

# **Occupational Role Stress and Health Related Quality of Life among Secondary School Teachers**

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Growing industrialization and technical advancement have caused an obvious change in the field of teaching, rendering teaching today a challenging task. The research examined occupational role stress among Government secondary school teachers (S.S.T.s). The purpose of the study was to find out the Role Stressors among secondary school teachers and the relationship of Occupational Role Stress to the Health Related Quality of Life of the teachers. The sample comprised of 200 S.S.T.s (100 men and 100 women). Purposive sampling technique was applied to draw the sample. Cross-sectional Survey was used as research design in the study. Data collection was done by using Questionnaires namely ORSS (Pareek, 1983), Q-LES-Q- Short Form (Endicott, Neej, Harrison, & Blumenthal, 1993), and WHOQOL-BREF (World Health Organization, 2004) in Urdu version. Both descriptive and inferential statistics were used for data analysis. The results showed that men S.S.T.s experienced more ORS than women S.S.T.s and that men S.S.T.s had poor Physical Health as compared to women S.S.T.s. It was also found that there had been no significant relationship between ORS and demographic variables.

*Keywords:* Occupational Role Stress, Role Stressors, Health Related Quality of Life, Secondary School Teachers

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Stress refers to the response of a person to the stimulus imposed on him. It is the situation where the well-being of an individual is challenged by different demands expected to be fulfilled at his end (Erkutlu & Chafra, 2006). Occupational Stress particularly means stress followed by lacking the potentials to meet the challenges of a job (Rees, 1997). Stress has become a frequently used term in daily life which is a result of growing industrialization and following modern trends of living. Teaching profession puts a lot of demands on teachers hence leading them to stress. Teachers also have to handle students with diverse interests and attitudes that could be an underlying reason of stress (Roland, 2003).

Various studies see stress in context with physical, mental and psychological perspective. When we talk about stress with reference to business or job, it is called Occupational Stress. (OS) is defined as stress caused by job and work among employees (Ganster & Schaubroeck, 1991). Role can be defined as the combination of norms and duties that is set by the authorities and influential in an organization. It is actually a set of actions that a person has to take within an organization to deal with the challenges and tasks assigned to them by the significant people around and sometimes set by the person himself (Pareek, 1993).

Pareek (1997) reported about ten different components of Occupational Role Stress (ORS), which include Role Overload (RO), Role Erosion (RE), Role Isolation (RI), Role Stagnation (RS), Role Expectation Conflict (REC), Self- Role Distance (SRD), Role Ambiguity (RA), Resource Inadequacy (RIn), Personal Inadequacy (PI), and Inter- Role Distance (IRD). To study various components of ORS and to find out its causes, Desgupta and Kumar (2009) carried out a study on doctors in a government hospital of Shimla (India) on a sample of 150 doctors where they came up with the findings consistent to Pareek (1997).

Elaborating the term further, Nelson and Hurrell (1997) argued that stress is the worst outcome of today's lifestyle that involves a lot of technical advancement. In an organization there are different factors which contribute to stress among people of different fields. These elements involve lack of security, burden of work, and overload of information. The effects of this stress are various like mental, physical and emotional which is consistent with the findings of Quick (1989) who has reported in his study that stress brings with it symptoms of bad functioning of mind and body. Roles assigned to the people in an organization have deep impact on the minds of those people. Accepting certain roles becomes the internal need of a person to satisfy their self-esteem, status and self-ego (William & Alligeri, 1994). But when their abilities do not

support them to perform the roles assigned to them appropriately, the situation leads to stress (Lee & Schular, 1980).

ORS has been reported to influence health related quality of life. As a result of stress Behavioral, Physical, Emotional and Mental symptoms may appear in a person thus collectively describing the effects of ORS on Health Related Quality of Life (HRQOL). Definition of QOL has been modified by Social Science researchers and Psychologists to a great deal. Mein, Martikainen, Stansfeld, Brunner, Fuhrer, and Marmot (2000) have defined QOL as the paramount of human health and describe it with reference to the social, psychological and physical grounds of human life. As far as the QOL of teachers with reference to ORS is concerned, they report more illness, use of medicines, burnout, depressive symptoms, passive sexual behavior and many other psychological as well as bodily symptoms (Bauer et al., 2006). Occupational stress is frequently reported and studied and has been found to have significant relationship with health and illness. It was estimated that almost half of the diseases are caused by the OS (Pelletier & Lutz, 1988).

Wang (2009) conducted a study to explore the relationship between ORS, burnout among teachers and their physical and mental health. A sample of 300 teachers was selected from Peking University through stratified random sampling technique. 4 tools used in the study included BDI, SF-36, OSI-2 and MBI-Gs. The conclusion drawn was burnout among teachers as an outcome of occupational stress among them and that burnout in turn was related to depression and poor physical health among teachers.

Leung (2009) wanted to see relationship between Occupational Role Stress and person's health status as well as the effects of management behaviors upon the intensity and severity of problems related to stress. The findings revealed that Occupational Role Stress has close relation to the mental health of Secondary School teachers and stress, anxiety and depression are the various outcomes of (ORS). Sometimes the influence of ORS on HRQOL becomes so serious that it takes under it not only the individual but the whole organization. Prominent aspects of individual life that is affected by ORS include, overall quality of life, health, levels of self-efficacy, achievement drive and personal growth of individual within a certain profession. While for organization, ORS results into lack of communication, employee absenteeism due to ill-health, high turnover rate, recruitment problems, low motivation levels, low productivity and finally poor performance (Michie, 2003). Consistently stress affects both psychological as well as social health severely (Karasek & Theorell, 1990). According to an

estimate, 180 million days in offices go unutilized and there is no work due to the sickness caused by ORS (Sigman, 1992). Studies have found stress affecting both physical as well as mental health of teachers (Parabissi, Rolland, & Santinello, 1991; Wang, Lan, Li, & Wang, 2002). Demographic variables have been studied to have close relationship with ORS by many researchers (Jick & Payne, 1980; Quick & Quick, 1984). Jick and Mitz (1985) conducted a similar study where they wanted to see if gender was important in ORS and whether the consequences of ORS are same for both genders or not. Garrosa, Gonzalez, Moreno-Jimenez and Liang (2008) carried out a study to highlight the importance of demographic variable to affect ORS. The model for burnout predication used in this study suggested that it could be predicted from demographic variables, occupational stressors and hardly personality. Chaturvedi (2009) added more to the relationship between ORS and demographic variables by keeping in mind the trends of present day organization where to work has become equally compulsory for both males and females. He found in his study that female teachers with age range 40 to 60 are better able to cope with the challenges of their profession as compared to those below and above this age range and then that of male professionals. Teacher Stress Model relies on the fact that ORS is not outcome of a single stressor but it is actually multidimensional as far as organizational factors are concerned. These organizational factors are chained together and collectively to cause ORS among S.S.T.s. This model is of the view that the chain of unpleasant events invites the onset of stress (Fimian, 1984). Person -Environment Fit Model has an important role to play in adjusting the person to an organizational environment, in a person`s recruitment and selection and teaching the norms, traditions and culture of an organization. Burnout, emotional attachment with teaching, public image of teachers, fear of being found out, limited opportunities for reflection, reluctance to seek help, isolation, need for perfection, aggressive parents, colleagues and pupils are the various causes that may not be visible but play a very important role in causing stress among teachers (Holmes, 2005). Stress is an invitation to many unwanted, unpleasant and troublesome consequences which may include undesirable feelings and behavioral response, physiological disease, psychological problems, and organizational problems (Ross, 2005).The negative consequences of ORS can be summarized as poor employee performance, drug intake at workplace, absenteeism, great turnover, decreased motivation, poor health quality, malfunctioning, behavioral problems and low customer service (Quick, Quick, Nelson, & Hurrell, 1997; Wright & Smye, 1996). In a study carried out by Majeed, Rashid, and Zia-ur-Rehman, (n.d) level of teacher`s stress and its relationship with the different variables such as climate of work, working conditions, work load,

student`s behavior and different administrative assignments were analyzed. It was concluded in the study that secondary school teachers suffered from ORS caused mostly by lack of equipment to teach, greater quantity of students in classrooms, poor working conditions and job insecurity.

## **Rationale of the Study**

Occupational Role Stress has remained of interest for many researchers since 1950 onwards, and various studies have been conducted in this area. ORS among secondary school teachers has also been studied by various researchers with its different components but only a few studies have been conducted in Pakistan focusing on ORS among Government Secondary School Teachers and its relationship with their Health Related Quality of Life. The present study is hence another effort to draw researcher`s attention to ORS, its sources and consequences among the teachers of secondary schools, and its relationship with the physical, mental and social health of teachers which is called their HRQOL in the following study.

The study is an effort to find out different stressors that can cause ORS among teachers. It is helpful in devising different tools to reduce ORS among teachers and to improve overall quality of education system as well as quality of work of S.S.T.s. It is further important to guide the physicians and psychologists to identify the factors that are related to HRQOL of teachers. It has suggestions for researchers to address self- efficacy, self-esteem, level of confidence and need for perfection among teachers. The study is socially helpful as well as it addresses many week points of education system in public sector institutions and provides a comparison of both private and public sector institutions.

## **Hypothesis**

- Female Secondary School Teachers experience more ORS than Male Secondary School Teachers.
- Female Secondary School Teachers have poor HRQOL as compared to Male Secondary School Teachers.
- Role Overload and Role Erosion are significant predictors of HRQOL among secondary school teachers.
- Demographic variables will significantly predict ORS among Secondary School Teachers.

## **Method**

**Participants:** The participants selected for the study included 200 Government secondary school teachers, 100 males and 100 females. Sample was drawn through purposive sampling technique from 8 different Government schools of Lahore, Pakistan. Cross-Sectional Survey was used as research design.

**Sampling:** Sample was collected by using purposive sampling technique. This technique was used because data was to be collected from the population of interest with specific characteristics of the selected group. Sampling frame for study was secondary school administration. Data were collected from eight Govt. schools of Lahore. Sample comprised of 200 teachers (100 male teachers and 100 female teachers). Inclusion criteria was secondary school teachers in Govt. schools with the age range 22 to 60 While exclusion criteria for study was primary school teachers, internees, tutors and private schools teachers and teachers below the age 22 and above 60.

**Instruments and Measures:** Occupational Stress Scale (ORSS) constitutes items that tend to measure individual role stress, other conflicts that exist within an occupation like teaching and influence of the demographic variable upon that role stress. Occupational Role Stress Scale was constructed originally by Pareek (1983). It constitutes 50 items and respondents rate each item as 0, 1, 2, 3 and 4 that depend upon the relevance of the item to their Occupational Stress. It measures 10 Role stressors (Pareek, 1983). ORS scale used in this study was refined and adopted by Sohail (1996) which constitutes 10 subscales. These ten subscales measure all the ten components of ORS. Five point Likert scale is the response criteria in this scale. The scale has an alpha coefficient of 0.96 while the scale is valid up to 0.86 and this validity is drawn out by using Varimax Rotation. Ten Role Stressors measured by ORS-scale include RI, RS, RE, RC, IRD, SRD, RO, PI, RIn, and REC.

Quality of Life Enjoyment and satisfaction Questionnaire (Q-LES-Q)- Short Form, developed by Endicott is a five-item scale, a self-report instrument with score responses on a 5-point scale ('not at all or never' to 'frequently or all the time'), with higher scores indicating better enjoyment and satisfaction with specific life domains. Q-LES-Q-SF is reported to be highly reliable and valid to be applied on adults.

Scoring of Q-LES-Q-SF is done in the way that raw score total is drawn by adding first 14 items while last 2 items are left uncalculated and are treated as independent items. The range of raw score is between 14 to 70.

Health is not merely physical well-being rather WHO has given a broad definition of health that answers the questions of public in a multidimensional way. Health according to WHO is person's physical, mental as well as social well-being (WHO, 2004).

WHOQOL- BREF (WHO, 2004) is a questionnaire which constitutes 30 items focusing on how one feels about one's overall quality of life. It is an abbreviated form of previously developed WHOQOL-BREF. It is multicultural and covers 4 areas of QOL such as environmental, social, physical and psychological. The reliability of the scale is from good to very good in terms of psychometric properties and is sound and valid to apply on the respondents of diverse cultures (Connel, Lotfy, and Skevington, 2004).

WHOQOL-BREF is developed in a way that it has representation of 50 % males and 50% females. It constitutes 26 items. Items cover the QOL on four aspects that are Physical, Psychological, Social and Environmental. Apart from that, two items (Question1& 2) are kept separate to ask about person's overall view of QOL and Health. Scoring is done in a way that scores of each of four domains are taken in positive ascending order for example as it increases from zero to 4 it shows at zero there will be lowest value of Quality of life and it is highest at 4. Domain score is calculated from mean score of items for each domain. By multiplying mean scores with 4. In WHOQOL, the first process is transforming scores to a range of 4-20. In the 2nd method, scores are transformed from 0-100 scale (WHO, 2004).

**Procedure:** For data collection, eight Govt. Secondary schools of Lahore were visited. At first, girl schools were visited. In the start of procedure, permission was taken from the principals of the targeted schools to approach the teachers. They were presented the request form with the signatures of the supervisor and University Registrar to grant permission for data collection. After approaching the teachers, first of all their consent was asked for if they wanted to become participants of research and purpose of study was explained to them. ORS scale was read out loudly to them before administering it and various points which had ambiguity were explained for clarification. Questionnaires were distributed among participants after giving them instructions. Many female teachers found it boring and showed a little reluctance after filling half of the questionnaire. Many inquired about the benefit they will have from this research. To bring back their interest, participants were told that after they have filled questionnaires, they will be explained various techniques of Psychology to manage stress and enhance Quality of life. Response ratio was not quite satisfactory; if 30 teachers participated from a school, 20 were able to complete it according to instructions. Questionnaires were collected omit after they been

had filled and they were further told to remain part of research until and unless two more questionnaires (WHOQOL-BREF and Q-LES-Q-SF) were filled. Same procedure and process was applied to schools for boys. After the time interval of one week, participants were again contacted and they were asked to respond to the WHOQOL-BREF, and Q-LES-Q-SF. Again questionnaires were distributed and collected after the given time. Male respondents were found less difficult to deal with, however it was observed on certain items regarding QOL i.e. items related to the quality of sexual performance, they were quite hesitant to respond.

After collecting the questionnaires, scoring was done by through cut-off scores and manuals. Both descriptive and inferential statistics were used for data analysis. Regression Analysis was applied as statistical technique and along with it Correlation, ANOVA, and t-test were applied to draw results.

## Results

To present demographic variables, descriptive tools of statistics have been used while different variables related to ORS and HRQOL are analyzed by using inferential statistics. The results are presented as under.

**Table-1: Demographics of the teachers who participated in the study**

Variables	Frequency	%
<b>Age</b>		
22-32	69	34.5
33-42	54	27.0
43-52	51	25.5
53-60	25	12.5
<b>Marital Status</b>		
Married	155	77.5
Unmarried	45	22.5
<b>Qualification</b>		
Matric	5	2.5
Intermediate	6	3.0
Graduation	48	24.0

Masters	131	65.5
M. Phil	10	5.0
<b>Income</b>		
10,000-	20	10.0
20,000-	59	29.5
30,000-	50	25.0
40,000-	40	20.5
50,000-	17	8.5
60,000-	13	6.5

Percentage of the age of the participants in table 1 shows that the maximum participants lie between 22-32 years of age that is 34.5%. The marital status of 155 candidates is married that is 77.5% of the total sample, while 22.5% are unmarried. Most of the participants have an income of Rs. 20,000-30,000 that is 29.5% while 25.0% has 30,000-40,000 and 20.5% has an income of 40,000-50,000.

**Table-2: Reliability Analysis of Scales**

Scale	N of items	N of cases	Cronbach Alpha
ORSS	90	200	.74
WHOQOL-BREF	26	200	.74
Q-LES-Q-SF	16	200	.74

Table 2 shows the reliability analysis of the three scales used in the study. The scales used in the study were translated into Urdu version. The reliability analysis of Occupational Role Stress Scale shows that it has Cronbach Alpha value equal to .745 which means scale is reliable. Q-LES-Q-SF used to measure Quality of Life Enjoyment and Satisfaction has Alpha value equal to .743, which again justifies the reliability of the scale. The Alpha value for World Health Related Quality of Life-BREF scale is .749 which again shows the significant reliability of the scale.

**Table-3: Independent sample t-test**

Variables (n=100)	Males (n=100)		Females		t	Cohen`s d
	M	SD	M	SD		
RS	14.24	6.31	11.35	6.41	3.21**	0.45
PI	16.33	6.26	11.66	6.38	5.22**	0.73
RE	15.67	5.55	10.44	6.55	6.06**	0.86
RA	14.37	7.85	9.24	6.63	4.99	0.70
SRD	15.27	6.00	10.77	6.51	5.07**	0.71
RIn	17.32	6.47	12.46	6.58	5.26**	0.74
RC	15.00	5.64	12.09	6.29	3.56**	0.48
RC	15.00	5.64	12.09	6.29	3.56**	0.48

Note: \*\*P <0.05

Independent sample t-test (table 3) shows comparison between male and female teachers on Role Stagnation, Role Erosion, Role Ambiguity and Personal Inadequacy in the above table. Male S.S.Ts have high scores on all the four variables and P=0.000 which is highly significant (2-tailed) and further that male teachers` experience of SRD, RIn, and RC is higher than female teachers. (P <0.05).

**Table-4: Independent sample t-test comparing domain-1 of Health Related Quality of Life that is physical health between both genders**

Variables	Males		Females		df	t	Cohen`s d
	M	SD	M	SD			
Domain-1	57.07	15.09	52.99	12.08	198	2.06*	0.29
Domain-2	58.39	13.69	57.06	14.08	198	.66	
Domain-3	58.24	21.09	59.93	21.97	198	-.55	
Domain-4	54.68	17.39	55.79	17.90	198	-.44	
Q-LES-Q	45.37	9.02	46.97	8.03	198	-1.29	

Note: \*P <0.05

Table 4 shows independent sample t-test comparing HRQOL between male and female teachers. Male teachers` mean scores on domain-1 are higher than female teachers and also the p value is sig. (2-tailed) =0.04.the analysis shows that male teachers have poor physical health as compared to female teachers.

**Table-5: Linear Regression showing RO and RE as significant Predictors of HRQOL**

Variable	Dependent Variable: HRQOL		
	B	SE	β
RO	-2.82	.66	-.34
RE	2.42	.74	.26
R2	.08		
F	9.64**		

Note: \*\*P < 0.01

Regression analysis is used to predict HRQOL by using different components of ORS as independent variables. Table 5 shows that Role Erosion and Role Overload are significant predictors of HRQOL.

**Table-6: Linear Regression analysis showing demographic variables as predictors of ORS**

Variable	B	SE	β
Age	.77	1.66	.03
Marital status	8.87	9.33	.06
Qualification	-6.69	5.21	-.08
Job experience	5.13	4.12	-.08
Income	.00	.00	-.01
Gender	-38.31	7.56	-.34**
R2	.13		
F	5.78**		

Note: \*\*P < 0.01

The linear regression analysis for the relationship between demographic variables and ORS has been shown in the above table. The result values show that only gender is a significant predictor of ORS ( $p < 0.01$ ) while for all other variables difference is not significant, so hypothesis is said to be rejected here. Hence demographic variables do not seem so important in predicting ORS among secondary school teachers.

The current study looks into the different components of ORS and their relationship to the HRQOL of Secondary School Teachers. The first hypothesis that female SSTs experience more ORS as compared to males is rejected. The results show a mean score of 158.08 for male teachers and 120.36 for female teachers on ORS. The study findings are very close to the findings the study conducted by Aftab and Khatoon (2012) where mean scores of male teachers on ORS were higher than female teachers. Results also match the findings of Desgupta and Kumar (2009). In their study, among 150 doctors (male and female), there were more male doctors who scored higher on ORS as compared to female doctors. The findings of Antanasoska and Eres (2011) were not more different as it was revealed that stress levels of male teachers are higher than female teachers in their study. The results can be justified with this view as suggested by many researchers and scholars that overall females seem more comfortable with the professions like teaching and nursing because of the natural element of care, locus of control and level of patience that makes them less stressful as compared to the male teachers. The 2nd hypothesis that female S.S.T.s would have poor HRQOL as compared to the male S.S.T.s is rejected in terms of scores on Domain-1 that is the physical health. The results are such that male S.S.T.s mean score on physical health are 57.07 and female teachers have 52.99 with a ( $P = 0.04$ ). The study findings coincide with the results of a previous study by Mondal et al. (2011) where there was a marked difference between the scores of both genders in terms of ORS and the physical health of male SSTs was affected more as compared to the female S.S.T.s. The result findings of a study conducted by Moreno et al. (2007) show that physical health of female teachers was poor than that of the male teachers. The present study results are inconsistent with that study. Results are also comparable with the findings of another study by Basu and Bhattacha (2007). The results revealed that female professionals had better physical health as compared to the male professionals. There may be inconsistency between the results mentioned and results of various other studies where mostly females are found with the physical complaints as in the study of Wang (2009). The 3rd hypothesis that RO and RE will be significant predictors of HRQOL is approved. The study findings can be compared with the

findings of Leung (2009) in terms of consistency of results showing ORS as a significant predictor of physical, mental and social health of teachers. The study findings are further supported by the literature including research findings of Edimansyah, Nating and Rusli (2008), Salami (2010), Fakhri and Zadeh (2011), Jackson and Rothmann (2006), Wang (2009). Hypothesis 4 that a significant relationship could be predicted between ORS and Demographic variables is however rejected. The results for this hypothesis are inconsistent with the various research findings such as Aziz (2004), Garrosa, Gonzalez, Moreno-Jimenez and Liang (2008), Cardoso and Fernandes (2011), and Abbas, Asadullah, and Rogers (2012).

## **Conclusion**

The study findings reveal that overall ORS is experienced more by male SSTs as compared to the female S.S.Ts and that the relative scores for various components of ORS such as RS, RE, PI, RA, SRD, RC and RIn are higher in male SSTs than female SSTs. The study further reveals that the components such as RO and RE are found significant in predicting HRQOL of S.S.Ts. The findings further disclose that male S.S.Ts. are found more to report poor physical health as compared to their opposite gender. Their scores on the physical domain of Q-LES-Q are higher than the female S.S.Ts. It is also revealed through results that there is no significant difference between ORS and demographic variables.

## **Research Limitations**

The sample is too small to be generalized to all Government school teachers. The study provides a comparison of male and female secondary school teachers but does not come up with a comparison of public and private school teachers. Causal interpretations cannot be made because of cross-sectional research design used in the study. Sample is divided into equal number of female and male participants but there is no equal demographic distribution. Furthermore, the study points out different sources that may contribute to the stress and problems that the secondary S.S.T.s encounter regarding physical, psychological and social health but does not suggest the possible solutions to those problems. Data is collected from metropolitan area of Pakistan (Lahore) where schools are in a comparatively better condition whereas condition of schools in small cities and rural areas is even worse so the researcher cannot claim to express exact causes of ORS and poor HRQOL of SSTs.

## Recommendations

The study should have taken into account both Government and private S.S.T.s so that a comparison of both organizations could be made to present different factors and causes of ORS in a more detailed form. Sample should have been drawn from both primary and secondary school teachers and it should have been large in size so that results could be generalized to a larger population. The study provides a hint that further research is required on the effectiveness of stress management interventions, coping strategies and training programs among SSTs and that Schools should introduce health educational programs to enhance HRQOL of teachers.

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