

IMPLICATIONS OF QUALITY OF WORK LIFE ON STRESS LEVEL AN EMPIRICAL STUDY

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Abstract

In the era of cut-throat competition, companies are continually working to improve their performance and to increase effectiveness of their processes and systems. This all has led to the increased job demands, stress level and eventually high turnover rates. Now companies are redesigning their work culture to provide a proper quality of work life to their employees to enhance their potential in a conducive work environment. The paper attempts to study quality of work life of managers, to study the levels of stress among managers and to study the influence of quality of work life on stress levels of managers in Shipping Industry. The scope of the study is 5 major Shipping companies spread throughout India. A sample of total 72 managers is taken from. The results indicate a very significant and highly negative correlation between quality of work life and role stress of managers in Shipping Industry.

Key Words: Quality of Work Life, Role Stress and Shipping Industry.

Introduction and literature review

Over the past four decades, significant changes have taken place within the work place. The demands of the current business environment are increasing stress on HR professionals of today and this is impacting their work, personal life, physical health and emotional well being. The constant changes in industry, ups and downs in employment markets, and challenges of hiring and retaining best talent, aligning HR functions with business objectives in current environments are increasingly posing threats to their stress levels. It has become very important for the management to understand behaviour related problems of people working in the organisations for achieving the predetermined goals. The issues which are gaining importance these days are – if the people are under occupational/organisational role stress, if the quality of work life is as per their requirements, if they are satisfied with their jobs and if managerially they are successful or not. The level of organisational stress and job satisfaction will vary from person to person.

Hackman and Oldhams (1980) highlighted the constructs of quality of work life in relation to the interaction between work environment and personal needs. The work environment that is able to fulfil employees' personal needs is

considered to provide a positive interaction effect, which will lead to an excellent quality of work life. **Serey (2006)** found that meaningful and satisfying work is often merged with discussions of job satisfaction, and believed to be more favourable to quality of work life. **Rethinam & Esmail (2008)** said that the main elements of the quality of work life, such as health and well-being, job security, job satisfaction, competence development, balance between work and non work life are expected to help human resource practitioners as adult educators to co-design the IT work with humanistic factors. This will ensure the smooth transition of the contemporary workforce towards a knowledge based workforce. Stress among employees is associated with reductions in productivity, absenteeism, low organizational commitment and high turnover, and these costs are directly linked to reduced organizational effectiveness and financial loss (**Lingard, 2003; Reynolds and Tabacchi, 1993**). Stress affects all categories of doctors; however role stress reduces through the level of management as well as social support (**Cardoso and Fernandes, 2011**). Research suggests that a common flaw in hospitals is that they fail to address the issues associated with doctor's wellbeing, such as the experience of work-related stress and burnout and the extent to which

the doctor's feel they are supported and valued (**Anderson et al., 2001**). The regular occurrence of these role stressors that prevent employees from meeting organizational expectations can evoke a variety of outcomes commonly recognised as symptoms of role strain. These include low job satisfaction, absenteeism, lower organizational commitment, poorer job performance, negative attitude toward work, tension and anxiety (**Zohar, 1994**). **Ross and Boles (1994)** suggested that supervisory and managerial support reduces job-related strains such as role conflict and role ambiguity. This claim is supported by a number of findings that suggest supervisory and leadership behaviours actually increase role clarity (**Hampton et al., 1986; Johnson et al., 1989**).

Pestonjee (1999) explained that optimum level at which stress is functional is different for different persons and is dependent on a variety of factors like the personality of an individual, self esteem, his educational background, authority to make decisions, control over various organizational and environmental variables and so on. **Sparks et al. (2001)** has found that compressed work time schedules, flexible work hours increase satisfaction with the work environment and the work schedule itself. **Cheng et al., 2000**, says

that an unstressful workplace is not merely from the financial reimbursement or other benefits that matter. It is a feeling of fulfilment and gratification that the employees experience from working, thus it eventually provides a good health and well being.

Javernppa and Eloranthay(2001) said that the work associated with greater task variety, task discretion and skill development opportunities foster the competency development among the workforce. There are types of work, which are intrinsically interesting and provide opportunities for competency development which in turn enhances Quality of Work Life. **Lehal (2007)** found that organisational role stress is a factor, which has a negative role to play especially in private sector. To reduce the stress level in private sector executives, work overload should be controlled, the role clarity should be there, group and political pressure should be reduced, the jurisdiction of authority should not create any uncertainty and ambiguity of the role, the person should not be kept so busy that he is not able to fulfil his social obligations, he should have sufficient time to solve domestic and personal problems. So, the organisations must carefully visualise, how much maximum time a person can devote in the organization and that too by working in an efficient manner.

Methodology

Present study

The above mentioned and other similar studies made the plot for the present study. The authors attempt to study quality of work life and level of stress of employees in the five organizations of shipping industry i.e. Shipping Corporation of India, Great Eastern Shipping Company Limited, Mercator Lines, Dynacom Shipping and CTI Shipbrokers.

Objectives

The paper studies quality of work life and level of stress in the organizations of the shipping industry. The main objectives of the study are as follows:

- To see the association of level of stress with psycho-demographic factors i.e. Age, marital status, and gender of managerial employees of the organizations of the shipping industry.
- To see the association of quality of work life with psycho-demographic factors i.e. Age, marital status, and gender of managerial employees of the organizations of the shipping industry.
- To find out the correlation between quality of work life and the levels of stress of managerial employees

of the organizations of the shipping industry.

- To find out the impact of quality of work life on the levels of stress of managerial employees of the organizations of the shipping industry.
- To find out the correlation between quality of work life and the sub-dimensions of stress of managerial employees of the organizations of the shipping industry.

Hypotheses

H_{1a}. There is an association between the level of Stress and psycho demographic variables of managerial employees of the organizations of the shipping industry.

H_{2a} There is an association between quality of work life and psycho demographic variables of managerial employees of the organizations of the shipping industry.

H_{3a}. There exists a significant relationship between quality of work life and levels of stress of managerial employees in the organizations of the shipping industry.

H_{4a}. Quality of work life has a significant impact on the level of stress of the managerial employees in the organizations of the shipping industry.

H_{5a} There exists a significant relationship between quality of work life and sub dimensions of stress of managerial employees in the organizations of the shipping industry.

Research design

The study is a diagnostic study. Five organizations were chosen from Shipping Industry. Out of the 100 questionnaires that were sent online to the employees working at the middle level management, 72 were received back fully filled. The questionnaire consists of 2 parts. One related to the quality of work life offered in the organisation and the second part consisted of the role stress of managerial employees in the shipping industry.

Measures

Primary data was collected through preliminary interviews and questionnaires ultimately. Quality of work life questionnaire (Sinha and Sayeed 1980) and organizational role stress (Udai Pareek) were used to undertake the study.

The Quality of Work Life Inventory by Sinha & Sayeed (1980):

Quality of work life inventory by Sinha & Sayeed (1980) was taken to measure various aspects of work life. Quality of work life inventory consisted of

85 items measuring 17 dimensions of quality of work life, namely:

- (i) **Economic Benefits (EB):** receiving adequate monetary income and financial rewards.
- (ii) **Physical Working Condition (PWC):** conditions affecting physical comfort and convenience on and at the job.
- (iii) **Mental State (MS):** feeling good vs. Feeling of depression or being upset at work.
- (iv) **Career Orientation (CO):** progressing for career objectives and having opportunity for progress.
- (v) **Advancement on Merit (AM):** the extent to which rewards and punishments are based on merit.
- (vi) **Effect on Personal Life (EPL):** effect of job on personal life. The hangover effect on the individual which may be positive or negative.
- (vii) **Union Management Relation (UMR):** the relationship between union and management and consideration of each other's point of view.
- (viii) **Self Respect (SR):** the feeling of being treated as an adult with respect and due dignity.
- (ix) **Supervisory Relationship (RS):** the relationship with the supervisor and mutual understanding.

(x) **Intra group Relations (IGR):** the way workers in a group interact.

(xi) **Sense of Achievement Vs Apathy (A):** the workers concern and ambition for work.

(xii) **Confidence in Management (CM):** beliefs that the management is aware of and concerned about workers problems and interests.

(xiii) **Meaningful Development (MD):** opportunity to learn more and apply skills and abilities meaningfully and in a challenging way.

(xiv) **Control, Influence and Participation (CIP):** the extent to which workers are involved in decision making, their influence and control.

(xv) **Employee Commitment (EC):** loyalty to company and concern for its future.

(xvi) **General Life Satisfaction (GLS):** fulfillment of 'life' needs apart from the work situation i.e. Infamily, in society and so on.

(xvii) **Organizational climate:** the organisational outlook and approach in the interest of worker for the betterment of industry.

Organizational Role Stress (ORS) questionnaire:

Organizational role stress questionnaire developed by UdaiPareek was taken to

assess the degree of stress arising from various aspects of the job. Organizational role stress consisted of ten dimensions, namely:

(i) **Inter-role Distance (IRD)** – The conflict arises when an individual occupies more than one role.

(ii) **Role Stagnation (RS)** - Feeling of being stagnated in the same role.

(iii) **Role Expectation Conflict (REC)** – It arises due to conflicting expectations or demands by different role senders.

(iv) **Role Erosion (RE)** - When credit for tasks performed in one's role is given to others or when some tasks belonging to one's role are performed by others.

(v) **Role Overload (RO)** – When the role occupant feels that his/her role expectations are too many or too high.

(vi) **Role Isolation (RI)** – When there is incompatibility of one's role with other employee's roles in the organization.

(vii) **Personal Inadequacy (PI)** – A feeling of insufficient knowledge, skills or training to undertake a role effectively.

(viii) **Self-role Distance (SRD)** – It arises out of the conflict between self-concept about the role and the expectations from the role, as perceived by the role occupant.

(ix) **Role Ambiguity (RA)** – Lack of clarity about the various expectations that an employee has from his/her role.

(x) **Resource Inadequacy (rin)** – It arises when the resources required by the

role occupant for performing the role effectively are unavailable.

The items were scored on a five-point Likert scale from strongly disagree to strongly agree.

Reliability and Validity Analysis:

Reliability can be defined to the extent to which a variable is consistent in what it is intended to measure. In the present research, the reliability of questionnaires was determined by using Cronbach's Coefficient alpha.

Validity' represents the extent to which a measure correctly represents the concept

of study. As standardized questionnaires were used for the purpose of collecting data Validity testing has already been performed by the respective authors.

Analysis of data

To arrive at pertinent analysis, the collected data was put to statistical analysis using SPSS package. The tools, which were employed to test the drafted hypothesis for analysis included: Analysis of Variance (ANOVA), Correlation and Regression Analysis. After scoring the questionnaire the data was tabulated for each variable being studied separately.

Table 1: Reliability Analysis

	Quality of Work Life	Organizational Role Stress
Number of items	85	50
Cronbach Alpha (α)	0.966	0.952

The reliability coefficient indicated that the scale for measuring is quite reliable. An alpha value of 0.60 and 0.70 or above is considered to be the criterion for demonstrating internal consistency of new scales and established scales respectively.

Hypothesis testing

H_{1a}. There is an association between the level of Stress and psycho demographic variables of managerial employees of the organizations of the shipping industry

Table 2: ANOVA for Psycho-demographic variables and Stress

Stress		Sum of Squares	Df	Mean Square	F	Sig.
Age	Between Groups	.581	4	.145	.540	.707
	Within Groups	18.039	67	.269		
	Total	18.620	71			
Marital Status	Between Groups	.044	1	.044	.166	.685
	Within Groups	18.576	70	.265		
	Total	18.620	71			
Gender	Between Groups	.023	1	.023	.088	.768
	Within Groups	18.596	70	.266		
	Total	18.620	71			

The results of one-way ANOVA (table 2) suggested no significant difference in the level of Organisational Role Stress among different age levels, marital status and gender, getting p-value more than .05 ($p=.707$, $p = .685$ and $p=.768$ respectively). Therefore the null hypothesis (H_{1a}) that there is no significant difference in the level of Organisational Role Stress among different age levels, marital status and gender is not rejected or may be accepted.

H_{2a} There is an association between quality of work life and psycho

demographic variables of managerial employees of the organizations of the shipping industry

Table3: ANOVA for Psycho-demographic variables and QWL

QWL		Sum of Squares	Df	Mean Square	F	Sig
Age	Between Groups	.776	4	.194	.503	.734
	Within Groups	25.850	67	.386		
	Total	26.62	71			
Marital Status	Between Groups	.194	1	.194	.514	.476
	Within Groups	26.432	70	.378		
	Total	26.626	71			
Gender	Between Groups	.199	1	.199	.528	.470
	Within Groups	26.427	70	.378		
	Total	26.626	71			

The results of one-way ANOVA (table 3) suggested no significant difference in the level of Quality of Work Life among different age levels, marital status and gender, getting p-value more than .05 ($p=.734$, $p = .476$ and $p=.470$ respectively). Therefore the null hypothesis (h_{2a}) that there is no significant difference in the level of Quality of Work Life among different age levels, marital status and gender is not rejected or may be accepted. Therefore, the 1st and 2nd hypothesis that there exists a significant

relationship of psycho-demographic variables i.e. Age; gender and marital status of employees with quality of work life and stress level of managerial employees are not rejected.

H_{3a} . There exists a significant relationship between quality of work life and levels of stress of managerial employees in the organizations of the shipping industry.

H_{4a} . Quality of work life has a significant impact on the level of stress of the managerial employees in the organizations of the shipping industry.

Table 4: Correlations

		Quality of Work Life	Stress
QWL	Pearson Correlation	1	-.811**
	Sig. (2-tailed)		.000
	N	72	72
Stress	Pearson Correlation	-.811**	1
	Sig. (2-tailed)	.000	
	N	72	72

** . Correlation is significant at the 0.01 level (2-tailed).

Pearson's Correlation coefficient was used to test the hypothesis, and the results in table 4 showed a significant and highly negative correlation ($r = -.811$, $p = .000$) between quality of work life and role stress among employees. Therefore the null hypothesis (h_{3a}) that there exists a significant relationship between quality of work life and levels of stress of employees in the organizations of the shipping industry is rejected.

In order to examine the impact of quality of work life on role stress of employees, regression technique was used. Table 5 reports the strength of the relationship between the model and the dependent variable.

A. Predictors: (Constant), QWL

It can be seen that regression model explained 65.7% of the variance in the organizational role stress. Table 6 summarizes the results of Analysis of Variance. It was found the regression sum of squares is slightly less than the model explained residual sum of squares, which indicated that most of the variation, is not explained by the above quality of work life dimensions. The significance value of F statistic is less than 0.05, which means that the variation explained by the model is not due to chance

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.811 ^a	.657	.652	.30192

Table 6: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.239	1	12.239	134.269	.000 ^a
	Residual	6.381	70	.091		
	Total	18.620	71			

has significant impact on the level of role stress of employees is not rejected or may be accepted.

A. Predictors: (Constant), QWL

B. Dependent Variable: STRESS

From the above results it can be concluded that the hypothesis H_{4a} is supported. The dimensions associated with quality of work life are significant predictors of overall organizational role stress. Thus, the hypothesis (h_{4a}) that quality of work life

H_{5a} There exists a significant relationship between quality of work life and sub dimensions of stress of managerial employees in the organizations of the shipping industry.

Table 7: Correlations

	QWL	IRD	RST	REC	RE	RO	RI	PI	SRD	RA	RIN
QWL Pearson	1	-.669**	-.701**	-.764**	-.597**	-.651**	-.657**	-.693**	-.708**	-.745**	-.619**
Correlation											
Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
N	72	72	72	72	72	72	72	72	72	72	72

**. Correlation is significant at the 0.01 level (2-tailed).

QWL – Quality of Work Life, ORS – **Organizational Role Stress Dimensions:**
Organizational Role Stress

Inter-role Distance (IRD) ; Role Stagnation (RS) ; Role Expectation Conflict (REC) ; Role Erosion (RE) ; Role Overload (RO); Role Isolation (RI) ; Personal Inadequacy (PI) ; Self-role Distance (SRD) ; Role Ambiguity (RA) ; and Resource Inadequacy (rin).

QWL showed significant negative correlation with all the ten sub-dimensions of organizational role stress. The correlation values were as follows: Inter-role Distance (IRD) ($r = -.669$, $p = .000$); Role Stagnation (RS) ($r = -.701$, $p = .000$) ; Role Expectation Conflict (REC) ($r = -.704$, $p = .000$) ; Role Erosion (RE) ($r = -.597$, $p = .000$) ; Role Overload (RO) ($r = -.651$, $p = .000$) ; Role Isolation (RI) ($r = -.657$, $p = .000$) ; Personal Inadequacy (PI) ($r = -.693$, $p = .000$) ; Self-role Distance (SRD) ($r = -.708$, $p = .000$) ; Role Ambiguity (RA) ($r = -.745$, $p = .000$) ; and Resource Inadequacy (rin) ($r = -.619$, $p = .000$). Therefore, the hypothesis (h_{5b}) that there exists a significant relationship between quality of work life and sub dimensions of stress level of managerial employees in the organizations of the shipping industry is rejected.

Summary of results

- Psycho-demographic variables i.e. Age; gender and marital status of

employees has significant relationship with Quality of Work Life and Stress Level of employees are not rejected.

- Quality of work life has significant and highly negative correlation with role stress. With regards sub-dimensions of role stress, quality of work life had significant and strong negative correlation with all ten sub-dimensions of role stress of managerial employees.

Discussion

The findings of the study support the results of Hakanen et al., 2008; Tzschatzsch, 2008; Hombergh et al., 2009 and Fogaca et al., 2008. Work-related stress has been linked to reduced productivity, absenteeism, low organizational commitment and high staff turnover and all of these contribute to reduced service and financial loss for the employer organization (Lingard, 2003). Thus, organization should be alert for behavioural symptoms related to stress such as reduced enthusiasm, high absenteeism, tardiness, and decreased productivity.

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