cultural validation (Cheng, 2003). A research gap exists in the relationship between leadership and employee behavior since most research is based on individualistic cultural samples (e.g., U.S.; Dennis & Donde, 2005; Fry et al., 2005; Turnley & Feldman, 1999).

Relatively little research has been conducted on samples from collectivistic cultures (e.g., Chinese). It is imperative for scholars to explore the transportability of Western psychological constructs and organizational practices to other cultural contexts (Tsui, Nifadkar, & Ou, 2007). Moreover, China has had a rapidly growing economy, and managing Chinese human resources effectively becomes a critical issue for many multinational companies. It is important to understand how spiritual leadership conceptualization applies to Chinese employees and how it varies with the Western cultures in process (Luthans, Avey, Clapp-Smith, & Li, 2008). Thus, how the theory and the cause-and-effect model of Fry's (2003; Fry et al., 2005) spiritual leadership apply to Chinese industries and organizations is one purpose of the present study. We recruited samples from two major Chinese communities (i.e., Taiwan and China) as our targeted respondents.

Chinese traditional values affect employees' work attitudes in Chinese organizations (Yang, 1984). Nisbett, Peng, Choi, and Norenzanai (2001)

suggested that cultural differences not only influence people's perceptions of the outer world, but also impact their cognitive processes and even metaphysical concepts. Compared to Western cultures, the Chinese culture values face-saving and interpersonal harmony in organizational behaviors (Yang, 2004). To maintain or to promote one's self-esteem is considered crucially important in Chinese culture, as well as in the work context. Moreover, Chinese reveal different self-concept framework or inner structure of self from those of Western cultures (Weng, Yang, & Hsu, 2004). The present study proposes that it is important to inquire into the Chinese self concept, particularly the role of self-esteem and self-efficacy in the spiritual leadership model.

The next question for researchers is "Can spiritual leadership theory apply to various organizational settings or industries?" To answer this question, researchers must identify the representative industries across two major Chinese societies. According to governmental statistics in Taiwan, in recent decades, service industries and financial-banking industries developed vigorously. According to the Small and Medium Enterprise Administration of the Ministry of Economic Affairs (White Paper on Small and Medium Enterprises [SMEs], 2008), by the end of 2007, companies in the service industry and financial-banking industry in Taiwan reached a ratio of 79% of the total SMEs. The employee population was 58%. In addition, most of the global companies (including those in Taiwan) invested in manufacturing industries in China (Investment Commission, MOEA, 2001). Therefore, this study included manufacturing industries in China, and service industries and financial-banking industries in Taiwan as the three representative Chinese industrial samples.

Spirituality and Leadership

The integration of spirituality in leadership theory has emerged in recent years. Some researchers have attempted to identify effective leaders' spiritual characteristics. For instance, Fairholm (1997, 1998) suggested that effective leaders possess higher levels of inner belief, intellectual ability, and the ability to help people to be independent, make individual meaning, find individual value, and live their goals. Reave (2005) reviewed 150 studies on effective leadership and concluded that successful leaders' universal spiritual characteristics are integrity, honesty, and modesty. The spiritual behavior of an effective leader includes respect for others, equality in treating others, care, identification with contribution, reaction for feedback, and self-reflection (Reave, 2005).

Fry (2003) incorporated spirituality (individuals' internal psychological characteristics) into leadership (external behavior to accomplish organiza-

tional goals effectively by collective force) and proposed a cause-and-effect model of spiritual leadership. Fry et al. (2005) used the U.S. Air Force for samples, and empirically validated the theory proposed in 2003. They demonstrated the fit of the theoretical model, and proved the influence of spiritual leadership on subsequent employee productivity and commitment to organizations.

Fry et al.'s (2005) theory of spiritual leadership is fundamentally rooted in a motivation-based aspect, which is similar to that of transformational and charismatic leadership, both of which emphasize intrinsic motivation. Fry's theory also encompasses a religious-based aspect (i.e., religion and spirituality both value care and love), an ethic-based aspect (e.g., treating organizational stakeholders and customers with service and responsibility), and a value-based aspect (e.g., developing an organizational culture that values employees' work meaning and positive interpersonal relationship). *Spiritual leadership* is defined by Fry et al. (2005) as follows:

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—that is, they experience meaning in their lives, have a sense of making a difference, and feel understood and appreciated. (p. 835)

Fry's (2003; Fry et al., 2005) model is the most representative spiritual leadership theory at the present time (Dent, Higgins, & Wharff, 2005). Therefore, this study adopts the definition and measurement instruments of spiritual leadership, based on Fry's research.

Mediators in Spiritual Leadership

In the theory of spiritual leadership, Fry et al. (2005) proposed three factors of a leader's spirituality. These include (a) *vision*: to depict the future and the reason of the organization, to define self-positioning and behavior, to value the process of the organizational future, and to communicate this value to employees in developing their internal meaningfulness; (b) *hopelfaith*: to affirm the expectation and confidence in the accomplishment of the organizational vision/goal/mission; and (c) *altruistic love*: to have complete, harmonious, and happy feelings through care and appreciation for self and others. They also proposed two factors of a follower's responses: (a) *meaning/calling*: the feeling that individuals have meaningful and valuable life; and (b) *membership*: the feeling of being understood and appreciated. We propose a third important follower's response factor: (c) *self-esteem/self-efficacy*: the

follower's spiritual–psychological attributes toward inner self. The hypothesized relationships among these variables are described in the following sections.

Followers' Spiritual–Psychological Attribute Toward Work (Meaning/Calling) and Followers' Spiritual–Psychological Attribute Toward Organization–Team (Membership)

SLT suggests that leaders construct a vision to call for employees' internal meaningfulness. The employees then feel that they have special, meaningful tasks to complete (Fry et al., 2005). Based on Fry et al.'s fundamental model, the present study proposes the following hypotheses:

Hypothesis 1. Spiritual leadership will have a positive influence on employees' meaning/calling.

Hypothesis 2. Spiritual leadership will have a positive influence on employees' membership.

Followers' Spiritual–Psychological Attribute Toward Inner Self (Self-Esteem)

Leadership effectiveness is a product of good followers and good leaders. Shamir (2007) made some recommendations for studies from the follower-centered approach, including examining how followers' characteristics (e.g., self-concept) determine the nature of the leadership relationship. In addition, more work is suggested to examine how followership is construed across different industries and cultures (Schyns, Felfe, & Blank, 2007).

Pierce and Gardner (2004) suggested that self-esteem is a multi-construct concept that involves individual lives, social relationships, competence to perform special tasks and jobs, and so forth. Past studies and measurement of self-esteem have often referred to a more general concept of self-esteem; that is, self-esteem toward individual and life. However, few studies have explored employees' specific self-esteem in organizations. Pierce and Gardner developed the concept of *organization-based self-esteem* (OBSE), which is the individual's perception on self-competence and value in an organization. Therefore, OBSE is a specific form of self-esteem toward one's role in an organization.

Leadership theories suggest that leadership influences individuals' self-esteem. Research has indicated that leadership affects people's identity, value, and self-esteem (Cremer, van Knippenberg, van Knippenberg, Mulenders, & Stinglhamber, 2005). In group or organization relationship,

leaders promote subordinates' values and identification to the organization (Hogg, 2001). Leaders' support, respect, and care have a positive influence on subordinates' self-esteem (Tyler, 1999). This study proposes the following:

Hypothesis 3. Spiritual leadership will have a positive influence on employees' self-esteem.

*Followers' Spiritual–Psychological Attribute Toward Inner Self:
Self-Efficacy (Psychological Empowerment)*

Self-efficacy involves an individual's belief in his or her ability to perform activities with skill (Gist, 1987). It is the individual's confidence in being capable of accomplishing the expected goal by practicing necessary acts (Bandura, 1997). In the work context, some researchers have identified the process of enhancing feelings of self-efficacy among organizational members as *empowerment* (Conger & Kanungo, 1998). In this definition, *empowerment* is a specific form of self-efficacy that is related to work. Other researchers have suggested that self-efficacy is the core concept or result of empowerment (Lee & Koh, 2001; Spreitzer, 1995). Therefore, we used self-efficacy-related items in the Psychological Empowerment Scale developed by Spreitzer (1995) to measure conceptually the specific self-efficacy that is related to work as one's spiritual inner self.

Spiritual leadership influences subordinates' self-concept by reinforcing their competence and confidence (Conger & Kanungo, 1988; Shamir, House, & Arthur, 1993). Value-based leadership emphasizes the values of sharing and significant internalization of values by leaders (Bass & Avolio, 1994; House, 1996; House & Shamir, 1993). Leaders facilitate individual self-efficacy and self-value on the contribution to group vision. The present study suggests that spiritual leaders can enhance employees' self-efficacy.

Hypothesis 4. Spiritual leadership will have a positive influence on employees' self-efficacy perceptions.

*Organizational Outcomes (Career Management Behavior and Productivity)
by Meaning/Calling and Membership*

Spiritual leaders make spiritual calling for members' commitment to work, and help employees generate faith in the value of their profession. Kraimer, Seibert, and Liden (1999) suggested that psychological empowerment can predict the intention of career development. The study of Sturges, Conway, Guest, and Liefvooghe (2005) on university graduates in the UK

indicated that a high level of organizational commitment can predict employees' career management behavior in an organization. Sturges et al. also demonstrated that long-term care of the organization for employees' careers has a positive influence on employees' career self-management behavior. Thus, meaning/calling and membership perception have an influence on employees' work attitudes and work behavior. This study proposes the following:

Hypothesis 5a. Meaning/calling will have a positive influence on career self-management.

Hypothesis 5b. Meaning/calling will have a positive influence on productivity.

Hypothesis 6a. Membership will have a positive influence on career self-management.

Hypothesis 6b. Membership will have a positive influence on productivity.

Organizational Outcomes by Self-Esteem

Self-esteem and organizational experience is critical for employees' motivation, work attitude, and behavior. Employees with high levels of self-esteem regard themselves as important, meaningful, effectual, and worthwhile in the organization. Pierce, Gardner, Cummings, and Dunham (1989) demonstrated that enhancement of individual self-esteem in the organization significantly increased employees' organizational commitment and satisfaction with the organization. Bono and Judge (1998, 2003) observed that self-esteem and self-efficacy are highly related to work performance.

After reviewing the literature related to OBSE for the past decade, Pierce and Gardner (2004) indicated that OBSE reveals positive correlation with intrinsic work motivation, career attitude, and constructive work behavior; and it shows negative correlations with turnover and turnover intention. Compared to employees with low self-esteem, those with high self-esteem have more positive outcomes (Gecas, 1989; Locke, Frederick, Lee, & Bobko, 1984; Ozer & Bandura, 1990). Thus, we propose the following:

Hypothesis 7a. Employees' self-esteem will have a positive influence on their career self-management behavior in the organization.

Hypothesis 7b. Employees' self-esteem will have a positive influence on their productivity.

Organizational Outcomes by Self-Efficacy

Empowerment enables employees to contribute efficiently, while organizations can keep their talents more readily (Spreitzer, 1995). Employees with high levels of empowerment tend to report more work satisfaction (Spence Laschinger, Finegan, Shamian, & Wilk, 2004), to develop a career plan in the organization (Spreitzer, 1995), and to predict the intention of promotion in the organization effectively (Annelies & Vianen, 1999; Giles & Larmour, 2000). Kraimer et al. (1999) stated that work meaningfulness and psychological empowerment can predict career development intentions, and that self-decision and influence can predict organizational commitment. Moreover, employees with higher self-efficacy are more likely to explore their careers and to practice career self-management (Betz, 2004).

There are positive correlations among psychological empowerment, managerial effectiveness (Spreitzer, 1995), employee effectiveness (Spreitzer, Kizilos, & Nason, 1997), and employee productivity (Koberg, Boss, Senjem, & Goodman, 1999). Gist and Mitchell (1992) reviewed the empowerment literature and indicated that work performance is related to self-efficacy. The research of Locke et al. (1984) demonstrated that upon controlling competence and previous performance, there is a positive relationship between self-efficacy and future work performance. Thus, the following hypotheses are proposed:

Hypothesis 8a. Employees' self-efficacy will have a positive influence on career self-management behavior in the organization.

Hypothesis 8b. Employees' self-efficacy will have a positive influence on productivity.

Champoux (2000) and Mayfield (2002) indicated that leaders' care for their employees leads to employees' emotional attachment (e.g., membership in the organization) in which employees shall be more willing to stay in the organization. Leaders' behavioral consistency, support, and care for employees' career development affect employees' satisfaction and commitment to the organization (Jernigan & Beggs, 2005). Leaders' care and value on employees' development carry out employees' psychological contract (e.g., meaning/calling) and enhance their commitment to the organization and self-career management behavior in the organization (Sturges et al., 2005; Sturges, Guest, Conway, & Davey, 2002). To restate the mediating importance of meaning/calling and membership, this study proposes the following:

Hypothesis 9a. Meaning/calling will mediate the relationship between spiritual leadership and followers' outcomes.

Hypothesis 9b. Membership will mediate the relationship between spiritual leadership and followers' outcomes.

Self-Esteem and Self-Efficacy as Salient Mediators for the Chinese

Chinese self-concept and self-process have been discussed by scholars as being unique and prominent factors in the process of most interpersonal, social, and organizational interactions among the Chinese. Yang (1995, 2004, 2006) developed a four-part theory of the Chinese self from an indigenized psychology perspective in which four self subsystems—that is, individual, relationship, familistic (group), and other-oriented selves—are posited to compose the Chinese self. From this perspective, the Chinese self-concept (e.g., self-esteem, self-efficacy) is more social-oriented than individual-oriented. In terms of the aspect of indigenous psychology, the interaction between the Chinese (particularly those in traditional society) and their living environment is much more social-oriented than individual-oriented (Yang, 1993). The social-oriented self is more influential than the individual-oriented self (Yang, 2004).

Social-oriented self-esteem is above the individual's own positive self-evaluation because (a) the success or achievement is more valued for individuals to pursue interpersonal, family, or group goals or to pursue face-saving, reputation, and respect from others; and (b) individuals' psychological attributes and behavioral characteristics are, in turn, valued by the view of interpersonal relationship, family, group, or others (Weng, Yang, & Hsu, 2004; Yang, 2004). Chinese society values face-saving, inner self, self-esteem, and self-efficacy (Hwang, 1977). Subsequent empirical studies by Yang and his associates (e.g., Farh & Cheng, 2000; Yang, 2000) have validated this theoretical concept. To imply from this aspect the fulfillment of self or the satisfaction of self-needs for the Chinese is particularly subject to the social context. Yang's (1993, 2004) conceptualization of the Chinese self is similar in content to the research variable of OBSE in this study, which is the mediating variable in the leadership process.

The majority of leadership research agrees that leadership consists of leader–follower dyadic relationships within groups and organizations, and has an impact on individuals' identification, values, and self-esteem (Cremer et al., 2005). Self-esteem is reported, then, to influence many human behaviors, including organizational behaviors (e.g., group process, response to conflict situations, task interdependence, perceived relationships with others, personal psychological well-being, anxiety, depression, aggression, criminal behavior; Brockner, 1988; Duffy, Shaw, & Stark, 2000; Leary & Baumeister,

2000). Therefore, the mediating importance of self-esteem between leadership and organizational outcomes is evident.

Self-efficacy is also an important mediator between social structural empowerment and individual/organizational outcomes. Psychological empowerment is a critical mechanism for enhancement of work satisfaction, performance, and organizational outcomes (Morgeson & Campion, 2003). Research (Avolio, Zhu, Koh, & Bhatia, 2004) has concluded that psychological empowerment mediates the relationship between transformational leadership and organizational commitment. Through the mediation of psychological empowerment (i.e., autonomy, competence, meaning, influence), work characteristics (e.g., autonomy, feedback) have different influences on intrinsic motivations (Gagne, Senecal, & Koestner, 1997). In addition, one empirical study on school faculty (Heck, Bedeian, & Day, 2005) indicated that OBSE mediates the relationship among work satisfaction, antecedent of emotional commitment, and leader-member exchange quality and complaints in the workplace. The present study suggests that spiritual leadership affects both employees' organizational perception (i.e., meaning/calling, membership) and self-perception (i.e., self-esteem, self-efficacy) and further influences employees' career self-management and productivity:

Hypothesis 9c. Employees' self-concept will mediate the relationship between spiritual leadership and career self-management.

Hypothesis 9d. Employees' self-concept will mediate the relationship between spiritual leadership and productivity.

Research Framework

As shown in Figure 1, the research framework summarizes the aforementioned hypotheses, and posits the influences of the three leader spiritual factors on the three types of follower spiritual-psychological mediators (Hypotheses 1 through 4). The influence of followers' mediators on career management behavior and productivity is then portrayed by Hypotheses 5a through 8b. Salience of employee spiritual-psychological mediators between spiritual leadership and organizational outcomes is tested in Hypotheses 9a through 9d.

Method

Samples

The present study was conducted through a purposive and convenience sampling from the two major Chinese societies: Taiwan and China. The

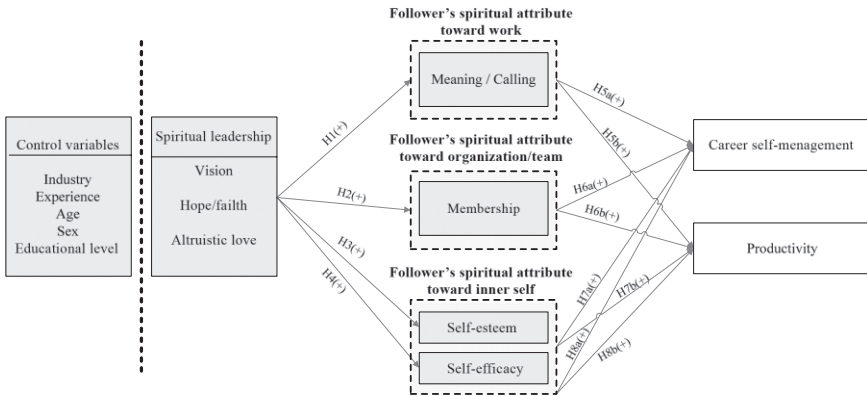


Figure 1. Research framework for the study. Note. Hypotheses 9a through 9d are mediation effects.

target respondents in Taiwan were as follows: (a) retail service industries (e.g., TECO, Fortune Motors); (b) financial/banking industries (e.g., Mega International Commercial Bank, E. Sun Bank, HSBC); and (c) manufacturing industries (e.g., Uni-President, Taya).

About 20 companies were selected for the questionnaire survey. A total of 502 employees (228 males, 258 females, 16 did not report gender) in these Taiwan enterprises provided valid responses. Their mean age was 33.9 years ($SD = 7.7$; range = 19–60 years), and their mean work experience was 9.7 years ($SD = 6.9$; range = 0.2–30 years) As to the samples in China, 289 employees (163 males, 116 females, 10 did not report gender) from about 12 companies, mostly manufacturing industries invested in by Taiwanese ($n = 204$) and also a few service industries samples ($n = 76$), gave valid responses in the questionnaire survey. Their mean age was 25.0 years ($SD = 4.7$; range = 18–45 years), and their mean work experience was 3.6 years ($SD = 3.9$; range = 0.1–40 years). Questionnaires were collected from the purposive industries and enterprises using a convenience sampling method. The valid response rates were 52.4% and 58.2% for Taiwan and China, respectively.

Measures

Spiritual leadership. The construct of spiritual leadership was measured by 17 items extracted from the 26-item Spiritual Leadership Scale that was developed by Fry et al. (2005). The items were rated on a 5-point Likert-type

scale ranging from 1 (*completely agree*) to 5 (*completely disagree*). Reliability and validity of this scale were both soundly verified. Cronbach's alphas of the three dimensions (i.e., vision, hope/faith, altruistic love) ranged from .90 to .93. Sample items for the three dimensions are as follows: "I understand and am committed to my organization's vision" (vision); "I always do my best in my work because I have faith in my organization and its leaders" (hope/faith); and "My organization really cares about its people" (altruistic love).

Meaning/calling. The measurement of meaning/calling also included items from Fry et al.'s (2005) Spiritual Leadership Scale. Items were rated on a 5-point scale ranging from 1 (*completely agree*) to 5 (*completely disagree*). Cronbach's alpha provided by Fry et al. was .89. A sample item is "The work I do is very important to me."

Membership. The membership measure was composed of five items from Fry et al.'s (2005) Spiritual Leadership Scale. Cronbach's alpha for this measure was .90. A sample item is "I feel my organization understands my concerns."

Self-esteem. The self-esteem measure is a 10-item scale based on the Organization-Based Self-Esteem (OBSE) scale that was designed by Pierce and Gardner (2004). It is a 5-point scale ranging from 1 (*completely agree*) to 5 (*completely disagree*). Pierce and Gardner provided sound reliability and validity for this measure. Sample items include "I count around here," "I am taken seriously around here," and "I can make a difference around here."

Self-efficacy. The self-efficacy measure consists of three items of self-efficacy perception abstracted from the Psychological Empowerment Scale that was developed by Spreitzer (1995). The items were rated on a 5-point scale ranging from 1 (*completely agree*) to 5 (*completely disagree*). Cronbach's alpha was .81. A sample item is "I am confident about my ability to do my job."

Employees' career management behavior in the organization. Sturges et al.'s (2002) original Employee Career Management Behavior Questionnaire includes two categories: (a) career self-management behavior within the organization, which represents employees looking for opportunities of career self-development in the organization; and (b) career self-management behavior outside the organization, which represents employees looking for opportunities of career self-development outside the organization. In the present study, we adopted the nine-item scale that measures career self-management behavior within the organization. The items were rated on a 5-point scale ranging from 1 (*completely agree*) to 5 (*completely disagree*). The scale had satisfactory reliability and validity. A sample item is "I have a lot of contacts with influential people in my organization."

Productivity. The productivity measure was composed of three items from Fry et al.'s (2005) Spiritual Leadership Scale. Cronbach's alpha for the

measure was .82. A sample item is “Everyone is busy in my department; there is little idle time.”

Reliability and Validity

Back-translation and interrater reliability. Fry et al.’s (2005) five-factor, 26-item Spiritual Leadership Scale and the three-item productivity scale were utilized in this study through the procedure of back-translation and were verified to achieve a .70 or greater interrater reliability. First, the scale was translated from English into Chinese by an organizational psychology professor and two industrial–organizational doctoral students. Then, a language expert (with many years of work experience in English translation) translated the Chinese piece back into English. Then, two language experts (with master’s degrees in English as Applied Foreign Language) were invited to rate the consistency between the original English questionnaire and the translated English questionnaire. They were requested to judge the percentage of similarity between the two English versions on each item. When any one of the two raters’ similarity judgments fell below 70% on a single item, they were requested to revise that item in the Chinese version until an agreement was reached, in order to produce a greater than .70 similarity rating for both raters. The procedure was concluded when all ratings (for all items) exceeded the level of .70. This is to assure that all items in the scale achieve a translation validity and interrater reliability of at least .70.

Reliability analysis. Cronbach’s alphas for all research variables were between .73 and .93, as shown in Table 1. This reveals a high level of reliability.

Construct validity. Confirmatory factor analyses were performed to validate the spiritual leadership construct. The significance of chi square is regarded as the criterion of overall fit. However, chi square is simply affected by sample size. When the number of samples is large, the overall model is easily rejected (Bentler & Bonett, 1980; Marsh, Balla, & McDonald, 1988; Marsh & Hocevar, 1985). Therefore, this study not only attends to the magnitude of chi square, but also examines other fit indexes. In Table 2, the analytical result for each dimension of spiritual leadership shows that goodness of fit index (GFI) and non-normed fit index (NNFI) are greater than .90 (i.e., .91 to .99), with root mean residuals (RMR) less than or close to .05, indicating a good fit for each spiritual leadership dimension.

Convergent validity and discriminant validity. In order to reduce the influence of small samples and multiple parameters in parameter estimation, the present study applied partial disaggregation of Bagozzi and Foxall (1996), and combined the indicators in the same construct into composite indicators according to the amount of factor loading or at random. Specifically speaking,

Table 1

Reliability Analysis

Variable and construct	Number of items	Taiwan		China	
		<i>N</i>	α	<i>N</i>	α
Spiritual leadership					
Vision	5	493	.905	265	.824
Hope/faith	5	494	.923	276	.860
Altruistic love	7	488	.929	261	.790
Psychological/spiritual factors toward work/organization					
Meaning/calling	4	498	.885	273	.831
Membership	5	492	.901	274	.852
Psychological/spiritual factors toward inner self					
Self-esteem	10	496	.933	270	.905
Self-efficacy	3	501	.869	276	.782
Organizational outcomes					
Career self-management	9	492	.837	268	.782
Productivity	3	483	.823	265	.733

Note. Taiwan, *N* = 502; China, *N* = 289.

this study recombined the 10 items of self-esteem into six indicators, and the nine items of career self-management into five indicators for confirmatory factor analyses to measure further the convergent validity and discriminant validity.

Convergent validity of the model can be validated by the following criteria: larger estimation value of normalized parameter in all constructs; all average variance extracted (AVE) exceeds 0.50 (Fornell & Larcker, 1981). According to the analytical results of AVE and component reliability (CR) in Table 3, almost all AVEs of the research variables were larger than .50 (Taiwan sample, .57–.79; China sample, .48–.62). CRs exceeded .60 (Taiwan sample, .87–.92; Chin sample, .75–.89). Table 2 shows that the average factor loadings are greater than .50 (for Taiwan, the average is .65–.79; for China, the mean is .61–.87). These results reveal that convergent validity of the research variables in this study is satisfactory.

With regard to discriminant validity, this study follows the criterion suggested by Anderson and Gerbing (1988b) that the square of AVE of the

Table 2

Confirmatory Factor Analysis on Constructs of Spiritual Leadership

Construct	χ^2	df	GFI	AGFI	NNFI	CFI	RMR	Variance accumulation	Factor loading
Taiwan									
Vision	125.30	5	.91	.72	.87	.95	.044	72.72	A11 > .82; M = .85
Hope/faith	19.74	5	.98	.95	.98	.99	.014	76.40	A11 > .84; M = .87
Altruistic love	238.63	14	.88	.76	.87	.91	.044	70.16	A11 > .71; M = .83
Meaning/calling	31.04	2	.98	.93	.97	.99	.019	74.99	A11 > .76; M = .86
Membership	29.64	5	.98	.93	.97	.98	.021	71.91	A11 > .79; M = .84
Self-esteem	153.61	9	.91	.78	.89	.93	.043	62.48	A11 > .66; M = .79
Self-efficacy	0.00	0		Saturated	model			79.33	A11 > .88; M = .89
Career self-management	83.57	14	.95	.91	.92	.94	.043	52.26	A11 > .62; M = .72
Productivity	0.00	0		Saturated	model			73.97	A11 > .80; M = .85
China									
Vision	67.00	5	.95	.85	.87	.93	.046	59.93	A11 > .69; M = .73
Hope/faith	41.96	5	.97	.90	.93	.97	.033	63.66	A11 > .73; M = .80
Altruistic love	261.66	14	.87	.74	.78	.86	.072	55.57	A11 > .58; M = .74
Meaning/calling	0.69	2	1.00	1.00	1.00	1.00	.006	62.23	A11 > .64; M = .78
Membership	13.04	5	.99	.97	.98	.99	.021	62.85	A11 > .69; M = .79
Self-esteem	138.78	9	.92	.80	.89	.92	.046	53.55	A11 > .57; M = .72
Self-efficacy	0.00	0		Saturated	model			69.84	A11 > .69; M = .74
Career self-management	95.43	5	.95	.90	.88	.92	.050	47.11	A11 > .61; M = .68
Productivity	0.00	0		Saturated	model			65.21	A11 > .70; M = .80

Note. Taiwan, N = 502; China, N = 289. Extracted factor = 1. GFI = goodness-of-fit index; AGFI = adjusted GFI; NNFI = non-normed fit index; CFI = comparative fit index; RMR = root mean residual.

Table 3

Convergent Validity of Spiritual Leadership

Construct	Taiwan		China	
	AVE	CR	AVE	CR
Vision	.72	.93	.59	.88
Hope/faith	.76	.94	.63	.89
Altruistic love	.70	.94	.55	.89
Meaning /calling	.74	.92	.62	.86
Membership	.71	.92	.62	.89
Self-esteem	.71	.92	.69	.87
Self-efficacy	.62	.94	.53	.91
Career self-management	.44	.87	.37	.83
Productivity	.73	.89	.65	.84

Note. Taiwan, $N = 502$; China, $N = 289$. AVE = average variance extracted; CR = component reliability.

intended construct compared with the square of its correlations with other constructs. When the AVE of the construct is higher than the intercorrelation squares, it indicates the independency of the construct. According to the correlation matrices in Tables 4 and 5 and the AVEs in Table 3, the AVEs are higher than the intercorrelation squares of the three leadership constructs. Therefore, discriminant validity of the three leader spiritual constructs is verified. Based on the AVE analysis of the four employee psychological perceptions (i.e., meaning/calling, membership, self-esteem, self-efficacy) in Table 3 and the correlation analysis in Table 4, the AVEs of the four psychological perceptions are also higher than their corresponding intercorrelation squares. Therefore, discriminant validity of the four perceptions (mediators) is verified.

Second-order confirmatory factor analysis of spiritual leadership. Anderson and Gerbing (1988a, 1988b) suggested that a higher level of cofactors must be extracted when the level of correlation between the cofactors is high. According to second-order confirmatory factor analyses of spiritual leadership in Table 6, the fit is acceptable ($>.85$). Chi-square ratios of the second-order model to that of the first-order model are close to 1.00 (Taiwan sample, .91; China sample, .93). This implies that to reduce the influence of multiple parameters on parameter estimation, the second-order factor of spiritual

Table 4

Correlational Analysis for the Taiwan Sample

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Vision	3.48	0.81	—							
2. Hope/faith	3.70	0.80	.81	—						
3. Altruistic love	3.34	0.86	.69	.73	—					
4. Meaning/calling	3.82	0.78	.51	.58	.47	—				
5. Membership	3.44	0.81	.64	.65	.75	.62	—			
6. Self-esteem	3.83	0.65	.43	.50	.44	.54	.59	—		
7. Self-efficacy	4.04	0.71	.29	.32	.21	.44	.32	.61	—	
8. Career self-management	3.36	0.58	.36	.31	.32	.37	.40	.42	.31	—
9. Productivity	3.59	0.86	.27	.35	.30	.34	.29	.41	.26	.14

Note. $N = 502$. All correlations significant at $p < .01$.

leadership (as a substitute for the first-order factor) can be used in subsequent analyses.

Results

Correlation Analysis of the Variables

Table 6 shows the intercorrelations of the research variables. It can be noted that all correlations reached a significance level ($p \leq .01$), demonstrating that Hypotheses 1 through 8b were empirically supported.

Multi-Sample Analysis

Taiwan. According to the hierarchical regression analyses in Tables 7 and 8, the increases in explained variance (ΔR^2 of Model 2) by spiritual leadership in predicting career self-management and productivity are 13.0% and 11.1%, respectively, indicating that spiritual leadership very significantly predicts employee career self-management and productivity within organizations. In Model 3, two more variables were included: employees' psychological perceptions (i.e., meaning/calling, membership), and ΔR^2 being 4.7% and 2.4%.

Table 5
Correlational Analysis for the China Sample

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Vision	3.70	0.75	—							
2. Hope/faith	4.08	0.68	.61**	—						
3. Altruistic love	3.71	0.73	.58**	.57**	—					
4. Meaning/calling	3.82	0.72	.52**	.54**	.43**	—				
5. Membership	3.54	0.75	.56**	.57**	.66**	.65**	—			
6. Self-esteem	3.92	0.62	.37**	.42**	.38**	.49**	.51**	—		
7. Self-efficacy	4.14	0.66	.27**	.38**	.15*	.43**	.30**	.62**	—	
8. Career self-management	3.45	0.57	.26**	.29**	.30**	.36**	.42**	.49**	.42**	—
9. Productivity	3.85	0.83	.21**	.34**	.31**	.30**	.27**	.34**	.27**	.12*

Note. *N* = 289.

p* < .05. *p* < .01.

Table 6

Confirmatory Factor Analysis (CFA) of Spiritual Leadership

Model	χ^2	GFI	AGFI	NNFI	CFI	RMR	Second-order χ^2 / First-order χ^2
Taiwan							
First-order CFA	686.70	.87	.83	.93	.94	.037	0.91
Second-order CFA	626.21	.87	.83	.96	.96	.036	
China							
First-order CFA	736.70	.86	.81	.92	.97	.056	0.93
Second-order CFA	684.93	.86	.82	.92	.93	.039	

Note. Taiwan, $N = 502$; China, $N = 288$. $df = 116$. GFI = goodness-of-fit index; AGFI = adjusted GFI; NNFI = non-normed fit index; CFI = comparative fit index; RMR = root mean residual.

Noticeably, the β s of the three leader spiritual factors in Model 3 are insignificant or reduced, compared to those in Model 2. These findings empirically demonstrate the mediating effect of meaning/calling and membership between spiritual leadership and organizational outcome variables. Hypotheses 9a and 9b are thus empirically supported by the Taiwan sample.

After including employees' psychological perception of inner-self factors (i.e., self-esteem, self-efficacy) in the hierarchical regression (Model 4), ΔR^2 increased to 4.8% and 3.9%, respectively. Regression coefficients for meaning/calling and membership turned out to be insignificant or less significant. These results provide evidence that spiritual leadership influences career self-management and productivity through the mediation of employee self-esteem and self-efficacy, over and above the effect of meaning/calling and membership. Self-esteem ($\beta = .23, p < .001$; $\beta = .37, p < .001$) is the major contributor to the explained variance of the overall model. These results reveal that Hypotheses 9c and 9d are empirically supported by the Taiwan sample.

Sobel tests (Preacher & Leonardelli, 2008) were utilized to examine the path coefficients. The results show that the four indirect effects from spiritual

Table 7
Hierarchical Regression Analysis of Meditating Effects: Taiwan Sample

Independent variable	Dependent variable: Career self-management				Dependent variable: Productivity			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Industry 1	-.09	-.17*	-.22**	-.22**	.16	.07	-.01	-.00
Industry 2	-.04	-.13	-.16*	-.17**	.04	-.08	-.11	-.12
Experience	.01	.01	.01	.01	.01	.01	.00	.00
Age	-.00	-.01	-.01	-.01*	.01	.01	.01	.00
Sex	-.21***	-.17**	-.14*	-.15**	-.02	.05	.08	.05
Educational level	-.01	.04	.06	.04	-.07	-.01	.01	-.00
Vision		.22***	.18***	.20***		-.09	-.11	-.08
Hope/faith		-.00	-.07	-.11		.33***	.24*	.20*
Altruistic love		.07	.00	.02		.13	.11	.12
Meaning/calling			.16***	.10*			.21**	.14*
Membership			.11*	.03			.04	-.10
Self-esteem				.23***				.37***
Self-efficacy				.06				-.03
ΔR^2	.05**	.13***	.05***	.05***	.04*	.11***	.02**	.04***
R^2	.05	.18	.23	.27	.04	.15	.17	.21
Significant F_{change}	3.65	10.20	11.09	12.06	2.62	8.01	7.80	8.47

Note. $N = 502$. Coefficient is beta. Dummy variables: Industry 1 and Industry 2.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8

Hierarchical Regression Analysis of Mediating Effects: China Sample

Independent variable	Dependent variable: Career self-management				Dependent variable: Productivity			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Industry 1	-.07	-.04	-.12	-.03	-.10	.01	-.01	.07
Experience	.01	.01	.00	-.00	-.01	-.01	-.01	-.02
Age	-.00	-.00	-.00	.00	.01	.01	.01	.01
Sex	-.19*	-.16*	-.16*	-.16*	.11	.13	.14	.14
Educational level	.06	.08	.07	.00	-.01	.01	-.00	-.06
Vision	.09	.09	.04	.03	-.01	-.05	-.09	-.10
Hope/faith	.08	.08	-.04	-.10	.40***	.33**	.28*	.28*
Altruistic love	.12	.12	.01	.06	.12	.11	.11	.15
Meaning/calling	.10	.10	.10	.01	.19	.19	.19	.13
Membership	.22**	.22**	.22**	.12	-.01	-.01	-.01	-.10
Self-esteem	.23**	.23**	.23**	.23**	.22	.22	.22	.22
Self-efficacy	.23***	.23***	.23***	.23***	.14	.14	.14	.14
ΔR^2	.04	.10***	.07***	.14***	.01	.14***	.02	.04*
R^2	.04	.15	.21	.35	.01	.14	.16	.20
Significant F_{change}	1.87	4.30	8.95	8.95	2.50	4.21	3.80	4.06

Note. $N = 289$. Coefficient is beta. Dummy variables: Industry 1 and Industry 2. * $p < .05$. ** $p < .01$. *** $p < .001$.

leadership to productivity (.185, .221, .187, and .049, respectively) and to career self-management behavior (.133, .192, .130, and .041, respectively) are all significant (all $ps < .001$), indicating prominent influence of the four mediators. Thus, Hypotheses 9a through 9d are supported by the Taiwan sample.

China. Similar results were observed in the China sample. In Table 6, the increases in explained variance (ΔR^2 of Model 2) by spiritual leadership in predicting career self-management and productivity are 10.1% and 13.6%, respectively, again indicating that spiritual leadership very significantly predicts employee career self-management and productivity within organizations. Meaning/calling and membership in Model 3 added another 6.8% of ΔR^2 in predicting career self-management. However, the increased variance in productivity ($\Delta R^2 = 1.7\%$) did not reach statistical significance. Thus, employee psychological survival is verified to mediate the relationship of spiritual leadership on career self-management only, but not on productivity. Thus, Hypotheses 9a and 9b are partially supported by the China sample.

After including self-esteem and self-efficacy in the regression (Model 4), ΔR^2 reached 13.7% and 3.8%, respectively, meaning that the influence of self-esteem and self-efficacy is prominent. The aforementioned findings again support the notion that spiritual leadership influences career self-management and productivity through the mediation of employee self-esteem and self-efficacy, over and above the effect of meaning/calling and membership. Thus, Hypotheses 9c and 9d are empirically supported by the China sample.

Again, Sobel tests (Preacher & Leonardelli, 2008) reveal significant mediation effects. Path coefficient results show that the four indirect effects from spiritual leadership to productivity (.216, .250, .204, and .129, respectively) and to career self-management behavior (.181, .269, .200, and .133, respectively) are all significant (all $ps < .001$), indicating prominent influence of the four mediators. Thus, Hypotheses 9a through 9d are supported by the China sample.

Cross-Industry Analysis

Financial/banking industry. Cross-industry analyses yielded similar results to those in the previous section. Table 9 shows that the ΔR^2 s in Model 2 for career self-management and productivity are 18.0% and 12.9%, respectively, indicating significant explained variance by spiritual leadership to the two outcome variables. Meaning/calling and membership in Model 3 resulted in a ΔR^2 to .07, $p < .01$, and .04, with β s of the three leader spiritual factors being insignificant or reduced. The result demonstrates the mediating effect

Table 9

Hierarchical Regression Analysis of Mediating Effects: Financial/Banking Industry

Independent variable	Dependent variable: Career self-management				Dependent variable: Productivity			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Constant	3.28***	2.40**	1.33*	0.92	2.84***	2.14***	1.24	0.49
Experience	-.01	.01	.00	-.01	-.04	-.01	-.02	-.04
Age	.02	-.00	-.00	.00	.04*	.02	.02	.03
Sex	-.29**	-.26*	-.17	-.18	.05	.03	.12	.13
Educational level	-.02	-.03	.05	.01	-.06	-.08	-.01	-.10
Vision		.26**	.21*	.22*		.01	-.03	-.03
Hope/faith		.05	-.06	-.08		.22	.13	.09
Altruistic love		.08	.10	.12		.15	.15	.22
Meaning/calling			.28***	.23**			.20	.09
Membership			.02	-.10			.09	-.12
Self-esteem				.27*				.36*
Self-efficacy				.02				.14
ΔR^2	.10**	.18***	.07**	.03*	.03	.13***	.04	.06**
R^2	.10	.27	.33	.37	.03	.16	.20	.26
Significant F_{change}	3.64	10.76	6.76	3.36	1.23	6.86	2.83	5.17

Note. $N = 156$. Coefficient is beta. * $p < .05$. ** $p < .01$. *** $p < .001$.

of meaning/calling and membership between spiritual leadership and career self-management. However, the mediating effect between spiritual leadership and productivity is not supported.

After introducing the inner-self factors (i.e., self-esteem, self-efficacy) in the hierarchical regression (Model 4), ΔR^2 became .03, $p < .05$, and .06, $p < .001$, which proves that spiritual leadership is mediated by the inner-self factors of self-esteem and self-efficacy to influence career self-management and productivity, over and above the importance of the two spiritual survival factors (i.e., meaning/calling, membership). Self-esteem ($\beta_s = .270$ and $.357$, $ps < .05$) is observed to be the major source of explained variance of the overall model.

Service industry. Table 10 reveals that the increased variances by spiritual leadership (Model 2) in explaining career self-management and productivity are .154, $p < .001$, and .079, $p < .001$. After meaning/calling and membership are included (Model 3), the ΔR^2 s are .04, $p < .01$, and .05, $p < .01$, respectively. Regression coefficients for the three leader spiritual factors turned out to be insignificant or less significant. When self-esteem and self-efficacy are entered into the regression (Model 4), ΔR^2 s are .09, $p < .001$, and .04, $p < .01$. Again, these results provide evidence that spiritual leadership influences career self-management and productivity through the mediation of employee self-esteem and self-efficacy, over and above the effect of meaning/calling and membership. Self-esteem ($\beta_s = .204$, $p < .01$, and $.438$, $p < .001$) is observed to be the most significant source of explained variance of the overall model.

Manufacturing industry. The pattern of results for the manufacturing industry samples is similar to that for the financial/banking industry samples. In Table 11, the increased variances by spiritual leadership (Model 2) in explaining career self-management and productivity are .128, $p < .001$, and .131, $p < .001$, respectively. Meaning/calling and membership explained additional 9.6%, $p < .001$, and 1.8% of variance (Model 3). Self-esteem and self-efficacy in Model 4 make significantly more contributions (ΔR^2 s = .13, $p < .001$, and .07, $p < .01$) as those shown in the previous analyses. The mediation of employee self-esteem and self-efficacy, over and above the effect of meaning/calling and membership in the spiritual leadership process was, again, supported by the results, with self-esteem ($\beta_s = .224$, $p < .01$, and $.309$, $p < .05$) and self-efficacy ($\beta = .229$, $p < .01$) found to be the most prominent source of explained variance of the overall model.

Summary. To summarize, the results from multi-samples and cross-industries show a consistently salient mediating effect of inner-self psychological factors (i.e., self-esteem, self-efficacy) between spiritual leadership (i.e., three-leader and two-follower factors) and organizational outcomes (i.e., both career self-management behavior and productivity). Such mediating effects can be observed across the two Chinese samples (i.e., Taiwan and China), as well as across the three major industries.

Table 10
Hierarchical Regression Analysis of Mediating Effects: Service Industry

Independent variable	Dependent variable: Career self-management				Dependent variable: Productivity			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Constant	3.55***	2.27***	2.02***	1.27***	3.08***	1.64*	1.10	0.67
Experience	.01	.01	.00	.00	-.00	-.01	-.01	-.01
Age	-.00	-.01	-.01	-.01	.02	.02	.02	.02
Sex	-.09	-.04	-.06	-.06	.02	.05*	.08	.04
Educational level	.01	.06	.08	.09*	-.04	-.01	.01	.04
Vision		.18*	.17*	.19**		-.17	-.17	-.14
Hope/faith		-.04	-.09	-.11		.33*	.16	.18
Altruistic love		.16**	.03	.05		.18	.08	.05
Meaning/calling			.10	.00		.34**	.34**	.30*
Membership			.15*	.07		.03	.03	-.13
Self-esteem				.20**				.44**
Self-efficacy				.15*				.14
ΔR^2	.01	.15***	.04**	.09***	.04	.08***	.05**	.04**
R^2	.01	.17	.23	.32	.04	.13	.18	.23
Significant F_{change}	0.57	12.63	4.99	12.90	2.14	6.12	5.99	5.23

Note. $N = 237$. Coefficient is beta.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 11

Hierarchical Regression Analysis of Mediating Effects: Manufacturing Industry

Independent variable	Dependent variable: Career self-management				Dependent variable: Productivity			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Constant	3.70***	2.32***	2.19***	1.45**	3.96***	1.50*	1.40	0.76
Experience	-.01	.01	-.01	.00	-.05	-.04	-.04	-.02
Age	-.01	-.01	-.00	-.01	.01	.02	.02	.01
Sex	-.18*	-.17*	-.18*	-.20*	.00	.07	.08	.05
Educational level	.06	.07	.03	-.02	-.08	-.03	-.04	-.09
Vision		.11	.08	.07		.12	.08	.06
Hope/faith		.19*	.04	-.05		.22	.21	.11
Altruistic love		.04	-.07	-.01		.17	.11	.17
Meaning/calling			.16*	.08			.19	.12
Membership			.19*	.11			-.04	-.15
Self-esteem				.22***				.31*
Self-efficacy				.23**				.17
ΔR^2	.04	.13***	.10***	.13***	.02	.13***	.02	.07**
R^2	.04	.16	.26	.39	.02	.15	.16	.22
Significant F_{change}	1.64	8.00	9.59	14.79	0.98	8.14	1.63	6.59

Note. $N = 204$. Coefficient is beta. * $p < .05$. ** $p < .01$. *** $p < .001$.

The results reveal that the three leader spiritual factors (i.e., vision, hope/faith, altruistic love) have a profound impact on employee career self-management behavior and productivity, accounting for an average of 13.9% variance (range = 10.1%-18.0%) in the two multi-sample analyses and the three cross-industry analyses. The inner-self psychological factors, as prominent mediators, contribute significantly to organizational outcomes over and above the two follower spiritual factors: meaning/calling and membership. The influence is obvious, in which an average of 8.7% additional variance (range = 3.4%-13.7%) was explained in employee career self-management behavior, and 5.0% (range = 3.8%-7.1%) explained in productivity.

Discussion

We conducted the present study with several objectives in mind. First, we wanted to examine whether the construct of spiritual leadership could be applied from Western to Eastern cultures, and across various Chinese industries. Second, we examined whether the construct of spiritual leadership would have a positive effect on organizational behavior across the two Chinese samples and the three industry samples. Third, we tested whether the inner-self spiritual attribute or the self-concept spirituality of followers (e.g., self-esteem, self-efficacy) would have a consistent salient effect on two leadership outcomes, as did the other two follower mediators (i.e., meaning/calling, membership) across different Chinese societies and industries.

Universality (Cross-Cultural Validation) of the Construct of Spiritual Leadership

This study validated the cross-cultural importance of spiritual leadership for employees in Taiwan and China. Internal reliabilities and validities of the construct of spiritual leadership were proven sound for both the Taiwan and the China samples. Convergent validity and discriminant validity have also been verified across the two Chinese samples. Fry et al. (2005) discussed the formative (vs. the reflective) characteristic of spiritual leadership that spiritual leadership is actually conceptualized as a second-order construct comprised of first-order subdimensions. The present study's findings support this notion since both the first- and second-order analyses on the factor structures of spiritual leadership showed a good fit. The three factors of spiritual leadership (i.e., vision, hope/faith, altruistic love) and the two follower spiritual factors (i.e., meaning/calling, membership) were thus demonstrated as applicable to Chinese organizational settings.

Positive Effects of Spiritual Leadership to Organizational Behaviors

The findings of the present study demonstrate the three leader spiritual factors to influence significantly employees' career self-management behavior and productivity through the two follower spiritual survival factors and the two follower self-concept-related factors, across cultures and across industries. Hypotheses 1 through 9d were all supported by the empirical evidence. The salience and incremental interpretability of the self-concept-related mediators, self-esteem (OBSE) and self-efficacy, in the prediction of organizational outcomes, indicate a successful extension and modification to Fry et al.'s (2005) original model.

The results of regression analyses in the present study show that spiritual leadership had a positive effect on outcome variables in both Chinese samples, which supports the universality of transformational leadership, as argued by Bass (1997) and Dorfman and Howell (1997). The positive relationship results yielded by this study are similar to those reported by researchers in related leadership studies. For example, transformational leadership (Pillai & Williams, 2004), charismatic leadership (Shea & Howell, 1999), and servant leadership (Poon, 2006) have all been reported to reveal positive effects on organizational outcomes. In these value-based leadership studies, self-attribute was demonstrated to influence organizational outcomes positively. The findings in this study also support the notion by Kraimer et al. (1999) that meaning and empowerment (self-efficacy) are more important in predicting career advancement intention, as was found in this study (i.e., more variance was explained in career management behavior than in productivity), while other attributes (e.g., autonomy, power impact) may be more important in predicting performance.

One of the major contributions of the present study is to validate the mediating effect of self-concept-related psychological/spiritual attributes, over and above the two follower spiritual survival factors (i.e., meaning/calling, membership). Self-concept was found to be the major mediator between spiritual leadership and organizational outcomes consistently across samples and industries. Inner-self spirituality added incremental variance other than the organization-related spiritual factors (i.e., meaning of work and membership) in predicting organizational outcomes. Career self-management and productivity enhancement were both related to intrinsic work motivations (Gagne & Deci, 2005).

The reason why employee spiritual factors toward inner self are more important than are spiritual factors toward organizations might be interpreted by Maslow's (1943) need hierarchy theory and cognitive evaluation motivation theory (Deci, 1975; Deci & Ryan, 1980; Gagne & Deci, 2005). Maslow suggested that the need for respect (including internal self-esteem,

e.g., sense of achievement; and external self-esteem, e.g., identity) and the need for self-actualization (including personal growth, self-potential, self-accomplishment, and creativity) are high-level human psychological needs that transcend social needs (including membership, acceptance, love, friendship). In other words, when social needs (e.g., membership) are satisfied, individuals pursue satisfying higher-level needs (e.g., self-esteem, self-actualization), which are closely related to self-efficacy.

Spiritual leadership not only satisfies employees' social needs for membership, but also nurtures their self-esteem and self-competence. According to cognitive evaluation motivation theory, as higher-level self needs are satisfied, intrinsic motivation is promoted, which leads to employee career self-management and productivity contribution. Moreover, from cross-cultural psychology and indigenous psychology aspects, the Chinese culture is characterized as a collectivistic type of culture in which individuals seek interpersonal harmony and social identification. It is common that individuals repress themselves to comply with social norms (Yang, 2004), or socially oriented self-esteem (OBSE in the present study) dominates individual's behavior.

Employees' pursuit of heightened self-esteem (Shamir et al., 1993) is common and evident in their social organizational roles. Therefore, in organizational settings, employee inner-self-related factors contribute extraneous variance in explaining outcome variables other than do organization-related factors. The findings in this study are consistent with the views of Nisbett, Peng, Choi, and Norenzanai (2001), Cheng (2003), and Yang (1984, 2004). Employee psychological factors of self-concept in the Chinese enterprises added incremental validity other than the organization-related spiritual factors (i.e., meaning of work, membership) in predicting organizational outcomes. Or, inner-self spiritual factors may, in fact, mediate between the two organization-related spiritual factors and organizational outcomes.

The present study suggests differences from or modifications to Fry et al.'s (2005) original model by highlighting the importance of inner-self spiritual factors, over and above the contribution of the two follower survival factors identified by Fry et al. A question to ponder is as follows: Are the inner-self spiritual factors observed in the Chinese samples as similarly important to organizational outcomes as they are in other cultures? This question must be investigated in future research.

Functional Universality of the Effects of Spiritual Leadership on Organizational Outcome

There are several research variables that were parallel in measurement and comparable to those in Fry et al.'s (2005) original study; that is, the five spiritual leadership factors and productivity. By performing additional

regressions for the Chinese and Fry et al.'s samples, we found that the change of productivity caused by spiritual leadership operated similarly in North America and in the Chinese societies, but the magnitude of the effects was far less in the Chinese societies. When the five spiritual leadership factors were regressed altogether on productivity, production variances of 16.3% and 17.0% were explained for Taiwan and China, respectively, as compared to 67.0% for the U.S. (using the correlational data provided by Fry et al., 2005, p. 845, Table 4).

Bass (1997) proposed the concept of functional universality to cross-cultural leadership research. *Functional universality* holds when the within-group relationship between two variables (e.g., transformational leadership and effectiveness) is the same across cultures, yet the extent to which transformational leadership behaviors are viewed as effective may vary across individuals with different cultural values (Spreitzer, Perttula, & Xin, 2005). Sample research of a functional universal perspective was conducted on a group in Hong Kong (Yu, Leithwood, & Jantzi, 2002). It was found that the effects of transformational leadership on teachers' commitment to change operated similarly in both North America and Hong Kong, but the magnitude of the effects was far less in Hong Kong.

The results in the present study show that the regression power of spiritual leadership on productivity was less in the Chinese samples than in the U.S. sample, which supports Bass's (1997) functional universality perspective and is consistent with Yu et al.'s (2002) findings. However, the present findings show incongruence to those of Jung, Yammarino, and Lee (2009), as well as Pillai and Meindl (1998). After studying a group of Korean samples, Jung et al. argued that a collectivistic culture would enhance the effect of transformational leadership. This incongruence may be interpreted by the following two discussions.

Are There Other Plausible Mediating–Moderating Mechanisms between Spiritual Leadership and Outcomes? Or are There Different Leadership Processes across Cultures?

The present research results indicate that the average variance levels in career self-management behavior and productivity explained by all of the research variables for the two Chinese samples were only 31.2% and 20.4%, respectively. There is still about 69% to 80% of the variance remaining unexplained.

A plausible explanation is that there may be other mediating–moderating mechanisms that are relevant to the SLT process. For example, Cohen and Avrahami (2006) found justice variables to have positive relationships with organizational behaviors. Some researchers have argued that trust in the

leader, loyalty, and value congruence as important follower mediators between transformational leadership and effectiveness (Jung et al., 2009), whereas collectivistic orientation (Jung et al., 2009; Walumbwa & Lawler, 2003) and traditionality or respect for hierarchy in relationships (Spreitzer et al., 2005) were reported to moderate between transformational leadership and effectiveness across Eastern and Western cultures. Therefore, apart from the spiritual leadership factors suggested by Fry (2003), future research may need to investigate further whether other factors exist that might influence the spiritual leadership process on organizational outcomes, and whether these factors are equivalently effective on organizational variables across cultures.

The Plausibility of Spiritual Leadership to be “Variform Universal” across East and West

Dickson, Hange, and Lord (2001) and Spreitzer et al. (2005), following Bass (1997) and Lonner (1980), suggested the variform universality of cross-cultural leadership studies (i.e., when a general principle holds across cultures, but the enactment of that principle differs across cultures). While there is not yet any research on the variform universality of transformation leadership found, research by Farh, Earley, and Lin (1997) provides evidence for the construct of organizational citizenship as variform-universal (i.e., the construct of organizational citizenship exists across different cultures, but its enactment is different in an Asian context). This implies that the five factors of spiritual leadership—vision, hope/faith, altruistic love, meaning/calling, and membership—may exist as the leader–follower process across East and West, yet the enactment of these factors is probably different in the Asian context.

Researchers may need to create new items or measures to capture the variform enactment of spiritual leadership for Asian cultures. This can also interpret the less effective magnitude of spiritual leadership on the Chinese samples, as well as the incongruence to the argument that collectivistic cultures will enhance the effect of transformational leadership, since more contextually valid measures of spiritual leadership are simply needed.

Industrial Variations or Cultural Variations?

Another possibility accounts for the fact that less productivity variance was explained by spiritual leadership in the Chinese samples. We cannot rule out the influence of industrial variations. The respondents in this study were all sampled from profitable organizations, while those in Fry et al.’s (2005) research were Army samples. Profitable organizations/industries are different from the Army in many aspects (e.g., work characteristics, goal orientations, organizational structure; Campbell et al., 1990) with regard to influencing

productivity. These differences may serve as mediations or moderations, which result in different spiritual leadership effectiveness. Future studies must investigate further and clarify this notion with appropriate research designs to differentiate the industrial variations from the cultural variations in spiritual leadership effectiveness.

Industrial Universality in Explaining Outcomes

Previous discussions about cultural functional universality and variform universality in the definition and process of SLT are also appropriate for industrial functional universality and variform universality in SLT. As discussed in the previous section, profitable organizations/industries are different from the Army (i.e., the samples used by Fry et al., 2005). In many aspects, therefore, the functional universality of spiritual leadership effects and the variform universality of the definition of spiritual leadership may also require further exploration of different industrial contexts.

Culture-Specific or Functional Universality of Self-Concept-Related Mediators?

Self-concept-related variables have been proven to contribute extraneous variance to outcomes in SLT, thus demonstrating its salient mediating effects on Chinese culture. However, we do not know whether the mediating effects of self-concept variables between two variables (i.e., spiritual leadership, organizational outcomes) hold true across cultures, or if they stand true only in the Chinese culture (i.e., culture-specific). Moreover, even if the mediating process of the self-concept variables is cross-culturally similar, we know little about its magnitude or the extent to which spiritual leadership behaviors are viewed as effective across cultures through this mediation (i.e., functional universal).

Spiritual Leadership as New-Genre Leadership and Implications for Chinese Organizational Management

Traditional leadership models describe leadership primarily based on “economic cost–benefit assumptions” (Bass, 1985, p. 5) in which leader–follower exchange relationships, setting goals, providing direction and support, and reinforcement behaviors are emphasized. New-genre leadership models, as termed by Bryman (1992), conceive leadership behavior in terms of symbolic leader behavior; visionary, inspirational messages; emotional feelings; ideological and moral values; individualized attention; and intellectual stimulation (Avolio, Walumbwa, & Weber, 2009). For the past two

decades, charismatic and transformational leadership theories have been the most frequently researched theories (Avolio, 2005; Lowe & Gardner, 2000). Similarly, spiritual leadership stems from the transformational leadership school, is a new-genre leadership, and is posited to be associated positively with leadership effectiveness and important organizational outcomes across types of organizations, situations, levels of analyses, and cultures. As empirical evidence emerges, more related management practices and research in this regard will thrive.

There were case examples of spiritual leadership practices in the Chinese society reported, with the Tzu-Chi NPO group perhaps being the most widely known. Rooted in Buddhist values, the Tzu-Chi holds a vision of establishing an auspicious, peaceful society. Tzu-Chi's spiritual leader calls her people by Buddhism's spirit. Tzu-Chi members are all enthusiastic volunteers to endeavor actively to organization development, as well as in altruistic activities. The Tzu-Chi model conformed to the concept of spiritual leadership process. The Tzu-Chi's spiritual leadership model comprises the conceptualization of community, benevolent visions, meaningful activities, individual participation, and ethical and individual consideration, which advances the quality of organization (Spears, 1995).

There was also a sample case of SLT for profitable organizations. Recently, Tu and Lin (2009) reported a case study of a large department store in Taiwan after 7 years of spiritual practice implementations (i.e., spiritual education). Spiritual leadership was activated by the organizational leader, who was inspired by unique spiritual experiences. The results showed a significantly positive relationship between spiritual management, spiritual health, and workplace spirituality. These facts of cases and practices may serve as a practical application of SLT that has important implications to the Chinese organizational management.

Organizational Transformation Through Spiritual Leadership: Generalization From the Army to Profitable Industries

The extant SLT study with empirical validation (Fry et al., 2005) was composed of Army samples. 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). Despite the Army's unique organizational characteristics, it is believed that the organizational transformation process through spiritual leadership in the Army is generalizable to profitable organizations, since both accomplish goals through the process of learning-organization development (Senge, Kleiner,

Roberts, Ross, & Smith, 1994). In the present study, spiritual leadership was found to have an impact on followers' outcomes across profitable industries, as it did in the Army (Fry et al., 2005). The findings reveal the external generalizability of SLT to broader practical applications other than the Army.

Implications to the Chinese Leadership Theory and Research

The mainstream Chinese leadership research was more of an emic approach. An *emic* approach to leadership, in terms of social anthropology, refers to being culturally relevant and specific with the leadership; whereas an *etic* approach refers to a description of leadership in terms that can be applied to other cultures (i.e., an *etic* approach is culturally neutral; Morris, Leung, Ames, & Lickel, 1999). The majority of Chinese leadership theory and research is emic and agrees that paternalistic leadership (PL) is the prevalent leadership style in Chinese business organizations (Cheng, Chou, Wu, Huang, & Farh, 2004).

The three components of PL—that is, authoritarian leadership, benevolent leadership, and moral leadership—have been demonstrated to be important for many Chinese followers' variables (Hsu, Hu, Ling, Cheng, & Chou, 2004). Among these, authoritarian leadership is more of a Chinese culture-specific construct, while benevolent leadership comprises universal human values that are parallel to Western leadership style; for instance, transformational leadership (Cheng et al., 2004) and charismatic leadership (Su & Huang, 2006). However, there is a lack of consensus on the construct of moral leadership styles (Hsu et al., 2004) and a lack of differentiation among subordinate responses to PL (Cheng et al., 2004). Spiritual leadership of vision, hope/faith, and altruistic love that calls for followers' spiritual responses of meaning/calling, membership, and heightened self-concept yielded an alternative aspect and valid conceptualization to the construct of benevolent leadership, as well as follower responses, from the *etic* approach (Morris et al., 1999) to Chinese leadership theory.

Western leadership style also has different relative importance to organizational outcome variables, compared with PL. For example, when comparing subordinate responses to PL versus Western transformational leadership, affective commitment was found to be more influenced by Western leadership, whereas normative commitment may be more influenced by PL (Cheng et al., 2004). Future studies are needed to examine the relative importance of SLT effectiveness among various social organizational variables across cultures, in addition to productivity and career management behavior, as in the present study.

Implications for Workplace Spirituality Theory and Research

Workplace spirituality is an emerging area of research inquiry. It is believed that both leaders and followers need a fulfilled spiritual life. Past research (Robert, Lawrence, & Duggal, 2001; Ross, 1995) on spirituality has suggested that individuals intend to actualize self-value and interpersonal relationships. People in good spiritual health often generate intrinsic motivation; look on the positive side of life; persist in their beliefs; and devote themselves to the pursuit of meaningful work, life, and career (Robert et al., 2001; Ross, 1995).

The World Health Organization (Boero, Caviglia, Braidà, Fabello, & Zorzalla, 2005) defines *health* as “physical, mental, and social well-being” (p. 916). Spirituality is an important exhibition of individual mental and social well-being (Boero et al., 2005). It has been found consistently in empirical studies that individual spirituality relates significantly to health and quality of life (Boero et al., 2005; Brush & Daly, 2000; Potter & Zansznowski, 2000).

Giacalone and Jurkiewicz (2004) reviewed past related studies and suggested that *workplace spirituality* is the value system in organizational culture, and it encourages and assists with the employees to have prominent self-experience in work process to further result in benevolence and pleasure. Research (Leigh, 1997; McCormick, 1994) has also demonstrated that organizations that value employees’ spiritual growth are positively related to creativity, employee satisfaction, team performance, and organizational commitment. Consistent with past literature (e.g., House & Shamir, 1993; Pillai & Williams, 2004; Poon, 2006)—which validated the relationship of transformational leadership, charismatic leadership, and servant leadership with self-efficacy and career self-management—the findings in the present study also support the relationship between workplace spirituality and positive workplace behavior.

The present study, inspired by the research of Fry et al. (2005), is the first spiritual leadership research into Chinese work settings and is important in its implications for multinational organizations that invest in China. It is important for leaders to practice spiritual leadership in Chinese cultural and industrial contexts, as well as to actively create or maintain a positive environment for promoting employee self-concept to produce more positive organizational behavior.

Until the present day, the major empirical research on workplace spirituality in terms of spiritual leadership in Chinese society was rooted in its cultural traditions of Confucianism and Legalism (Cheng et al., 2004; Farh & Cheng, 2000). Confucianism ethics value the father–son cardinal relationship, which is believed to supersede all other social relations. Fathers possess absolute authority and legitimacy over their children and other family

members (Cheng, Chou, & Farh, 2000). Likewise, the concept of control and political manipulation, which is valued highly in the Legalist school, has prevailed in the leader–follower relationship ever since it was first formed during the imperial ruling of China. In this kind of authoritarian leadership, leaders possess absolute authority, and subordinates are obligated to be obedient.

The present study and the SLT of vision, hope/faith, and altruistic love are fundamentally rooted in the values of Christianity. Transformational leadership of the West and paternalistic leadership of Chinese societies actually originated from distinct leadership theories, each bearing dissimilar assumptions of rights and obligations of the superior and the subordinate. A paternalistic leader may display authority, control, and image building (Farh & Cheng, 2000), while a transformational leader may present personal charisma and intellectual inspiration (Bass, 1985). However, the two kinds of leadership do have common characteristics. Spirituality may be one of them.

Scholars have addressed the idea that individualized care in transformational leadership is similar to benevolent leadership, while other researchers (Parry & Proctor-Thomson, 2002) have suggested that the display of integrity, justice, and selflessness by transformational leaders is similar to moral leadership in PL. The present study of spiritual leadership validated universal human values based on Christianity that have practical substantiality to social organizational behavior in Chinese societies and can be served as one of the fundamental theories for future spirituality research.

Future studies are encouraged to continue to explore workplace spirituality that is rooted in Oriental cultures. Also rooted in Eastern cultures, there are other dimensions or content of workplace spirituality to be explored, in addition to Confucianism. For example, *Wu wei* (i.e., effortless doing; man must place his will in harmony with the natural universe; minimum disruption and interference in leading subordinates) originated from the values of Daoism (Cheung & Chan, 2005); while *mindfulness*, *selflessness*, and *compassion* originated from the psychology of Buddhism (Brown, Ryan, & Creswell, 2007; Kernochan, McCormich, & White, 2007). Taking Buddhist values, for example, empirical studies about these values (i.e., mindfulness, selflessness, compassion) have been burgeoning and are well documented (Brown et al., 2007; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2006; Ortner, Kilner, & Zelazo, 2007; Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006).

Despite most early research emphasizing their medical/clinical/therapeutic functions in reducing human suffering, pain, and stress, their roles in social organizational life and leadership have begun to be noticed (Brodbeck, Frese, & Javidan, 2002; Kernochan et al., 2007; Thomas, 2006). Nevertheless, this domain is still open to more research regarding holistic

perspectives to integrate Eastern cultural values into leader–follower relationships.

Suggestions for Future Research

Since spiritual leadership is important, future studies should not neglect the issue of how to improve spiritual leadership, as well as enhance the mediating mechanisms, self-esteem, self-efficacy, meaning/calling, and membership. How do leaders cultivate the quality of spiritual leadership, establish the value system of spiritual leadership in the organization, and carry out the values in daily attitude and behavior? How do leaders create an organizational environment that facilitates the growth of spirituality to stimulate followers' meaningful perceptions on organization and work? Employee cognition toward psychological empowerment is also a notable research issue.

Multilevel analyses across individual, team, unit, and organization are needed. Research of spiritual leadership at the organizational or strategic level has generally lagged behind (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006; Avolio et al., 2009). For instance, how do employees compete and cooperate with the teams? How do employees perceive work climate? How do supervisors interact with employees? These phenomena do not exist independently, and they mostly interact with each other. Some phenomena are influenced by the others. In fact, since individuals are usually involved in the group and the organization, their behaviors are also influenced by the group and the organization (Peng & Lin, 2008). Future studies should look into cross-level factors and effects of spiritual leadership.

There still remains much unexplained variance regarding organizational outcomes, comparing the results of the Chinese samples to those of Fry et al.'s (2005) Western sample. Average incremental variance explained (ΔR^2) by spiritual leadership on organizational outcomes was only 12.0% in the present study. In addition, overall variance explained (R^2) by all research variables in both of the Chinese samples ranged from 19.7% to 35.0%. This is lower than those reported by Fry et al. (2005), in which the entire spiritual leadership cause-and-effect model (including organizational commitment) accounted for 74% of the variance of productivity (p. 846, Figure 3). Thus, except for the researched spiritual leadership factors in this study, there may be other factors that are relatively important in explaining organizational outcomes in Chinese organizational settings.

With regard to mediating variables, the two follower survival factors and the two self-concept spirituality factors only contributed an additional 1.7% to 13.7% variance to the outcome variables. Avolio et al. (2009) and Yukl (1999) have called for more research effort to be placed on both the moder-

ating and mediating mechanisms that link transformational leadership to follower outcomes. To date, few studies have simultaneously examined mediated moderation or moderated mediation (e.g., DeCremer & van Knippenberg, 2004; Walumbwa, Avolio, Gardner, Wernsing, & Paterson, 2008). Further studies should be proposed to determine whether or not other mechanisms exist in mediating or moderating spiritual leadership and organizational outcomes. This may increase additional interpretability to outcome variables.

Other organizational outcomes should also be researched. Fry's (2003) cause-and-effect model of spirituality investigated organizational commitment and productivity as organizational outcomes, whereas this study regards career self-management and productivity as organizational outcomes. Yet, there are still other important organizational behaviors that are closely associated with spiritual leadership (e.g., organizational citizenship; Cheng & Liao, 2000; Niehoff & Moorman, 1993) and employees' psychological well-being, including organizational commitment (Bolon, 1997; Huang, 2002; Lin, 1999), work satisfaction (Bolon, 1997; Lin, 1999; Organ & Konovsky, 1989), psychological contract (Chun, Lee, & Rousseau, 2004; Van Dyne, Graham, & Dienesch, 1994), and so forth. Future inquiry is needed to investigate the process of other outcome variables.

The significant effect of background variables implies a need for further examination. Background variables, particularly gender, have been shown to influence outcome variables significantly (see Tables 4 through 8). Although this study treats background variables as controlled variables, future studies might find interest in studying the role of background variables in the process of spiritual leadership.

Study Limitations

Although the current study showed interesting results, there are several limitations that may limit its validity, and readers must exercise caution when interpreting the findings. First, our respondents were sampled on a purposive convenience basis, in lieu of a systematic planned research design. Fortunately, the SLT is based on a human universality assumption, which might reduce the generalization limitations of the convenience sampling. Second, the cross-sectional type of research in the present study has its limit in validity. Longitudinal data, as well as qualitative data, are needed for triangulation in further validation of the SLT. Third, in terms of followers' outcome variables, objective measures (e.g., objective performance indicators, ratings from peers/supervisors), other than subjective measures (e.g., self-report), will increase the explained variance power of the SLT impact or

effectiveness. Finally, because the samples were collected from a number of different enterprises in three Chinese major industries, it would be interesting to observe how the SLT applies in one single large enterprise where organizational culture is more consistent and employees share common values.

In conclusion, as the world becomes more globalized and diversified, managers must develop a more global view in leading subordinates. It is important to define the boundary conditions in identifying leadership styles to be more or less effective (Dickson, Den Hartog, & Michelson, 2003; Jung et al., 2009).

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