Workplace spirituality and employee work attitudes: An exploratory empirical assessment
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Keywords Work, Beliefs, Employee attitudes, Behaviour, Empirical study

Abstract One important question in the field of workplace spirituality concerns the relationship of this construct with employee work attitudes. This study attempts to make a rigorous empirical examination of the relationship between workplace spirituality and five prevalent employee job attitudinal variables. It assesses the validity and reliability of the measures used and discusses the results of the analysis, which indicate that each of the three dimensions of spirituality used has a significant relationship with two or more of the five job attitude variables examined. While acknowledging that spirituality at work is an abstract concept, this study attempts to provide some of the first empirical support that there is a positive association between spirituality at work and employee job outcomes. The paper concludes with a number of implications and research directions for both academics and business managers, including the need to investigate the comprehensive impact of spirituality at work on individuals and organizations.

An important trend in business in the twenty-first century is a focus on employee spirituality in the workplace (Shellenbarger, 2000). Workplace spirituality has been the subject of many business magazines, such as the cover story for both Business Week (Conlin, 1999) and Fortune (Gunther, 2001). In addition, there have been many books written about spirituality at work (see Neal, 1997). More recently, academics have begun investigating spirituality in business. This growing body of literature on workplace spirituality has offered a number of insights, but it also has been criticized for lacking rigor or critical thinking (Gibbons, 2000).

In the present study, we seek to address some of these limitations in the following ways. One, we develop one of the first sets of formal hypotheses in this new field concerning the relationship between workplace spirituality and five work attitudinal variables. Two, we conduct exploratory empirical research to test these hypotheses. In doing so, our study also enables us to examine the construct validity on some of the survey-based measures of workplace spirituality developed by Ashmos and Duchon (2000). To accomplish these objectives, this manuscript is organized as follows. First, we review the literature on spirituality and propose hypotheses regarding the relationship between several facets of spirituality and employee work attitudes. Second, we describe the research instrument and methods utilized in this study. Third, we present the research results of the reliability and validity...
assessments, and the hypotheses tests. Finally, we discuss the implications for both research and practice.

Theoretical background
Research on workplace spirituality
In this study we consider the meaning and implications of spirituality within the context of the workplace. While workplace spirituality is considered a highly personal and philosophical construct, nearly all of the academic definitions acknowledge that spirituality involves a sense of wholeness, connectedness at work, and deeper values (Gibbons, 2000). Workplace spirituality involves the effort to find one's ultimate purpose in life, to develop a strong connection to coworkers and other people associated with work, and to have consistency (or alignment) between one's core beliefs and the values of their organization (Mitroff and Denton, 1999). Accordingly, workplace spirituality can be defined as "... the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community" (Ashmos and Duchon, 2000, p. 137).

It is important to note that for some people spirituality at work involves a religious connotation while for others it does not (Neck and Milliman, 1994). In fact, historically much of the interest in spirituality has been rooted in religion. However, for many others spirituality at work today does not involve a connection to any specific religious tradition, but rather is based on their own personal values and philosophy (Cavanagh, 1999; Mitroff and Denton, 1999).

In the last decade, there has been a growing body of literature on spirituality at work. However, this literature has a number of limitations (Gibbons, 2000). First, much of the research has concentrated on describing personal spiritual experiences at work (Konz and Ryan, 1999), rather than on the impact that dimensions of workplace spirituality have on individual work attitudes and behaviors. While the focus on personal spirituality experiences is essential, it is also important to conduct research which helps us understand the potential positive impact on employee attitudes that can occur when management supports individuals' needs in the workplace on a spiritual level (King and Nicol, 1999). Second, the studies which have dealt with this topic of employee attitudes often simplistically assume that spirituality at work always has a positive impact (Gibbons, 2000), rather than formally postulating and empirically testing for these relationships.

One of the first steps in conducting rigorous research is to clearly define and measure the workplace spirituality construct. Recently, Ashmos and Duchon (2000) developed a survey and conducted principal components factor analysis, extracting seven different dimensions of workplace spirituality. In this paper, we chose to focus on only three of these dimensions for several reasons. First, we chose the three dimensions because they have been seen as important in prior studies (e.g. Hawley, 1993; Milliman et al., 1999; Mitroff and Denton, 1999)
and are representative of employees’ involvement in spirituality in the workplace at three levels of analysis suggested by Neal and Bennett (2000): individual; group; and organization. Second, it should be recognized that workplace spirituality is a complex and multi-faceted construct. We did not focus on the transcendent aspect of workplace spirituality because we believe it is more likely to impact an individual’s personal life. Instead, the three dimensions were chosen in part because we postulated they are more likely to have closer relationships with our intended study objective, employee work attitudes and behaviors. Finally, focusing on three dimensions allows for a more parsimonious study. These three core dimensions include purpose in one’s work or “meaningful work” (individual level), having a “sense of community” (group level), and being in “alignment with the organization’s values” and mission (organization level). Figure 1 graphically depicts the conceptualization of workplace spirituality used in this study. It is important to note that in our study we empirically assess these dimensions at the individual level of analysis.

We next discuss each of these aspects of workplace spirituality, how these dimensions vary from traditional organizational behavior variables, and develop hypotheses concerning their relationship with employee work attitudes. Before discussing the dimensions of spirituality, we wish to state two issues upfront concerning this study. First, we acknowledge that using a survey instrument to measure something as deeply personal and abstract as workplace spirituality presents numerous challenges. Second, we do not wish to indicate that examining the relationship between spirituality and employee job attitudes implies that the single most important purpose of spirituality is its connection to employee work attitudes and ultimately organizational
effectiveness. Despite these concerns, we believe that the relationship between workplace spirituality and employees' job attitudes is an important and legitimate area of inquiry and that survey based methods are one way to attempt to create more rigorous research in this still relatively new field of study.

**Dimensions of workplace spirituality**

*Meaningful work.* A fundamental aspect of spirituality at work involves having a deep sense of meaning and purpose in one's work. This dimension of workplace spirituality represents how employees interact with their day-to-day work at the individual level. The expression of spirituality at work involves the assumptions that each person has his/her own inner motivations and truths and desires to be involved in activities that give greater meaning to his/her life and the lives of others (Ashmos and Duchon, 2000; Hawley, 1993). The quest for purpose in work is not a new idea. However, the spirituality view is that work is not just meant to be interesting or challenging, but that it is about things such as searching for deeper meaning and purpose, living one's dream, expressing one's inner life needs by seeking meaningful work, and contributing to others (Ashmos and Duchon, 2000; Fox, 1994; Neal, 1998). Similarly, Moore (1992) observes that work is a vocation and a calling as a way to create greater meaning and identity in the workplace.

*Community.* A critical dimension of workplace spirituality involves having a deep connection to, or relationship with, others, which has been articulated as a sense of community (Ashmos and Duchon, 2000). This dimension of workplace spirituality occurs at the group level of human behavior and concerns interactions between employees and their co-workers. Community at work is based on the belief that people see themselves as connected to each other and that there is some type of relationship between one's inner self and the inner self of other people (Maynard, 1992; Miller, 1992). Neal and Bennett (2000) note that this level of spirituality involves the mental, emotional, and spiritual (e.g. "esprit de corps") connections among employees in teams or groups in organizations. The essence of community is that it involves a deeper sense of connection among people, including support, freedom of expression, and genuine caring.

There have been a few firms that appear to have developed strong organizational cultures that emphasize a sense of community among employees. For instance, at Southwest Airlines community includes a feeling among the employees that they are all part of a larger organizational family, that employees take care of each other as well as their customers, and that employees' families are also an important part of the firm (Freiberg and Freiberg, 1996; Milliman et al., 1999).

*Alignment with organizational values.* A third aspect of spirituality in the workplace is when individuals experience a strong sense of alignment between
their personal values and their organization's mission and purpose. This component of workplace spirituality encompasses the interaction of employees with the larger organizational purpose (Mitroff and Denton, 1999). Alignment with the organization's values is related to the premise that an individual's purpose is larger than one's self and should make a contribution to others or society. Alignment also means that individuals believe that managers and employees in their organization have appropriate values, have a strong conscience, and are concerned about the welfare of its employees and community (Ashmos and Duchon, 2000). Similarly, Hawley (1993) observed that part of living by one's inner truth involves working in an organization with integrity and a purpose that is beneficial to others beyond simply making a profit.

Alignment with organizational values involves the concept that employees desire to work in an organization whose goal is to not just be a good corporate citizen, but an organization that seeks to have a high sense of ethics or integrity and make a larger contribution than the typical company to the welfare of employees, customers, and society. For instance, Malphurs (1996, p. 52) states that a person "should not work for any organization, sacred or secular, if he or she does not share to a great degree the same institutional values"

While organizations clearly experience many limitations and remain imperfect institutions, the alignment with organizational values concept suggests that there are some firms that have a higher level of commitment to their workers, customers, and society than others. For example, there is some evidence which suggests that many of the employees at Southwest Airlines feel aligned with the company's cause which includes offering low airfares (allowing people to fly who normally couldn't afford to), frequent and on-time flights, and a personable service characterized by fun and humor (Milliman et al., 1999). Other examples of firms with strong and socially oriented values are described by Collins and Porras (1994) in their book, *Built to Last*.

**Hypotheses**

Workplace spirituality has been proposed to be positively related to employee work attitudes (e.g. Neck and Milliman, 1994). However, few formal hypotheses have been proposed in the literature between these three dimensions of workplace spirituality and specific employee attitudinal variables. Based on our literature review, we formally propose hypotheses concerning the relationship between three dimensions of workplace spirituality and five organizational behavior variables: organization commitment, intention to quit, intrinsic work satisfaction, job involvement, and organization-based self-esteem (OBSE).

*Organization commitment and intention to quit.* These two variables are related to each other in that they both involve how individuals perceive their relationship to their current organization. Intention to quit concerns
whether an individual is considering leaving their current organization and investigating alternative employment prospects. Like intention to quit, organizational commitment is strongly related to reduced turnover. Organization commitment has been defined as a condition in which an individual feels a bond with their organization and wishes to maintain membership in the organization (Mowday et al., 1979). More recently, three components of organization commitment have been hypothesized: continuance, normative and affective (Meyer and Allen, 1997). The latter of these (affective) relates most closely to Mowday et al.'s (1979) original conceptualization. We will focus on Mowday et al.'s (1979) conceptualization of organization commitment since it is the most well known aspect of this construct and because doing so will enable us to present a more parsimonious approach. We now examine the literature on how the dimensions of spirituality relate to these two key job attitudes.

Meaningful work is expected to be related to an individual's attitudes toward their organization. Interesting and challenging work has been found to be negatively related to turnover and absenteeism (Hackman and Oldham, 1976). Since the spirituality concept of meaningful work is seen as a deeper and more personal concept than job challenge, it can also be expected to positively impact employee attitudes toward their organization, including turnover.

Several researchers have advanced the idea that a sense of community is linked to employee commitment and turnover (which is strongly related to intention to quit). Trott (1996) proposed that spiritual well being, which includes a sense of community, will be positively related to cooperation and negatively related to turnover and absenteeism. Milliman et al. (1999) postulated that having a strong sense of community and strong purposeful organizational goals were related to greater employee commitment and higher retention rates. Brown (1992) states that a sense of community also leads to greater employee satisfaction with the organization.

Alignment with organizational values is also considered to be related to organization commitment. It has been proposed that organizations which create an environment where the firm identifies with and is responsive to employees' input and sense of values will have employees who:

- are more adaptable and will help the company succeed (Catlette and Hadden, 1998);
- have a greater sense of *esprit de corps* (Channon, 1992); and
- are more strongly committed to helping the organization succeed (Hawley, 1993; Catlette and Hadden, 1998).

Altogether this research suggests the following set of hypotheses:

*H1a.* The greater the experience of personal purpose and meaning in one's work, the greater the organization commitment of the individual.
$H1b$. The greater sense of community at work, the greater the organization commitment of the individual.

$H1c$. The greater the alignment of one's personal values with organizational values, the greater the organization commitment of the individual.

$H2a$. The greater the experience of personal purpose and meaning in one's work, the lesser the intention of the individual to quit the organization.

$H2b$. The greater sense of community at work, the lesser the intention of the individual to quit the organization.

$H2c$. The greater the alignment of one's personal values with organizational values, the lesser the intention of the individual to quit the organization.

*Intrinsic job satisfaction and job involvement.* Both of these attitudinal variables relate to how an employee views or perceives their work experience in their current job and organization. Intrinsic job satisfaction involves an individual's attitudes toward elements related to work such as achievement, responsibility, advancement, and growth (Herzberg *et al.*, 1959). Job involvement concerns the degree to which an individual identifies with and actively participates in his/her job and considers his/her performance to be important to their self-esteem (Blau, 1986).

Trott (1996) states that those who are open to meaningful and purposeful relationships, which are key aspects of community, are more likely to grow, learn, and achieve at work and less likely to experience job burnout. It has also been proposed that organizations which create an environment that is responsive to their employees' sense of purpose and values will have people who are more motivated in their work (Catlette and Hadden, 1998; Hawley, 1993) and are more likely to have a productive and satisfied workforce (Riordan *et al.*, 1997; Kraimer, 1997). For example, Milliman *et al.* (1999) suggest that a strong sense of community and organizational values is related to employee satisfaction and motivation. These findings are similar to those of Collins and Porras (1994) and Peters and Waterman (1982) who found that organizations with some type of higher meaning have more motivated workforces. Other studies indicate that employees who feel their organization offers them a strong sense of connection and genuine sense of purpose also tend to be more creative and innovative in their work (Hawley, 1993; Harman, 1992), and experience greater personal growth and development (Hawley, 1993). Meaningful work can also be expected to influence employee attitudes toward work. For instance, Jaques (1996, 1998) suggested that when individuals' work is matched to their potential capability, they are more likely to achieve their full potential. Altogether this research leads to the following two sets of hypotheses:
**H3a.** The greater the experience of personal purpose and meaning in one's work, the greater the intrinsic work satisfaction of the individual.

**H3b.** The greater sense of community at work, the greater the intrinsic work satisfaction of the individual.

**H3c.** The greater the alignment of one's personal values with organizational values, the greater the intrinsic work satisfaction of the individual.

**H4a.** The greater the experience of personal purpose and meaning in one's work, the greater the job involvement of the individual.

**H4b.** The greater sense of community at work, the greater the job involvement of the individual.

**H4c.** The greater the alignment of one's personal values with organizational values, the greater the job involvement of the individual.

**OBSE.** OBSE concerns the degree to which individuals believe they satisfy their needs and have a sense of personal adequacy in their organizations. Employees with high OBSE are satisfied with their organizational role and see themselves as important, meaningful, respected, and worthwhile within their organization. OBSE has been found to be positively related to job performance, organizational satisfaction, citizenship behavior, and organizational commitment (Pierce et al., 1989).

Anderson (1997) postulated that having a sense of community is linked to employee trust and respect, which are key elements of OBSE. Similarly, Trott (1996) proposed that spiritual well being, which includes a sense of community and alignment with organizational values, will also be positively related to an individual's psycho/social adjustment.

Alignment with organizational values can also be expected to enhance employee OBSE. Employees who feel their input is appreciated and are also aligned with their organization's values believe they can make a real difference to the company and to others, (Catlette and Hadden, 1998), feel a personal responsibility for the organization's success or failure (Brown, 1992; Rosen, 1992; Catlette and Hadden, 1998), experience a high sense of service (Hawley, 1993), and contribute their thoughts, inspiration, and energies to the company (Block, 1993; Brown, 1992; Rosen, 1992; Kiefer, 1992). This research suggests the following hypotheses:

**H5a.** The greater the experience of personal purpose and meaning in one's work, the greater the organization-based self-esteem of the individual.

**H5b.** The greater sense of community at work, the greater the OBSE of the individual.

**H5c.** The greater the alignment of one's personal values with organizational values, the greater the OBSE of the individual.
Methods

Sample

A cross-sectional survey design was used to test the proposed hypotheses. The sample population was part-time, evening MBA students attending a business school in the southwest USA. Almost all of the MBA students included in the survey were working in full-time job positions. The survey was administered in two ways. First, 167 of the surveys were administered in person and returned directly to the researchers during several MBA classes with a return rate of 100 percent. Second, 41 surveys were returned out of 60 mailed to distance learning MBA students for a return rate of 68 percent. Eight of these surveys were later discarded due to missing variables, resulting in a final usable sample size of 200.

Approximately 56 percent of the sample is over the age of 30. The sample is 47 percent female and 53 percent male. The respondents have worked in their current company for an average 5.0 years and have an average of 11.4 years of full-time work experience. About one-half of the sample is currently supervising other employees. Seventy percent of the respondents work in for-profit organizations and 30 percent in non-profits. The participants work in the following industry sectors: 35.8 percent service, 23.8 percent manufacturing, 10.9 percent military, 9.0 percent government, 8.0 percent health care, and 12.4 percent other.

Measures

The measures were based on a seven-point scale from 1 (“disagree strongly”) to 7 (“agree strongly”). The exceptions were the satisfaction variables, which were on a scale from 1 (“very dissatisfied”) to 7 (“very satisfied”). We now briefly list the source and coefficient alpha for each of the measures used (note that Table 1 contains the descriptive statistics for each of the constructs below and also contains an abbreviated statement for each item used in the study):

- **Meaningful work.** This scale includes six items from Ashmos and Duchon (2000). The coefficient alpha was 0.88.

- **Sense of community.** Seven items were developed by the authors of this paper for this study to tap this dimension. Ashmos and Duchon (2000) developed a scale that measures “conditions of community” which include items that assess more the enabling conditions of community. The community scale developed for this study focuses on the sense of community experienced by workers rather than enabling conditions or outcomes of community. The coefficient alpha was 0.91.

- **Alignment with organizational values.** This includes eight items from Ashmos and Duchon’s (2000) spirituality scale. The coefficient alpha was 0.94.
<table>
<thead>
<tr>
<th>Variable( ^a )</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meaningful work</td>
<td>4.82</td>
<td>1.53</td>
<td>(0.88)</td>
<td>(0.91)</td>
<td>(0.94)</td>
<td>(0.89)</td>
<td>(0.84)</td>
<td>(0.86)</td>
<td>(0.82)</td>
<td>(0.93)</td>
</tr>
<tr>
<td>2. Sense of community</td>
<td>4.72</td>
<td>1.23</td>
<td>0.63*</td>
<td>0.58*</td>
<td>0.82*</td>
<td>(0.94)</td>
<td>(0.89)</td>
<td>(0.84)</td>
<td>(0.86)</td>
<td>(0.82)</td>
</tr>
<tr>
<td>3. Alignment of values</td>
<td>4.51</td>
<td>1.37</td>
<td>0.60*</td>
<td>0.77*</td>
<td>0.77*</td>
<td>0.66*</td>
<td>(0.84)</td>
<td>(0.86)</td>
<td>(0.82)</td>
<td>(0.93)</td>
</tr>
<tr>
<td>4. Organization commitment</td>
<td>4.64</td>
<td>1.30</td>
<td>0.57*</td>
<td>0.56*</td>
<td>0.56*</td>
<td>0.66*</td>
<td>(0.84)</td>
<td>(0.86)</td>
<td>(0.82)</td>
<td>(0.93)</td>
</tr>
<tr>
<td>5. Intention to quit</td>
<td>3.57</td>
<td>1.83</td>
<td>-0.45*</td>
<td>-0.45*</td>
<td>-0.57*</td>
<td>-0.66*</td>
<td>-0.66*</td>
<td>-0.66*</td>
<td>-0.66*</td>
<td>-0.66*</td>
</tr>
<tr>
<td>6. Intrinsic work satisfaction</td>
<td>4.82</td>
<td>1.34</td>
<td>0.50*</td>
<td>0.52</td>
<td>0.49*</td>
<td>0.54*</td>
<td>0.54*</td>
<td>0.54*</td>
<td>0.42*</td>
<td>0.42*</td>
</tr>
<tr>
<td>7. Job involvement</td>
<td>4.40</td>
<td>1.33</td>
<td>0.51*</td>
<td>0.50*</td>
<td>0.46*</td>
<td>0.63*</td>
<td>0.63*</td>
<td>0.63*</td>
<td>0.42*</td>
<td>0.42*</td>
</tr>
<tr>
<td>8. OBSE</td>
<td>5.45</td>
<td>1.27</td>
<td>0.54*</td>
<td>0.68*</td>
<td>0.57*</td>
<td>0.60*</td>
<td>0.60*</td>
<td>0.60*</td>
<td>0.43*</td>
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</table>

**Notes:** Reliability estimates are in parentheses; \( n = 200 \) for all variables. \( a \) Scales range from 1 to 7. * Significant at \( p < 0.01 \)
Organization commitment. Six organization commitment items were selected from Mowday et al.’s (1979) organization commitment scale. The coefficient alpha was 0.89.

Intention to quit. The intention to quit items come from multiple sources. Two of the items are from Jones (1986) and the last item is from Chung (1989). The coefficient alpha for this variable was 0.84.

Intrinsic work satisfaction. This scale is based on the satisfiers or motivators from the motivation hygiene theory (Herzberg et al., 1959). This includes three items based on satisfaction with advancement and career opportunities and one item based on satisfaction with the nature of work from Nathan et al. (1991). The coefficient alpha for this scale was 0.86.

Job involvement. The job involvement scale includes four items from a ten-item scale by Kanungo (1982). The coefficient alpha was 0.82.

OBSE. Five items were selected from Pierce et al.’s (1989) OBSE scale. The coefficient alpha was 0.93.

Results
Reliability and validity assessments
Reliability for each multi-item scale was assessed using Cronbach’s alpha, and validity was assessed using confirmatory factor analysis. Results of the reliability analysis are reported in Table I along with the Pearson’s correlations and descriptive statistics for each variable. Overall, strong reliability is demonstrated with coefficient alphas ranging from 0.82 to 0.94.

Confirmatory factor analysis (CFA) was conducted on each multi-item scale using the underlying factors identified. For this analysis, SPSS’s Amos 4.01 software was used. Using a conservative strategy, no factor or covariance path was altered. In addition, no error terms were allowed to covary in any of the measurement models, and each indicator item was linked to a single latent variable. Each of the measurement items and their corresponding CFA loadings and significance values are presented in Tables II and III. Overall these results indicate a good fit for all the scales used. All item loadings are above the preferred 0.30 threshold for acceptability. In addition, all t values for the loadings are significant at p < 0.001.

Hypotheses tests
All hypotheses were tested in the context of structural equation modeling (SEM). SEM was used for several reasons. First, SEM allows for a simultaneous examination of all of the proposed hypotheses, rather than five separate regression analyses. Second, the testing of the fully specified model allows us to examine which dimensions of the spirituality construct are driving the relationship with the employee attitude variables. Third, in SEM the overall fit
<table>
<thead>
<tr>
<th>Meaningful work</th>
<th>Measurement model parameters: standardized loadings</th>
<th>t-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience joy in work</td>
<td>0.86</td>
<td>0.00</td>
</tr>
<tr>
<td>Spirit is energized by work</td>
<td>0.87</td>
<td>0.00</td>
</tr>
<tr>
<td>Work is connected to what I think is important in life</td>
<td>0.76</td>
<td>0.00</td>
</tr>
<tr>
<td>Look forward to coming to work</td>
<td>0.91</td>
<td>0.00</td>
</tr>
<tr>
<td>See a connection between work and social good meaning</td>
<td>0.33</td>
<td>0.00</td>
</tr>
<tr>
<td>Understand what gives my work personal meaning</td>
<td>0.73</td>
<td>0.00</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Sense of community</th>
<th>Measurement model parameters: standardized loadings</th>
<th>t-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working cooperatively with others is valued</td>
<td>0.00</td>
<td>0.69</td>
</tr>
<tr>
<td>Feel part of a community</td>
<td>0.00</td>
<td>0.72</td>
</tr>
<tr>
<td>Believe people support each other</td>
<td>0.00</td>
<td>0.84</td>
</tr>
<tr>
<td>Feel free to express opinions</td>
<td>0.00</td>
<td>0.66</td>
</tr>
<tr>
<td>Think employees are linked with a common purpose</td>
<td>0.00</td>
<td>0.76</td>
</tr>
<tr>
<td>Believe employees genuinely care about each other</td>
<td>0.00</td>
<td>0.81</td>
</tr>
<tr>
<td>Feel there is a sense of being a part of a family</td>
<td>0.00</td>
<td>0.87</td>
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<thead>
<tr>
<th>Alignment of values</th>
<th>Measurement model parameters: standardized loadings</th>
<th>t-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel positive about the values of the organization</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Organization is concerned about the poor</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Organization cares about all its employees</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Organization has a conscience</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Feel connected with the organization’s goals</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Organization is concerned about health of employees</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Feel connected with the mission of the organization</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Organization cares about whether my spirit is energized</td>
<td>0.00</td>
<td>0.00</td>
</tr>
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**Note:** *All t-tests are significant at p < 0.001*

of the model provides an indication of the validity for the proposed conceptual model. Finally, SEM is a natural extension of the confirmatory factor analysis that we conducted above. A structural analysis of the component dimensions of each of the constructs was conducted using Amos 4.01. Composite scores were calculated for each multi-item scale and used in structural equation analysis.

Figure 2 depicts a fully specified model with gamma paths from each dimension of workplace spirituality to the five dependent employee
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Measurement model parameters: standardized loadings

<table>
<thead>
<tr>
<th></th>
<th>ETA1</th>
<th>ETA2</th>
<th>ETA3</th>
<th>ETA4</th>
<th>ETA5</th>
<th>t-valuea</th>
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<tr>
<td><strong>Organization commitment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proud to tell others I’m part of the organization</td>
<td>0.86</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>–</td>
</tr>
<tr>
<td>Organization inspires the very best in me</td>
<td>0.84</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>15.47</td>
</tr>
<tr>
<td>Glad I chose this organization to work for</td>
<td>0.79</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>13.83</td>
</tr>
<tr>
<td>Talk up this organization to my friends</td>
<td>0.87</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>16.18</td>
</tr>
<tr>
<td>Would accept almost any job assignment</td>
<td>0.44</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>6.35</td>
</tr>
<tr>
<td>Really care about the fate of the organization</td>
<td>0.73</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>12.26</td>
</tr>
<tr>
<td><strong>Intention to quit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will probably look for a new job next year</td>
<td>0.00</td>
<td>0.75</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>–</td>
</tr>
<tr>
<td>Scan sources for prospective jobs</td>
<td>0.00</td>
<td>0.83</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>11.27</td>
</tr>
<tr>
<td>Frequently think of quitting my job</td>
<td>0.00</td>
<td>0.81</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>11.09</td>
</tr>
<tr>
<td><strong>Intrinsic work satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities for advancement in this job</td>
<td>0.00</td>
<td>0.00</td>
<td>0.91</td>
<td>0.00</td>
<td>0.00</td>
<td>–</td>
</tr>
<tr>
<td>Satisfied with chances for advancement</td>
<td>0.00</td>
<td>0.00</td>
<td>0.95</td>
<td>0.00</td>
<td>0.00</td>
<td>21.30</td>
</tr>
<tr>
<td>Satisfied with career opportunities</td>
<td>0.00</td>
<td>0.00</td>
<td>0.81</td>
<td>0.00</td>
<td>0.00</td>
<td>15.55</td>
</tr>
<tr>
<td>Satisfied with nature of work</td>
<td>0.00</td>
<td>0.00</td>
<td>0.48</td>
<td>0.00</td>
<td>0.00</td>
<td>7.25</td>
</tr>
<tr>
<td><strong>Job involvement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very much involved personally with my job</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.77</td>
<td>0.00</td>
<td>–</td>
</tr>
<tr>
<td>Consider job essential to my existence</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.82</td>
<td>0.00</td>
<td>11.07</td>
</tr>
<tr>
<td>Like to be absorbed in my job</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.70</td>
<td>0.00</td>
<td>9.54</td>
</tr>
<tr>
<td>Live, eat, and breath my job</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.64</td>
<td>0.00</td>
<td>8.68</td>
</tr>
<tr>
<td><strong>OBSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I count around here</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.95</td>
<td>–</td>
</tr>
<tr>
<td>I am an important part of this place</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.96</td>
<td>29.43</td>
</tr>
<tr>
<td>I am trusted around here</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.65</td>
<td>11.48</td>
</tr>
<tr>
<td>I make a difference around here</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.84</td>
<td>18.94</td>
</tr>
<tr>
<td>There is faith in me around here</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.75</td>
<td>14.52</td>
</tr>
</tbody>
</table>

**Notes:** a All t-tests are significant at $p < 0.001$

Attitudinal variables. This model is in effect the same as a canonical correlation approach that allows a simultaneous analysis of five dependent job attitude variables. Table IV provides the parameter estimates and corresponding t-values for each path in the model. The fit indices for this model are very good (comparative fit index (CFI) = 0.98, relative fit index (RFI) = 0.93, and the Tucker Lewis index (TLI) = 0.94). In addition, the Chi square (99) to degrees of freedom (10) ratio is also good. Next we discuss each hypothesis test in more detail.
H1 states that the spirituality of the individual is positively related to the organization commitment of the individual. To test this hypothesis, we examine the gamma paths between organization commitment and the spirituality dimensions of: meaningful work; sense of community; and

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Estimate</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\gamma_{1,1}$</td>
<td>0.15</td>
<td>4.86***</td>
</tr>
<tr>
<td>$\gamma_{1,2}$</td>
<td>-0.13</td>
<td>-1.75</td>
</tr>
<tr>
<td>$\gamma_{1,3}$</td>
<td>0.26</td>
<td>3.49***</td>
</tr>
<tr>
<td>$\gamma_{1,4}$</td>
<td>0.31</td>
<td>4.11***</td>
</tr>
<tr>
<td>$\gamma_{1,5}$</td>
<td>0.18</td>
<td>2.71**</td>
</tr>
<tr>
<td>$\gamma_{1,6}$</td>
<td>0.33</td>
<td>4.36***</td>
</tr>
<tr>
<td>$\gamma_{1,7}$</td>
<td>0.24</td>
<td>-2.69**</td>
</tr>
<tr>
<td>$\gamma_{1,8}$</td>
<td>0.23</td>
<td>2.27*</td>
</tr>
<tr>
<td>$\gamma_{1,9}$</td>
<td>0.57</td>
<td>2.12*</td>
</tr>
<tr>
<td>$\gamma_{1,10}$</td>
<td>0.42</td>
<td>6.11***</td>
</tr>
<tr>
<td>$\gamma_{1,11}$</td>
<td>-0.28</td>
<td>5.83***</td>
</tr>
<tr>
<td>$\gamma_{1,12}$</td>
<td>0.25</td>
<td>-2.55**</td>
</tr>
<tr>
<td>$\gamma_{1,13}$</td>
<td>0.14</td>
<td>1.39</td>
</tr>
<tr>
<td>$\gamma_{1,14}$</td>
<td>0.10</td>
<td>0.94</td>
</tr>
<tr>
<td>$\gamma_{1,15}$</td>
<td>0.01</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Notes: * Significant at $p < 0.05$; ** significant at $p < 0.01$; *** significant at $p < 0.001$
alignment of values. Each of these gamma path t-values is significant at the
$p < 0.001$ level ($\gamma_{1,1} = 4.86$, $\gamma_{6,1} = 4.36$, $\gamma_{11,3} = 5.83$). Based on these results, $H1$ is supported.

$H2$ proposes that the greater the spirituality of the individual, the lower their
intention to quit the organization. To test this proposition, we examine the
gamma paths between intention to quit and the three latent factors of
spirituality. Sense of community and alignment of values are significant at the
$p < 0.01$ level and in the predicted negative direction ($\gamma_{7,2} = -2.69$, $\gamma_{12,3} = -2.55$). However, meaningful work did not contribute significantly to
the predictive power of the model, although the expected negative direction of
relationship did hold ($\gamma_{8,1} = -1.75$). Therefore, $H2$ is partially supported ($H2a$
is unsupported while $H2b$ and $H2c$ are supported).

$H3$ predicts a positive relationship between workplace spirituality and
intrinsic work satisfaction. To test this hypothesis, we examine the gamma
paths between intrinsic work satisfaction and the three spirituality dimensions.
The evaluation of each factor provided mixed results. $t$-tests for both
meaningful work and sense of community were significant ($\gamma_{3,1} = 3.49$, $\gamma_{8,2} = 2.27$). However, the alignment of values variable is insignificant ($\gamma_{13,3} = 1.39$). From this analysis, $H3a$ and $H3b$ are supported, but $H3c$ is not supported.

$H4$ states that the greater the workplace spirituality, the greater the job
involvement. Two of the three $t$-values for the gamma paths are significant
($\gamma_{4,1} = 4.11$, $\gamma_{9,2} = 2.12$). That is, meaningful work and sense of community
increased with job involvement. Alignment of values is insignificant in this
model ($\gamma_{14,3} = 0.94$). Based on this analysis, $H4a$ and $H4b$ are supported, and
$H4c$ is not supported.

$H5$ proposes that the greater the workplace spirituality, the greater the
OBSE. This hypothesis was also tested by examining the gamma paths
between OBSE and meaningful work, sense of community, and alignment of
values. Here we see the same pattern as $H3$ and $H4$. Meaningful work and
sense of community is significant ($\gamma_{5,1} = 2.71$, $\gamma_{10,2} = 6.11$), yet the alignment
of values path is insignificant ($\gamma_{15,3} = 0.05$). Therefore, $H5a$ and $H5b$ are
supported, while $H5c$ is not supported.

It is important to note that while $H3c$, $H4c$, and $H5c$ were unsupported in
this analysis concerning alignment of organizational values, we still believe
that it is an important dimension of workplace spirituality. First, $H1c$ and $H2c$
were supported in our analysis in regards to this construct. Second, from the
descriptive analysis (Table I) the Pearson correlations show alignment of
organizational values correlating with all five of the work attitude variables.
Therefore, the SEM analysis indicates that alignment of organizational values
simply does not predict three of the work attitudes over and above the
meaningful work and sense of community variables.
Discussion
This study has sought to address some of the limitations in past research on spirituality at work by using a more precise way to measure certain workplace spirituality dimensions, developing formal hypotheses on the relationships of these dimensions to key organizational behavior goals, and employing a more rigorous empirical method to test the proposed relationships. We assessed the relationship between spirituality and employee work attitudes with structural equation modeling analyses. The analysis results are supportive of the hypothesized relationships between the spirituality dimensions examined and:

- organization commitment;
- an individual’s intention to quit;
- intrinsic work satisfaction;
- job involvement; and
- OBSE.

These are the first empirically based findings on the relationships between workplace spirituality and these organizational behavior variables.

The structural equation analysis also indicates that the spirituality dimensions were significantly related to the five job attitude dimensions. Specifically, the analysis in the fully specified model (Figure 2) indicates that meaningful work was significantly related to four of the five job attitude variables (the exception being intention to quit), sense of community was significantly related to all five of the outcome variables, and that alignment with organizational values was significantly related to organization commitment and intention to quit.

These results provide empirical support for the proposed relationships between these dimensions of workplace spirituality and important employee attitudes. The findings also provide additional validity support for Ashmos and Duchon’s (2000) workplace spirituality survey measures. Ashmos and Duchon’s sample was drawn from the health care sector with a significant portion of the respondents being female. Our data sample consists of mainly professionally employed adults in a part-time graduate business program from a wide range of industries (service, manufacturing, etc.). A slight majority of the sample is male, and 70 percent of respondents worked in for-profit organizations in a wide range of industries. While the sample is diverse, it contains mainly professional employees. Future studies should investigate lower-level employees to determine if the same relationships hold. The confirmatory factor analysis results for this sample provide additional supporting evidence for the construct validity of two dimensions of Ashmos and Duchon’s (2000) spirituality construct: alignment with organizational values and meaningful work.
Limitations and directions for future research

While these results are encouraging, it is important to consider that this study is based on a single self-report survey instrument. As mentioned previously, this is a new area of research and one in which the highly personal nature of the subject may make it difficult to capture on a survey instrument. Due to the self-report nature of this study, there is potential for common method variance among some of the scales. In addition, some of the scales had relatively small standard deviations, suggesting less discrimination. Finally, it should be considered that the sample is based on graduate business students, although it is important to note that these students are almost completely full-time working adults with a significant number of years of work experience and representation from a wide number of industries. Below are our suggestions for future research to address some of these limitations.

A first need for future research is to conduct further confirmatory analysis of these spirituality measures on different work samples. In addition, given the subjective and highly personal nature of the spirituality construct, it would be ideal if multiple methods of research were used to cross-validate these measures, including employee interviews, supervisor assessments of employees, and quantitative organizational measures of employee effectiveness.

Second, this research indicates that other important organizational behavior variables, such as organizational citizenship, should be considered for further examination. Organizational citizenship is discretionary behavior that is not part of an employee's formal job duties, but that promotes organizational effectiveness (Podsakoff et al., 1997). It is logical to assume that employees who experience deeply meaningful work or who have a strong connection to their company's values might be likely to engage in such extra-role job behaviors.

Third, it is important to conduct such research in different institutional environments, such as differences in for-profit versus non-profit organizations. Along this same line, research needs to be conducted on how various organizational variables may moderate or mediate the relationship between workplace spirituality and employee job attitudes and effectiveness. As an example, it would be interesting to see if any factors in the extrinsic work environment, such as the nature of the human-resource-management system, the supervisor, the organizational structure or culture, and factors in the employee's work environment moderate or mediate the relationship between spirituality and employee work attitudes.

Fourth, research needs to consider potential negative aspects of workplace spirituality. For example, it may be possible that what one considers to be a highly spiritual belief or practice may have a negative impact on other people. Some potential negative implications include the potential for proselytizing a set of spirituality values as "the only path" which can breed intolerance. It is also possible that employees who experience a high degree of spirituality at
work may become deeply attached to the current practices of the company and therefore become resistant to change.

Finally, there is concern that organizations may attempt to manipulate and use the concept of spirituality at work as a tool to increase productivity (discussed more later). Future empirical research and new methods of investigation are needed to examine the potential direct or indirect negative consequences of workplace spirituality.

**Implications for practice**

This study uses rigorous survey-based research methods and presents some of the first empirical data indicating a positive association between three dimensions of workplace spirituality and five employee work attitudes. In addition, the five work attitude variables examined here have been empirically linked to other variables of interest to organizations, such as reduced turnover and absenteeism and improved creativity and job performance. As mentioned above, we do have concerns about how well workplace spirituality can be captured in survey research and whether workplace spirituality may have negative side effects. Nonetheless, this study provides some initial empirical support for the premise that workplace spirituality can also have a positive impact on employee work attitudes and ultimately the organization. As such, this investigation supports the findings from a number of other applied studies, such as Collins and Porras's (1994) *Built To Last, The Service Profit Chain* (Heskett *et al.*, 1997), and best companies to work for (Grant, 1998). All of these studies indicate that providing maximum avenues for personal values, growth, and development benefits not only the employee, but also the organization. In fact, it may be fruitful to study the linkages and similarities between research on best companies to work for and studies on spirituality at work. Research in both of these areas may likely provide important insights into the type of organizational environment and culture that is needed for employee well being and longer-term organizational effectiveness.

While there clearly are significant potential positive outcomes of workplace spirituality, the concern that organizations may attempt to manipulate or use the concept of spirituality at work as a tool to simply increase productivity must be acknowledged. As such, effective organizational change approaches are needed to implement spirituality at work philosophies if these benefits are to accrue to employees and the company. Some suggestions for successful organizational change approaches are as follows. First, we believe that organizational change approaches must be guided by a clear philosophy that workplace spirituality represents truth and is the right thing to do, not because it may lead to higher profits. Workplace spirituality must be practiced in an authentic manner before it has a positive impact on employees or on the longer-term effectiveness of organizations.
Second, it is essential that organizational change and development programs associated with spirituality at work have strong employee participation so that input is heard from all levels of the firm. An important aspect of this spirituality at work development process is creating forums for open discussion and greater clarification of what spirituality at work means, since the concept is highly personal and abstract. Strong company values will need to be developed to ensure that the values and rights of all employees are respected. Such a discussion is exciting, but will stretch the boundaries of what levels of freedom of expression are allowed in firms. Training programs on interpersonal communication and listening skills will likely be required to help promote this process.

Third, workplace spirituality must take place within the context of appropriate organizational goals (e.g. do the goals of the practices have a potential direct or indirect negative impact on employees or other stakeholders of the organizations?). For this reason we suggest that change efforts incorporate feedback mechanisms from internal (e.g. employees) and external (e.g. customers, consultants, suppliers, etc.) sources to ensure that ongoing assessments occur regarding the true impact of the workplace spirituality approaches. Clearly, future research is needed to explore how companies can effectively change and implement authentic workplace spirituality philosophies.

In conclusion, this study has provided some empirical data confirming the validity of multiple dimensions of spirituality at work as well as the predictive validity of these dimensions with a number of employee work attitudes. While this is a promising study, more research is needed on the comprehensive nature of the relationship of workplace spirituality to both individual well being and work attitudes. Such studies need to be guided not only by more rigorous methods, but also critical thought, if we are to learn more about the true nature of workplace spirituality and its impact on employees and organizations.

References


Trott, D.C. (1996), Spiritual Well-being of Workers: An Exploratory Study of Spirituality in the Workplace, University of Texas, Austin, TX.