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Experiencing meaningfulness climate in teams: How spiritual leadership enhances team effectiveness when facing uncertain tasks

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This study integrates social information processing theory with leadership and climate literature, and aims to produce novel theoretical insights into whether and how spiritual leadership and task uncertainty foster conditions to enhance meaningfulness climate and subsequent team effectiveness in China. Team effectiveness was operationalized as team performance and team organizational citizenship behavior (OCB). Based on data collected at three time points over 12 months from multiple sources of 123 teams in China, we found that spiritual leadership was positively related to team performance and team OCB through meaningfulness climate. Further, the relationship between spiritual leadership and meaningfulness climate was stronger for teams with high task uncertainty than teams with low task uncertainty.

KEYWORDS

China, meaningfulness climate, spiritual leadership, task uncertainty, team effectiveness

1 | INTRODUCTION

As people spend most of their waking hours at work, work lays the primary foundation for identity, purpose, and belongingness (Michaelson, Pratt, Grant, & Dunn, 2014). Meaningful work has been identified as the most important feature that individuals seek in a job (Cascio, 2003; Michaelson et al., 2014). When employees feel what they are doing at work is meaningful, they tend to find their job significant, valuable, and interesting (Hackman & Oldham, 1976). By contrast, when employees find their work meaningless, they will think of their job as trivial, worthless, and boring. This difference helps to understand why some employees show high engagement at work, whereas others are not able to be fully engaged at work. Research demonstrates that work meaningfulness is beneficial to both employees and organizations. For example, meaningfulness has been associated with increased work engagement (e.g., Chen, Zhang, & Vogel, 2011; May, Gilson, & Harter, 2004; Soane et al., 2013), job satisfaction (e.g., Sparks & Schenk, 2001), well-being (e.g., Campbell, Converse, & Rodgers, 1976), and reduced stress (e.g., Elangovan, Pinder, & McLean, 2010).

Despite the increasing breadth of work meaningfulness literature, there is little research on work meaningfulness in work teams. Extant research has largely ignored the antecedents and the outcomes of collective and shared perceptions regarding work meaningfulness among team members. However, as team becomes the fundamental unit in job accomplishments, whether members perceive their team projects or work as meaningful and purposeful can affect their team behaviors. Our objective is thus to expand work meaningfulness literature by exploring the presence and impact of shared perceptions held by team members on work meaningfulness. We call these shared perceptions *meaningfulness climate*, defined as the shared perceptions among team members of the extent to which their work is significant, valuable, and interesting.

Prior literature has demonstrated the importance of leaders in shaping team climate (Dragoni, 2005). Here, we focus on spiritual leadership and investigate its role in developing meaningfulness climate, as it enhances employees' beliefs that they are working intrinsically for the right thing (Reave, 2005). Spiritual leadership refers to "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, Vitucci, & Cedillo, 2005, p. 836). Research on spiritual leadership has shown its beneficial effects on employee outcomes, such as organizational commitment, organizational citizenship behavior, and well-being (e.g., Chen & Li, 2013; Chen & Yang, 2012; Fry et al., 2005; Fry & Cohen, 2009; Fry & Slocum, 2008), yet there is limited knowledge on how spiritual leadership influences teams. Particularly as modern organizations are increasingly team based, examining spiritual leadership in teams allows us to have a more comprehensive understanding of spiritual leadership by increasing our knowledge on how spiritual leadership influences a team as a whole.

Concerning the effects of meaningfulness climate, we argue that with high meaningfulness climate, team members will be more devoted to work, enhancing team effectiveness. Thus, with the above in mind, we propose that spiritual leadership improves team effectiveness through meaningfulness climate. We focus on two of the most important criteria of team effectiveness: (a) team performance, namely the extent to which a team accomplishes its tasks (Motowidlo, 2003); and (b) team organizational citizenship behavior (OCB), which reflects team-level discretionary behaviors that are not formally required but are necessary for effective team functioning (Organ, Podsakoff, & MacKenzie, 2006). Moreover, drawing on social information processing theory (Salancik & Pfeffer, 1978), which indicates that team members rely more on information cues such as values, work requirements, and expectations from the social environment, to shape their individual perceptions, attitudes, and behaviors in uncertain, ambiguous, or complex situations (Goldman, 2001; Larson & Callahan, 1990), we also propose that task uncertainty will be a key contingency of the impact of spiritual leadership on meaningfulness climate, and document that spiritual leaders may make valuable contributions to the development of meaningfulness climate when task uncertainty is high (see Figure 1 for proposed conceptual model). Furthermore, we conducted a three-wave survey with 123 teams in China. Data collected from Chinese teams also contribute to our understanding of leadership in Chinese context, and even Confucian societies.

Our study makes several contributions to spiritual leadership and work meaningfulness literature. First, we extend the research on meaningfulness by examining meaningfulness climate, team members' shared perceptions of the extent to which meaningful work is encouraged, which is not addressed by individual-level theories of meaningfulness. Second, by exploring the influence of spiritual leadership on

meaningfulness climate and team effectiveness, we help to explain how spiritual leaders, a key source of social information, contribute to the formation of meaningfulness climate.

Third, this study adds to the emerging literature on leadership in the Chinese context (e.g., Tsui, Nifadkar, & Ou, 2007; Zhang et al., 2012) by examining the generalizability of spiritual leadership and the related processes. Prior indigenous Chinese leadership research on paternalistic leadership (Chen, Eberly, Chiang, Farh, & Cheng, 2014) and authoritarian leadership (Zhang, Tsui, & Wang, 2011) suggested that leadership theories can be culturally contingent. By contrast, other Chinese leadership research found that although the specific leadership behaviors can differ in the Chinese context, generic leadership constructs at a high level of abstraction, such as transformational leadership (Den Hartog et al., 1999; Fu, Tsui, Liu, & Li, 2010; Zhang et al., 2011) and authentic leadership (Walumbwa, Avolio, Gardner, Wernsing & Peterson 2008), are also valid in the Chinese context. These previous findings raise an important question on the generalizability of spiritual leadership in Chinese organizations. Particularly, are there unique cultural idiosyncrasies in spiritual leadership in Chinese organizations?

As Fry (2003) noted, workplace spiritual leadership can "be inclusive or exclusive of religious theory and practice" (p. 706). Despite the universalistic value of spiritual leadership, little attention has been given to the underlying processes of how spiritual leadership affects team effectiveness in different cultural and religious contexts. Scholars argue that spiritual leadership—similar to transformational leadership (Bass & Steidlmeier, 1999) and authentic leadership (Malphus, 2003)—is deeply rooted in the Christian philosophical traditions (Fry, 2003). By contrast, the principal ideological, religious, and spiritual belief systems of Chinese people are rooted in indigenous Chinese religions—Daoism (also spelled Taoism) and Confucianism—and Buddhism (Du, Jian, Du, Feng, & Zeng, 2014). In addition, Ma and Tsui (2015) suggested that Legalism, which explicitly discussed how to lead and face competitions in the Art of War, is the predominant Chinese philosophy underlying business and leadership practices in Chinese organizations. Despite the considerable differences in religious beliefs (e.g., the concept of God) and practices, the religious values and teachings of these eastern religions show similarities with western religions such as Christianity and Judaism in many aspects of personal spiritual growth, such as faith, vision, and altruistic love, which establish the basis of spiritual leadership. Indeed, we found support for the universalistic value of spiritual leadership in the Chinese context. Because the majority of studies on spiritual leadership were conducted in western culture (Reave, 2005) and few in other cultural settings focused on team-level mechanisms (Benefiel, Fry, & Geigle, 2014), this study provides knowledge on the effects of spiritual leadership on teams in eastern culture. In sum, this study extends the Chinese leadership literature by demonstrating the generalizability of spiritual leadership in the Chinese context with a focus on how spiritual leadership and team context work together to foster meaningfulness climate in Chinese context. Besides, as prior research mostly relies on individualistic cultural samples (e.g., United States; Fry et al., 2005), our study also enhances our understanding on the relationship between spiritual leadership and team outcomes in collectivistic culture.

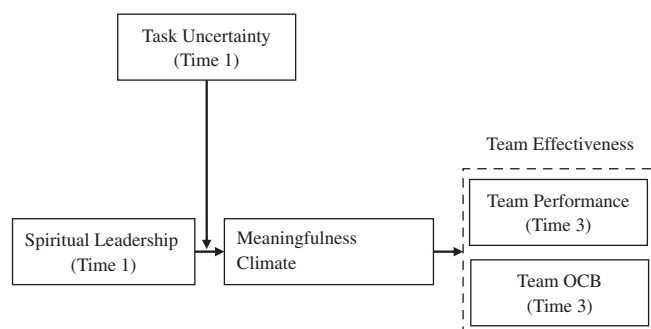


FIGURE 1 Proposed theoretical model

2 | THEORETICAL BACKGROUND AND HYPOTHESES

2.1 | Social information processing theory

Social information processing theory states that employees try to make sense of and understand their work environments by interacting with one another and exchanging information, which in turn shapes their work attitudes and behaviors (Salancik & Pfeffer, 1978). In other words, employees in their organizational lives do not reside in a vacuum. Instead, they actively seek information cues from other members in the same work team to understand and adapt their attitudes, behaviors, and beliefs to work environments. Team leaders serve as a key source of social information. They not only represent organizations because of their hierarchical position, but also because they interact with members frequently and directly. Accordingly, a team leader's behaviors play an important role in shaping members' collective perceptions about their work environments, which guide their behaviors in the team (Chiu, Owens, & Tesluk, 2016).

Spiritual leadership is a value-based and spirit-centered leading approach that values followers' meaning of work (Fry, 2003). Indeed, recent research has noted that spiritual leaders can help employees improve performance by providing meaning and purpose to employees about their work roles (Yang, Liu, Wang, & Zhang, 2017). Given that specific leadership styles can shape facet-specific climates (Boekhorst, 2015), we argue that spiritual leaders can foster a climate for work meaningfulness, which enhances team effectiveness reflected in team performance and team OCB.

In addition, social information processing theory suggests that social information is more important for employees when situations are uncertain, complex, and ambiguous (Salancik & Pfeffer, 1978). Specifically, under uncertain, complex, and ambiguous conditions, employees are more likely to refer to social information like leadership behaviors to shape their perceptions of work environments. In medical organizations, employees face a great deal of uncertainty due to technical limitations and the overall variability of patient inputs (Chowdhury & Endres, 2010; Holmberg, 2013). As noted by Argote (1982), "There is uncertainty about what is wrong with particular patients and about appropriate treatment methods" (p. 422). Therefore, according to social information processing theory, we have identified a key situation, task uncertainty, to be a contingency of the effect of spiritual leadership on meaningfulness climate. More detailed theoretical justifications are provided below.

2.2 | Spiritual leadership, meaningfulness climate, and team effectiveness

Our first hypothesis contends the relationship between spiritual leadership and meaningfulness climate. We focus on spiritual leadership because of the natural connection between spirituality and meaningfulness. Meaningfulness denotes the work as both significant and positive in valence with a eudaimonic focus (Steger, Dik, & Duffy, 2012). Meaningfulness literature has identified spiritual life as one of the four main sources of meaningfulness (Rosso, Dekas, & Wrzesniewski, 2010). Accordingly, spirituality has been used to indicate work

meaningfulness (Ashmos & Duchon, 2000; Clark et al., 2007). Thus, we believe that spiritual leadership serves as an important factor that nurtures meaningfulness climate.

Based on social information processing theory (Salancik & Pfeffer, 1978), we propose that spiritual leaders create a salient social cue to team members that reinforces the shared perceptions of the meaningfulness of work. Spiritual leaders' behaviors toward members are manifested as spiritual motivation (work as a calling), spiritual practices (showing respect for others, demonstrating fair treatment, expressing caring and concern, listening responsively, recognizing the contributions of others, and engaging in reflective practice), and spiritual values (e.g., humility) (Reave, 2005). Thus, there are at least three reasons why spiritual leadership may shape meaningfulness climate. First, spiritual leaders help team members develop their spiritual values through their work by creating a vision (Fry, 2003). These members describe their work as a calling so that their work has a meaning and makes a difference, rather than merely describing work as a job or career. Spiritual leaders can also create a strong belief among team members that the meaning of work is prioritized, valued, and supported, creating collective judgments about the meaningfulness of work.

Second, spiritual leaders exhibit greater consistency across situations in their spiritual practices. Spiritual leaders nurture their team members by showing respect for others, demonstrating fair treatment, expressing caring and concern, listening responsively, recognizing the contributions of others, and engaging in reflective practice (Reave, 2005). These spiritual practices create a warm and caring environment that increases the intrinsic motivation among team members to work (Chen & Li, 2013). As a result, team members in such environment would perceive their work as significant, valuable, and interesting, resulting in an enhanced sense of work meaningfulness (Lam, Wan, & Roussin, 2016). Consistent with social information processing theory, spiritual leaders are particularly instrumental in shaping members' collective perceptions about the meaningfulness of work because of consistent leadership practices in diverse situations.

Third, humility is a key indicator of spiritual values in a leader (Reave, 2005). We argue that spiritual leaders are particularly important in fostering a climate for work meaningfulness by consistently demonstrating the spiritual values of humility. For instance, leaders show humility by admitting mistakes and limitations, making team members' strengths and contributions socially salient by spotlighting, and seeking to be taught by team members rather than doing all the teaching (Owens & Hekman, 2012). Such behaviors can help members develop a belief that their jobs are important and their roles are significant to the team, leading to an increased collective sense of work meaningfulness. Thus, we hypothesize:

Hypothesis 1: Spiritual leadership is positively related to meaningfulness climate.

We also expect meaningfulness climate to be beneficial to team effectiveness. Work climates can provide teams with information about what behaviors are expected and encouraged (Priesemuth, Schminke, Ambrose, & Folger, 2014). Strong meaningfulness climate indicates that team members share the perception that engagement in meaningful job is supported. Members in such teams are more likely

to commit to their job and energize members to work together toward their common goals (Kanter, 1983; Lam et al., 2016; Soane et al., 2013), which then contribute to good team performance. In addition, meaningfulness climate raises consciousness among team members concerning team effectiveness by providing a clear description of one's own job and the connection between the job and the collective goals. This helps team members take efforts to enhance the collective effectiveness of the team by engaging in discretionary behaviors such as OCB (Hu & Liden, 2011). Conversely, in teams with weak meaningfulness climate, members will collectively hold the belief that the meaningfulness of work tends to be ignored. They are likely to feel bored, dejected, and deenergized (Lam et al., 2016; Pines, 1993; van Selm & Dittmann-Kohli, 1998). As a result, they will not be motivated to work on team goals or go extra miles.

Besides, social exchange theory (Blau, 1964) provides theoretical explanations on the effects of meaningfulness climate on team effectiveness. When members feel that they benefit from team meaningfulness climate, they reciprocate the benefits by exerting effort in enhancing team effectiveness. In contrast, with low work meaningfulness climate, members gain few benefits from meaningfulness climate, and they are less likely to behave towards team effectiveness as a pay back. Taken together, we hypothesize the following:

Hypothesis 2: Meaningfulness climate is positively related to (a) team performance and (b) team OCB.

Drawing on social information processing theory, we argue that spiritual leaders are posited to serve as a significant source that messages the importance of work meaning to employees, thus shapes meaningfulness climate (Hypothesis 1). Besides, meaningfulness climate provides team members with the information that engaging in meaningful job is expected and supported, so members are more likely to find their job energizing, enhancing team performance (Hypothesis 2a) and team OCB (Hypothesis 2b). Taken together, we anticipate that spiritual leadership indirectly influences team performance and team OCB through meaningfulness climate.

Hypothesis 3: Meaningfulness climate mediates the relationship between spiritual leadership and (a) team performance and (b) team OCB.

2.3 | Moderating role of task uncertainty

Social information theory also suggests that social information is given more weight in uncertain, complex, and ambiguous context (Salancik & Pfeffer, 1978). As such, team members are more likely to rely on social cues to shape their work attitudes and behaviors when the team context is uncertain, complex, and ambiguous (Larson & Callahan, 1990; Lau & Liden, 2008). Task uncertainty refers to the extent to which members have incomplete information about the task they face (Gardner, Gino, & Staats, 2012). Task uncertainty is a contextual factor that implies unpredictability and dynamism in the task environment of a team (Cordery, Morrison, Wright, & Wall, 2010). Faced with a rapidly changing environment, work teams have to deal with increasingly turbulent and unpredictable work environments (Gardner et al., 2012; Kozlowski, Gully, Nason, & Smith, 1999). Such internal and external

context can create uncertainty about a team's task, such as the nature of each member's work, the knowledge needed to accomplish the team task, the steps of finishing team work, and changing customer demands and expectations (Gardner et al., 2012).

Leaders who exhibit spiritual leadership emphasize the meaning of work to members (Fry, 2003). They convey information that can be utilized by team members to form meaningfulness climate. When a team is faced with uncertain tasks, members have to deal with incomplete information about the task. They will have a stronger need for powerful others, such as spiritual leaders, to process critical social information (Lau & Liden, 2008). Therefore, according to social information processing theory, team members are more likely to rely on social information from spiritual leaders to form their shared perceptions of work meaningfulness under uncertain task conditions.

In contrast, members in teams with clear team tasks may feel a higher degree of independence and self-sufficiency (Lau & Liden, 2008). They tend to ignore or pay less attention to social information from their spiritual leaders. In other words, team members addressing team tasks in clear and stable task environments are less attentive to and receptive of their spiritual leaders' influence, rendering spiritual leadership is less effective in elevating their perceptions of meaningfulness climate. These arguments are consistent with research showing employees rely more on prototypical leaders when situations are uncertain and ambiguous (Cicero, Pierro, & Van Knippenberg, 2010; Nohe & Michaelis, 2016). Therefore, we propose:

Hypothesis 4: Task uncertainty moderates the relationship between spiritual leadership and meaningfulness climate, such that the positive relationship is stronger under high uncertainty than under low uncertainty.

2.4 | An integrative moderated mediation model

According to the analytical framework of moderated mediation (e.g., Edwards & Lambert, 2007; Preacher, Rucker, & Hayes, 2007), significant moderation of the path from spiritual leadership to meaningfulness climate by task uncertainty (Hypothesis 4), together with the mediated relationship between spiritual leadership and team performance (Hypothesis 3a) and team OCB (Hypothesis 3b) via meaningfulness climate, typically should result in a moderated mediation model. Specifically, based on social information processing theory, when task uncertainty is high, team members are more likely to rely on social information from spiritual leaders to shape meaningfulness climate, which in turn leads to high levels of team performance and team OCB. As a result, meaningfulness climate plays a more important role in transmitting the effects of spiritual leadership on team performance and team OCB.

Conversely, when task uncertainty is low, team members may not rely as much on spiritual leaders to form meaningfulness climate, which leads to low levels of team performance and team OCB. Meaningfulness climate thus plays a less important role in mediating the effects of spiritual leadership on team performance and team OCB. Taken together, we offer our final hypothesis:

Hypothesis 5: Task uncertainty moderates the indirect relationship between spiritual leadership and (a) team performance and (b) team OCB through meaningfulness climate, such that the indirect relationship is stronger under high uncertainty than under low uncertainty.

3 | METHODS

3.1 | Participants and procedures

We collected data from five medical organizations in China. Participants were leaders and members from different functional teams, such as human resources, finance and accounting, research and development, customer service, product management, and marketing and sales. The members of each work team shared common goals and they interacted with each other on daily basis for team goals. For each team recruited, there was only one team leader with at least three members. To ensure full team membership, members had to have at least worked for the team over half a year (Hu & Liden, 2011). To obtain the organizations' consent, the first author personally visited each company's top management team and human resource management (HRM) department and explained the purpose and the benefits of the research. A contact person working full time at each company helped with survey distribution. The contact person hand-delivered survey packets to participants. Each packet included clear instructions for completing and returning the surveys. We assured participants through the cover letter and the contact person that their responses would be kept completely confidential. Completed surveys were returned in envelopes with pre-paid postage.

Data were collected in three phases to minimize common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To increase valid response rate, we offered incentives to participants. In Time 1 survey, employees were asked to report their perceptions of spiritual leadership, task uncertainty, and demographic information. Those who participated in Time 1 survey received a 15 RMB (the currency used in China, approximately \$2 US) gift voucher as an appreciation of their time. Six months later (Time 2), employees completed another survey assessing their perceptions of meaningfulness climate. Those who completed their surveys in Time 2 survey received an additional 15 RMB (approximately \$2 US) gift voucher. Finally, 1 year after Time 1 survey (Time 3), team leaders rated the team performance and OCB in Time 3 survey. They received a 30 RMB (approximately \$4 US) gift voucher for participation.

With the assistance of human resource managers of each company, out of the 728 employees working in 180 teams that were invited to participate in the study, 646 employees (88.7% response rate) from 161 teams (89.4% response rate) completed Time 1 survey. In Time 2 survey, 540 employees (74.2% response rate) from 135 teams (75% response rate) reported their perceptions of meaningfulness climate. In Time 3 survey, 125 team leaders (69.4% response rate) provided ratings on team performance and OCB.

The final sample was composed of 123 teams, including 123 team leaders (68.3% response rate) and 490 team members (67.6%

response rate). Teams were from five medical organizations: organization 1 (75.0% response rate for team leaders), organization 2 (69.4% response rate for team leaders), organization 3 (60.5% response rate for team leaders), organization 4 (68.8% response rate for team leaders), and organization 5 (66.7% response rate for team leaders). The same industry provided the advantage of controlling for potential organization-level confounding variables.

Teams included in the final sample had diverse functions: human resources (10.6%), finance and accounting (13.8%), research and development (24.4%), customer service (17.1%), product management (15.4%), and marketing and sales (18.7%). One-way analysis of variance (ANOVA) showed there were no significant differences across the different types of teams for all targeted variables ($p > 0.05$). The average tenure with the team was 3.48 years ($SD = 0.55$). Team size ranged from 3 to 10, with a mean of 3.98 ($SD = 1.29$). The mean age of all team members was 39.06 years ($SD = 5.55$). The team leader sample had an average age of 37.8 years ($SD = 5.39$) and 56.1% were men.

3.2 | Measures

Unless otherwise noted, all measures were rated on a 5-point scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. We followed the back-translation procedure recommended by Brislin (1980) to translate items from English to Chinese.

3.2.1 | Spiritual leadership

Spiritual leadership was rated by team members using Pawar's (2014) nine-item scale. A sample item was "My supervisor expresses his/her respect for our members' values" (Cronbach's $\alpha = 0.88$). We averaged each member's evaluation to form a team-level spiritual leadership variable. To justify the appropriateness of aggregating individual scores to the team level, we calculated the value of within-team agreement index $r_{wg(j)}$ (James, Demaree, & Wolf, 1993) and intraclass correlation coefficients, ICC(1) and ICC(2) (Bliese, 2000). The mean $r_{wg(j)}$ was 0.91 (median = 0.93, range = 0.71 to 1.00), suggesting strong within-team agreement regarding spiritual leadership. The ICC(1) was 0.19, which is above the median value of 0.12 reported by James (1982), indicating team membership accounted for 19% of the variance in spiritual leadership ratings. The ICC(2) was 0.65, which is higher than the 0.60 cut-off point recommended by Glick (1985), indicating teams could be reliably differentiated in terms of average team member ratings of spiritual leadership. In addition, ANOVA results showed significant differences in team-level means of spiritual leadership ratings ($F = 1.27, p < 0.05$). Taken together, these lines of evidence supported the aggregation of the spiritual leadership ratings.

3.2.2 | Task uncertainty

Team members provided their ratings on task uncertainty using van de Ven and Delbecq's (1974) three-item scale. Each of the three items were reverse-coded. A sample item was "I understand the sequence of steps that I can follow to complete this task" (Cronbach's $\alpha = 0.79$). The aggregation of individual team members' perceptions of task uncertainty to the team level was justified (mean $r_{wg(j)} = 0.94$, median $r_{wg(j)} = 0.98$, range = 0.70 to 1.00; ICC(1) = 0.29, ICC(2) = 0.67;

$F = 4.78, p < 0.001$). This measure evaluates the degree to which team members have incomplete information about the task they face. Previous studies (e.g., Gardner et al., 2012) have used the same measure to assess task uncertainty at the team level.

3.2.3 | Meaningfulness climate

We adapted May et al.'s (2004) four-item scale to measure meaningfulness climate. We used a referent-shift approach to capture perceptions of meaningfulness overall, rather than their individual experiences. A sample item was "The work members of my team do on this job is meaningful to them" (Cronbach's $\alpha = 0.78$). The aggregation of individual team members' perceptions of meaningfulness climate to the team level was justified (mean $r_{wg(j)} = 0.83$, median $r_{wg(j)} = 0.88$, range = 0.60 to 1.00; ICC(1) = 0.12, ICC(2) = 0.51; $F = 1.53, p < 0.01$).

3.2.4 | Team performance

Team leaders rated team performance using a four-item scale developed by Liden, Wayne, and Stilwell (1993). A sample item was "rate the overall level of performance that you observe for this team" (Cronbach's $\alpha = 0.81$). Team performance was rated on a 5-point scale ranging from 1 = *unacceptable* to 5 = *outstanding*.

3.2.5 | Team OCB

Team leaders evaluated team OCB using Ehrhart's (2004) five-item scale. A sample item was "Team members help out others who have been absent and return to work" (Cronbach's $\alpha = 0.74$).

3.2.6 | Control variables

We included several control variables that may influence the proposed relationships in this study. First, following previous research, we controlled for team mean age (in years) to rule out potential confounds when predicting team performance and team OCB (e.g., Carter & Mossholder, 2015; Hu & Liden, 2011; Schaubroeck, Lam, & Cha, 2007). Second, we controlled for team mean tenure (in years) because greater tenure facilitates learning, coordination, and control, and these skills may in turn affect team processes and outcomes (e.g., de Jong, Curşeu, & Leenders, 2014). Third, we controlled for team size because prior research suggests that team size

determines the availability of human resources and the number of workload requirements within the team that may influence team performance and team OCB (e.g., González-Romá & Hernández, 2014; Halebian & Finkelstein, 1993; Hu & Liden, 2015). Finally, we controlled for leader gender and age as they have been found to impact team members' performance in previous studies (e.g., Kearney, 2008; Wang, Chiang, Tsai, Lin, & Cheng, 2013; Zacher, Rosing, Henning, & Frese, 2011).

4 | RESULTS

4.1 | Confirmatory factor analysis

We conducted two sets of confirmatory factor analyses (CFAs), one for team member data and one for team leader data, to assess the discriminant validities of all variables. For the variables rated by team members (i.e., spiritual leadership, task uncertainty, meaningfulness climate), the CFA results showed that the hypothesized three-factor model yielded a better fit ($\chi^2(101) = 323.13$, comparative fit index (CFI) = 0.96, non-normed fit index (NNFI) = 0.95, standardized root mean square residual (SRMR) = 0.05, root mean square error of approximation (RMSEA) = 0.07) than a two-factor model, i.e., spiritual leadership and task uncertainty measured at Time 1 as a combined factor ($\Delta\chi^2(2) = 474.61, p < 0.01$; $\chi^2(103) = 797.74$, CFI = 0.87, NNFI = 0.85, SRMR = 0.10, RMSEA = 0.12) and a one-factor model, with all three variables as a combined factor ($\Delta\chi^2(3) = 1001.86, p < 0.01$; $\chi^2(104) = 1324.99$, CFI = 0.77, NNFI = 0.73, SRMR = 0.13, RMSEA = 0.16). For the variables rated by team leaders (i.e., team performance and team OCB), the CFA results revealed that the hypothesized two-factor model provided a better fit ($\chi^2(26) = 45.81$, CFI = 0.96, NNFI = 0.94, SRMR = 0.06, RMSEA = 0.08) than a one-factor model, with the two variables as a combined factor ($\Delta\chi^2(1) = 153.48, p < 0.01$; $\chi^2(27) = 199.29$, CFI = 0.63, NNFI = 0.51, SRMR = 0.14, RMSEA = 0.23). Therefore, the results provided support for the discriminant validity of measures collected from both team members and team leaders.

4.2 | Hypothesis testing

Table 1 presents the means, SDs, reliabilities, and correlations of all variables. Hypothesis 1 predicts that spiritual leadership is positively

TABLE 1 Means, SDs, reliabilities, and correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Team mean age	39.06	5.55	—									
2. Team mean tenure	3.48	0.55	0.46**	—								
3. Team size	3.98	1.29	0.02	0.00	—							
4. Leader gender	0.56	0.50	0.24**	0.15	0.05	—						
5. Leader age	37.8	5.39	0.46**	0.41**	−0.13	0.04	—					
6. Spiritual leadership	3.78	0.28	0.05	0.03	−0.10	0.00	0.15	(0.88)				
7. Task uncertainty	2.30	0.49	0.05	0.06	−0.14	0.09	−0.03	−0.03	(0.79)			
8. Meaningfulness climate	3.82	0.39	−0.01	−0.15	−0.06	−0.12	−0.08	0.31**	−0.14	(0.78)		
9. Team performance	4.11	0.47	−0.08	0.02	0.12	0.11	0.02	0.02	−0.24**	0.18*	(0.81)	
10. Team OCB	3.83	0.49	0.06	−0.01	−0.05	0.08	0.01	0.09	−0.12	0.21**	0.31**	(0.74)

Note. $N = 123$ (teams); $N = 490$ (individuals). Gender: 0 = women, 1 = men. Cronbach's alpha reliabilities are reported in the parentheses on the diagonal. OCB: organizational citizenship behavior.

* $p < 0.05$; ** $p < 0.01$.

TABLE 2 Summary of regression analyses results for meaningfulness climate

Variables	Model 1			Model 2			Model 3			Model 4		
	B	SE	β	Sig.	B	SE	β	Sig.	B	SE	β	Sig.
Control variables												
Team mean age	0.01	0.01	0.14	0.22	0.01	0.01	0.14	0.19	0.01	0.01	0.15	0.16
Team mean tenure	-0.11	0.07	-0.16	0.14	-0.10	0.07	-0.15	0.14	-0.10	0.07	-0.14	0.17
Team size	-0.02	0.03	-0.06	0.49	-0.01	0.03	-0.04	0.67	-0.02	0.03	-0.06	0.51
Leader gender	-0.10	0.07	-0.12	0.19	-0.10	0.07	-0.13	0.16	-0.09	0.07	-0.12	0.20
Leader age	-0.01	0.01	-0.09	0.42	-0.01	0.01	-0.14	0.18	-0.01	0.01	-0.15	0.14
Independent variable												
SL					0.45***	0.12	0.32	0.00	0.45***	0.12	0.32	0.00
Moderator												
TU									-0.10	0.07	-0.13	0.14
Interaction term												
SL \times TU												
R^2	0.05				0.15				0.17		0.48*	0.22
ΔR^2	0.05				0.10***				0.02		0.03*	0.20
f^2	0.05				0.18				0.20		0.25	0.25

Note. N = 123 (teams); N = 490 (individuals). Unstandardized (B) and standardized (β) regression coefficients are reported. Effect size index: $f^2 = R^2/(1 - R^2)$ (Cohen, 1969). SL: spiritual leadership; TU: task uncertainty. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

related to meaningfulness climate. As shown in Table 2, spiritual leadership had a positive relationship with meaningfulness climate ($B = 0.45$, $SE = 0.12$, $p < 0.001$), providing support for Hypothesis 1. With respect to Hypotheses 2a and 2b, the results in Table 3 demonstrated that after controlling for spiritual leadership, task uncertainty, and their interaction (spiritual leadership \times task uncertainty), the effects of meaningfulness climate on team performance ($B = 0.28$, $SE = 0.12$, $p < 0.05$) and team OCB ($B = 0.28$, $SE = 0.13$, $p < 0.05$) were significant. Thus, Hypotheses 2a and 2b were supported.

We employed the PRODCLIN program (MacKinnon, Fritz, Williams, & Lockwood, 2007) to test the mediation effects (Hypotheses 3a and 3b). The PRODCLIN program results indicated that the indirect effects of spiritual leadership on team performance (*indirect effect* = 0.11, $SE = 0.06$, 95% confidence interval [0.01, 0.24], excluding zero) and team OCB (*indirect effect* = 0.11, $SE = 0.06$, 95% confidence interval [0.00, 0.25], excluding zero) via meaningfulness climate were positive and significant. Thus, Hypotheses 3a and 3b were supported.

Regarding Hypothesis 4, we found a positive interaction between spiritual leadership and task uncertainty in predicting meaningfulness climate ($B = 0.48$, $SE = 0.22$, $p < 0.05$, Model 4 in Table 2). We plotted this interaction at the values of 1 SD above and below the mean of task uncertainty in Figure 2 (Aiken & West, 1991). As expected, the relationship between spiritual leadership and meaningfulness climate was positive and significant when task uncertainty was high (*simple slope* = 0.64, $SE = 0.15$, $p < 0.001$). However, when task uncertainty was low, the relationship became nonsignificant (*simple slope* = 0.15, $SE = 0.17$, *ns*). Thus, Hypothesis 4 was supported. Spiritual leadership was positively related to meaningfulness climate when the team was faced with unclear and ambiguous team tasks, while this association disappeared when team tasks were clear and straightforward.

We followed Preacher et al. (2007)'s approach to examine the moderated mediation hypotheses (Hypotheses 5a and 5b). Based on 5,000 bootstrap samples, the results of Table 4 showed that the indirect effects of spiritual leadership on team performance (*indirect effect* = 0.16, $SE = 0.08$, $p < 0.05$, 95% confidence interval [0.03, 0.35], excluding zero) and team OCB (*indirect effect* = 0.16, $SE = 0.09$, $p < 0.05$, 95% confidence interval [0.01, 0.37], excluding zero) via meaningfulness climate were significant at high levels of task uncertainty, while the indirect effects were nonsignificant at the mean of task uncertainty or at low levels of task uncertainty. Thus, Hypotheses 5a and 5b were supported.

5 | DISCUSSION

Drawing on the social information processing perspective (Salancik & Pfeffer, 1978), this study aims to provide novel insights on the antecedents and boundary conditions of meaningfulness climate in teams. Using a multilevel and multisource sample, we found that spiritual leadership was positively associated with meaningfulness climate, which in turn enhanced team effectiveness. We also found that the association between spiritual leadership and meaningfulness climate was contingent on task uncertainty, such that the association was stronger when a team was uncertain about its task. Finally, our findings indicated that the benefit of spiritual leadership in promoting

TABLE 3 Summary of regression analyses results for team effectiveness

Variables	Team OCB											
	Team performance				Team OCB				Team OCB			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	B	SE	β	Sig.	B	SE	β	Sig.	B	SE	β	Sig.
TMA	-0.02	0.01	-0.19	0.10	-0.02	0.01	-0.18	0.11	-0.02	0.01	-0.22	0.05
TMT	0.04	0.10	0.05	0.62	0.06	0.09	0.07	0.49	0.10	0.09	0.11	0.28
TS	0.05	0.03	0.13	0.16	0.04	0.03	0.10	0.29	0.04	0.03	0.12	0.20
LG	0.13	0.09	0.14	0.14	0.15	0.09	0.16	0.09	0.18*	0.09	0.19	0.04
LA	0.01	0.01	0.09	0.43	0.01	0.01	0.06	0.59	0.01	0.01	0.09	0.41
SL	0.05	0.15	0.03	0.76	0.04	0.15	0.03	0.78	-0.07	0.16	-0.04	0.64
TU					-0.22*	0.09	-0.23	0.02	-0.18*	0.09	-0.19	0.04
SL \times TU					-0.11	0.28	-0.04	0.70	-0.24	0.28	-0.08	0.39
MC									0.28*	0.12	0.23	0.02
R ²	0.05				0.10				0.14		0.02	
∇R^2	0.05				0.05*				0.04*		0.02	
f ²	0.05				0.11				0.16		0.02	

Note. N = 123 (teams); N = 490 (individuals). Unstandardized (B) and standardized (β) regression coefficients are reported. Effect size index: $f^2 = R^2/(1 - R^2)$ (Cohen, 1969). LA: leader age; LG: leader gender; MC: meaningfulness climate; OCB: organizational citizenship behavior; SL: spiritual leadership; TMA: team mean age; TMT: team mean tenure; TS: team size; TU: task uncertainty. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

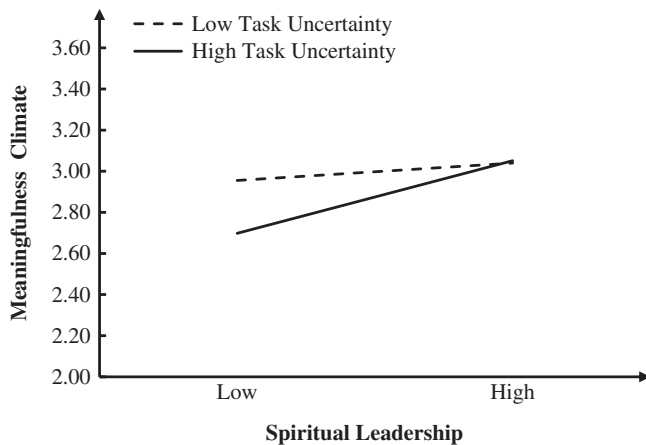


FIGURE 2 The interactive effect of spiritual leadership and task uncertainty on meaningfulness climate

team effectiveness via meaningfulness climate was stronger for teams with high task uncertainty.

5.1 | Theoretical implications

This study makes several contributions to the literature. First, by conceptualizing the meaningfulness of work at the individual level and emphasizing the positive impact of meaningfulness on individual members in the organization, prior research (e.g., Lam et al., 2016; May et al., 2004; Soane et al., 2013) likely understates the full impact of work meaningfulness. This is potentially problematic because it overlooks the possibility that work meaningfulness emerges as a climate of work teams. Using social information processing theory (Salancik & Pfeffer, 1978) as a conceptual framework, we expand the traditional individual-level focus by conceptualizing work meaningfulness at the team level and exploring the antecedents and consequences of meaningfulness climate in teams. According to social information processing theory, employees engage in active interactions with each other to understand their work environments. This process yields a collective evaluation of work meaningfulness in a team.

Second, although past studies have highlighted the role of leaders in the development of work climate and demonstrated how specific leadership styles can shape facet-specific climates (e.g., Boekhorst, 2015; Ehrhart, 2004; Liao & Chuang, 2007; Naumann & Bennett, 2000), limited research has examined how leadership fosters

meaningfulness climate. The current research sheds light on whether leaders can shape meaningfulness climate by demonstrating spiritual values and practices. Our findings revealed that spiritual leaders are a particularly important determinant in forming meaningfulness climate. According to social information processing theory, employees seek to understand work environments by seeking social cues from their immediate leaders. Accordingly, spiritual leaders are particularly instrumental in transmitting social cues into the work environment through vision, values, and loving relationships rather than fear, legitimate power, and control (Fry, 2003). Employees receive this social information from their spiritual leaders and can better understand what is expected and supported in the workplace, which then shapes their shared perceptions of meaningfulness in the team.

Third, this study contributes to the work climate literature in that it is among the first to directly examine the relationship between meaningfulness climate and team effectiveness. Although previous research has demonstrated specific climates can affect employee attitudes and behaviors (Liao & Chuang, 2007; Walumbwa, Hartnell, & Oke, 2010), little has been done to investigate the effects of meaningfulness climates on team outcomes. We found meaningfulness climate was positively related to team performance and team OCB. This finding is important in that our research provides some of the first insights into the association between meaningfulness climate and team effectiveness, and suggests meaningfulness climate, such as demonstrating the significance of work to team members, can help teams enhance team effectiveness.

Fourth, prior studies on spiritual leadership have focused primarily on how spiritual leadership influences employee outcomes (e.g., Chen & Li, 2013; Pawar, 2014). However, less emphasis has been placed on how the behaviors associated with spiritual leadership might impact team outcomes. Consistent with recent theorizing and arguments that leaders often engage in behaviors that are directed toward the team rather than individual members (Hogg, 2001; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004; Walumbwa, Wu, & Orwa, 2008), we addressed this research gap by providing important insights on how spiritual leaders enhance team effectiveness in team settings. Our results demonstrated that spiritual leadership enhanced team performance and team OCB by cultivating meaningfulness climate. To our best knowledge, this is a first in the published literature on how spiritual leadership is linked to team effectiveness. This finding suggests that leaders' spiritual values such as integrity, and spiritual practices such as expressing caring and concern toward subordinates, enhance the

TABLE 4 Bootstrapping results for test of conditional indirect effects at specific values of task uncertainty

Dependent variables	Values of task uncertainty	Indirect effect		95% CI	
		Estimate	SE	Lower	Upper
Team performance	−1 SD (1.81)	0.04	0.07	−0.07	0.21
	Mean (2.30)	0.10	0.06	0.02	0.26
	+1 SD (2.79)	0.16*	0.08	0.03	0.35
Team OCB	−1 SD (1.81)	0.04	0.07	−0.05	0.26
	Mean (2.30)	0.10	0.07	0.01	0.29
	+1 SD (2.79)	0.16*	0.09	0.01	0.37

Note. $N = 123$ (teams); $N = 490$ (individuals). Results are based on 5,000 bootstrap samples. CI: confidence interval; OCB: organizational citizenship behavior.

* $p < 0.05$.

formation of meaningfulness climate, which in turn improves team effectiveness. As such, the result also suggests that meaningfulness climate is a proximal component through which spiritual leadership influences more distal team outcomes (i.e., team performance and team OCB). In other words, spiritual leadership acts as an important tool that shapes meaningfulness climate, thereby promoting high levels of team performance and team OCB. This finding integrates team leadership with work climate literature and responds to the call for more attention to the critical role of team leadership in shaping work climate (Dragoni, 2005; Naumann & Bennett, 2000).

Finally, we considered task uncertainty as a contextual factor that influences the effects of spiritual leadership, responding to calls for more exploration on the boundary conditions for the effectiveness of spiritual leadership (Chen & Yang, 2012). Previous research studying such boundary conditions has mainly focused on managerial position (Chen & Li, 2013) and organizational spirituality (Pawar, 2014). However, considering that the contemporary team environment is characterized by turbulence and change (Gardner et al., 2012; Kozlowski et al., 1999) and that spiritual leadership is viewed as a necessary "condition for organizations to be successful in today's highly unpredictable high-velocity, Internet-driven environment" (Fry, 2003, p. 720), this line of research has largely neglected whether and how uncertain team context could shape the relation between spiritual leadership and meaningfulness climate. In the current study, we integrated social information process theory to unveil the contingent role of task uncertainty in amplifying or mitigating the relationship between spiritual leadership and meaningfulness climate. Our results clearly demonstrated that spiritual leadership contributes the most to the emergence of meaningfulness climate when task uncertainty is high. This finding is consistent with social information processing theory; social information becomes more important when situations are uncertain, complex, and ambiguous (Salancik & Pfeffer, 1978). Spiritual leaders represent social information that values members' meaning of work (Fry, 2003). Accordingly, team members are more likely to rely on social information from their spiritual leaders to form their shared perceptions of meaningfulness climate when task uncertainty is high. That is, task uncertainty enhances the importance of social information in fostering meaningfulness climate. In contrast, the results showed that when task uncertainty was low, the impact of spiritual leadership on meaningfulness climate was weaker. As social information processing theory implies, members of low task uncertainty teams are less likely to rely on social information to understand their work environment. Accordingly, a secure situation may translate into less reliance on spiritual leaders in shaping meaningfulness climate. This finding suggests that spiritual leadership may not always facilitate team effectiveness, especially for teams with low task uncertainty.

5.2 | Practical implications

The current study offers valuable practical implications for managers and organizations. First, the findings suggest that spiritual leadership can be a useful way to shape meaningfulness climate and thus enhance team effectiveness. To benefit from spiritual leadership's positive effects, managers and organizations may support the

development of spiritual leadership by providing leader selection and training programs. Given that a key antecedent for spiritual leadership is leaders' individual spirituality (Pawar, 2014), organizations can recruit leaders who are high in spirituality and can regard leaders' spirituality as a requirement when considering candidates for promotions. Organizations can also provide leadership trainings aimed at cultivating and promoting spiritual leadership, thereby encouraging leaders to demonstrate spiritual values of integrity, honesty, and humility, and spiritual practices of showing respect, providing fair treatment, expressing care and concern, responsive listening, and appreciating others' contributions in both work and nonwork domains (Reave, 2005).

Second, our research presents meaningfulness climate as a bridge between spiritual leadership and team effectiveness. Thus, organizations may assist work teams to create a climate for work meaningfulness that signals to members that work meaningfulness is expected and encouraged, thereby guiding members' psychological states and behaviors toward work meaningfulness even when management is not there telling them what to do. Practices such as job rotation, job sharing, and skill variety and autonomy training programs may be beneficial for guiding team members toward finding their work to be valuable, purposeful, and significant.

Third, our examination of the moderating effects of task uncertainty revealed that the relationship between spiritual leadership and meaningfulness climate was stronger for teams with high task uncertainty. This result suggests that solely displaying spiritual leadership behavior is insufficient to cultivate meaningfulness climate in teams; instead, meaningfulness climate is also contingent on task uncertainty. Therefore, teams undergoing uncertainty may benefit from spiritual leaders who can navigate the uncertainty context, which in turn enhances meaningfulness climate. It is important for organizations to effectively diagnose the extent of task uncertainty a team faces (Cordery et al., 2010). Based on this diagnosis, organizations may distinguish in their decision to promote one leadership style between levels of task uncertainty, as spiritual leadership may be effective for both high and low task uncertainty, but in different ways. Specifically, organizations may choose spiritual leadership as their preferred leadership style for team leaders through leader selection and development when a team encounters uncertain tasks, while spiritual leadership may not be suited to secure situations.

5.3 | Limitations and directions for future research

Several limitations in the current research should be addressed. First, the sample was set in the medical industry to reduce the potential influences of other organization-level confounding factors on the studied relationships. However, this choice may have limited the observed variability and may decrease external validity. Although the current investigation in the medical industry highlighted the importance of spiritual leadership, it remains to be ascertained whether such findings hold true in other contexts. Therefore, we encourage future replications that study multiple organizational settings. Furthermore, we focused on traditional work teams characterized by face-to-face exchanges, stable membership, a shared goal, and a common leader (Hackman, 2002; Hu & Liden, 2011; Zohar & Tenne-Gazit,

2008). Given the increasing prevalence of virtual teams (Martins, Gilson, & Maynard, 2004), another worthwhile extension of the current research is to answer the question whether meaningfulness climate can emerge in virtual teams.

Second, although we used a multisource, multiwave design to reduce common method bias, reverse causality is still possible. For example, it is possible that the causal relationship between meaningfulness climate and team OCB could potentially run in the opposite direction. Specifically, members are likely to be exposed to interpersonal cues from coworkers, managers, and customers by engaging in OCB, such as helping new coworkers and making suggestions to improve performance and enhance customer service quality (Hu & Liden, 2011; Lam et al., 2016), which in turn motivates them to experience meaningfulness climate. Thus, future research should use a longitudinal design to better rule out the possibility of reciprocal relationships between meaningfulness climate and team OCB.

Third, we collected data solely in the Chinese context to explore how and when spiritual leadership enhances team effectiveness. However, this may decrease the generalizability of our findings. Although spiritual leadership has been found to be effective in the Chinese context (e.g., Chen & Li, 2013; Chen & Yang, 2012; Chen, Yang, & Li, 2012), spiritual leadership is also prevalent in other countries such as the United States (Fry et al., 2005), Thailand (Afsar, Badir, & Kiani, 2016), and India (Pawar, 2014). Therefore, the research question about how and when spiritual leadership influences team effectiveness is best suited to a cross-country context. We thus encourage future research to replicate and extend the current study using other countries beyond China.

Fourth, although in the present study we focused on the mediating role of meaningfulness climate based on social information processing perspective, investigating other mechanisms through which spiritual leadership links to team effectiveness could prove fruitful for future research. For example, according to regulatory focus theory (Higgins, 1997, 1998), collective promotion focus may mediate the relationship between spiritual leadership and team effectiveness. Spiritual leaders can be considered as an intrinsically motivating force that enables team members to satisfy their needs for growth, attention to gains, and the attainment of aspirations and ideals. Regulatory focus theory suggests that promotion focus is evoked when these needs are satisfied. Thus, spiritual leaders produce the motivation for a collective promotion focus to emerge, which in turn may enhance team effectiveness such as team performance (Owens & Hekman, 2016). From the person–environment fit perspective, another possible mediator could be collective value fit. Spiritual leaders, who are responsible for creating vision and value congruence across the strategic, empowered team, and individual levels (Fry, 2003), develop collective value fit among team members, which would in turn promote team effectiveness such as team performance (Kristof-Brown, Seong, Degeest, Park, & Hong, 2014).

Finally, our study tested one factor (task uncertainty) among a number of contextual factors that might influence the spiritual leadership–meaningfulness climate relationship in teams. Future research is needed to extend our study by exploring other aspects of the team context that can influence the relationship between spiritual leadership and meaningfulness climate. For example, prior research on

work climate suggests it is jointly affected by HR practices and leadership behaviors (Hong, Liao, Hu, & Jiang, 2013; Hong, Liao, Raub, & Han, 2016; Schneider, 1990). Scholars have distinguished between two types of HR practices: control-focused and commitment-focused HR practices (Arthur, 1994). Control-focused HR practices aim to reduce labor costs and increase efficiency by controlling work procedures, whereas commitment-focused HR practices aim to increase organizational performance by enhancing employee commitment (Arthur, 1994; Boon & Kalshoven, 2014; Whitener, 2001). It is possible that the benefits of spiritual leadership can be strengthened by a consistent signal from top management through the formulation and enactment of commitment-focused HR practices, while spiritual leaders may be deemed inconsistent with control-focused HR practices. It is also possible that team structure may moderate the association between spiritual leadership and meaningfulness climate. Mechanistic structures create situations of low uncertainty due to their emphasis on rigid, tight, and bureaucratic systems, whereas organic structures create situations of high uncertainty due to their emphasis on flexible, loose, and decentralized systems (Ambrose, Schminke, & Mayer, 2013). Thus, according to social information processing theory, the relationship between spiritual leadership and meaningfulness climate will be stronger when the team operates in an organic structure as opposed to a mechanistic structure.

6 | CONCLUSION

The present study makes valuable contributions to the leadership and work climate literature. Our research highlights the importance of meaningfulness climate in the spiritual leadership–meaningfulness climate relationship and of task uncertainty as an important contextual boundary condition for the effectiveness of spiritual leadership. We hope the theoretical insights gained through this effort will spur future research aimed at exploring additional antecedents and consequences of meaningfulness climate in teams.

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