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"Does The Factors Of Spiritual Intelligence Distinguish The Levels Of Employee Stress?"

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ABSTRACT
In the present scenario, everyone is striving to achieve and make use of the opportunities and resources to its best. Stress has become a part of everyone's life. In a corporate world, managers face day to day affairs where stress is inevitable and unavoidable. The purpose of this research work is to find out whether the factors of Spiritual Intelligence can distinguish the levels of employee stress and can help managing the level of stress of the employees. Two standardized questionnaires were used. The Spiritual Intelligence Self Report Inventory (SISRI- 24) developed by King, 2008 was selected to measure the four factors of Spiritual Intelligence of employees. Secondly, The Occupational Stress Index developed by Srivastava and Singh in 1981 was used to measure the three levels of employee stress. The study was conducted among 300 employees to measure the level of Stress and Spiritual Intelligence of each individual. The data was analyzed using Wilk's Lambda and the findings reveal that the factors of Spiritual Intelligence do not have the ability to distinguish the level of employee stress.

Key Words: Factors of Spiritual Intelligence, Levels of stress, Employees.

I. INTRODUCTION

At the end of 1990, research on neurology found that brain has another "Q" or other kind of intelligence (Zohar and Marshall, 2004). This new intelligence is named as "Spiritual Quotient". Spiritual Quotient comes from the Latin word "Spiritus", and the meaning is "the vitalizing principle of an organism (Zohar and Marshall, 2004).

Zohar and Marshall (2000) in their book "Spiritual Intelligence, the Ultimate Intelligence" said that apart from IQ and EQ, there is third intelligence, that isSpiritual Intelligence (SQ). According to their explanation, Spiritual intelligence is an intelligence which puts behavior and manner in our life in a broader term and this is an intelligence to assess our action and our way of life compared to other.

According to King (2008), Spiritual intelligence constructs a four factor model. They are:CET(Critical Existential Thinking)- the capacity to critically contemplate the nature of existence, reality, the universe, space, time, death and other existential or metaphysical issues.

PMP (Personal Meaning Production) - the ability to derive personal meaning and purpose from all physical and mental experiences, including the capacity to create and master a life purpose.

TA (Transcendental Awareness) - the capacity to identify transcendent dimensions of the self (e.g., a transpersonal self), of others, and of the physical world during the normal, waking state of consciousness.

CSE (Consciousness State Expansion) - the ability to enter and exit higher/ spiritual states of consciousness at one's own discretion (as in deep contemplation, meditation, prayer, etc.).

In a developing country like India, every organization should give importance to its employees along with business profits. Everyday employees face lot of challenges increasing their stress level which directly and indirectly affect their work. Stress is something which everyone has encountered at least ones in life. Stress is defined as mental strain caused by the disturbing factors in one's life which impacts their day to day functioning in life. Work stress is a stress which occurs in the workplace of an individual. Work related stress is caused due to work demands and pressures that are not matched to their knowledge, skill, and capabilities to cope. Every employee is different and there is individual difference so far as the abilities to cope with stress is concerned.

II. LITERATURE REVIEW

The research in spirituality in workplace is receiving greater attention in the area of occupational stress. According to Cash and Gray (2000), the catalyst for the widespread interest in workplace spirituality is its unstable work environment characterized by downsizing, reengineering and new technologies. Demoralized employees are seeking spiritual solutions to

consequent tensions and stress (Mitroff & Denton, 1990). Faced with problems of fear, social alienation and constant turbulent changes, employees are embarking on an individual search for deeper meaning in life. For others, work place spirituality represent an attempt to experience spirituality not only in their personal lives but also at work where they spend a large amount of time (Krishna Kumar & Neck, 2002).

Job related stress affects all, but for some workers it becomes overpowering. The sources of job stress include the physical characteristics of work such as heat, noise and cold. Other stressors include time pressures, excessive responsibility, role conflict, role ambiguity and even chronic boredom (Hudson& Sullivan, 1990).

Salvador C Delapena (2010) conducted a study on Spiritual Intelligence and work stress among Basic Education Faculty of a private nonsectarian school. The study measured the degree of spiritual Intelligence and work stress among 4 basic education faculties. A standardized questionnaire was used to determine the respondent's spiritual intelligence while a pretested researcher- made questionnaire was used to measure the respondent's level of work stress. The statistical tools used for data analysis and interpretation were mean, t test and Pearsons r. The findings indicated that no significant relationship was found between the respondent's level of spiritual intelligence and work stress.

Sally Itliong Maximo (2010) conducted a study relating to the constructs of spiritual intelligence with stress management. The researcher conducted her study among employees of Saint Luis University, Bagerio city consisting of an audit population with age ranging from early twenties to late fifties. The main tools used by the researcher were three inventories: i) The Spiritual intelligence Indicators Inventory, ii) The Religious Commitment Inventory, and iii) The Stress Management Strategies Inventory. The statistical tools used for the study were Factor analysis, ANOVA, Pearson and Partial correlation coefficient, multiple regression analysis and a series of t tests. The findings of the study revealed that there is positive relationship between Spiritual intelligence and stress management.

T Kumar & S Pragadeeswaran (2000) conducted a study among employees working in Neyveli Lignite Corporation, a public sector undertaking engaged in power generation. The research was carried out with an objective of finding out the status of occupational stress and spiritual practices of employees. A random sampling technique was used to record the responses about occupational stress and spiritual practices. The status of occupational stress was evaluated using frequency distribution and one sample chi square analysis. SQ with low, moderate and high stress groups were compared using F test (one way ANOVA). Findings revealed that SQ of employees of executive level remained same regardless of the level of stress.

E. Ahmaian conducted a study on job stress and spiritual intelligence among 198 members of National Company of oil products distribution in Torbat Heydarich. The research tools include Badie Spiritual Consciousness questionnaire and Helryjel Job Stress questionnaire. The findings revealed that there is a relation between spiritual intelligence and occupational stress of employees.

Azad Marzabadi (2013) conducted a study to explore the relationship between job stress and organizational spirituality and spiritual intelligence in the personnel of Bagiyatallah University of medical sciences. Data were collected using Milliman Organizational Spirituality Questionnaire (2003), King Spiritual Intelligence Questionnaire and HSE Job Stress Questionnaire. The findings show that Job stress is negatively correlated to Spiritual intelligence.

Arnetz (2013) conducted a study to determine whether employee's spiritual values and practices in the workplace attenuate occupational stress and work related exhaustion and promote mental well-being. 649 participants completed validated measures of mental well-being, occupational stress and work related exhaustion as well as two newly developed measures of individual spiritual values and practices in the workplace. Factor analysis confirmed that spirituality items belonged to two separate constructs. In logistic regression model, the spiritual values in the workplace scales were positively associated with mental well-being and low occupational stress. Findings of the study revealed that employees' spiritual values and practices as well as workplace acceptance of such practices, appear to promote mental well-being and attenuate stress.

A lot of work is done on spirituality, mental well-being, spiritual practices, job stress, and stress management. But there is controversies in the literature regarding their relationships. However, there is no empirical studies that have been instituted in connection with factors of Spiritual Intelligence with the levels of Employee stress. No study has been conducted thus far in Indian context.

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These limitations create the need to conduct an empirical study to get more meaningful findings. The present study using standardized tests and instruments in Indian context challenges certain inconsistent issues held in literature and attempts to clarify several contradictions.

III. OBJECTIVE OF THE STUDY

The objective of the study is to find out whether the factors of Spiritual Intelligence areable to distinguish the various levels of occupational stress in organizations.

IV. METHODOLOGY

Sample

The sample consisted of both male and female employees working in organizations in India. The sample size is 300.

Measures

The research instruments included two scales: The Spiritual Intelligence Self Report Inventory (SISRI-24) questionnaire and the Occupational stress Index. The Spiritual Intelligence Self Report Questionnaire was developed by King in the year 2008. It included 24 items for each of the four spiritual intelligence factors. They are: Critical Existential Thinking (7 items), Personal Meaning Production (5 items), Transcendental Awareness (7 items) and Consciousness State Expansion (5 items). The items are rated on a five point likert scale, ranging from the response (0) not at all true of me to (4) completely true of me. Higher scores represent higher levels of spiritual intelligence.

The Occupational Stress Index was developed by Srivastava and Singh in the year 1981. The Occupational Stress Index consists of 46 items, each rated on a five point scale. Out of the 46 items, 28 were true keyed and the remaining 18 were false keyed items. Two different patterns of scoring was given to true keyed and false keyed items ranging from strongly disagree (1) to strongly agree (5) for True keyed items and strongly disagree (5) to strongly agree (1) for False keyed items. Following the principles of normal distribution, the scores were divided into three categories or levels of stress: Low, Medium, and High.

After collection of data, reliability tests were conducted by computingthe Cronbach's Alpha for each construct through Statistical Package for Social Science (SPSS). The questionnaire items relating to Spiritual Intelligence and Employee Stress are found to be highly reliable (See Table 4.1). According to Hair, Black, Babin, Anderson and Tatham (2010) the minimum accepted alpha value should be 0.60.The following table shows the Cronbach's Alpha value of the two variables of interest.

Table 4.1 Reliability Statistics of the variables

Reliability Statistics (Cronbach's Alpha)	
Employee Sample 300	
Spiritual Intelligence (Independent variable)	Employee Stress (Dependent variable)
0.882	0.935

V. DATA ANALYSIS

This part of analysis is directed towards finding out the ability of the factors of Spiritual Intelligence in discriminating the three levels of Employee stress as categorized as - Low, Medium, High.

The group statistics of the four factors of Spiritual Intelligence which are taken to find out the discriminating ability are furnished below.

Table 5.1. The Group statistics of the four factors contributing towards the Spiritual Intelligence towards the levels of employee stress

Level of Stress		Mean	Std. Deviation	Valid N (list wise)	
				Unweight	Weighted
Low	CET	12.6667	4.32503	18	18
	PMP	12.0556	4.33145	18	18
	TA	12.8889	3.75561	18	18
	CSE	11.6111	4.39437	18	18

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	TSQ	49.2222	13.93073	18	18
Medium	CET	14.4082	4.14607	267	267
	PMP	12.0861	4.12813	267	267
	TA	15.3258	4.2562	267	267
	CSE	11.1161	4.41094	267	267
	TSQ	52.9363	14.30862	267	267
High	CET	14.8667	3.18179	15	15
	PMP	13.2667	2.73774	15	15
	TA	16	3.6645	15	15
	CSE	12.2667	2.71153	15	15
	TSQ	56.4	7.68858	15	15
Total	CET	14.3267	4.12513	300	300
	PMP	12.1433	4.07982	300	300
	TA	15.2133	4.23252	300	300
	CSE	11.2033	4.33875	300	300
	TSQ	52.8867	14.0489	300	300

An attempt was made to check the significance of the difference in the means across three levels of stress.

The result shows that the means of four factors of spiritual intelligenceare higher for high level of stress in comparison to medium level stress and again, it is higher in medium level of stress when compared with low level stress of employees.

Table: 5.2. Test of Equality of Group means

Factors of Spiritual Intelligence	Wilks' Lambda	F	df1	df2	Sig.
CET	0.989	1.645	2	297	0.195
PMP	0.996	0.597	2	297	0.551
TA	0.979	3.111	2	297	0.046
CSE	0.996	0.582	2	297	0.559
TSQ	0.993	1.084	2	297	0.34

From Test of Equality of Group Means table, it was found that the mean is significant($p<0.05$) for TA factor of Spiritual Intelligence among the four factors of Spiritual Intelligence. This shows that, only TA factor of Spiritual Intelligence has a difference among the mean scores of the four factors of Spiritual Intelligence towards the level of employee stress. It can be concluded that only TA factor of Spiritual Intelligence have the ability to distinguish the stress level of the employees.

Table 5.3. Eigen values indicating the proportion of variance explained by the first 2 canonical discriminant functions

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.046[a]	91.1	91.1	0.21
2	.004[a]	8.9	100	0.067

a. First 2 canonical discriminant functions were used in the analysis.

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Table 5.4. The statistical test of significance for Wilk's Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	Df	Sig.
1 through 2	0.952	14.648	8	0.066
2	0.996	1.321	3	0.046

With more than two groups, more than one discriminant function can be obtained. The Eigen value (.046) indicates the proportion of variance explained by the first function. It explains 91.1% of the variance. The canonical correlation (0.210) is the correlation between the discriminant scores and the levels of employee stress which was found to be positively correlated. The square of the canonical correlation is 0.0441 and hence only 4.41% of the variance in the discriminating model is due to the changes in the level of employee stress towards the four factors of Spiritual Intelligence. The significance of this discriminant function is tested by framing the following hypothesis.

Hypothesis:

H_0: The factors considered here do not have the discriminating ability to distinguish a High Level of employee stress to Middle Level employee stress and to Low Level employee stress.

H_1: The factors considered here have the discriminating ability to distinguish a High Level employee stress to Middle Level employee stress and to Low Level employee stress.

The statistical test of significance for Wilk's Lambda was carried out and found to be insignificant with $p>0.05$.

Hence the hypothesis, H_0 is accepted and this discriminant function canbe further used forexplanations.

When we consider the second discriminant function, the Eigen value(0.004) indicates the proportion of variance explained by the second function. It explains 8.9 % of the variance. The canonical correlation (0.067) is the correlation between the discriminant scores and the levels of employee stress which was found to be positively correlated. The square of the canonical correlation is 0.0045 and hence 0.45% of the variance in the discriminating model is due to the changes in the four factors of Spiritual Intelligence. The significance of this discriminant function is tested by framing the following hypothesis.

Hypothesis:

H_0: The factors considered here do not have the discriminating ability to distinguish a High Level employee stress to Middle Level employee stress and to Low Level employee stress.

H_1: The factors considered here have the discriminating ability to distinguish a High Level employee stress to Middle Level employee stress and to Low Level employee stress.

The statistical test of significance for Wilk's Lambda was carried and foundsignificant (p less than 0.05). Hence the hypothesis, $H_0$is rejected and this discriminant function cannot be further used for explanation.

Table5.5. Standardized Canonical Discriminant Function Coefficients to measure the relative contribution of each of the predictor factor on the discriminant function

Factors of Spiritual Intelligence	Function	
	1	2
CET	0.696	-0.287
PMP	-0.026	0.677
TA	0.841	0.28
CSE	-1.05	0.365

Each Standardized Canonical Discriminant Function Coefficient in absolute values reflects the relative contribution of each of the predictor factor on the discriminant function. Here when first discriminant function is considered, it was found that TA (0.841) is exerting more influence in discriminating between a High Level employee stress to Middle Level employee stress to Low Level employee stress. It is followed by CET (.696) and PMP (-.026). The lowest discriminating power is shown by CSE (-1.050).

Here when the second discriminant function is considered, it was found that PMP (0.677) is exerting more influence in discriminating

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between a High Level employee stress to Middle Level employee stress to Low Level employee stress. It is followed by CSE (.365). CET (-0.287) is found to have the lowest discriminating ability in this function.

Table 5.6. Canonical Discriminant Function Coefficients indicating unstandardized scores

Factors of Spiritual Intelligence	Function	
	1	2
CET	0.169	-0.07
PMP	-0.006	0.166
TA	0.2	0.067
CSE	-0.242	0.084
(Constant)	-2.679	-2.97

Unstandardized coefficients

The Canonical Discriminant Function Coefficients indicated theunstandardized scores concerning the Spiritual Intelligence. It is the list of Coefficients of the unstandardized discriminant equation.

Function1:
Level of Employee Stress= -2.679 + (.169 CET) + (-.006 PMP) + (.200 TA) + (-.242 CSE)
Function 2:
Level of Employee Stress= -2.970 + (-.070 CET) + (.166 PMP) + (.067 TA) + (.084 CSE)

Table 5.7. Functions at Group Centroids

Level of Stress	Function	
	1	2
Low	-0.844	-0.02
Medium	0.058	-0.015
High	-0.016	0.29

In the case of first function, it can be interpreted that, High Level employee stress have a mean of -0.16,for Middle Level employee stress mean value is .058 and Low Level employee stress have mean of -0.844. Since the first function explains 91.1% variance, it is more relevant. In the case of second function, it can be interpreted that, High Level employee stress have a mean of 0.290,for Middle Level employee stress mean value is -0.015 and Low Level employee stress have mean of -0.020.

Table: 5.8.Classification Results

	Level of Stress	Predicted Group Membership			Total
		Low	Medium	High	
Original Count	Low	10	6	2	18
	Medium	67	121	79	267
	High	3	6	6	15
%	Low	55.6	33.3	11.1	100
	Medium	25.1	45.3	29.6	100
	High	20	40	40	100

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From the above classification results, the low, medium and high level of stress in the predicted group shows 45.7% correctly classified.

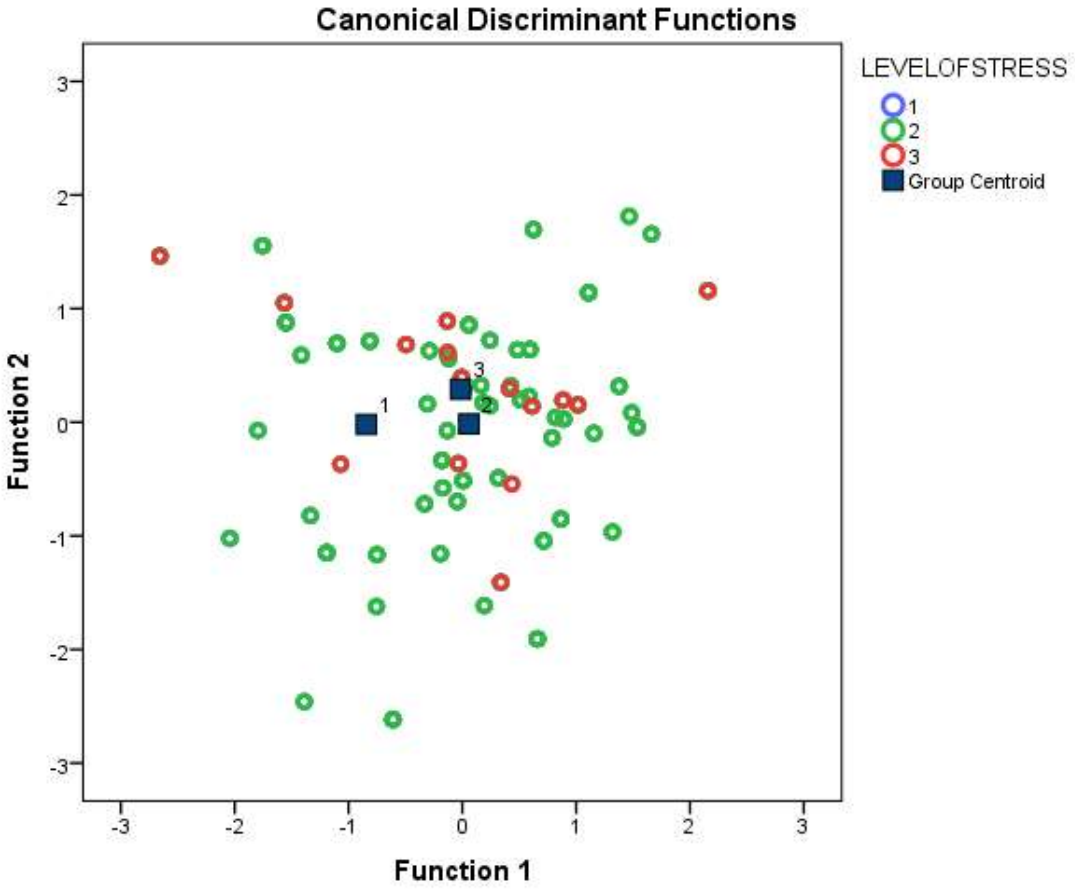

Figure 5.a. Canonical Discriminant Function- Low, Medium and High level of Employee Stress

VI. DISCUSSION AND CONCLUSION

The study was conducted to know if the factors of Spiritual Intelligence have the discriminant ability to distinguish the high level employee stress to medium level employee stress to low level employee stress. According to the results, the mean value of the factors of spiritual intelligence towards the level of stress is higher for high level stress than the medium level stress to that of low level stress of employees. The findings corroborate the results of T Kumars& S Pragadeeswaran (2000) and Salvador C Delapena (2010) when the authors considered only the total score of Spiritual Intelligence not the individual factors.

Again, the findings of the test of equity of group means shows that among the four factors of spiritual intelligence only TA dimension shows a slight significance on the stress level of employees.

The two discriminant functions obtained when used Wilk's Lambda reveal in Function 1 that the factors of Spiritual Intelligence do not have the discriminant ability to distinguish high stress level of employees to medium level and to that of low stress level of employees. Since the first function explains a 91.1% variance, it is more relevant than the second function with very low variance. Hence the study concludes that the factors of Spiritual intelligence- CET, PMP, TA and CSE do not discriminate the level of stress among employees. Therefore, future studies should employ other relevant internal or external factors that determine the ability to distinguish the level of stress among employees. Further, researchers are suggested to implement the same study with other intelligence like Intelligence Quotient, Emotional Quotient among employees.

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