

# Effect of occupational stress on executives' leadership styles

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## Abstract

In the present investigation an attempt was made to explore the influencing effect of occupational stress on the executive's leadership style. The occupational stress index developed by Shrivastava & Singh (1981) and Managerial Styles developed by McBer & Co. (1980) were administered on a sample of 388 Executives of Neyveli Lignite Corporation Ltd., Neyveli. The inferential statistical techniques, Chi-Square Test and Pearson's Product Moment Correlation Coefficient were applied for determining the effect of occupational stress as an influence of leadership styles. The correlation analysis suggests that presence of the occupational stressors influences positively the coercive and authoritative leadership styles and influences negatively the affiliative, democratic, pace-setting and coaching styles. The Chi-Square Test also confirms the presence of association between stressors and leadership styles.

**Keywords:** Occupational stress; Leadership style; coaching style; Democratic; Affiliative.

## Introduction

At present the managerial scenario in our country is drastically changing. The entry of multinationals in our country has put forth a severe competition with Indian conventional Industries. Unless we equip ourselves to face the challenges caused by the entry of multinationals our industries will cripple down. Now a compulsion is there over the senior executives to examine their own leadership styles, outlooks, policies, etc., and it has become a must that they should get a newer insight in facing these challenges.

A person capable of influencing group activities in an organization with regard to goal formation and its accomplishment is called as a Leader - Allen (1958). Leadership is an important and critical task as it helps in guiding the organization in the right direction. The successful has one major attribute that makes it stand apart from the other organizations and it is the dynamic and effective leadership. A recent study conducted by Management Development Institute at Gurgaon has concluded that productivity could improve by 30 to 40 percent without extra finance or new technology

but with leadership qualities, Harihara Mahadevan (1996). But many individuals refuse to accept leadership role because of the frustration to become leader due to too many uncompensated overtime, too many problems, involving people and too much organizational politics. This anxiety provoking fashion of leadership due to tension, depression or stress will not give productivity improvement because productivity is an attitude of mind of progress or constant improvement of what exists (Shyam Sundar Pal, 1997; Jain Sinha, 2001). To manage this, mind stability is the best skill that a manager must have now -a-days to manage the stress.

The use of coercive power contributed maximum to the perception of stressful work life. Such coercive nature of power is likely to cause disruptive uses of power which may cause disintegration of the group (Sumita Singh and Sengupta 2001).

Stress arises from either a lack of assessment, or an incorrect appraisal of persons and environment; leading to unreasonable expectations and disappointment. Work related psychological

stresses are known to affect the body functions through psychological process and influence through four types of closely inter-related mechanisms-emotional, cognitive, behavioral and psychological (Levi, 1990).

Work is the main cause of stress in their life because a significant positive relation as been revealed between jobs related stress and role overload, role conflict and strenuous working condition (Chand and Sethi, 1997). Treadgold (1999) has suggested that those engaged in work related to them are better able to cope with daily stress than those who are engaged in unrelated work. Glowinkowski and Cooper (1986) have exhaustively analyzed the factors responsible for managerial stress. Results conclude that work overload, role ambiguity, role conflict, strained inter-personal relations, bad communication, lack of participation, office politics, job insecurity and work-family relationship were factors responsible for managerial stress. Nicholas (1999) made a study on the relationship between the leadership style and stress levels of 585 elementary school teachers. They were administered with Leader Behaviour Description Questionnaire (LBDQ), Teachers Stress Interview (TSI). LBDQ measured to dimensions of leadership: consideration initiating structure.

The data were analyzed using a cross-sectional, correlation with regression by using SPSS. Results revealed that relationship oriented leadership style explained more of the variance in the stress levels. Pragadeeswaran (2003) made a study on "Introspective practices and executives' leadership behaviour". The sample included 334 executives from a public sector organization the subjects were administered with managerial style scale, occupational stress index and emotional competency scale. Data were subject to two-way ANOVA statistical analysis. Results indicated that there were no significant difference in the dominance of leadership styles based on executives' occupational stress level and emotional competency levels.

## Methodology

## Sample

Study participants were 388 executives working in a Public sector located in Tamil Nadu. A random sampling was done to select the sample. The mean age of respondents was 40 years. Their average income was Rs. 25000/-. The educational attainment of the participants range is from Diploma to Post Graduation in Engineering with experience range of 10 to 20 years.

## Measures

To study the variables in the present study the two psychometric devices were utilized.

## Occupational Stress Index

The level of occupational stress was assessed with the help of Occupational Stress Index developed and standardized by Shrivatsava and Singh (1981). The Occupational Stress Index consists of 46 items with five alternative responses viz., strongly agree, agree, uncertain, disagree, strongly disagree. This index assesses employee's perceived stress arising from the twelve dimensions of job life. These are role overload, role conflict, role ambiguity, unreasonable group and political pressure, under participation, responsibility for the persons, powerlessness, and poor-peer relations at work, intrinsic impoverishment, low status, strenuous working conditions and unprofitability.

Index of reliability had been determined by using Guttman Split formula and t-value is calculated using the Edwards (1969) formulae and found to be 0.71 (t-value=9.98). The index of validity was also ascertained by computing Edwards formulae which was found to be 0.84 (t-value=15.81).

## Managerial Styles

Mc Ber Company (1980) has identified six managerial styles viz., coercive, authoritative, affiliative, democratic, pace-setting and coaching styles. This scale has 36 pairs of statements which describe what managers do in their jobs. The respondents have to select one statement of each pair which one best applies to them. There are

Table 1. The correlation co-efficient and t-ratio between six leadership style score and occupational stress of executives

S. No	Occupational Stressors	Leadership styles (N=388)					
		Coercive	Authoritative	Affiliative	Democratic	Pace-setting	Coaching
1	Role overload	0.303 (6.25)**	0.260 (5.29)**	-0.380 (8.07)**	-0.320 (6.64)**	-0.339 (7.08)**	-0.314 (6.50)**
2	Role ambiguity	0.283 (5.80)**	0.186 (3.72)**	-0.419 (9.07)**	-0.331 (6.89)**	-0.318 (6.59)**	-0.447 (9.82)**
3	Role conflict	0.310 (6.41)**	0.213 (4.29)**	-0.360 (7.58)**	-0.299 (6.16)**	-0.331 (6.89)**	-0.539 (12.57)**
4	Unreasonable group and political pressures	0.331 (6.89)**	0.186 (3.72)**	-0.336 (7.01)**	-0.338 (7.06)**	-0.308 (6.36)**	-0.561 (13.31)**
5	Responsibility for persons	0.232 (4.69)**	0.182 (3.64)**	-0.363 (7.65)**	-0.367 (7.75)**	-0.363 (7.65)**	-0.315 (6.52)**
6	Under-participation	0.243 (4.92)**	0.218 (4.39)**	-0.329 (6.84)**	-0.359 (7.56)**	-0.319 (6.61)**	-0.329 (6.84)**
7	Powerlessness	0.247 (5.01)**	0.207 (4.16)**	-0.305 (6.29)**	-0.372 (7.87)**	-0.301 (6.20)**	-0.496 (11.22)**
8	Poor peer relations	0.235 (4.75)**	0.221 (4.45)**	-0.328 (6.82)**	-0.333 (6.94)**	-0.359 (7.56)**	-0.421 (9.11)**
9	Intrinsic impoverishment	0.231 (4.67)**	0.217 (4.37)**	-0.324 (6.72)**	-0.322 (6.68)**	-0.302 (6.22)**	-0.290 (5.95)**
10	Low status	0.230 (4.64)**	0.254 (5.16)**	-0.301 (6.2)**	-0.384 (8.17)**	-0.317 (6.57)**	-0.284 (5.82)**
11	Strenuous working conditions	0.229 (4.62)**	0.251 (5.09)**	-0.299 (6.16)**	-0.311 (6.43)**	-0.458 (10.12)**	-0.319 (6.61)**
12	Unprofitability	0.420 (9.09)**	0.236 (4.78)**	-0.325 (6.76)**	-0.307 (6.34)**	-0.351 (7.36)**	-0.568 (13.56)**

\*\* - Significant at 0.01 level

totally 12 statements describing each style. The reliability coefficient was found to be 0.27 (t-value=2.77) and validity coefficient to be (t-value=5.86).

### Results

Correlation analysis was used to determine the influencing effect of occupational stress on executives' leadership styles. The t-value is also calculated from the obtained correlation value (Table 1).

Figures in parentheses denote t-value

Hypothesis: *There is no correlation between occupational stress and executives' six leadership styles (coercive, authoritative, affiliative, democratic pacesetting and coaching).*

The positive coefficient values indicate that all the twelve stressors are directly related to coercive

and authoritative leadership styles. As the executives have more stress, their coerciveness and authoritative tends to become more dominant. "Unprofitability" (0.42) stresses highly but is positively correlated to coercive and the stressor "role overload" (0.26) increases the dominance of authoritative style to a greater level. But the trend is opposite in the case of other leadership styles. The increasing trend of these stressors in executives would reduce the dominance of affiliative, democratic, pace-setting and coaching leadership styles. The predominant stressors role ambiguity (-0.419) affects the affiliative, low status (-0.384) affects the democratic, strenuous working condition (-0.458) on pace-setting and unprofitability (-0.588) affects the coaching style to a greater extent. According to Neil (1997), the occupational stress due to role

Table 2. Different levels of occupational stress of executives

Leadership styles	Occupational Stress level				X <sup>2</sup>	LS
	Low	Moderate	High	Total		
Coercive	12	40	20	72	18.47	0.05 S
Authoritative	17	81	19	117		
Affiliative	12	20	10	42		
Democratic	10	25	9	44		
Pace-setting	18	30	10	58		
Coaching	15	35	5	55		
Total	84	231	73	388		

S- Significant

Hypothesis: Executives' six leadership styles (coercive, authoritative, affiliative, democratic, pace-setting and coaching) are independent of their occupational stress

conflict and role ambiguity highly affects the leadership styles.

The present investigation is also confirmed with the results of Nicholas (1999) that the relationship oriented leadership style is significantly correlated to their stress level.

An alternative way of looking at the effect of the levels of occupational stress on the leadership styles is to use the Chi-Square Test of Independence. Chi-square tests of independence of attributes are between six leadership styles (Table 2).

On the basis of Table 2, it can be seen that Chi-Square value (18.47) is significant at 0.05 levels stating that there is an association between the occupational stress and leadership styles. It can be said that majority of executives (81) follow authoritative style of leadership and have moderate occupational stress out of 388 executives. 73 have high stress level. Thus it can be said that occupational stress has influencing effect on the executives' leadership style. The result does not confirm our null hypothesis.

## Conclusion

The sum up, the results of the present study suggest that the work related stress has facilitating influence on the leader behaviour of the organization. Coercive and authoritative seems to get greatly influenced in a positive way to these work related stressors in particular unprofitability and role overload. Absence of these stressors enhances the applicability of affiliative,

democratic, pace-setting and coaching leadership styles. Presence of role ambiguity reduces highly the dominance of affiliative. Role conflict is negatively correlated to democratic style to a lesser extent and powerlessness stressor affects pace-setting to a lesser extent. Also

through Chi-Square analysis it is found that the leadership styles of the executives are dependent on their occupational stress level.

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