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Heterogeneity of Role Stress

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ABSTRACT

Stress is experienced in organisational roles as problems are encountered in role performance. The nature of role stress was investigated by measuring ten role stressors on executives of an Indian public sector industry, and the sample was partitioned in four ways as lower, middle, and higher age; junior, middle, and senior management levels; low, middle, and high qualification levels; and R&D, quality, production, and miscellaneous functions. Rank ordering of mean scores of the ten role stressors for the company as a whole and within each group revealed that the first ranking role stressor is uniform, but the second to the tenth ranking role stressors are not uniform across the groups and in the company as a whole. Comparisons with t-test on means performed for each role stressor (and the total role stress), for each pair of groups, under each type of grouping have also revealed significant differences in role stress experienced across the groups formed within the company. By demonstrating heterogeneity of role stress experience in the company, the study helps better appreciation of differences in problems faced by the employees across the company. The results of the study can help in formulating a contingency model to enhance organisational performance and effectiveness.

Introduction

Stress has always been a part of human existence. Its origin can be traced in the literature to the 17th Century when it was identified with hardship, straits, adversity or affliction as meant by the Latin word: Stringere. In the 18th and 19th Centuries, the meaning of stress changed to denote force, pressure, strain or strong effort with reference to an object or person (Hinkle 1973). In physics, stress is the internal restoration force generated within a solid body when an external force is applied to distort the body. The concept of stress was transferred from physicists to social scientists (Cooper & Marshall 1978). The first reference to Stress in humans was made by Selve (1936) who conceptualised it as a nonspecific response of the body to any demand made upon. Lazarus, Cohen, Folkman, Kanner and Schaefer (1980) clarified that stress is not only a response, but also a function of individual appraisal of the situation. People do not respond directly to a stimulus as such; they respond to meaning of the stimulus in relation to their perception of the environment. Events can be stressful, only when they are perceived to be threatening. Stress is dependent on the individual appraisal of what is at stake and what resources are available for meeting the demands posed. What is stressful for one person, may be normal for others and vice versa. What is stressful for an individual in some situations may not be stressful for the same individual in other situations. The modern view of stress is that it arises from a lack of fit between a person and his/her environment when there is an inability to cope with the demands made (Harrison 1978). Today, people are living in the 'Age of Stress' (Pestonjee 1999). Understanding the meaning of stress, its nature and complexities, its causes and determinants are important for maintaining human wellbeing and effectiveness in the organisational and non organisational contexts.

Role stress results from problems encountered in role performance. When these problems are confronted or resolved, the resulting role stress reduces or gets eliminated. This in turn promotes enhanced well being of the role occupant and enhanced performance and effectiveness at the individual and organisational levels. Homogeneity of role stress indicates that the same kind of problems are prevailing throughout the organisation and the same kind of solutions/interventions hold good for all parts of the organisation. Heterogeneity of role stress, on the other hand, signifies that different kinds of problems are prevailing in different parts of the organisation and different kinds of solutions/interventions are required for different parts of the organisation. Realisation of these differences is useful for formulating a contingency model for enhancing organisational performance and effectiveness.

This paper is focused on the study of role stress (or stress experienced while performing in an organisational role) as a dependent variable and personal variables (age, management level, qualification level, and functional

assignment) as independent variables. It investigates the nature of role stress, and an empirical analysis has been done to determine whether role stress is homogeneous or heterogeneous across the groups formed within the organisation on the basis of age (lower, middle, higher age groups), management levels (junior, middle, senior management levels), qualification levels (low, middle, high qualification levels), functional groups (R&D, quality, production, miscellaneous functions).

The paper is organised in five parts. The first part explains the concept of stress and how it is experienced in organisational roles. The second part describes the evolution of role stress framework. The third part develops the rationale for the study, and defines the hypotheses and objectives of the study. The fourth part deals with methodology employed for the study and results obtained about heterogeneity of role stress. The final part of the paper comprises discussions and conclusions about the findings and their implications for contemporary policies and practices of human resource management.

THE CONCEPT OF STRESS

Stress can be triggered by both desirable and undesirable events in life. Stress resulting from desirable events is called Eustress (meaning good stress). Eustress is pleasant and has curative effects. On the other hand, stress resulting from undesirable events is called Distress (meaning bad stress). Distress has bad effects on the individuals concerned (Selye 1975).

Stress cannot result from any opportunity/challenge/constraint/demand, whatsoever, unless its outcome is perceived to be both important and uncertain at the same time (Schwarzer 2009). Stress is a part of our everyday life. Moderate level of stress is in fact necessary for an individual to stay alert and active. High level of stress, on the other hand, would lead to impairment of human wellbeing and performance. Stress is additive. It is necessary to prevent spiralling of stress to contain it within a reasonable limit for harnessing its benefits, while avoiding its perils.

Stress in Organisational Roles

Performing in an organisational role invariably needs interactions with a set of connected roles within or outside the organisation. Role occupants in these connected roles do have their expectations from the role in question (the focal role); they function as Role Senders for the focal role, influencing how the focal role should function. The role occupant in the focal role also has expectations from his/her own role and functions as a role sender. The role senders for the focal role are significant for defining the focal role; determining how the focal role should function to the job description written by a designated authority in the organisation. On the contrary, an Organisational Role (Pareek 1993) is defined by the expectations of its role senders, which includes the role occupant, the superior (or boss), the direct reports (or subordinates), the peers, and in some cases, customers, suppliers, partners, team members and 'process owners'.

A role occupant encounters problems, constraints, deficiencies or conflicts in some form or the other during the course of his/her role performance. The role occupant is expected to perform and deliver on his/her role expectations in spite of impediments, such as the following: role occupant finds it difficult to interact with the related roles; role is unimportant and does not make an impact in the organisation (this is highly de motivating for the role occupant); role occupant is not clear about his/her role expectations; adequate resources have not been provided for performing in the role; role occupant does not have the competence required for performing in his/her role; role involves conflicting expectations; role occupant is compelled to do what he does not like; role does not offer opportunities for growth and development of the role occupant; role occupant cannot utilise his/her strengths in the assigned role; role involves excessive workload.

Occupation of an organisational role is, therefore, a potential source of stress. Stress experienced in roles is referred to as Role Stress. High role stress is the result of a poor role design or poor 'personenvironment fit'. Work stress jeopardises the role performance and wellbeing of the role occupant.

EVOLUTION OF ROLE STRESS FRAMEWORK

Several frameworks have been developed for the measurement of role stress. The concept of role stress was introduced by Kahn, et al. (1964) who identified three role stressors (i.e., role conflict, role ambiguity and role overload). In this framework, role conflict included inter sender conflict, intra sender conflict, inter role conflict, and person role conflict. Based on the framework of Kahn, et al. (1964), a role conflict scale comprising of eight items, and a role ambiguity scale comprising of six items was developed by Rizzo, House and Lirtzman (1970). These two scales were extensively used for role stress research for a long time in spite of controversies about their validity. McGee, Ferguson and Seers (1989) called for a moratorium on the use of these scales. According to

Kelloway and Barling (1990), however, the call for moratorium on the use of these scales was premature.

Only two role stressors were measurable until Beehr, Walsh and Taber (1976) developed a role overload scale comprising three items. This condition existed before the contribution made by Pareek (1982), as until this contribution research on stress in organisational roles was confined to role conflict, role ambiguity and role overload, even though these three role stressors ill represented the complexities of performance in organisational roles. Pareek (1982) significantly expanded the framework of role stress by identifying eight role stressors which closely represented problems encountered in organisational roles. He developed the Your Feelings About Your Role (YFAYR) Scale, which comprises 40 items to measure inter role distance, role stagnation, role ambiguity, role erosion, role overload, role isolation, role inadequacy and self role distance. The YFAYR scale was improved by Pareek through factor analysis, which led to splitting role ambiguity into a new version of role ambiguity and role expectation conflict; and role inadequacy into resource inadequacy and personal inadequacy. A comprehensive role stress measurement scale comprising 50 items for the measurement of ten role stressors was thus, realised. The new instrument was called the Organisational Role Stress (ORS) Scale (Pareek 1983).

A new role stressor called Role Underload was identified by Srinivasan and Anantharaman (1988) though factor analysis of the YFAYR scale and by Srivastav and Pareek (2008) through factor analysis of the ORS scale. Srivastav (2009) developed the New Organisational Role Stress (NORS) Scale comprising 71 items for measuring 11 role stressors, which included role Underload. Studies on the use of the NORS scale for role stress research are yet to be reported. The Organisational role stress (ORS) scale developed by Pareek (1983) was selected for this study. The choice of ORS scale was made because Gordon (2004) had branded the ORS scale as a classic inventory for the measurement of role stress in organisations. The scale has been extensively used for research on role stress (Pestonjee 1999), and because the role stressors in ORS framework were found to be relevant for the company under study as reflected by recent studies on role stress (Bhattacharya & Basu 2007, Dasgupta & Kumar 2009).

RATIONALE FOR THE STUDY

Every role stressor arises from a specific kind of problem encountered by the role occupant during the course of his/her role performance. Identification of prominent role stressor(s) at the organisational level is useful for identifying the most important problem(s) to be solved for the organisation and offers excellent opportunities for enhancing organisational performance and effectiveness (Srivastav 2007). The knowledge of prominent role stressor(s) operating in an organisation as a whole and in different parts thereof would be helpful for designing the most effective strategies for enhancing organisational performance and effectiveness in different parts of the organisation.

Influence of personal variables on individual perception has been studied by several researchers. According to Lynn, Barksdale and Shore (1995), age influences the perception of employee commitment to the organisation. Singh (1994) has shown that an employee's hierarchical level influences his/her perception of inequity in the organisation. Later, Schminke, Cropanzano and Rupp (2002) demonstrated that an employee's hierarchical level influences his/her perception of distributional and procedural fairness in the organisation. And Quazi (2003) has reported that education level influences the perception of corporate social responsibility. Moreover, Waller, Huber and Glick (1995) have reported that functional background is a determinant of the selective perception of executives. The above mentioned studies clearly illustrate how individual perception is influenced by a number of personal variables. These personal variables are 1) age, 2) hierarchical (or management) level, 3) qualification (or education) level, and 4) functional background.

According to Vazquez (2001), stress depends on the perceived danger to individual well being. Since stress is dependent on perception and perception is influenced by personal variables, it can be expected that role stress is dependent on personal variables. Further, role stress is related with job satisfaction (Teas 1983), and job satisfaction is related with personal variables (Asadi, et al. 2008). Hence, role stress should be related with personal variables.

The influence of age and/or gender on role stress has been reported by a number of researchers (Bhattacharya & Basu 2007, Dasgupta & Kumar 2009). Studies on the influence of other personal variables on role stress, however, are not common. Studies on role stress across groups formed on the basis of personal variables in companies have generally not been reported in the literature. It may, however, be noted that Estryn-Behar, et al. (1990) studied the relationship between job stress and personal variables beyond age and gender (including type of occupation, shift, number of years of work in hospital, daily travel time to work, marital status, number of children, and wish to move house) for female hospital workers. Moreover, Luecken, et al. (1997) have reported that working women with children at home, experience higher levels of home strain than those without children at home, irrespective of marital status or social support. It is, therefore, proposed to study role stress across groups formed on the basis of age, hierarchical level, educational qualification, and function performed, in a large company to examine whether the role stress is homogeneous or heterogeneous across such groups.

Hypotheses

The following four hypotheses have been formulated for this study:

H1 As employees age, they mellow, realising that it is not worth getting upset with small things and their stress reduces. It can, therefore, be hypothesised that age influences role stress.

H2 As the hierarchical (management) level increases, one has more freedom to organise work and obtain additional resources. Stress should, therefore, reduce as hierarchical (management) level increases. It is hypothesised that hierarchical (management) level influences role stress.

H3 As qualification (or education) level increases, capacity to understand role requirements may increase. Also the capacity to perform in the given role may be higher. It can, therefore, be hypothesised that qualification (or education) level influences role stress.

H4 Different functional assignments in an organisation impose different kinds of restrictions/threats/challenges/opportunities. It is, therefore, hypothesised that functional background influences role stress.

Objectives of the Study

The study has three prime objectives.

- 1. To enhance the understanding of role stress, its nature and complexity across different types of groups formed in the selected company (on the basis of age, hierarchical level, educational qualification, and function performed),
- 2. To identify the prominent role stressors (scoring the highest and the second highest) for each group under each type of formation, and
- 3. To determine the significant differences in role stress experienced across the groups under each type of grouping.

Methodology for the realisation of the above mentioned objectives is explained in the following section.

METHODOLOGY

Site and Sample

A large Indian public sector company with multiple production units in different parts of the country was selected for the study. The sample comprised 453 executives randomly selected from the corporate headquarters of the company and from each production unit. The sample included different age groups, hierarchical levels, qualification levels, and functional assignments of executives as obtained in the company (truly representing the population under study).

Procedure

Workshops on role stress were conducted in the corporate headquarters and in each production unit of the company to expose the participants to the framework of role stress and its impact on individual and organisational performance and effectiveness. The workshop participants were randomly selected executives representing all the diversity present in the company. The participants were promised that role stress profile at the individual and organisational levels with implications thereof would be furnished to them. Role stress was measured after motivating the respondents as explained above. Data collection in this manner minimised the data errors due to possible manipulation of natural response by the respondents. Promised information was given to the respondents after the measurement of role stress. Educational qualifications of the participants were numerically coded as shown in Table 1.

Ι	ower qualification group		Medium qualification group	High qualification group					
NC	Qualification	NC	Qualification	NC	Qualification				
1	Matriculation	6	Non technical postgraduate degree	8	Non technical doctorate degree				
2	Higher secondary	7	Technical graduate degree	9	Technical postgraduate degree				
3	Technical certificate			10	Technical doctorate degree				
4	Non technical graduate degree								
5	Technical diploma								

Note: NC = Numerical Code.

Measures

Four personal variables, viz., age, grade (hierarchical or management level), educational qualification, and functional affiliation (organisational function performed), were recorded for each respondent. The ORS scale (Pareek 1983), was used for measuring the following ten role stressors by observing the frequency of behaviours associated with each role stressor.

- 1. Inter role distance (IRD) arises when the role occupant finds it difficult to balance between the organisational and non organisational roles.
- 2. Role stagnation (RS) results from inability to take over a new role; the role occupant keeps on stagnating in the old role due to lack of competence for the new role.
- 3. Role expectation conflict (REC) arises when the role occupant encounters conflicting expectations from his/her role.
- 4. Role erosion (RE) results when some of the important functions belonging to one's role are performed by other roles.
- 5. Role overload (RO) arises when there are too many or too high expectations from one's role.
- 6. Role isolation (RI) results when the role occupant experiences lack of interaction/communication with the connected roles.
- 7. Personal inadequacy (PI) arises when the role occupant does not have the competence for performing in his/her role.
- 8. Self role distance (SRD) results when the role occupant experiences a conflict between the self and his/her role; the role demands what the role occupant does not like to do.
- 9. Role ambiguity (RA) arises when the role occupant is not clear about expectations from his/her role.
- 10. Resource inadequacy (RIn) results when the role occupant encounters inadequacy of resources for performing in his/her role.

The ORS scale comprises 50 items/statements. For each role stressor, there are five items/statements. Respondents are required to rate each item/statement from zero to four (zero denotes the least likely situation and four signifies the most likely situation). Respondent's score for each role stressor (in the range: o - 2o) is obtained by adding the scores for the given five items/statements (e.g., items 1, 11, 21, 31, 41 for inter role distance). The score for total role stress (in the range: o - 2oo) for a respondent is obtained by adding his/her scores for the ten role stressors.

Analysis

Personal and role stress data were collected from 453 respondents. The ORS sample (N = 453) for the company as a whole was partitioned in four different ways, on the basis of respondent age, management level, educational qualification, and functional assignment. For each type of grouping, the respondents were mutually exclusive across the groups formed. However, there were common respondents between groups under different types of grouping. On the basis of age, the sample was partitioned as the lower age group (23 to 29 years), the middle age group (30 to 39 years), and the higher age group (40 to 58 years). On the basis of management level, the sample was partitioned as the junior management level (grades: I to III), the middle management level (grades: IV and V) and the senior management level (grades: VI to VIII). On the basis of educational qualification, the sample was partitioned as the low qualification level, the middle qualification level, and the high qualification level, which are shown in Table 1. On the basis of functional assignment, the sample was partitioned as the R&D function, the quality function, the production function, and the miscellaneous function (representing the remaining functions in the organisation).

Means were calculated for each role stressor and for the total role stress for the undivided sample and for each one of the groups formed. Rank ordering the means of each role stressor was also done for the undivided sample and for each one of the groups formed. Prominent (the highest and second highest scoring) role stressors were identified for the overall company and for each group under each type of grouping. Under each type of grouping a t-test on means was performed to detect statistically significant differences for total role stress and for each role stressor between different pairs of groups. Two tailed significance with p < 0.1 was used for interpretation.

RESULTS

192)

Table 2 furnishes the means for the eleven role stress variables (ten role stressors and total role stress) and shows the results of rank ordering of means done for the ten role stressors for the company as a whole and for each one of the 13 groups formed.

_	Ta IRD RS		ble	2 Mean REC	d rank o	le stress variables RO RI			PI			SRI)	RA				
Groups	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R
Company as a whole (N = 453)	4.95	9	6.46	7	6.50	6	9.23	1	5.22	8	7.76	2	7.62	4	6.68	5	4.94	10
Age groups:																		
Lower ($n = 58$)	6.02	8	7.69	5	6.72	7	9.14	1	4.95	10	9.00	2	8.78	3	8.28	4	5.64	9
Middle (n = 135)	5.13	9	5.60	6	6.33	7	9.91	1	5.51	8	7.57	3	7.44	4	7.16	5	4.79	10
Higher (n = 260)	4.62	10	6.11	6	6.53	5	8.89	1	5.13	8	7.58	3	7.46	4	6.08	7	4.87	9
Management levels:																		
Junior (n = 247)	4.69	10	6.74	6	6.25	7	9.33	1	5.18	8	7.73	3	8.51	2	6.94	5	5.14	9
Middle (n = 175)	5.28	9	6.33	7	6.79	4	9.42	1	5.42	8	7.96	3	6.74	5	6.53	6	4.82	10
Senior $(n = 31)$	4.10	9.5	4.97	7	6.81	4	7.32	1	4.48	8	6.84	3	5.52	5.5	5.52	5.5	4.10	9.5
Qualification levels:																		
Low $(n = 185)$	4.21	10	6.28	6	6.32	5	8.84	1	5.18	8	7.27	4	7.96	2	6.04	7	5.02	9
Medium (n = 219)	5.58	8	6.90	6	6.65	7	9.57	1	5.45	9	8.05	2	7.63	4	7.34	5	5.00	10
High (n = 49)	4.88	8	5.16	7	6.45	4	9.16	1	4.39	10	8.29	2	6.33	5	6.14	6	4.41	9
Functions:																		
R & D (n = 79)	4.56	10	6.75	6	6.84	5	9.16	1	5.14	9	8.05	2	6.85	4	6.05	7	5.65	8
Quality (n =	4.42	10	6.46	6	6.20	7	9.24	1	5.00	9	7.85	3	7.87	2	6.93	5	5.11	8

	IKD		NO		KEC	REC RE			NO		IXI		1.1		SKD		IV.	
Groups	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R	Mean	R
Production (n = 64)	6.23	7	6.41	6	6.20	8	9.06	1	5.77	9	7.03	4	7.59	2	6.78	5	4.19	10
Miscellaneous (n = 118)	5.38	8	6.28	7	6.92	5	9.33	1	5.35	9	7.79	2	7.75	4	6.64	6	4.60	10

RO

RI

PΙ

SRD

 $\mathbf{R} \mathbf{\Delta}$

RE

RS

IRD

REC

Note: N = number of samples for company as a whole, n = number of samples in the group, R = Rank, IRD = Inter-Role Distance, RS = Role Stagnation, REC = Role Expectation Conflict, RE = Role Erosion, RO = Role Overload, RI = Role Isolation, PI = Personal Inadequacy, SRD = Self Role Distance, RA = Role Ambiguity, RIn = Resource Inadequacy, and TRS = Total Role Stress.

Nine out of ten role stressors are differently ranked across the age groups and qualification levels. Eight out of ten role stressors are differently ranked across the functions. Seven out of ten role stressors are differently ranked across the management levels. Only one out of ten role stressors (i.e., role erosion), is uniformly ranked (Rank 1) in the undivided sample and under each one of the 13 groups.

Table 3 furnishes the results of t-test on means for each role stress variable in different pairs of groups under each type of group formation. Table 3 shows that 42 out of 165 tests conducted revealed statistically significant differences. Significant differences in the experience role stress were found in 11 out of 33 tests conducted for the age groups, 10 out of 33 tests conducted for the management groups, 12 out of 33 tests conducted for the qualification groups, and nine out of 66 tests conducted for the functional groups.

Table 3 Significance of difference for role stress variables

	't' values for Role Stress Variables													
Pair of groups	IRD	RS	REC	RE	RO	RI	ΡΙ	SRD	RA	RIn	TRS			
Age groups														
Lower vs. Middle	1.46	1.62	0.71	-1.27	-0.93	2.33**	1.84*	1.79*	1.31	-0.36	1.48			
Lower vs. Higher	2.40**	2.47**	0.36	0.43	-0.34	2.48**	1.97*	3.85***	1.24	-0.33	2.53**			
Middle vs. Higher	1.32	1.18	-0.54	2.52**	0.89	-0.02	-0.05	2.62***	-0.21	0.09	1.19			
Management levels	Management levels													
Junior vs. Middle	-1.53	1.05	-1.47	-0.24	-0.60	-0.61	3.99***	1.07	0.84	-1.96*	0.19			
Junior vs. Senior	0.55	3.21***	-0.86	2.86***	1.16	1.27	3.88***	2.02**	1.50	0.26	2.32**			
Middle vs. Senior	0.24	2.40**	-0.02	2.88***	1.50	1.57	1.56	1.41	1.02	1.49	2.14**			
Qualification levels	Qualification levels													
Low vs. Medium	-3.54***	-1.57	-0.86	-1.89*	-0.68	-2.06**	0.71	-3.29***	0.07	-1.59	-2.22**			
Low vs. High	-1.28	1.97*	-0.22	-0.54	1.33	-1.51	2.32**	-0.17	1.15	-1.40	0.28			
Medium vs. High	1.40	3.13***	0.38	0.68	1.83*	-0.36	1.88*	2.13**	1.16	-0.42	1.85*			
Functions														
R&D vs. Quality	0.27	0.58	1.23	-0.14	0.27	0.36	-1.72*	-1.77*	0.99	0.60	0.07			

RI

PΙ

SRD

R A

RIn

TRS

f groups
i

IRD

	IKD	No	KEC	KE	RO	KI	11	SKD	М	KIII	IKS
R&D vs. Production	-2.47**	0.53	0.99	0.14	-0.90	1.58	-0.97	-1.17	2.55**	1.41	0.16
R&D vs. Misc	-1.51	0.86	-0.15	-0.28	-0.37	0.42	-1.37	-1.07	1.79*	0.50	-0.20
Quality vs. Production	-3.08***	0.09	-0.01	0.31	-1.26	1.61	0.41	0.27	2.04**	1.09	0.11
Quality vs. Misc	-2.25**	0.38	-1.66*	-0.20	0.77	0.13	0.22	0.62	1.09	-0.04	-0.33
Production vs. Misc	1.40	0.20	-1.24	-0.42	0.64	-1.34	-0.22	0.23	-0.80	-1.03	-0.35

RE

RO

REC

RS

Notes: a. vs. = versus, Misc. = Miscellaneous, IRD = Inter-Role Distance, RS = Role Stagnation, REC = Role Expectation Conflict, RE = Role Erosion, RO = Role Overload, RI = Role Isolation, PI = Personal Inadequacy, SRD = Self-Role Distance, RA = Role Ambiguity, RIn = Resource Inadequacy, and TRS = Total Role Stress. b. * p <= 0.1, ** p <= 0.05, and *** p <= 0.01.

DISCUSSION

Table 2 shows that role erosion has emerged as the most prominent stressor for the company as a whole and for each one of the 13 groups formed within in the company. This role stressor is so strong that it dominates (having the first rank) in each one of the 13 groups. Predominance of role erosion in the public sector (Sandra & Frans 2002) companies has been reported by many researchers (Mohan & Chauhan 1999). All other role stressors are differently ranked at least under two out of four types of grouping.

Considering the first and second ranking stressors in this study, the following are the opportunities for improving organisational performance and effectiveness in different parts of the organisation (Srivastav 2007).

Role erosion needs to be deemphasised in all the groups. It may be noted that role erosion arises when some of the important functions belonging to the role in question are performed by some other roles (Pareek 1983). This means reduced importance of the role which is demotivating for the role occupant. It reduces the contribution of the role occupant and jeopardises his/her role performance. To overcome role erosion, the role needs to be enriched (Srivastav 2007) with additional functions which are relevant for the organisation and the role in question. Role enrichment (Pareek 1993) as explained can be systematically carried out in the organisation involving all the role senders for analysing and redesigning the role to enhance its contribution to the related business processes. Process based role analysis and design (PROBRAD) (Srivastav, in press), a practical and user friendly organisation development intervention, can be gainfully employed for effective role enrichment.

Role isolation needs to be de emphasised in the related five groups. It may be noted that role isolation arises due to lack of interaction/communication between the focal role and its related roles (Pareek 1983). Role isolation can be overcome by strengthening of role inter linkages (Pareek 1993). Interdependence between the related roles needs to be created/improved for strengthening role inter linkages (Srivastav 2007). This again can be done through the application of PROBRAD.

Personal inadequacy needs to be de emphasised in the related four groups. It may be noted that personal inadequacy arises from lack of competence for performing in the role (Pareek 1993). Personal inadequacy can be overcome by competence building through effective training and development. And resource inadequacy needs to be de emphasised in the related four groups. It may be noted that resource inadequacy arises from lack of resources which are required for role performance (Pareek 1983) Effective augmentation/redistribution of resources and/or measures for conservation of resources are required for overcoming resource inadequacy (Srivastav 2007).

Table 3 reveals significant differences in 25.5 per cent of comparisons made for the ten role stressors across groups under different types of grouping. At least one significant difference exists for each role stress variable. At least nine significant differences exist for each type of grouping. Role stress is, therefore, not uniform, but differential across various groups in the company.

Conclusion

The nature of role stress has been investigated in this study. It is revealed that role stress experienced in the company under study is not homogeneous, but heterogeneous. With the exception of role erosion, prominent role stressors are not uniform throughout the company; they vary across the groups. Since each role stressor results from a specific kind of problems encountered by the role occupant during the course of his/her role performance, the knowledge of prominent role stressors in different parts of a company would help in identifying the most important problems to be solved in different parts of the company. A better appreciation of differences in problems prevailing across the company would facilitate easier identification of right opportunities for enhancing individual and organisational performance and effectiveness in different parts of the company.

Heterogeneity of role stress confirms that there cannot be one uniform solution/intervention which holds good for the organisation as a whole. More likely what would be profitable is a tailor made and specific solution/intervention for different parts of the organisation. The findings of this study are of strategic importance as they can lead to the formulation of a contingency model for enhancing organisational performance and effectiveness. It may, however, be noted that this study was conducted in a single public sector industry in India, and consequently, replication in other sectors and/or other countries is warranted. Further research has potential to provide relevant knowledge to guide human resource managers in the generation of robust frameworks that integrate the consequences and implications of the findings of this study.

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REFERENCES

Asadi, A., Fadakar, F., Khoshnodifar, Z., Hashemi, S. M., & Hosseininia, G. (2008). Personal characteristics affecting agricultural extension worker's job satisfaction level. *Journal of Social Science*, 4(4), 246-250.

Beehr, T. A., Walsh, J. T., & Taber, T. D. (1976), Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology*, 61(1), 41-47.

Bhattacharya, S., & Basu, J. (2007). Distress, wellness and organizational role stress among IT professionals: Role of life events and coping resources. *Journal of the Indian Academy of Applied Psychology*, 33(2), 169-178.

Cooper, C. L., & Marshall, J. (1978). Understanding executive stress (1-9). London: Macmillan Press.

Dasgupta, H., & Kumar, S. (2009). Role stress among doctors working in a government hospital in Shimla. *European Journal of Social Sciences*, 9(3), 356-370.

Estryn-Behar, M., Kaminski, M., Peigne, E., Bonnet, N., Vaichere, E., Gozlan, C., Azoulay, S., & Giorgi, M. (1990). Stress at work and mental health status among hospital workers. *British Journal of Industrial Medicine*, 47(1), 20-28.

Gordon, J. (2004). *Pfeiffer classic inventories, questionnaires, and surveys for training and development*. San Francisco, CA: John Wiley & Sons.

Harrison, R. V. (1978). Person-environment fit and job stress. In C. L. Cooper & R. Pyne (Eds.). *Stress at work* (175-205). New York: John Wiley & Sons.

Hinkle, L. E. (1973). The concept of stress in the biological and social sciences. *Science, Medicine and Man*, 1(1), 31-48.

Kahn, R. L, Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: John Wiley.

Kelloway, E.K., & Barling, J. (1990). Item content versus wording: Disentangling role conflict and role ambiguity. *Journal of Applied Psychology*, 75(6), 738-742.

Luecken, L. J., Suarez, E. C., Kuhn, C. M., Barefoot, J. C., Blumenthal, J. A., Siegler, I. C., & Williams, R. B. (1997). Stress in employed women: Impact of marital status and children at home on neurohormone output and home strain. *Psychosomatic Medicine*, 59(4), 352-359.

Lynn, M. S., Barksdale, K., & Shore, T. H. (1995). Managerial perceptions of employee commitment to the organisation. *Academy of Management Journal*, 38(6), 1593-1615.

McGee, G. W., Ferguson, C. E., & Seers, A. (1989). Role conflict and role ambiguity: Do the scales measure these two constructs? *Journal of Applied Psychology*, 74(5), 815-818

Mohan, V., & Chauhan, D. (1999). A comparative study of organisational role stress amongst managers of government, public and private sectors. *Journal of the Indian Academy of Applied Psychology*, 25(1-2), 45-50.

Pareek, U. (1982). Organizational role stress scales (manual, scale, answer sheet). Ahmedabad: Navin Publications.

Pareek, U. (1983). Organizational roles stress. In L. D. Goodstein & J. W. Pfeiffer (Eds.). *The 1983 annual* (115-123). San Diego, CA: University Associates.

Pareek, U. (1993). Making organizational roles effective. New Delhi: Tata McGraw-Hill Publishing.

Pestonjee, D. M. (1999). Stress and coping - The Indian experience (2nd ed.). New Delhi: Sage Publications.

Quazi, A. M. (2003). Identifying the determinants of corporate managers' perceived social obligations. *Management Decision*, 41(9), 822-831.

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15(2): 150-163.

Sandra, V. T., & Frans, L. L. (2002). The performance paradox in the public sector. *Public Performance & Management Review*, 25(3), 267-281.

Schminke, M., Cropanzano, R., & Rupp, D. E. (2002). Organization structure and fairness perceptions: The moderating effects of organization level. *Organizational Behavior and Decision Processes*, 89(1), 881-905.

Selye, H. (1936). A syndrome produced by diverse nocuous agents. Nature, 138, 32-35.

Selye, H. (1975). Confusion and controversy in the stress field. Journal of Human Stress, 1(2), 37-44.

Singh, P. (1994). Perception and reactions to inequity as a function of social comparison referents and hierarchical levels. *Journal of Applied Psychology*, 24(6), 557-565.

Schwarzer, R. (2009). *Stress and coping resources: Theory and review*. Berlin, Freie University. Available from http://web.fu-berlin.de/gesund/publicat/ehps_cd/health/stress.htm.

Srinivasan, P. T., & Anantharaman, R. N. (1988). Organizational role stress: Factor structure examination and comparison amongst sectoral organizations. *Journal of Psychometry*, 11(4), 21-28.

Srivastav, A. K. (2007). Stress in organizational roles - individual and organizational implications. *Icfaian Journal of Management Research*, 6(12), 64-74.

Srivastav, A. K., & Pareek, U. (2008). Measurement of stress in organizational roles: Revalidating the framework. In E. Biech (Ed.). *The 2008 Pfeiffer annual: Training* (187-208). San Francisco, CA: Pfeiffer.

Srivastav, A. K. (2009). New organizational role stress (NORS) scale. In E. Biech (Ed.). *The 2009 Pfeiffer annual: Training* (157-170). San Francisco, CA: Pfeiffer.

Srivastav, A.K. (in press). Harnessing the potential of organization development. In E. Biech (Ed.). *The 2011 Pfeiffer annual*. San Francisco, CA: Pfeiffer.

Teas, R. K. (1983). Supervisory behavior, role stress, and the job satisfaction of industrial salespeople. *Journal of Marketing Research*, 20(1), 84-91.

Vazquez, E. L. (2001). Risk perception interactions in stress and coping facing extreme risks. *Environmental Management and Health*, 12(2), 122-133.

Waller, M. J., Huber, G. P., & Glick, W. H. (1995). Functional background as a determinant of executives' selective perception. *Academy of Management Journal*, 38(4), 943-974.