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**Individual Spiritual Orientation at Work:
A Conceptualization and Measure**

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Abstract

This manuscript researches and reports the importance of measuring spiritual orientation in individuals. After conceptualizing spiritual orientation, an attempt has been made to construct and validate a scale to measure it. An 18-items Likerts' type scale has been developed, using the confirmatory factor analysis. The goodness of fit index is .90 for the six dimensions of spiritual orientation, which are: 1) Service towards humankind; 2) Feeling of inner peace and calm; 3) Being vision and value led; 4) Inter-connectedness; 5) Respect for others; 6) Self-awareness. A construct validity test has been conducted using Maslach and Jackson's burnout inventory. Five dimensions of the scale had an alpha value above .60. The self-awareness dimension had an alpha value of .50. Alpha value of the overall scale with 18 items was .82.

Introduction

When we talk of the complete self of individuals, we allude to their body, mind, emotions, and spirit, in totality. The interplay between our spiritual yearnings, emotions, psychological capacity, and our capability to learn are deeply interwoven (Howard, 2002). Based on our emotions, understandings and learning we search for meaning and purpose in life. We make efforts to live an integrated, fulfilled life. Maslow (1970: 273) recognized this when he stated:

'Man's inherent design or inner nature seems to be not only in his anatomy and physiology, but also his most basic need, yearnings, and psychological capacity. The inner nature is usually not obvious and easily seen, but is rather hidden.'

The inference that could be drawn from Maslow's statement is that everything is interconnected to everything else. This wholeness and inseparability of the body and the soul is a spiritual phenomenon. Spiritual reality is a unifying oneness (Howard, 2002).

With this realization, organizations that are viewed as rational systems are considering making room for the spiritual dimension, a dimension that has less to do with rules and order and more to do with meaning, purpose, and a sense of community (Ashmos & Duchon, 2000). Yesterday's business motto was "lean and mean," but today's business motto is "lean and meaningful" (*HR Magazine*, August 1998: 46). Spirituality is creeping into the office and companies are turning inward in search of a "soul" as a way to foster creativity and to motivate leaders (Michele & Karen, 1995). Increasingly, the better-educated, new generations of workers are insisting that their spirituality be welcomed in the workplace just as their intelligence is (Smith, 2002). These workers' actions are no longer motivated by low-level needs; they are looking for a higher order of self-fulfillment needs. Therefore, the organizations need to have an environment that cultivates the growth of human spirit in order to prosper.

Today's worker is looking for organizations with opportunities to unlock their own creative energies working in a supportive atmosphere that encourages involvement in a rapidly changing workplace (White, 2001). One therefore needs to understand what spirituality means and how spirituality is defined at work in order to manage them effectively.

Definition of Spirituality

Spirituality means different things to different individuals. According to Turner (1999), spirituality is that which comes from within. Therefore, it is difficult to give a universal definition of spirituality. For some, it has a religious connotation and for others it does not (Neck & Milliman, 1994). According to Moxley (1999: 24), being spiritual is about being fully human, and about integrating all the energies that are part of us. It is about connecting to that life force that defines us and connects us.

Mitroff and Denton (1999) say that spirituality is the basic belief that there is a supreme power, a being, and a force, whatever you may call it, that governs the entire universe. There is a purpose for everything and everyone. The universe is not meaningless or devoid of purpose. Everything is interconnected with everything else. Everything affects and is affected by everything else. Spirituality is reaching beyond or having a sense that things could be better. It is also about being holistic; being able to see that everything is interconnected with everything else (Zohar & Marshall, 2000). Freke (2000), in an encyclopedia of spirituality considers self-knowledge, selflessness, love, personal growth, morality, humility, acceptance, positivity, and forgiveness as part of spirituality. Taylor (2002) describes seven principles of spirituality. According to her spirituality is creativity. It is communication, respect, vision, and partnership. It is energy, flexibility, fun, and finding oneself. Thibault, Ellor, and Netting (1991) defined the term 'spiritual' as: 1) Pertaining to one's inner resources, especially one's ultimate concern, 2) The basic value around which all

other values are focused, 3) The central philosophy of life – which guides conduct, and 4) The supernatural and non-material dimensions of human nature. Spirituality, defined from the faith perspective is about four sets of connections - connection with self, with others, with nature and environment, and with the higher power (Howard, 2002).

The terms spirituality and religiosity differ in meaning. In Campinha-Bacote (1995), Peterson and Nelson state that religion is an organized body of beliefs and practices, and the behaviors representing and expressing those beliefs, whereas spirituality goes beyond religion and religious practices and includes inspiration, meaning, and purpose of life. Spirituality also includes forgiveness, and relatedness. Mitroff and Denton (1999) found support to the view that religion and spirituality differ. The participants of the study defined "spirituality" as "the basic feeling of being connected with one's complete self, with others, and the entire universe" Turner (1999) says that one thing that spirituality is not, is 'organized religion'.

According to Thompson (2001), spirituality is not formal, structured, or organized. It is non-denominational, i.e. it is above and beyond denominations, broadly inclusive and embraces everyone. It is the sacredness of everything, the ordinariness of everyday life. Spirituality is the awareness of the Divine Principle of our being, as characterized by our effort to live in harmony with that Divine Principle (Dhiman, 2006).

Bruce (2000) enumerates a number of researched opinions on spirituality. For a catholic theologian, spirituality is "the way we orient ourselves towards the Divine." For a physician at the Harvard Business School, it is "that which gives meaning to life." For a social worker, an individual search for meaning, purpose, and values that may not include the concept of God or a transcendent being. For others, to be "spiritual" means to know and to live according to the knowledge that there is more to life than meets the eye. To be "spiritual" means, beyond that, to know, and to live according to the knowledge that God is present in us in grace as the principle of personal, interpersonal, social, and even comic transformation.

The numerous definitions of spirituality indicate that it is more a personal concept than a common or generalized variable. The definition of spirituality may thus differ in the cultural context too.

“Spirituality means beginning to become aware of consciousness higher than that of body-mind centered ego, and the ability to live more and more in it or under its guidance. It is this consciousness – non-contingent, self-existent, pure ego, which is spirit or self. Spirituality is recognition of something greater than mind and life... a surge and rising of the soul in man out of the littleness and bondage of our lower parts towards a greater thing secret within him” (Sri Aurobindo, 1997).

Though, the various definition seem to indicate that spirituality is something personal and individually defined, when we discuss spirituality in the work context there is a great need to find out the similarities and combine them to see a broad agreement. In an attempt to find common themes Marques, Dhiman, and King (2005) conclude that spirituality in workplace is driven by internal (human), external (organizational), and integrated (human/organizational) factors and once these factors are interconnected, one can arrive at multi-applicable definition. Now we look at how spirituality at work has been conceptualized to understand the interconnections.

Conceptualization of Spirituality at Work

In line with the definition of spirituality, Ashmos and Duchon (2000) have said that spirituality at work, despite religious imagery, is not about religion or conversion, or about getting people to accept a specific belief system. Rather, it is about employees who understand themselves as spiritual beings whose souls need nourishment at work. It is about experiencing a sense of purpose and meaning in their work beyond the kind of meaning found, for example, in the job-design literature, which emphasizes finding meaning in the

performance of tasks (Hackman & Oldham, 1976). Spirituality is also about people experiencing a sense of connectedness with one another and with their workplace community.

Spirituality at work has to do with how you feel about your work - whether it is just a job or a calling (Thompson, 2001). Workplace spirituality refers to the ways we express our spirituality at work, both for personal support and in making ethical and just decisions (Smith, 2002). It is the desire to do purposeful work that serves others. It involves yearning for connectedness and wholeness (Ashar & Lane-Maher, 2004). Spirituality at the workplace is an attempt to get connected to the Divine Principle of our being in the context of the workplace (Dhiman, 2006).

Individual Spirituality at Work is a journey towards integrating an individual's work and spiritual life. This means having the work contribute to the individual's spiritual path, and having the individual's spiritual path to contribute to his/her work. The specific nature of this integrating journey will depend on the individual's spiritual path, but for a Buddhist, it might include practising mindfulness, compassion, and meditation at work and a career journey that emphasises "right livelihood" (Whitmeyer, 1994). Literature on Spirituality at Work includes work on spirituality and leadership, individual creativity, intuition and on sense of well-being at work.

Krishnakumar and Neck (2002), while consolidating the various views on the definition of spirituality at work present it in three broad frames - the intrinsic-origin view, religious view, and existentialist views. According to them, the intrinsic origin view holds that spirituality is a concept or a principle that originates from the inside of an individual. Religious views are specific to a particular religion.

Importance of Spirituality at Work

Although spirituality has common images in religious circles and personal interventions, it is a relatively new concept in the workplace. However, there is a realization of the beneficial consequences of the spirit at work. Organizations have begun to learn that encouraging spirituality boosts loyalty and enhances morale (Ashmos & Duchon, 2000). White (2001) emphasizes that spirituality at work is becoming important because people want to feel connected to work that is important, and to each other at work.

Vaill (2000) emphasizes the importance of spirituality at work by focusing on the role of a managerial leader. A managerial leader, according to him, manages and leads a system of spiritually conscious and spiritually concerned people. Thompson (2001) similarly observes that many people who are looking for jobs today put the compensation, and benefits second to working in a spiritually oriented workplace - a place where they are treated with respect, not only for what they know and can do, but also as human beings.

According to White (2001), there are two basic reasons to cultivate an environment for the human spirit: to dispel fears and to harness the internal energy of the employees. Until now, corporations have outbid each other to bring in the highly intelligent and self-motivated performers (Traynor, 1999). However, with higher costs associated with hiring and retaining intelligence, managers bring in fewer employees to accomplish more with less. Therefore, the presence of spirited individuals with high internal energy is critical for today's work environment. Spirituality brings in happiness and fulfillment in the employees. Personal fulfillment and high morale are closely linked to outstanding performance and therefore to organizational success (Turner, 1999). Spiritually competent individuals will be the differentiating factor in today's competitive environment.

Schoonover and Weiler (2002) say that for career purposes our soul is the center of our being. It is that part of us that knows our deepest needs and aspirations and that is the source of our energy. If we leave our soul at home and have no time for it later, our job will not be very fulfilling. In a spiritual person, "*the human spirit is fully in act.*" This means that the core dimension of the human being is radically engaged with reality (both contingent and transcendent). It refers to persons living and acting according to their fullest intrinsic potential, i.e. ultimately living in the fullness of interpersonal, communal, and mystical relationship (Frohlich, 2002).

Davidson (2002) emphasizes that since the underlying unity of existence is reflected at work in the dynamic process of interdependence, the web of relationships at work manifests the workings of the whole. Therefore, when spiritual individuals recognize that the survival, success, and well-being at work depend on their mutual reliance in a collaborative system, they move towards greater harmony and effectiveness. The emerging desire to form a "community" within the culture demonstrates that teams and organizations that powerfully connect to their spirit, achieve exponential gains in products and services, and they find that work is sacred (White, 2001).

According to Rutte (1996), spiritual individuals are in touch with the source of creativity. As business people, they realize the value of creativity and innovation. Creativity is the cornerstone of business. It allows them to come out with new products and services that are unique. It allows them to do more with less.

According to Neck and Milliman (1994), spirituality can positively affect employee and organizational performance. It can lead individuals to experience consciousness at a deeper level, thereby enhancing their intuitive abilities. This can help individuals develop a more purposeful and compelling organizational vision, which can increase innovation. Spiritual values can enhance teamwork and employee commitment to the organization.

The importance of having spiritually oriented or spiritually competent persons at work cannot be negated. It has therefore become very important to understand what we mean by spiritual orientation and how it can be measured and developed in the employees.

Spirituality at Work and Spiritual Orientation

Spirituality at work necessarily comprise two factors i.e. individuals and organization. By organization, we mean its policies and practices. However, individuals follow these policies and practices and give real meaning to them. It is therefore essential for the individuals to be spiritually oriented to create and promote spirituality at work. The following sections attempt to conceptualize the meaning of spiritual orientation.

Campinha-Bacote (1995) in the spiritually competent model of nursing care is of the view that spiritual competence is a process (not an endpoint), consisting of three components: 1) Spiritual awareness, 2) Spiritual knowledge, and 3) Spiritual skill.

Zohar and Marshall (2000), while discussing 'spiritual intelligence' talk about knowledge and awareness being part of spiritual competence. According to them, 'spiritual intelligence is our access to, and use of meaning, vision, and value in the way that we think and decision that we make'. This intelligence is our transformative intelligence that reframes our answers to our fundamental questions.

We conceptualize spiritual orientation as the self-perceived spiritual knowledge, skills, and attitude that influence one's ability to derive meaning and purpose from work and life.

Spiritual attitude: Is keeping a positive view, thinking beyond the apparent and having a feeling of peace within.

Spiritual knowledge: Is being close to self, understanding the needs of others and knowing that everything is affected by everything else.

Spiritual skill: Is the ability to practice spirituality well, the ability to live in the moment and the ability to take responsibility.

Measurement of Spiritual Orientation

Paradigm development involves a protracted process of conceptual assimilation. Scholars gradually collect instances of intellectual confirmation or falsification in order to build consensus for a predominant way of viewing a construct, and the framework upon which they build this theoretical consensus is data (Krahnke, Giacalone, & Jurkiewicz, 2003). Scientific methods provide the dispassionate objectivism and confirm our personal assumptions as common view. Empirical data gives us confidence that when we talk about certain ideas we are referring to the same thing. Organizations need conclusive evidence connecting workplace spirituality with bottom line performance. For workplace spirituality to be a viable construct in improving organizations and the people in them, it requires a degree of confidence that can be attained only through scientific measurement. Only with reliable data can we assuage the understandable reluctance of organizations to integrate spirituality into their workplaces. Attaining reliable data requires that valid, generalizable measures be developed.

Frequent attempts have been made in the past to define spirituality and to analyze its components. However, measurement of spirituality at work has been given little attention. In the following section, an attempt has been made to look at the existing tools to measure spiritual orientation.

Existing Instruments

In an attempt to conceptualize and measure spirituality at work, Ashmos and Duchon (2000) classified spirituality at work into three dimensions: 1) Inner life as spiritual identity; 2) Meaning and purpose in work; 3) A sense of connection and community. According to

them, the presence of these dimensions at the workplace contributes to organizational performance. They emphasize that organizations should provide the environment and the opportunity to individuals to express different aspects of their selves at work. They do talk about the importance of the inner life of employees and have focused on the measurement of their attitude about themselves, their immediate work environment, and the organization as a whole. However, they have ignored the skills and the awareness that are requisite for being spiritually competent. Ashmos and Duchon (2000) have focused on spirituality at work from the organization's perspective. They have not focused on the individual's spiritual orientation, with which an individual is likely to find meaning from any work that he or she does. The individual enjoys inner peace, respects others, and is willing to do service for others.

Ellison (1983) in the context of measuring the quality of life has developed a 'spiritual well being' scale. The researcher has tried to measure two inter related yet distinct aspects of spirituality: 1) The religious, and 2) The existential well-being. Thibault, Ellor, and Netting (1991) developed a scale that enables the practitioners to assess the type of spiritual functioning and fulfillment desired by older adults in long term care settings.

Previous attempts to measure spirituality have clearly ignored the measurement of spiritual orientation i.e. the spirituality within an individual. Although Ashmos and Duchon (2000) have measured spirituality at work and talked about the inner life of employees, they have ignored its measurement from the perspective of individual skill, knowledge and attitude. They have emphasized that the organization should provide an environment that encourages the growth of inner life of its employees. Ellison (1983) included religion into the definition of spirituality. Religion and spirituality are widely distinguished and spirituality is considered be beyond religion (Mitroff & Denton, 1999; Peterson & Nelson in Camphina-Bacote, 1995). Thibault, Ellor and Netting (1991) factored the concept in narrow and specific

way. Their scale attempts to focus on the needs that older persons have to continue and fulfill for a satisfying spiritual life.

The existing instruments measuring spirituality do not meet the needs of the industry to measure the individual's spiritual orientation, since their focus is on the organizational perspective i.e. what an organization should do to provide an environment that gets the best out of its employees. Identification and measurement of spiritual orientation, which an individual needs, to give his/her best at work, has not been attempted until now.

The present study therefore attempts to develop a scale to measure an individual's level of spiritual orientation. It focuses on the individual's spirituality. For an organization to meet competition, the employees should be able to appreciate the work environment and be competent enough to bring one's complete self to the work. The argument is that an individual high on spiritual orientation will be able to experience joy and meaning in any job and at any workplace, compared to those who are low on spirituality.

Spirituality is something that is inherent in a human being like self-esteem or self-efficacy. However, individuals differ in their knowledge, skills, and attitude with respect to spirituality. The level of awareness about spirituality within the self differs across individuals. Individuals differ in their attitude and the ability to practice spirituality well (Howard, 2002). Spirituality can be enhanced in an organization by providing an environment that supports the bringing in of individuals' spirituality to the work place. In line with this, Turner (1999) talks about the signs of a spiritually oriented workplace e.g. 'balance between work and family is encouraged', 'employees feel comfortable speaking about their ideas'. The other way to enhance spirituality at the workplace is to bring in individuals high on spiritual orientation to create such an environment. Most of the studies and scales that have been developed until now have focused on what an organization needs to do in terms of practices and policies to enhance the spiritual environment of the workplace. In order to bring individuals high on

spiritual orientation into organizations, there is a need to develop a scale to measure spiritual orientation at the individual level.

Methodology and Results

The present study attempts to develop a scale to measure spiritual orientation. The study has been conducted in two phases. The first phase involved an exploratory study. In this phase, spiritual orientation and its components were conceptualized and an exploratory analysis was done. The second phase involved a confirmatory analysis based on the results of the exploratory analysis.

Sample

The sample comprised of 210 respondents with minimum six months work experience. Average work experience of the sample was 14.9 years. The average age of the respondents was 35yrs.

In the second stage of exploratory and confirmatory analysis, the sample comprised of 406 respondents. The average age of the population of this set of respondents was 37 yrs and the average work experience was 16.2 years. The sample consisted of both government servants and individuals from private organizations.

The sample for the construct validation consisted of 196 respondents. Their average age was 36 yrs and average work experience was 15.4 years.

Stage I

Item Generation

Based on the theory and the definitions of spirituality given by various authors, the following twelve dimensions of spiritual orientation were identified: 1) Self-awareness; 2) Vision; 3) Capacity to face adversity; 4) Connectedness; 5) Accepting diversity; 6)

Spontaneity; 7) Respect and compassion; 8) Partnership; 9) Energy; 10) Flexibility; 11) Service towards others; 12) Belief in higher power.

A list of potential items was generated under each dimension keeping in view the attributes of knowledge, skill, and attitude to be fairly covered through the items. The items were developed based on definitions of spirituality given by various researchers. The experts consisting of academicians from premier institutions working in this area reviewed the items and the dimensions. These experts were professors who have general interest in spirituality literature and have research interest in this area. Based on the recommendations of the experts the twelve dimensions were redefined and reduced to nine since there was overlap in the dimensions identified. Dimensions like energy, flexibility, and partnership were removed. Experts viewed these to be part of other dimensions like capacity to face adversity, serving others, or feeling of inter-connectedness. The nine dimensions that were identified for exploratory analysis were:

1. ***Inter-connectedness.*** (intco) (Everything is a part and expression of oneness, interconnected with everything else)
2. ***Self-awareness.*** (selfa) (Knowing self, what I believe in? What will I fight for?)
3. ***Respect for others.*** (respe) (Personal privacy, physical space and belongingness, religion, gender, life style)
4. ***Capacity to face adversity.*** (adver) (No matter how bad things get, they will always work out somehow)
5. ***Being vision and value led.*** (vival) (It is reaching beyond, or having a sense that things could be better)
6. ***Feeling of inner peace and calm.*** (inpeac) (Happy with self, environment, work and others; no complaint with life, feeling positive about life)

7. *Service towards humankind.* (serhum) (Caring, hopeful, kind, compassionate and empathetic towards others; walking in the neighbor's shoes)
8. *Providing meaning and purpose in life.* (mepur) (Self and others)
9. *Being nondenominational.* (nonde) (Beyond religious boundary)

A Likert's type five-point scale with 42 items was constructed for these nine dimensions of spiritual orientation. The items were factor analyzed with an exploratory factor analysis applying varimax rotation. The analysis extracted nine factors. The cut off value of the loading was .40 and above. Stevens (2002: 394) suggests loadings which are about .40 or greater for interpretation purposes. According to Hair, Anderson, Tatham, and Grablovsky (1979: 234) rule of thumb factor loadings $\pm .30$ are considered significant. Loadings $\pm .40$ are considered more important, and if loadings are $\pm .50$ or greater they are considered very significant for sample size of 50 or more. Component rotated matrix of the exploratory factor analysis is given in Table 1.

Table 1 about here

Six out of nine factors were retained since some of the items did not get significant loadings. The items of some of the factors were scattered and did not have any theoretical meaning for the items of other factors. Some of the factors that emerged from the factor analysis did not form a meaningful category in accordance with the literature. Some items seem to convey different meanings to different respondents as the factors comprised of different items. For example, factor no. 2, included items from three dimensions i.e. respect for others, inner peace and calm and self-awareness. The same three dimensions formed three other factors consisting of almost exclusive items of each these dimensions. Hair et al. (1979: 237) suggest that factors that are not definable shall be reported but not considered for interpretation. Factor 2 was therefore not considered. Similarly, factor 8 also included items from three different factors. Two items of factor 8 were from the dimension self-awareness,

but then one of the items was positively significant while the other was negatively significant, though it was not a reverse coded item. This indicates that due to the abstract nature of spiritual orientation, items were not perceived to be clear in meaning and thus were interpreted differently from what it was defined according to theory. The factor was indefinable. Only one item had significant loading on factor 9. This could not be a representative factor unless the sample size was above 300 (Stevens, 2002: 395). This led to reduction of three factors, as these factors could not be defined.

Stage II

After an exploratory factor analysis, the total numbers of items on the scale were 22, which formed six dimensions of spiritual orientation. The categorization of the dimensions into knowledge, skill, and attitude was ignored. The items in the six dimensions identified after exploratory factor analysis did not fairly represent these categories. Due to the reduction in items, some dimensions were left with items consisting of just either the knowledge or skill or the attitude category. The six dimensions on the scale were:

- 1) Service towards humankind (serhum)
- 2) Feeling of inner peace and calm (innerpea)
- 3) Being vision and value led (vision)
- 4) Inter-connectedness (intercon)
- 5) Respect for others (respect)
- 6) Self-awareness (self awa)

The new data of 406 respondents was used to do an exploratory factor analysis based on the identified six dimensions. The new data also extracted the same six dimensions, validating the factors extracted from the first set of data using exploratory factor analysis. The rotated component matrix is given in the Table 2. The exploratory factor analysis with the new set of data was done solely for confirming the six dimensions.

Table 2 about here

A confirmatory factor analysis was conducted, since current thinking on construct validation argues that it is the most rigorous test of factorial structure. It helps to specify a priori theoretically meaningful models, compare competing models, evaluate the overall goodness of fit of a model, obtain parameter estimates adjusted for measurement error, assess correlated errors of measurement and identify specific parameters, which if included in the model would improve overall fit (Greenbaum & Derick, 1998).

A series of models were specified for first-order CFA using Lisrel 8.30 for the scale with 22 items. While defining the models, the items that were having lower loadings were also reconsidered. Models with 22 items, 16 items, 14 items, and 18 items were formed. A covariance matrix was computed using PRELIS 2.3 and the parameters were estimated by using maximum likelihood. Model fit was assessed using the Satorra-Bentler scaled Chi-square, the root-mean square error of approximation (RMSEA) with 90% confidence intervals (90% CI). The expected cross validation index (ECVI: index used for the purposes of model comparison, with the smallest values being indicative of the best fitting model) was used to assess the comparative fit of the models.

Four items were removed from the 22 items scale based on the loadings and the theoretical significance during the exploratory factor analysis with the new data set. The item 'self-awareness 4' was removed, as it was not found to have significant loading on any of the six factors (Hair et al. 1979). Item 'self-awareness 3' was dropped as it had significant loading in factor 2 where all other items were from the dimension 'respect for others'. Thus, it was not giving theoretical meaning to the dimension. 'Inter connectedness1' and 'respect1' were dropped as these items had significant loading on two factors (Hair et al., 1979).

Comparative estimates of fit indices are given in Table 3. The model with 18 items gave overall best statistical output. The path diagram is given in Fig. 1 and the statistical details are given in Table 4.

Table 3, Fig. 1 & Table 4 about here

Second-order CFA model was developed because hierarchical factorial structure exists between the six dimensions and spiritual orientation. The first-order factors are explained by a higher order structure, which is second-order factor of spiritual orientation. Estimates of fit indices for second-order CFA are given in Table 5. The path diagram is given in Fig. 2.

Table 5 & Fig. 2 about here

Construct Validation

Carmines and Zeller (1979) suggest that both criterion validity and content validity have limited usefulness for assessing the validity of empirical measures of theoretical concepts employed in social sciences. Construct validity is woven into the theoretical fabric of the social sciences, and is thus central to measurement of abstract theoretical concepts. Construct validity is concerned with the extent to which a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are measured. Therefore, for the present study we have calculated the construct validity of the spiritual orientation scale based on the theoretical relationship between burnout and spirituality.

Golden, Piedmmont, Clarrocchi, and Rodgerson (2004) found that spirituality showed incremental significance in predicting burnout even when controlling for personality and work environment, though the contribution was small. The lesser the spirituality of an individual, higher is the burnout. Spirituality is seen as the preventive measure for burnout. In an essay titled "Recapturing the soul of medicine," Dr. Remen (2001) reminds us that the

medical practitioners work is a service, which is a work of the heart and the soul, and it involves human relationship. She challenges doctors to find meaning in their work by seeing it differently, as through the eyes of a poet or a writer. Spirituality also requires pondering larger questions of life, such as where we fit in relation to the society of man, the world ecology and the universe - questions that are so easily abandoned when doctors are stressed, and yet are so necessary for their spiritual health. Considering the wide acceptance of spirituality as a coping mechanism for stress and burnout, one can hypothesize that:

Hypothesis 1: A person high on spiritual orientation will experience low burnout.

Maslach and Jackson's (1981) burnout inventory was used for construct validation. Data was collected from 196 respondents on the two dimensions (Emotional Exhaustion and Depersonalization) of the inventory, since the scale reflects a high degree of burnout in high scores on emotional exhaustion and depersonalization and low scores on the personal accomplishment. The personal accomplishment subscale has been taken as independent of the other two subscales by the authors. The correlation was established between the dimensions of the spiritual orientation scale and the Maslach and Jackson's burnout inventory. As hypothesized, all the six dimension of the spiritual orientation scale were negatively correlated at (.05 level of significance) to the burnout dimensions i.e. emotional exhaustion and depersonalization, even though the correlation values are low. The correlation matrix is given in Table 6. Comparative estimates of fit indices are given in Table 3. The model with 18 items gave overall best statistical output. The path diagram is given in Fig. 1 and the statistical details are given in Table 4.

Table 6 about here

Reliability Test

Finally, reliability check was done for the final scale with 18 items. Out of six dimensions, five dimensions were reliable with alpha values of 0.6 and above. The self-

awareness dimension had an alpha value of 0.5. Alpha value of the overall scale with 18 items was .82. The alpha values of the six dimensions are given in the table 7 along with the no. of items in each dimension.

Table 7 about here

Discussion

The basic objective of the study was to conceptualize spiritual orientation at work and then develop a measure for the same. Initially, nine dimensions of spiritual orientation were identified. The exploratory factor analysis reduced it to six dimensions. The exploratory factor analysis with the new set of data validated the six dimensions. However, four items were dropped since either these items did not show significant loadings on any of the other factors or the loading in a particular factor was not supported theoretically. The confirmatory factor analysis compared various models and the 18-item model was found to be the best fit.

Spirituality, though being a significant aspect of human experience, it remains a complex and somewhat vague concept (Thibault et al., 1991). Since spirituality is highly individual and intensely personal, the interpretation and attempt to make it objective are likely to be difficult. The Maslach and Jackson's (1981) burnout inventory was used for the construct validation. This is based on the hypothesis that spiritually oriented people are likely to have less stress and burnout since a highly spiritual person is likely to have inner peace. He/she is likely to be service oriented towards humankind and will face less conflict as they will have respect for others. Therefore, it was hypothesized that the burnout and stress will be less for people high on spiritual orientation. The negative correlation of the two dimensions of Maslach and Jackson's (1981) burnout inventory and the spiritual orientation scale do support the above hypothesis at .05 level of statistical significance, even though the correlation values are low.

The results of the statistical analysis are moderately significant. Further analysis can be done to improve the scale by developing some control items. This would help to strengthen the reliability of the dimensions. The demographic variables like age, sex, or region can be used to identify the differences in the answering pattern and to validate the scale. Moreover, other categories of the population sample e.g. scientists; engineers etc. can be used to strengthen the reliability of the scale.

Limitation

In the confirmatory factor analysis, an asymptotic covariance matrix was used for generally weighted least square. It is a good measure if the sample size is very large. In the present study, the sample size was not large enough to go for asymptotic covariance analysis.

The study could not follow the definition of spiritual orientation as attitude, knowledge and skills, since the items of the dimensions did not fall into any meaningful category of spiritual attitude, knowledge and skills after an exploratory factor analysis.

Conclusion

With the advent of knowledge workers and changing work demands, in order to face competition and perform well, spiritually oriented work environment and high spiritualism in individuals has become essential. The stress created by the abstract and unobservable nature of work demands that the individuals maintain their inner and outer equilibrium. Therefore, it has become important to focus on the spiritual needs and orientation of the employees. The needs of educated individuals who are seeking meaning in their jobs have to be addressed. In fact, organizations today need to bring in employees who are spiritually competent to enhance a fulfilling environment for all. The measurement of spirituality in individuals will not only help organizations in building a helpful, interconnected, respecting and peaceful work environment but will also help the organizations to achieve financial gains in the

completive business environment. The measurement of spirituality of individuals will help the organizations to facilitate the development of the individual through training and self-awareness programs. This study is an initial attempt to facilitate the individual and organizations' growth by providing an instrument to measure spiritual orientation. This will help the organizations to make efforts to measure the individuals' spiritual orientation levels and enhance their performance with better adjustment to their work and organization.

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Annexure

Stage II: Exploratory Factor Analysis with 42-item Scale

Table no. 1: Rotated Component Matrix of 42-item scale (N = 210)

	Rescaled Component								
	1	2	3	4	5	6	7	8	9
serhu 34	.75	.07	.20	.15	.04	-.02	.16	-.01	.12
serhu 33	.73	.07	.15	.05	.10	.03	-.02	.24	.07
mepur 35	.68	.27	.21	.25	.12	.02	.06	.02	.18
serhu 32	.52	.35	-.09	.07	.13	.31	.08	-.14	-.06
serhu 31	.44	.23	.07	-.04	.37	-.05	.18	.01	-.06
respe 11	.023	.65	.03	.24	.12	.17	-.03	-.04	.15
selfa 10	.09	.61	.01	.17	.07	.02	-.11	.06	-.01
respe 13	.11	.60	.24	-.00	-.09	.02	.43	.16	-.15
inpea 29	.19	.49	.15	.18	.28	-.33	.09	.21	.24
inpea 30	.26	.48	.18	-.05	.30	-.01	.04	-.14	-.04
selfa 9	.12	.43	-.08	.12	.21	.30	.05	-.03	.13
respe 14	.30	.43	.09	-.08	-.05	.40	-.01	-.20	.05
vival 25	.14	.04	.66	-.08	.27	-.06	.08	.06	.08
vival 22	.02	.05	.61	.13	-.03	.08	-.02	-.02	-.08
vival 24	.17	.03	.60	.12	.00	.13	.01	-.02	.14
vival 23	.07	.15	.54	.07	.07	.25	.15	-.06	-.18
nonde 41	.19	.10	.52	-.07	.12	.19	.26	.10	.21
adver 18	-.08	-.05	.37	.22	.23	.23	-.08	.10	-.17
mepur 37	.35	.17	-.14	.67	.14	-.03	.06	.14	-.03
mepur 36	.46	.10	-.04	.66	.01	-.01	.17	-.03	-.18
intco 4	.12	.16	.40	.58	-.09	.17	.00	-.04	.10
intco 2	-.01	.05	.36	.55	.07	.01	-.03	-.15	-.10
intco 3	-.12	.11	.06	.53	.15	.21	.05	.13	.14
nonde 39	.09	.27	.15	.49	.26	-.01	.38	-.11	.38
mepur 38	.20	.28	.10	.44	.16	.02	-.08	.39	.10
inpea 27	.15	.08	.17	.12	.81	.07	.04	-.01	-.08
inpea 26	.12	.09	.06	.09	.78	.11	.13	.08	-.01
inpea 28	-.01	.26	.05	.09	.55	.05	-.09	.16	.14
nonde 40	.28	.04	.13	.23	.30	.30	.22	.17	.22
respe 16	-.02	.04	.22	.09	.08	.65	.01	.02	.00
respe 17	.09	.05	.21	.07	.20	.55	.06	.07	-.00
respe 15	.25	-.04	.07	.10	-.00	.55	.21	-.06	-.09
respe 12	-.23	.21	-.01	-.08	-.01	.51	-.03	.03	.03
selfa 5	-.03	-.09	.27	.24	.14	.43	.00	.40	-.03
selfa 8	.10	.06	.13	.03	.00	-.03	.85	.03	.09
selfa 7	.14	-.16	-.03	.10	.13	.22	.80	.03	.02
selfa 6	.04	.16	-.12	.14	.21	.21	.22	.70	.14
intco 1	-.01	.14	.03	.13	.05	.10	-.00	-.49	.12
adver 19	.18	.40	.13	.19	.11	-.03	-.16	.44	.09
nonde 42	.29	.15	.16	.05	.16	.12	-.02	-.04	.79
adver 21	.08	.05	.25	.09	.26	.29	-.12	-.04	-.36
adver 20	.04	-.02	.25	.03	.19	.18	-.11	-.02	-.34

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 11 iterations.

Stage II: Exploratory Factor Analysis with 22- item Scale on New Data Set

Table 2: Rotated Component Matrix of 22-item scale (N = 406)

	Rescaled Component					
	1	2	3	4	5	6
Vision 4	.73	-.07	.17	.06	.12	.10
Vision 2	.66	.31	.07	.12	.10	.06
Vision 1	.54	.13	-.06	.16	-.02	.02
Intercon1	.54	-.04	.05	.10	.44	.04
Vision 3	.53	.22	.14	.09	.24	.04
Respect2	.17	.77	-.04	.12	.09	-.08
Respect4	.02	.64	-.08	.06	.02	.07
Respect3	.23	.63	.19	.13	.10	-.01
Self awa3	-.02	.55	.35	.03	.07	.16
Respect1	.41	.44	.06	.00	.01	.19
Serhum 4	.056	.03	.85	.01	.26	-.03
Serhum 3	.05	.03	.71	.16	.18	-.00
Serhum 2	.03	.18	.55	.04	-.08	.34
Serhum 1	.24	-.03	.54	.31	-.11	.14
Innerpea1	.12	.15	.07	.86	.07	-.01
Innerpea2	.21	.05	.10	.78	.13	.04
Innerpea3	.03	.06	.12	.61	.17	.21
Self awa 4	.20	.20	.27	.38	-.11	.25
Intercon3	.28	.15	.21	.06	.74	.04
Intercon2	.09	.12	.06	.22	.73	.22
Self awa1	.14	.10	.07	.04	.18	.76
Self awa2	.06	-.01	.11	.20	.06	.74

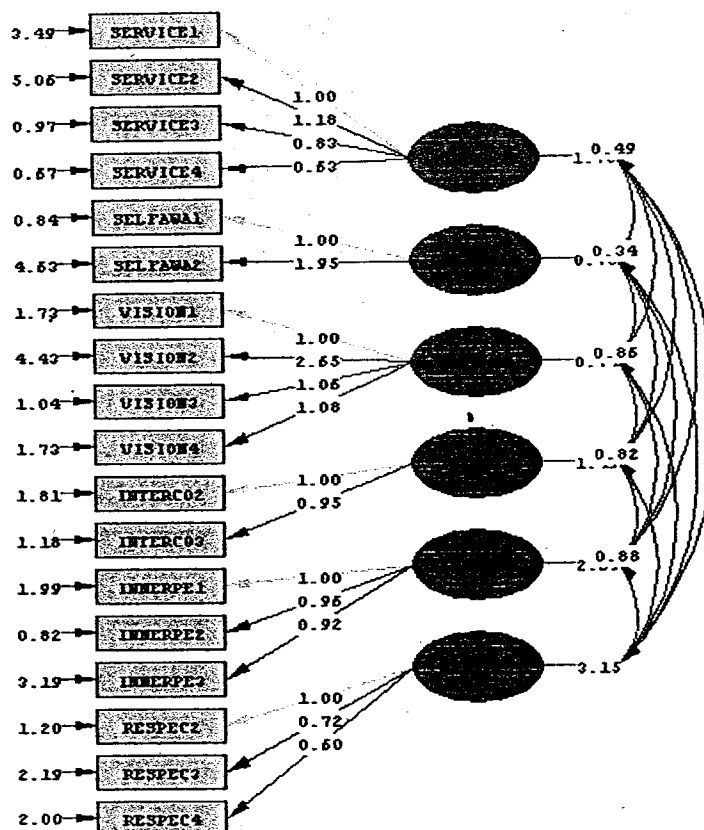
*Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.*

Confirmatory Factor Analysis (First-Order CFA Models)

Table 3: Comparative Estimates of Fit Indices

Model	DF	P	GFI	RMSEA
Six dimensional model with 22 items	194	0.0	0.78	.11
Six dimensional Model with 16 items	89	0.0	0.85	.10
Five dimensional model with 14 items	67	0.0	0.88	.10
Five dimensional Model with 16 items	94	0.0	0.83	.11
Six dimensional Model with 18 items	129	0.43	0.90	.01

Fig. 1: Path diagram (First-order CFA models)



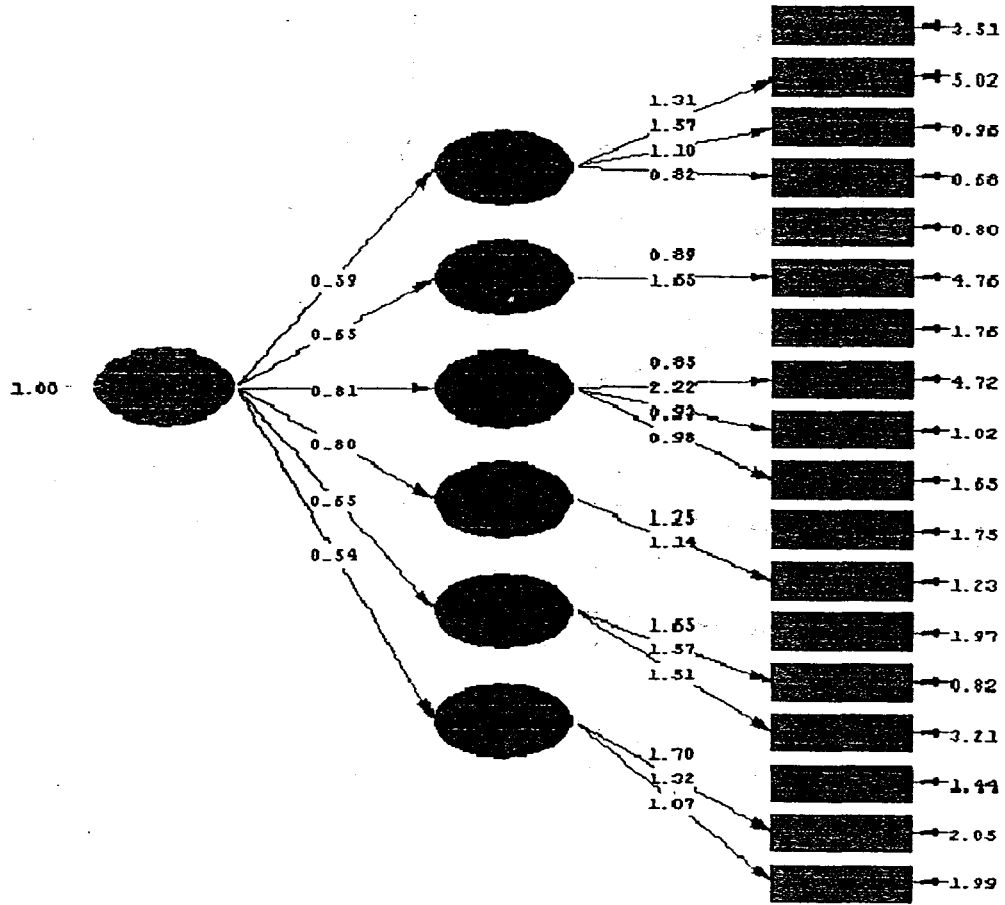
Chi-Square=122.26, df=120, P-value=0.42557, RMSEA=0.013

Table 4: Goodness of Fit Statistics of First-order CFA model of 18 items scale

Statistics	Value
Degrees of freedom	120
Minimum Fit Function Chi-Square	125.93 (P = 0.34)
Normal Theory Weighted Least Squares Chi-Square	122.26 (0.43)
Root mean Square Error approximation (RMSEA)	0.01
90 percent Confidence Interval for ECVI	1.87; 2.14
Root Mean Square Residual (RMR)	0.27
Goodness of Fit Index (GFI)	0.90
Adjusted Goodness of Fit Index (AGFI)	0.85
Parsimony Goodness of Fit Index (PGFI)	0.63
Normed Fit Index (NFI)	0.91
Non-Normed Fit Index (NNFI)	0.99
Parsimony Normed Fit Index (PNFI)	0.71
Comparative Fit Index (CFI)	0.99
Incremental Fit Index (IFI)	1.00
Relative Fit Index (RFI)	0.88

Critical N (CN) = 151.20

Fig. 2: Path diagram (Second-order CFA model)



Chi-Square=132.77, df=129, P-value=0.39217, RMSEA=0.016

Table 5: Goodness of Fit Statistics of Second-order CFA of 18 items scale

Statistics	Value
Degrees of freedom	129
Minimum Fit Function Chi-Square	134.80 (P = 0.34)
Normal Theory Weighted Least Squares Chi-Square	132.77 (0.39)
Root mean Square Error approximation (RMSEA)	0.02
90 percent Confidence Interval for ECVI	1.79; 2.09
Root Mean Square Residual (RMR)	0.29
Goodness of Fit Index (GFI)	0.89
Adjusted Goodness of Fit Index (AGFI)	0.85
Parsimony Goodness of Fit Index (PGFI)	0.67
Normed Fit Index (NFI)	0.90
Non-Normed Fit Index (NNFI)	0.99
Parsimony Normed Fit Index (PNFI)	0.76
Comparative Fit Index (CFI)	1.00
Incremental Fit Index (IFI)	1.00
Relative Fit Index (RFI)	0.88

Critical N (CN) = 150.44

Results of Construct Validity

Table 6: Correlations between dimensions of MBI and dimensions of spiritual orientation

	Serhum	Selfaware	Vision	Intconnected	Inner peace	Respect
Emotional Exhaustion	-.09	-.18**	-.22**	-.19**	-.31**	-.20**
Depersonalisation	-.23**	-.27**	-.32**	-.31**	-.24**	-.24**

Reliability Analysis

Table 7: Reliabilities of six dimensions and overall reliability of 18-items scale

Dimension	Alpha Value	No. of items
Service Towards Humankind	.69	4
Feeling of Inner Peace and Calm	.73	3
Being Vision and Value Led	.67	4
Inter-connectedness	.62	2
Respect for Others	.65	3
Self-awareness	.50	2
Spiritual Orientation Scale (Overall)	.82	18