

# Effects of Occupational Stress on Spiritual Quotient Among Executives

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**Abstract**—This paper is aimed at exploring the experiences of executives in coping with occupations related stress using spiritual quotient. The perceived status of occupational stress and spiritual quotient are evaluated based on the responses from employees in executive cadres in NLC. From the frequency distribution and chi-square analysis, it was found that occupational stress had less influenced among executives. From one-way ANOVA comparing the spiritual quotient among the executives with low, moderate and high level occupational stress; it was evident that the executives with low stress level tend to have high spiritual quotient level. Moreover, spiritual quotient tends to decline significantly when there was an increase in the level of stress among executives. The results of the correlation analysis strongly supported the negative relationship between spiritual quotient and occupational stress among executives at their workplace.

**Index Terms**—Occupational stress; and Spiritual quotient

## I. INTRODUCTION

Occupation related stress among working people is drastically increasing worldwide. Stress at work place has become an integral part of everyday life it is called by the World Health Organization as 'worldwide epidemic'. In the USA, approximately one-quarter of the working population suffer from work related stress. The figures for India are not readily available but there is not much doubt that occupational stress affects a significant number of workers and costs heavy financial losses, human sufferings and mental illness. On the other hand, spirituality in principal leadership like executives is not one form of leadership but recognizes principals who integrate personal meanings of spirituality into their preferred leadership practice in appropriate ways for their own well-being and the wellbeing of their organizations.

## II. REVIEW OF LITERATURE

Occupation related stress comes in many shapes and forms. HSE[1] defines occupational stress as "The adverse reaction people have to excessive pressures or other types of demand placed on them." Organizational stress may have harmful physiological and psychological effects on workers. Various studies have showed that workers suffering from stress exhibit decreased productivity, absenteeism, higher number accidents, lower morale and greater interpersonal conflict with colleagues and superiors W. Cranwell and Alyssa, J.[2].

It is important to distinguish between three closely related terms: stressors, stress and strain L. Francis and J. Barling[3]. Stressors are defined as the external events such as difficult relationships in the workplace or a heavy workload that contribute to the experience of stress S.L. Sauter, L.R.Murphy and J.J.Hurrell[4]. Stress is considered to be an individual's internal response to stressors and is characterized by arousal and displeasure. Strain, on the other hand, describes the long-term effect of stress and includes psychological outcomes such as anxiety and depression.

Occupational stressors are aspects of the work environment that cause strains, poor psychological health or well being of the individual T.A. Beehr[5]. It is now generally accepted that prolonged or intense stress can have a negative impact on the individual's mental and physical health C.L. Cooper, P.J. Dewe and M.P.O'Driscoll[6]. Work related stress is a feature of current economic activity from which most individuals suffer at times and to different extents. In a positive sense, work stress can be a source of excitement and stimulus to achievement. In a negative sense it can seriously impair quality of work life, and reduce personal and job effectiveness J. Bridge, C.L. Cooper and C. Highley-Marchington [7].

Stress in the workplace can affect communication effectiveness, the ability to focus on job and decision making ability C.J. Rees and D.Redfern [8]. Emmons [9] asserts that persons who demonstrate a capacity for heightened consciousness of transcendence possess spiritual intelligence. Spiritual intelligence empowers the individual to cope with and resolve life-world issues while demonstrating virtuous behavior such as humility, compassion, gratitude, and wisdom.

Zohar and Marshall [10] defined spiritual intelligence (spiritual quotient) as the intellectual ability to question why we are here and to be creative in our pursuit of answers. Thus, spiritual intelligence involves the cognitive processes resulting in both social modifications and consciousness transformations. Emmons[11] defined spiritual intelligence as the adaptive use of spiritual information to facilitate everyday problem solving and goal attainment. Intelligence is the implementation of a set of tools to arrive at a more productive, effective, happier, and ultimately more meaningful life. Spiritual intelligence is thus a mechanism by which people can improve their overall quality of life. It is the application of a domain of knowledge to problems in living.

Zohar and Marshall [12] hold the view that SQ is a conscious complex adaptive system and therefore its qualities will have a uniquely conscious expression that emerges when the brain meets the field of meaning. According to Biberman and McKeage[13], SQ is human

beings intelligence or capacity to link them closer to spiritual characteristics and manifestations such as compassion, meaning and purpose, consciousness (self awareness), vision and values.

The spiritual dimension of organizational life has been explored more formally through research. Duchon and Plowman[14] demonstrated that work unit performance is positively associated with work unit spirituality. Dent, Higgins and Wharff[15] reviewed 85 scholarly articles and found that most of them hypothesized a correlation between productivity and spirituality. They have pointed out the need for “a comprehensive and integrated theory of leadership that acknowledges leaders as complex beings who mature and develop over time in relationship to spiritual, emotional, cognitive, social, and physical domains”.

Marty [16] believed “spirituality has become an advertised instrument for helping individuals cope with and interpret their place in the stressed world business and commerce”. Kabat-Zinn[17] introduced mindful meditation as stress intervention therapy in modern medicine and psychology.

According to Fulton [18], spiritual quotient also lead to an enhanced ability to find joy in the small things in life and make it easier to remain focused. Mindfulness practices, in particular, encourage the examination of the small details of experience and lead to greater sensitivity to the fullness of life. Rather than requiring constant stimulation or excitement, the mindful person finds richness even in the mundane.

Vaughan [19] defined spiritual intelligence as a capacity for a deep understanding of existential questions and insight into multiple levels of consciousness. He also stated that the rational or goal behind the spirituality is to calm the mind and integrate our lower self (ego, personality, body) with the higher aspects of our being (higher self, Soul, Spirit) to gain greater spiritual awareness and in turn, its practices though spirituality or spiritual quotient exist in all traditions and cultures in varying forms and degrees since times immemorial.

Theorell [20] stated that work-related stress imposes a high health risk on individuals, causing psychological, physical, and behavioral health problems.

Research by Zellers and Perrine [21] showed “spirituality can be an effective coping tool for employees working in stressful jobs”. For instance, repeating a work with each breath may help people release stress and increase a relaxed feeling. Siegel [22] pointed that people turn to meditation for reducing stress and improving psychological health.

### III. STATEMENT OF THE PROBLEM

Work related stress is still a major challenge to employee health in the workplace. While few investigations have evaluated stress as a positive factor in motivating employees M. Le Fever, G.S. Kolt, and J. Matheny [23], a majority of researchers see stress as a potential risk to both employee well-being and business H.W. Jaffe, R.O. Valdiserri and K.M. De Cock [24].

Evidence directly links work-related stress to a series of employee ailments such as ineffective attitude and

dysfunctional behaviour. Negative influences from stress include anger, irritation, fear, and withdrawal. Such negative emotional responses from employees may override the rational behaviour of others causing these individuals to question the employees about their loyalty and ability to commit to and perform in the organization.

Although it has been noticed that spiritual practices like mindful meditation, nonattachment and compassion can be used to reduce stress in the workplace, relatively limited research has been conducted on the effects of spiritual quotient on employee stress management in the workplace. The intent of the current qualitative phenomenological research study was to explore the lived experiences of employees to better understand work related stress and the effect of using spiritual practices in attempting to manage stress in the workplace.

### IV. OBJECTIVES OF THE STUDY

The present research article is carried out with objective of finding out the status of occupational stress and spiritual practices in addition to finding out the effect of spiritual practices on occupational stress among employees working as executives in an organization.

### V. HYPOTHESIS

The following null hypotheses were framed for this study:

The occupational stress level is high among the executives.

There is no significant effect of spiritual practices on occupational stress of the executives.

### VI. METHODOLOGY

#### A. Sample

A sample for the study is executives those are working in Neyveli Lignite Corporation (NLC), a public sector undertaking engaged in power generation which is situated in Neyveli, Cuddalore district, Tamilnadu. For selection of respondent for the survey, a random sampling technique was used to record the responses about occupational stress and spiritual practices. A total 600 questionnaires were distributed to the NLC employees in executive position, out of which 550 questionnaires were returned. All the returned questionnaires were found with required information and so completely usable.

### VII. MEASUREMENT OF VARIABLES

The variables for the present work are occupational stress and spiritual practices among executives. To measure the occupational stress among the executives, the occupational stressors in the occupational stress index developed Srivastava and Singh [25] was used. This index consists of 46 items with Likert's scale ranging from 1 (strongly disagree) to 5 (strongly agree) for each item. The value for 'neutral' (neither disagrees nor agrees) is 3. Out of the 46 items 28 are true keyed and the remaining 18 are false keyed. These items relating to the 12 factors of

occupational stress i.e. Role overload, Role ambiguity, Role conflict, Group & political pressure, Responsibility for persons, Under participation, Powerlessness, Poor peer relations, Intrinsic improvement, Low status, Strenuous, Working condition and Unprofitability.

The spiritual measurement scale developed by Rojas [26] was used to measure the spiritual practices of the executives. There are 39 items in the scale with value ranging from 1 (strongly disagree), 2 (disagree), 3 (agree) and 4 (strongly agree) relating to 13 aspects, namely Fulfillment of self, Self determination, Self control, Discovery of self, Enrichment of self, Partnership mode, Small group mode, Organizational mode, Development mode and Ideopraxis. The value for 'neither disagree nor agree' is 2.5 (97.5 for all 39 items are pooled together). The scores of each factor are the sums of the scores of items belong to that factor.

### VIII. STATISTICAL TOOL

The status of occupational stress among executives was evaluated using frequency distribution and one-sample chi-square analysis. The executives are first grouped into three groups, namely low, moderate and high stress groups. Then the spiritual quotients among executives with low, moderate and high stress groups are compared using F-test (one way ANOVA).

### IX. RESULTS AND DISCUSSION

Table I provides number of executives with low, moderate and high level of stress along with percentage values. The one-sample test chi-square values eliciting the significance of the difference in the level of stress among executives are also shown in the table. It can be seen from the table that the level of stress due to 'Role overload', 'Role ambiguity', 'Role conflict', 'Political', 'Responsibility', 'Under participation', 'Powerlessness', 'Poor peer', 'Intrinsic Impoverishment', 'Low status' and 'Unprofitability' is low among 54.4%, 56.7%, 60.7%, 62.5%, 73.5%, 63.8%, 72.0%, 61.5%, 65.1%, 76.2% and 54.7% of the executives. At the same time, stress due to 'Strenuous' is high among 72.9% of the executives. That is, occupational stress among executives is found to be mainly due to 'strenuous' condition in their work place. When all stress factors are pooled together, it is found that the level of stress is low for majority of the executives (63.3%). The one sample test chi-square values are significant for all dimensions of occupational stress as well as for total occupational stress, in turn indicating that there is a significant difference in the level of occupational stress (low, moderate and high) among executives.

TABLE I. STATUS OF OCCUPATIONAL STRESS AMONG EXECUTIVES

(N = 550)

Dimensions of Occupational Stress	Level of Stress			Chi-Square <sup>#</sup> (DF = 2)
	Low	Moderate	High	
Role overload	299 (54.4)	202 (36.7)	49 (8.9)	173.31**
Role ambiguity	312 (56.7)	162 (29.5)	76 (13.8)	155.62**
Role conflict	334 (60.7)	187 (34.0)	29 (5.3)	253.81**
Political	344 (62.5)	143 (26.0)	63 (11.5)	228.66**
Responsibility	404 (73.5)	128 (23.3)	18 (3.3)	431.40**
Under participation	351 (63.8)	152 (27.6)	47 (8.5)	260.08**
Powerlessness	396 (72.0)	128 (23.3)	26 (4.7)	398.41**
Poor peer	338 (61.5)	174 (31.6)	38 (6.9)	246.17**
Intrinsic Impoverishment	358 (65.1)	158 (28.7)	34 (6.2)	291.55**
Low status	419 (76.2)	91 (16.5)	40 (7.3)	461.50**
Strenuous	19 (3.5)	130 (23.6)	401 (72.9)	421.25**
Unprofitability	301 (54.7)	168 (30.5)	81 (14.7)	133.92**
Total Occupational Stress	348 (63.3)	192 (34.9)	10 (1.8)	312.19**

Source: Primary Data

<sup>#</sup>One Sample Chi-square test; \*\*Significant at 1% level

Figures in brackets are percentages to total sample.

Spiritual Quotient is Low, Moderate and High if the Mean Score is < 97.5, >= 97.5 and < 136.5 and >= 136.5 respectively.

Table II presents the mean Spiritual Quotient (SQ) for low, moderate and high occupational stress groups. From the perusal of the mean values, it is apparent that the SQ is higher for executives with low stress compared to that of those with moderate and high stress due to all occupational factors except 'Low statuses. Further, there is no much difference in the SQ between moderate and high stress

groups. From F values, which are significant for all except 'low status', it is found that the SQ is significantly higher among executives with low stress. In the case of executives with low, moderate and high stress due to low status, the SQ is found to be similar and does not differ significantly (F value is insignificant). That is, SQ is independent of the level of stress due to 'low status' among executives whereas

it is vice versa in the case of other occupational factors. Further, the SQ is 125.43 and significantly higher for executives with low stress than SQ for executives with moderate (Mean = 110.40) and high (Mean = 113.00) stress

from their occupation on the whole (F value = 45.76,  $p < 0.01$ ).

TABLE II. COMPARISON OF SPIRITUAL QUOTIENT BY LEVEL OF STRESS AMONG EXECUTIVES

Dimensions of Occupational Stress	Spiritual Quotient			F Value (DF = 2, 547)
	Low Stress	Moderate Stress	High Stress	
Role overload	125.83 (18.50)	113.31 (16.67)	111.51 (19.20)	35.38**
Role ambiguity	126.25 (17.21)	109.67 (17.92)	116.01 (17.82)	50.07**
Role conflict	126.51 (16.77)	108.74 (17.51)	116.79 (18.43)	65.11**
Political	124.77 (18.25)	111.30 (16.60)	113.30 (19.46)	33.22**
Responsibility	123.48 (18.06)	109.90 (18.08)	112.28 (19.30)	29.04**
Under participation	124.37 (18.47)	112.14 (17.14)	112.26 (18.40)	28.84**
Powerlessness	122.09 (19.18)	116.95 (16.36)	102.23 (17.68)	16.25**
Poor peer	125.25 (17.07)	112.23 (18.53)	108.26 (20.57)	39.53**
Intrinsic Impoverishment	123.98 (18.10)	111.88 (18.61)	115.09 (17.42)	25.50**
Low status	119.83 (18.84)	122.30 (19.27)	115.90 (19.83)	1.61 <sup>NS</sup>
Strenuous	127.16 (15.90)	128.48 (17.96)	116.85 (18.56)	21.28**
Unprofitability	123.66 (19.35)	114.52 (17.92)	117.46 (16.87)	13.90**
Total Occupational Stress	125.43 (17.57)	110.40 (17.26)	113.00 (25.41)	45.76**

Source: Primary Data; \*\*Significant at 1% level. NS – Not Significant  
Figures in brackets are standard deviation.

The results of correlation, depicted in Table III support the above results. That is, there has been a significant negative correlation (inverse relationship) between spiritual

quotients and all occupational stress dimensions except 'low statuses.

TABLE III. CORRELATION BETWEEN OCCUPATIONAL STRESS DIMENSIONS AND SPIRITUAL QUOTIENT

Dimensions of Occupational Stress	Correlation	t-value
Role overload	-0.3182	-7.86**
Role ambiguity	-0.3003	-7.37**
Role conflict	-0.3677	-9.26**
Political	-0.2872	-7.02**
Responsibility	-0.2856	-6.98**
Under participation	-0.2831	-6.91**
Powerlessness	-0.2229	-5.35**
Poor peer	-0.3440	-8.58**
Intrinsic Impoverishment	-0.2544	-6.16**
Low status	-0.0178	-0.42 <sup>NS</sup>
Strenuous	-0.2496	-6.04**
Unprofitability	-0.1725	-4.10**
Total Occupational Stress	-0.3615	-9.08**

Source: Primary Data; \*\*Significant at 1% level. NS – Not Significant

# X. CONCLUSION

This article was designed to examine the effect spiritual quotient on occupational stress among executives. Frequency distribution analysis along with one-sample chi-square test is carried out to evaluate the status of occupational stress. The executives are categorized into three groups based on the stress level relative to each occupational factor as low, moderate and high. It was found that stress due to 'strenuous' was very high whereas the stress due to all other occupational factors was low among executives. To find out the relationship between SQ and Occupational stress, the mean SQ across low, moderate and high stress groups are compared using one way ANOVA (F test). It is concluded from the analysis that the SQ was high for executives with low stress level and it differs significantly from SQ for executives with moderate and high stress level. At the same time, it was found that the SQ level remains same among executives regardless of the level of stress due to low status. In sum, it is concluded that the level of stress is low among executives and the executives with low level of stress tend to have high SQ.

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