

**TITLE**  
**IMPACT OF SPIRITUALITY ON JOB PERFORMANCE**

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**ABSTRACT**

*Purpose:* The purpose of the paper is to investigate the impact of individual spirituality on a person's job performance. Stress and job satisfaction act as a mediator while age acts as a moderator.

*Design methodology/ approach:* An online questionnaire was created and its link was e-mailed to the respondents. The responses were analyzed using path analysis and regression analysis.

*Findings:* Spirituality has a positive influence on job satisfaction and job performance, and a negative impact on stress. Stress has a negative impact on both job satisfaction and job performance. Job satisfaction has a positive influence on job performance. In addition both stress and job satisfaction partially mediated the effect of spirituality.

*Research implications/ limitations:* The implications of this study are high for courses like the Art of Living purporting to spread spirituality, the professionals looking to enhance their job performance and the corporates looking to increase employee productivity, through measures or courses designed for improving spirituality.

Limitations include non-establishment of a clear causal relationship between the indicated variables. Scales for measuring spirituality could also emphasize an India-specific context. All respondents having undergone the Art of Living course, a one-sided interpretation of spirituality could be likely. Job performance could be better measured through a third party response in place of the self-reported response used in this study.

*Originality/ value:* No study has as yet focused entirely on the effect of individual spirituality on job performance. There has also been no focused study of this relationship in an Indian context. In these aspects, our paper offers a new perspective.

*Keywords:* Spirituality, Job satisfaction, Stress, Job performance, Age, Art of Living.

*Paper type:* Research paper

## INTRODUCTION

There has been, for quite some time now a strong focus on spirituality and the effects that it has on aspects of work related life. As people work in jobs with ever increasing pressures and demanding schedules, a need for imbining spiritual values for the perceived calming effects it generates has made even corporate focus on inculcating spirituality in the workplace (Krishnakumar & Neck, 2002). There have been numerous works which have focused on how spirituality positively influences the work environment by saying that when dimensions of spirituality are incorporated in the workplace it could lead to greater fulfillment of the individual at the workplace (Butts, 1999). Personal fulfillment aside, it also leads to the person reconciling his personal needs with that of the organization, as also the need felt by corporate to help people lead a balanced life (Laabs, 1995) (Leigh, 1997).

What we seek to mention here is that spirituality at work does not need to connote any religious inclination or proselytization at the workplace. Spirituality as has been shown later, involves various aspects of personal traits that manifest themselves in a positive manner in the individual's behavior at the workplace. Our focus in this study is individual spirituality, and how it affects the job performance of the individual by affecting the job satisfaction and perceived stress. We propose that stress and job satisfaction act as mediators in the relationship between spirituality and job performance, with age acting as a moderating variable. Older people have been found to evince a greater interest in spiritual activities (Moberg, 2001) (Schultz-Hipp, 2001), and this forms a basis for our selection.

Existing academic research has largely focused on workplace spirituality and its effects on work attitudes. Individual spirituality has not been dealt with in as great detail as has workplace spirituality. We believe that individual spirituality is an important facet of spirituality per se, and thus a study to study its effect on job performance is merited. Work by King and Nicoll (King & Nicoll, 1999) has indicated strongly that organizational enhancement may be effected through individual spirituality and that organizational environment could play an important role in individual spirituality development. There is also a significant lack of research on the topic in an Indian context. In the light of differences between Eastern and Western concepts of spirituality, we feel that a study that is done with an Indian target sample would yield informative results.

### *Spirituality*

Though spirituality seems to be an abstract term, several philosophers and authors have tried to define it in their own way according to their own context. Some important definitions of spirituality which together capture its basic essence are described below:

Vaill (1996) defines spirituality as the feeling individuals have about the fundamental meaning of who they are, what they are doing, the contributions they are making. Koenig (2000) states that spirituality is the personal quest for understanding answers to ultimate questions about life, about meaning, and about relationship to the sacred or transcendent, which could (or not) lead to or arise from the development of religious rituals and the formation of community. Graber (2001) opines that spirituality implies an inner search for meaning or fulfilment that may be undertaken by anyone regardless of religion. Giacalone (2003) feels that spirituality is a framework of organizational values evidenced in the culture that promote employees' experience of transcendence through the work process, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy.

As is evident from the definitions, spirituality can be defined in different ways to highlight its various facets or sub-dimensions, which as per (Howden, 1992) and (Westgate, 1996) are stated as follows:

(a) *Meaning and purpose in life* – This represents the process of looking for or participating in relationships or events which increase a sense of personal significance, hope besides motivation for living (Howden, 1992)

(b) *Inner resources* - They involve depending on one's own inner strength and internal guidance system, using an internal sense of peace for finding peace with external forces, and searching within for guidance(Howden, 1992)

(c) *Transcendence* – It is associated with moving beyond one's ego(Maslow, 1971), as well as shifting one's main focus beyond one's self to others and to the world at large(Chandler, Holden, & Kolander, 1992).

(d) *Positive interconnectedness*- It involves a healthy sense of relatedness between the self and other people/other life forms, with the potential inclusion of a universal being (Howden, 1992).

Since several key concepts of spirituality cannot be translated conveniently and accurately from one language/culture to another, from a cross-cultural perspective, ensuring construct validity becomes difficult for the scales that attempt to measure such constructs especially in cross-national/ cross-cultural studies.

### ***Job Performance***

Job performance, by the very nature of the term encompasses various aspects related to achieving superior productivity and proficiency at the workplace. Job performance seems to be a vague term in that it includes so many aspects of work related behavior in it, but is a prevalent parameter for studying the functioning of individuals at the workplace. A common definition of job performance is due to Campbell(Campbell, McCloy, Oppler, & Sager, 1996) who considers performance as an action of an employee, not an outcome. Job performance has been identified as a function of various personality traits, most notably of the “Big Five” personality dimensions (Barrick & Mount, 1991). Significant support for the prediction of job performance from personality is established (Tett, Jackson, & Rothstein, 2006).The fact that job performance is a function of an individual’s personality attributes bolsters our contention of individual spirituality having an effect on job performance. With different kinds of jobs, measures and interpretations of job performance too are different. The various dimensions of job performance that are captured include interpersonal relations, task performance, down-time behaviors (Murphy, 1989); job-specific task proficiency, personal effort, demonstration of effort among others (Campbell, McCloy, Oppler, & Sager, 1996); useful personal behavior, technical competence, leadership and supervision among others (Borman & Brush, 1993). Each of the measure seems to have its own relevance given a particular job setting.

### ***Job satisfaction***

Job satisfaction is a measure of how content an individual is with his job. As with job performance, job satisfaction too has various interpretations. Among the thousands of articles that have been published on this topic, one of the more famous explanations of job satisfaction is due to Locke (Locke, What is job satisfaction?, 1969)(Locke, The nature and causes of job satisfaction, 1976) where he states in his ‘Range of Affect’ theory that job satisfaction can be expressed as the difference between what one needs and what one wants in an organization, and that the importance placed by an individual on a particular facet of work moderates the kind of satisfaction/dissatisfaction that he would experience. There are numerous other theories of job satisfaction and consequent models that have gained prominence, among them being the two factor theory(Herzberg, Mausner, & Synderman, 1959) which postulates that satisfaction and dissatisfaction in the workplace are driven by motivation and hygiene factors respectively; the work of Spector(Spector, 1997) which states that job satisfaction is a cognitive and affective response to work. As in the earlier construct,

it is again apparent that personal attributes exert significant influence in the determination of job satisfaction and this is hence a construct of importance in our model.

### ***Stress***

The concept of stress again has varied definitions:

Schultz & Schultz (2003) defines stress as the result of any demand on the mind or body, and feels that a critical point is reached when the demand exceeds the person's belief that it can be personally managed. Lazarus (1993) feels that stress is not an imbalance between real demands in the environment and the person's actual ability to adequately cope with the demands, but an imbalance between perceived demands and a person's appraisal of their ability to cope with the demands (on them).

As regards frequency of stress related experiences, Caple (2001) says that everyone experiences stress on a daily basis, but a label of normalcy does not make it benign. It can lead to serious health problems, and it deserves attention.

Thus the key factor behind stress is a person's perception of the reality and not necessarily, the actual situation. To measure stress 12 dimensions are used, some of which are: overload, resources and communication, job security, pay and benefits, psychological well-being, and job satisfaction (Brown, 2008)

In terms of occupational stress, job pressure and organizational support are considered as two key dimensions (Vagg, 1999). For measuring job stress, the three noteworthy approaches are: the sociological, psychological and physiological approaches. (Hurrell, 1998).

### ***Spirituality and stress***

The role of spirituality in impacting stress has been analyzed in many studies covering clinical health and recuperation. A significant negative correlation between spirituality and stress has been indicated (Tuck, Alleyne, & Thinganjana, 2006). While dealing with the health and healing process of an individual, it has again been indicated that stress chokes the human spirit and thus negatively impacts the holistic healing process (Seaward, 2000). While there has been a lack of any controlled experiment to evaluate the effectiveness of spirituality in dealing with patients with post-traumatic stress, it has been established that the use of clergy in dealing with the existential questions of such persons is beneficial (Sigmund, 2003). It has also been established that people who display a higher score on the Jarel spirituality scale (Hungelmann, Kenkel-Rossi, Klassen, & Stollenwerk, 1996) are more likely to claim that their workplaces have a positive emotional climate and produce less stress (Csiernik & Adams, 2002). Again, while exploring quality of life aspects in people suffering from chronic illnesses, it has been found that a high sense of coherence and spirituality is correlated with low levels of stress and high quality of life (Delgado, 2007).

Hence our hypothesis is *H1: Spirituality has a negative influence on perceived stress.*

### ***Spirituality and job satisfaction***

Investigations into spirituality and job satisfaction have by and large indicated that they are positively related. While dealing with the issue of enhancing palliative care for the dying, a group of doctors at the Life Path Hospice and Palliative Care Inc. in Florida found that member's integration of spirituality into their work contributes significantly to their improvement of job satisfaction (Clark, et al., 2007). Workplace spirituality has been found, when its dimensions of meaningful work and sense of community as developed in the Ashmos & Duchon scale (Ashmos & Duchon, 2000) are considered, to positively influence workplace satisfaction (Milliman, Czaplewski, & Ferguson, 2003). Spirituality has again been found to have a significant positive correlation with job satisfaction which helps to contain burnout in individuals (Komala & Ganesh, 2007). There have been studies, however, which have reported that in the presence of workplace spirituality, individual spirituality does not

influence job satisfaction very much (Pawar, 2009). In fact, it is suggested that employees who lead themselves towards an increased level of spirituality in the workplace by using specific cognitive strategies would experience positive effects, among them being an increased level of job satisfaction (Neck & Milliman, 1994).

Hence, our hypothesis is *H2: Spirituality positively influences job satisfaction.*

### ***Stress & Job satisfaction***

Stress and its effect on job satisfaction have been studied extensively either through theoretical discourse or through experimental setup in actual organizational settings. Most of the findings have corroborated the hypothesis that stress has a negative influence on job satisfaction and a few of the representative research available through literature review is presented below.

A study on the effect of workplace stress on job satisfaction in public hospitals was done in New Zealand. It indicated that the medical practitioners had high levels of stress and low levels of job satisfaction (Lim & Pinto, 2009). Survey among school administrators in Malta indicated that people with higher levels of stress were the ones who were least satisfied with their jobs (Borg & Riding, 1993). The classical study done in the 1950's showed that the employees with higher levels of stress had higher dissatisfaction with their work or workplace (Brayfield & Crockett, 1955). An experiment conducted on managers recorded their stress levels before and after a conditioning session. The stress levels dipped after going through the session and job satisfaction also increased (Orpen, 1984). Job satisfaction was found to be strongly associated with low or moderate levels of stress while it decreased with high or moderately high levels of stress. The study was done also to probe for any link of these attributes to heart diseases (Heslopa, Smith, Metcalfe, Macleod, & Hart, 2002).

Hence, our hypothesis is *H3: Stress has a negative influence on job satisfaction.*

### ***Job satisfaction & Job performance***

Job satisfaction is a key attribute that affects job performance in organizational setup. It has been extensively researched upon and the a few illustrative findings have been mentioned below.

The relation between job satisfaction and job performance has been investigated in a study of local or municipal level officers in Ohio which indicated that higher levels of job satisfaction led to higher degree of job performance (McCue & Gianakis, 1997). In the 1970s, experiments with state government employees in the US proved a strong correlation between job satisfaction and performance and the effect was more pronounced for non-stimulating jobs (Baird, 1976). A multiple regression analysis was conducted to increase the accuracy of prediction of job satisfaction- job performance correlation. This further corroborated the strong link between the 2 attributes by involving employees from 3 nationwide corporations in the US (Jacobs & Solomon, 1976). Survey conducted with MIS professionals confirmed a direct relationship between job satisfaction and performance which was also found to be influenced by factors like job characteristics (Igarria, 1991). An extensive study of the employees of customer service organizations on the West Coast of the US led to the findings that job performance is highest when the employees perceived a high level of job satisfaction (Wright, Cropanzano, & Bonett, 2007). A useful qualitative and quantitative review of the various literature published over the years on the relationship between job satisfaction and performance and their strengths/weaknesses can be found in (Judge, Thoresen, Bono, & Patten, 2001).

Based on these, our hypothesis is *H4: Job satisfaction has a positive impact on job performance.*

### ***Stress & Job performance***

Stress negatively affects job performance which has been confirmed by academic as well as sample study. The results of few of such findings have been listed below. The meta-analysis of both published and unpublished studies and the accompanying data spanning over 25 years was done. It revealed that stress is negatively correlated to job performance both directly and through mediation effects of job satisfaction(Fried, Shirom, Gilboa, & Cooper, 2008). The survey of banking sector employees in Nigeria explored the significant relationship between workplace stress and employee performance(Oleyede, 2006). Investigation of stress-job performance relationship through a sample survey among Chinese workers in Hong Kong suggested strong negative correlation between the two attributes(Oi-Ling, 2003). A sample study of employees of North American MNCs in Pakistan and Malaysia was done. The results showed that strong negative relationship existed between workplace stress and job performance(Jamal, 2007). Research done with nurses in the US also corroborated the significant negative correlation of job performance with workplace induced stress(Motowidloa, Packard, & Manning, 1986).

Hence, our hypothesis is *H5: Stress has a negative impact on job performance.*

### ***Spirituality and Job performance***

The relationship between workplace spirituality and organizational performance is again a well-researched topic. The thought self-leadership theory (TSL) which has been said to assist employees in experiencing more spirituality is also an indicator of increased job performance (Neck & Milliman, 1994). Spirituality does seem to create an environment in which the employees feel happier and perform better (Garcia-Zamor, 2003). In the 70s and early 80s there was a strong interest in transcendental meditation (TM), and numerous studies were done to capture the effectiveness of it on various workplace attitudes. It was reported that TM is correlated strongly with improved work performance and satisfaction (Alexander, Swanson, Rainforth, Carlisle, Todd, & Oates, 1993)(Frew, 1974). Whilst dealing with the topic of emotional intelligence and its effect on work related behavior, Tischler et al. have examined concepts of spiritual intelligence and exclaimed that spirituality has the potential to raise emotional intelligence and claimed that there exists a causal link between these and work success, wherein work performance is a constituent(Tischler, Biberman, & McKeage, 2002). In another study on spirituality among hospital workers, researchers have found that work unit performance is closely associated with spirituality(Duchon & Plowman, 2005). Spirituality in the workplace is also said to be the key to have a successful enterprise and identified as one of the reasons for employees to report better performance(Guillory, 1997).

Hence, our hypothesis is *H6: Spirituality positively influences job performance.*

### **MODERATOR**

As mentioned earlier, spirituality experiences have been shown to be significantly related to age(Moberg, 2001)(Schultz-Hipp, 2001). We thus aim to study the responses with age as a moderating variable.

### **METHOD**

An online questionnaire was used for data collection. Mails were sent with the survey link to around 600 people, 480 of whom responded. 48 responses were rejected as being outside the purview of research.

*Spirituality:* Since several key concepts of spirituality cannot be translated accurately from one language/culture to another, from a cross-cultural perspective, ensuring construct validity becomes difficult for the scales that attempt to measure such constructs especially in cross-national/ cross-cultural studies.

Factorial validity and internal consistency are thus inadequate for some spirituality scales while explicit references to God may not be appropriate for certain newer spiritual traditions.

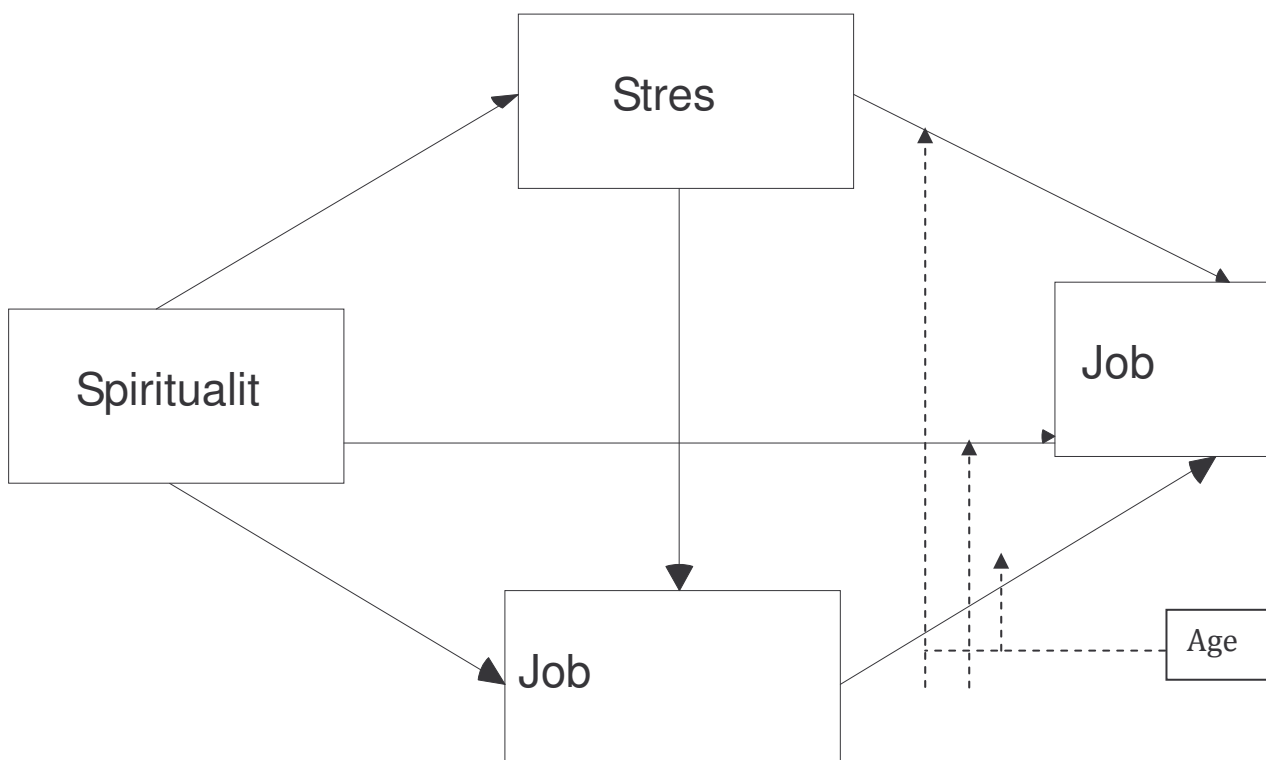
To avoid such problems, Dierendonck (2005) adapted the Howden Spirituality Assessment Scale (Howden, 1992) and created a shorter version that has ten items from the transcendence and inner resources scales. Since the Howden scale is one of the most widely used scales for measuring spirituality and keeping in mind requirements of brevity, we have used the shorter/ adapted version in our research.

*Stress:* Stress was measured by a 4 item scale developed by Cohen and Kamarck (Cohen, Kamarck, & Mermelstein, 1983).

*Job satisfaction:* Job satisfaction was measured by a 5 item scale developed by Brayfield and Rothe (Brayfield & Rothe, 1951).

*Job performance:* Job performance was measured by a modified 10 item scale developed by Wright et al (Wright, Kacmar, McMahan, & Deleeuw, 1995). The scale was modified to be used as a self-reported one. The modification proved to yield a reliable scale with a Cronbach's alpha of 0.85.

## MODEL



*Figure 1 – Research model*

Spirituality is taken as the predictor here and job performance as the outcome. Stress and

Job satisfaction are the mediating variables. Age is used as the moderating variable.

## RESULTS

### Scale reliability

The value of Cronbach's alpha, indicating the reliability of the scales for each of the constructs are: Spirituality (0.890), Stress (0.706), Job satisfaction (0.661) and Job performance (0.825).

A Cronbach's alpha with value greater than 0.7 implies that the scale is reliable enough to be used for the respective construct. The job satisfaction scale had a marginally less value of Cronbach's alpha.

On further investigation, it was found that only one of the items in the scale- 'js3', led to the loss of reliability as tabulated:

Item ID*	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
js3	20.7037	13.216	.199	.765

Table 1 – Adjustment for Cronbach's alpha (scale reliability)

Item 'js3' corresponds to the question – Each day of work seems like it will never end. The answer to this question might have been anomalous due to the following reasons:

The item is leading to loss of reliability because it was not able to capture the perception of job satisfaction of the respondents. Instead they might have been biased to answer the question through the perspective of spirituality. This could have happened because the survey is primarily dealing with the aspects of spirituality.

Another plausible reason could be that it was the first non-affirmative question encountered and the respondents may not have properly dealt with it properly. This in view of their orientation towards items in the affirmative sense encountered so far.

The respondents may have also replied based on the state of mind then, which may not reflect their true perception of the workplace and the satisfaction derived therein.

After removing the said item, the new Cronbach's alpha values are: Spirituality: 0.890; Stress: 0.706; Job satisfaction: 0.765; Job performance: 0.825.

With the general model in a figure format indicated below, the arrows indicate the relationship between constructs and represent the hypotheses. The moderating variable in this case does not have any effect on the model as all the data points are considered regardless of the value of the moderating variable.

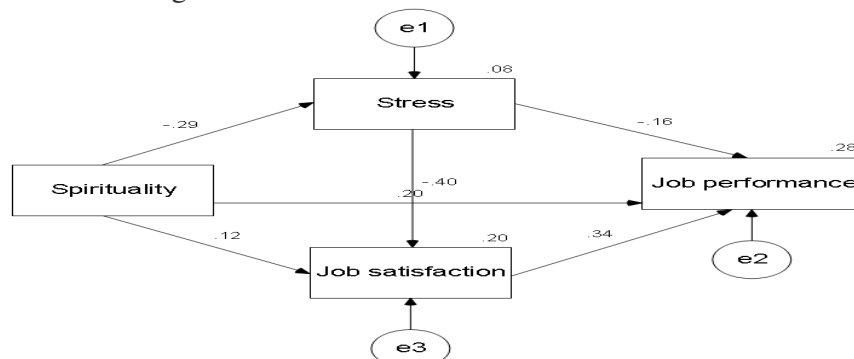


Figure 2 – Results of test hypotheses without moderation

The moderating variable is age for which 3 cases have been considered as

- 1) Without considering the moderating variable - age
- 2) Age less than or equal to median age (26 years)
- 3) Age greater than median age (26 years)



The standardized beta coefficients for the different constructs are given below, for the different values of moderator as well in the absence of moderating variable. The beta coefficients which are not significant are in **bold and red**, indicating the rejection of the corresponding null hypothesis

<i>Hypothesis</i>	<i>Antecedent</i>	<i>Dependent</i>	<i>Without moderation</i>	<i>Age &lt;= 26</i>	<i>Age &gt; 26</i>
H1	Sp <sup>1</sup>	St <sup>2</sup>	-.291	-.367	-.229
H2	Sp	JS <sup>3</sup>	.119	<b>.102</b>	<b>.027</b>
H3	St	JS	-.403	-.450	-.498
H4	St	JP <sup>4</sup>	-.162	<b>-.080</b>	-.297
H5	JS	JP	.339	.182	.275
H6	Sp	JP	.197	.333	.144

Table 2 – Standardized beta coefficients for the test hypotheses

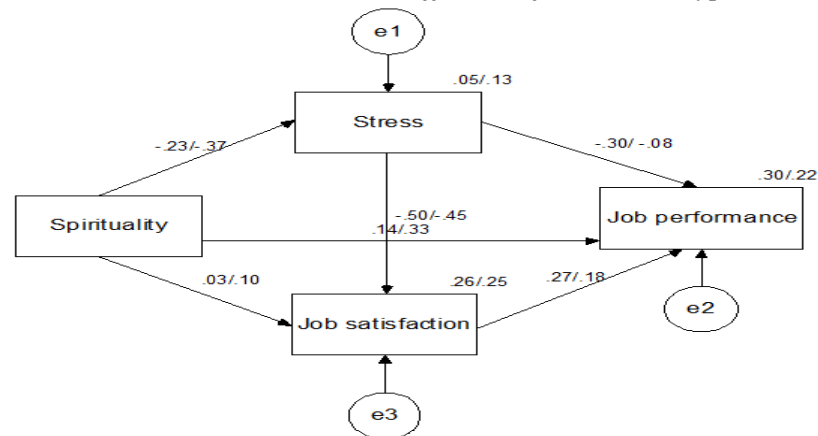


Figure 3 – Results of test hypotheses with moderating variable

The model with the moderating effect has been indicated above. The arrows indicate the relationship between constructs. The dichotomous moderating variable in this case takes two values and in each case only the data points corresponding to that value are analyzed.

X1/X2 – X1 values are corresponding to age <=26.

X2- values are corresponding to age > 26

### Mediation effect

The mediation effect of stress and job satisfaction has been studied under the conditions

- 1) Without considering the moderating variable - age
- 2) Age less than or equal to median age (26 years)
- 3) Age greater than median age (26 years)

### Calculation of mediation effect

<sup>1</sup>Spirituality

<sup>2</sup>Stress

<sup>3</sup>Job satisfaction

<sup>4</sup>Job performance

Mediator	<i>Sp → JP (A)</i> (direct effect)			<i>Sp → JP (B)</i> (with mediation)			<i>(A-B)</i> Mediation effect		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Job Satisfaction	0.324	0.411	0.251	0.229	0.353	0.191	0.095	0.095	0.060
Stress	0.324	0.411	0.251	0.237	0.351	0.151	0.087	0.087	0.100
Stress + Job Satisfaction	0.324	0.411	0.251	0.197	0.333	0.144	0.127	0.127	0.110

Table 3 – Results of mediation effect

The standardized coefficient for  $Sp \rightarrow JP$  with mediation effect is less than that for  $Sp \rightarrow JP$  without any of the mediator(s). The mediation effect is thus partial in all the three cases considered

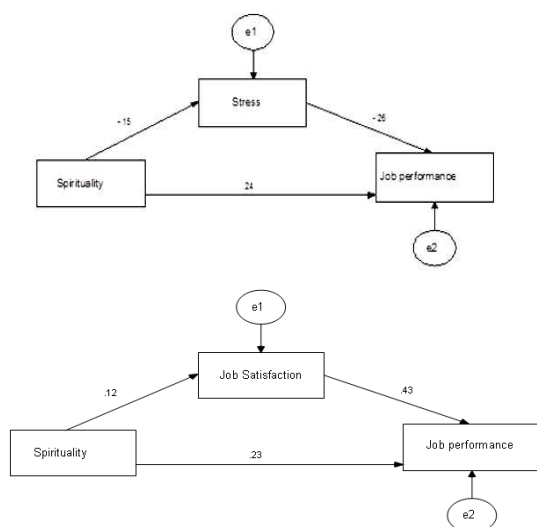


Figure 4 – Mediation effect of Stress and Job Satisfaction

**Test of significance of mediation effect (Sobel Test)**

The Sobel Test is performed to determine whether the mediation effect is significant. It is said to be significant if the Sobel statistic is greater than 1.96 and one-tailed probability is less than 0.05.

Mediator	(1)		(2)		(3)	
	Z	p-value	Z	p-value	Z	p-value
Job Satisfaction	2.497	0.012	1.425	0.077	0.432	0.332
Stress	3.049	0.002	1.140	0.127	2.614	0.004

Table 4 – Results of Sobel Test

From the above calculations, it can be inferred that the mediation effect of stress and job satisfaction at the 0.05 level of significance are –

- 1) Individually significant
- 2) Stress and job satisfaction are both not significant
- 3) Stress is significant while job satisfaction is not

**Discussion**

As mentioned in the table above, spirituality has a more pronounced effect in reducing stress among the younger age group. This can be explained by the fact that older people generally are more mature and have the hindsight of experience with leads to a more evolved

level of inner spirituality(Boswell, Kahana, & Anderson, 2006). The younger age group perhaps being exposed to concepts of spirituality for the first time, are able to realize more significant benefits on imbibing them at the workplace.

The degree of association of stress with workplace attributes is found to be more pronounced in the case of the older age group. This can be explained by the fact that younger people have better stress handling capacity and stress influences their performance to a lesser extent. Previous studies have also indicated that stress has higher negative association with age(Williams, 2003).

Job satisfaction has been found to have a positive correlation with age(Glenna, Taylor, & Weaver, 1977). The findings of our survey indicate that for the senior age group, job satisfaction has more influence on job performance through a higher beta coefficient in the case of seniors group.

### ***Limitations and conclusion***

A limitation of this study was the fact that a causal relationship between spirituality and job performance could not be established. Future research may deal with longitudinal samples which would help in this end.

A second limitation of the study was the fact that we used scales which are designed for use in a Western setting. Even though the spirituality scale makes no explicit reference to God, we feel that a version that would incorporate some India specific items would have possibly made the respondent feel in familiar territory.

A further cause of doubt could arise from the fact that all of the respondents had undergone an Art of Living course sometime in their lives. A person not exposed to other forms or versions of spirituality could possibly view spirituality only in the way Art of Living portrays it as. Future research could overcome this aspect by dealing with a more diverse sample set.

Since job performance was measured by a self-reported scale, this could be a further limitation in interpretation of the results. A more suitable way of measuring it would be through the use of a scale answered by a colleague or a superior of the respondent.

In spite of these limitations, this paper has dealt with an issue not dealt with in much detail in existing literature. Our finding that spirituality positively influences job performance could hold important implications for corporates looking for enhanced job performance from employees, in that they can look for measures/courses designed at improving the spirituality level of employees. Given the fact that all of the respondents had undergone the Art of Living course and displayed high levels of spirituality, it would also be helpful for organizations similar to the Art of Living Foundation that conduct such courses to see how they may further modify their courses to actually induce spirituality in participants, as a step to improve job performance.

### **BIBLIOGRAPHY**

- Alexander, C. N., Swanson, G. C., Rainforth, M. V., Carlisle, T. W., Todd, C. C., & Oates, R. M. (1993). Effects of the Transcendental Meditation program on stress reduction, health, and employee development: A prospective study in two occupational settings. *Anxiety, Stress and Coping: An International Journal*, 6, 245-262.
- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management*, 12 (4), 134-45.
- Baird, L. S. (1976). Relationship of performance to satisfaction in stimulating and nonstimulating jobs. *Journal of Applied Psychology*, 61 (6), 721-727.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five Personality Dimensions and Job Performance: A Meta-Analysis. *Personnel Psychology*, 44, 1-26.
- Borg, M. G., & Riding, R. J. (1993). Occupational Stress and Job Satisfaction among School Administrators. *Journal of Educational Administration*, 31 (1).
- Borman, W. C., & Brush, D. H. (1993). More progress toward a taxonomy of managerial performance requirements. *Human Performance*, 6 (1), 1-21.

- Boswell, G., Kahana, E., & Anderson, P. D. (2006). Spirituality and Healthy Lifestyle Behaviors: Stress counter-balancing effects on the well-being of older adults. *Journal of Religion and Health, 45* (4), 587-602.
- Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. *Journal of Applied Psychology, 35*, 302-311.
- Brayfield, A., & Rothe, H. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*, 307-311.
- Brown, J. C. (2008). *Full and part-time employee stress and job satisfaction at two upstate New York colleges, Vol 68(8-A)*. Dissertation.
- Butts, D. (1999). Spirituality at Work: An overview. *Journal of Organizational Change Management, 12* (4), 328-331.
- Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1996). A theory of performance. In N. Schmitt, & W. C. (Eds), *Personnel Selection in Organizations*. San Francisco: Jossey Bass.
- Caple, R. (2001). *Biofeedback and Stress Management Clinic*. Retrieved October 19, 2002, from <http://web.missouri.edu/~councwww/stress/stresswebpage.htm>  
<http://web.missouri.edu/~councwww/stress/stresswebpage.htm>
- Chandler, C. K., Holden, J. M., & Kolander, C. A. (1992). Counseling for Spiritual Wellness: Theory and Practice. *Journal of Counseling and Development, 71* (2), 168 - 175.
- Clark, L., Leedy, S., McDonald, L., Muller, B., Lamb, C., Mendez, T., et al. (2007). Spirituality and Job Satisfaction among Hospice Interdisciplinary Team Members. *Journal of Palliative Medicine, 10* (6), 1321-1328.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behavior, 24* (4), 385-396.
- Csiernik, R., & Adams, D. W. (2002). Spirituality, Stress and Work. *Employee Assistance Quarterly, 18* (2), 29-37.
- Delgado, C. (2007). Sense of coherence, spirituality, stress and quality of life in chronic illness. *Journal of Nursing Scholarship, 39* (3), 229-234.
- Dierendonck, D. V. (2005). The construct validity of Ryff's scales of Psychological well being and its extension with spiritual well being. *Personality and Individual Differences, 36* (3), 629-643.
- Duchon, D., & Plowman, D. A. (2005). Nurturing the spirit at work: Impact on work unit performance. *The Leadership Quarterly, 16* (5), 807-833.
- Frew, D. R. (1974). Transcendental Meditation and productivity. *Academy of Management Journal, 17*, 362-368.
- Fried, Y., Shirom, A., Gilboa, S., & Cooper, C. L. (2008). The mediating effects of job satisfaction and propensity to leave on role stress-job performance relationships: Combining meta-analysis and structural equation modeling. *International Journal of Stress Management, 15* (4), 305-328.
- Garcia-Zamor, J.-C. (2003). Workplace Spirituality and Organizational Performance. *Public Administration Review, 63* (3), 355-363.
- Giacalone, R. A. (2003). *The Handbook of Workplace Spirituality and Organizational Performance*. M.E. Sharpe, Armonk, NY: Shubhi Publications.
- Glenna, N. D., Taylor, P. A., & Weaver, C. N. (1977). Age and job satisfaction among males and females: A multivariate, multisurvey study. *Journal of Applied Psychology, 62* (2).
- Graber, D. (2001). Spirituality and healthcare organizations. *Journal of Healthcare Management, Vol.46, No.1* , 39-50.
- Guillory, W. A. (1997). *The living organization: Spirituality in the workplace*. Salt Lake City, UT: Innovations International.
- Herzberg, F., Mausner, B., & Synderman, B. B. (1959). *The Motivation to Work* (2 ed.). New York: John Wiley & Sons Inc.
- Heslopa, P., Smith, G. D., Metcalfe, C., Macleodb, J., & Hart, C. (2002). Change in job satisfaction, and its association with self-reported stress, cardiovascular risk factors and mortality. *Social Science & Medicine, 54* (10), 1589-1599.
- Howden, J. W. (1992). *Development and psychometric characteristics of the spirituality assessment scale*. . Unpublished.
- Hungelmann, J., Kenkel-Rossi, E., Klassen, L., & Stollenwerk, R. (1996). Focus on Spiritual Well-Being: Harmonious interconnectedness of mind-body-spirit--Use of the JAREL Spiritual Well-Being Scale: Assessment of spiritual well-being is essential to the health of individuals. *Geriatric Nursing, 17* (6), 262-266.
- Hurrell, J. J. (1998). Measuring job stressors and strains: Where we have been, where we are, and where we need to go. *Journal of Occupational Health Psychology, 3*, 368-369.
- Igbaria, M. (1991). Job performance of MIS professionals: An examination of the antecedents and consequences. *Journal of Engineering and Technology Management, 8* (2), 141-171.
- Jacobs, R., & Solomon, T. (1976). Strategies for enhancing the prediction of job performance from job satisfaction. *Journal of Applied Psychology, 62* (4), 417-421.
- Jamal, M. (2007). Job Stress and Job Performance Controversy Revisited: An Empirical Examination in Two Countries. *International Journal of Stress Management, 14* (2), 175-187.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patten, G. K. (2001). The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review. *Psychological Bulletin, 127* (3), 376-407.
- King, S., & Nicoll, D. M. (1999). Organizational enhancement through recognition of individual spirituality: reflections of Jacques and Jung. *Journal of Organizational Change Management, 12*, 234-242.
- Koenig, H. M. (2000). *Handbook of Religion and Health, Oxford*. New York: Oxford University Press.
- Komala, K., & Ganesh, L. S. (2007). Individual spirituality at work and its relationship with job satisfaction and burnout: An exploratory study among healthcare professionals. *The Business Review, Cambridge, 7* (1), 124-129.
- Krishnakumar, S., & Neck, C. P. (2002). The "what", "why", and "how" of spirituality in the workplace. *Journal of Managerial Psychology, 17* (2), 153-162.
- Laabs, J. J. (1995). Balancing Spirituality and Work. *Personnel Journal, 74* (9), 60-76.
- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine, 55*, 234-247.
- Leigh, P. (1997). The New Spirit at Work. *Training and Development, 5* (3), 26-33.
- Lim, R. C., & Pinto, C. (2009). Work stress, satisfaction and burnout in New Zealand radiologists: Comparison of public hospital and private practice in New Zealand. *Journal of Medical Imaging & Radiation Oncology, 53* (2), 194-199.

- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. (Ed), *Handbook of Industrial and Organizational Psychology* (pp. 1297-1343). Chicago: Rand McNally.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4, 309-336.
- Maslow, A. (1971). *The farther reaches of human nature*. New York: The Viking Press.
- McCue, C. P., & Gianakis, G. A. (1997). The relationship between job satisfaction and performance: The case of local government finance officers in Ohio. *Public Productivity & Management Review*, 21 (2), 170-191.
- Milliman, J., Czaplewski, A. J., & Ferguson, J. (2003). Workplace Spirituality and Employee Work attitudes. *Journal of Organizational Change Management*, 16 (4), 426-447.
- Moberg, D. O. (2001). The reality and centrality of spirituality. In D. O. (Ed), *Aging and spirituality* (pp. 3-20). New York: The Haworth Pastoral Press.
- Motowidloa, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational Stress: Its Causes and Consequences for Job Performance. *Journal of Applied Psychology*, 71 (4), 618-629.
- Murphy, K. R. (1989). Dimensions of Job performance. In J. P. R Dillon, *Testing: Applied and theoretical perspectives* (pp. 218-247). New York: Praeger.
- Neck, C. P., & Milliman, J. F. (1994). Thought Self-leadership: Finding Spiritual Fulfilment in Organizational Life. *Journal of Managerial Psychology*, 9 (6), 9-16.
- Oi-Ling, S. (2003). Job stress and job performance among employees in Hong Kong: The role of Chinese work values and organizational commitment. *International Journal of Psychology*, 38 (6), 337-347.
- Oleyede, D. O. (2006). Impact of work-induced stress on perceived workers' productivity in banking industry in lagos state. *IFE Psychology: An International Journal*, 14 (1), 15-25.
- Orpen, C. (1984). Managerial stress, relaxation and performance. *Journal of Management Development*, 3 (2), 34-47.
- Pawar, B. S. (2009). Individual spirituality, workplace spirituality and work attitudes: An empirical test of direct and interaction effects. *Leadership & Organization Development Journal*, 30 (8), 759-777.
- Schultz, J. C., & Schultz, M. T. (2003). *The Effects of Age on Stress Levels and Its Affect on Overall Performance*. Retrieved March 24, 2010, from <http://aabss.org/journal2003/Schultz.htm>: <http://aabss.org/journal2003/Schultz.htm>
- Schultz-Hipp, P. L. (2001). Do spirituality and religiosity increase with age? In D. O. (Ed), *Aging and spirituality* (pp. 85-97). New York: The Haworth Pastoral Press.
- Seaward, B. L. (2000). Stress and Human Spirituality 2000: At the Crossroads of Physics and Metaphysics. *Applied Psychophysiology and Biofeedback*, 25 (4), 241-246.
- Sigmund, J. A. (2003). Spirituality and Trauma: The Role of Clergy in the Treatment of Posttraumatic Stress Disorder. *Journal of Religion and Health*, 42 (3), 221-229.
- Spector, P. E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. Thousand Oaks, CA: Sage.
- Tett, R. P., Jackson, D. N., & Rothstein, M. (2006). Personality measures as predictors of job performance: A meta-analytic review. *Personnel psychology*, 44 (4), 703-742.
- Tischler, L., Biberian, J., & McKeage, R. (2002). Linking emotional intelligence, spirituality and workplace performance. *Journal of Managerial Psychology*, 17 (3), 203-218.
- Tuck, I., Alleyne, R., & Thinganjana, W. (2006). Spirituality and Stress Management in Healthy Adults. *Journal of Holistic Nursing*, 24 (4), 245-253.
- Vagg, P. R. (1999). The Job Stress Survey: Assessing perceived severity and frequency of occurrence of generic sources of stress in the workplace. *Journal of Occupational Health Psychology*, 4 (3), 288-292.
- Vaill, P. (1996). *Learning as a Way of Being*. San Fransico: Jossey Bass.
- Westgate, C. E. (1996). Spiritual wellness and depression. *Journal of Counseling and Development*, 75 (1), 26-35.
- Williams, C. (2003). Sources of workplace stress. *Perspectives on labour and income*, 4 (6).
- Wright, P. M., Kacmar, K. M., McMahan, G. C., & Deleeuw, K. (1995). P = f(MxA): Cognitive ability as a moderator of the relationship between personality and job performance. *Journal of Management*, 21 (6), 1129-1140.
- Wrighta, T. A., Cropanzano, R., & Bonett, D. G. (2007). The Moderating Role of Employee Positive Well Being on the Relation Between Job Satisfaction and Job Performance. *Journal of Occupational Health Psychology*, 12 (2), 93-104.

## **APPENDIX**

### **Spirituality Scale**

#### ***Questions were answered on a 6-point Likert Scale***

1. I can turn to a spiritual dimension within myself for guidance.
2. I have an inner strength.
3. I have experienced my own strength in times of struggle.
4. I have a sense of harmony or inner peace.
5. My innerness or an inner resource helps me deal with uncertainty in life.
6. I rely on an inner strength in hard times.
7. I experience a spiritual dimension that gives me strength and love.
8. Frequently meditating or praying gives a sense of inner peace.
9. I get personal strength and support from my God or a Higher Power.
10. I have a personally meaningful relationship with God or a Higher Power.

### **Job Satisfaction Scale**

#### ***Questions were answered on a 6-point Likert Scale***

11. I feel fairly satisfied with my present job.
12. Most days I am enthusiastic about my work.
13. Each day of work seems like it will never end.\*

14. I find real enjoyment in my work.
15. I consider my job rather unpleasant.

*\*excluded from analysis.*

### **Job Performance Scale**

***Questions were answered on a 5-point Likert Scale***

16. On the job, I express an underlying concern for doing things better, for improving situations.
17. On the job, I exhibit zeal about the job and a consequent willingness to work hard and energetically.
18. On the job, I exhibit a willingness to go beyond what the job requires and act before being asked.
19. I exhibit an ability to see the whole, parts and relations and use this to set priorities, plan, anticipate and evaluate.
20. On the job, I always get things done on time.
21. My superior is never disappointed in the quality of work that I produce.
22. My work habits (tardiness, length of breaks etc.) are exemplary.
23. I continue to be productive even when my superior is out of the workplace for an extended period of time.
24. My superior never has to check up on me.
25. I get along well with my co-workers.

### **Stress Scale**

***Questions were answered on a 5-point Likert Scale***

26. In the last month, how often have you felt that you were unable to control the important things in your life?
27. In the last month, how often have you felt confident about your ability to handle your personal problems?
28. In the last month, how often have you felt that things were going your way?
29. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?