Role Stress and Job Satisfaction: A Case Study of Personnel of Water and Sanitation Agencies of Punjab, Pakistan

Wahab Shahbaz and Dr. Muhammad Mudasar Ghafoor

ABSTRACT: Role stress is a common issue for personnel working in Government sector of Pakistan but very few researches have addressed this issue. The objective of this research study is to investigate the influence of role stress (ambiguity and conflict) on job satisfaction of personnel working in Water and Sanitation Agencies (WASAs) of Punjab, Pakistan. A structured questionnaire that includes measure of role stress (ambiguity and conflict) and job satisfaction were used for data collection from WASAs officers. Collected data from respondents were analyzed using Cronbach’s alpha, ANOVA, Pearson’s Correlation and regression analysis. It is found that role ambiguity has positive significant association with job satisfaction whereas there is negative but very weak relationship exist between role conflict and job satisfaction of personnel in WASAs.

Keywords: Role Stress, Job Satisfaction, WASAs, Role Conflict, Role Ambiguity.
Stress is one of the fundamental issues of an employee’s life because it leads to destruction of health, attitude and work behavior. There are many work related stress that make a job stressful. Some stresses are related to nature of the job like a job required a long period of attention, for example driving a truck. Some jobs are highly repetitive that make it boring and stressful. Other stress is concerned with interpersonal relationships at work like conflict with supervisor or co-workers. Stress in an organization also occur due to insufficient resources to do the job or inadequate reward system. A stressful working environment tends to increase absenteeism and turnover of personnel; therefore it is important to explore the impact of stress on personnel behavior in different context. Role stress occurs when there is gap between perceived role expectations and actual work done. It can be defined as the disparity between an individual’s perception about specific role and what is actually being accomplished by the individual currently performing the specific role (Lambert & Lambert, 2001). In this research we have considered two sources of role stress i.e. role ambiguity and role conflict. Role ambiguity occurs due to lack of information about role performance and role conflict occurs due to incompatible role expectations.

Stress is one of the pervasive problems of Government sector of Pakistan but very few researches have been conducted on role stress of Government Universities and Banks of Pakistan. For example, Akbar and Akhter (2011) conducted a study to identify the causes of faculty stress at Higher Education in Public and Private Business Schools of Punjab, Pakistan and found that Private sector faculty members were more immune to word stress as compared to Public sector Business Schools. Malik (2011) focused on occupational stress in public and private banks and found that among different occupational stressors like role overload, role clash, role of dominating control and lack of support from supervisor leads to the occupational stress at work. The research of Warraich, Ahmed, Ahmed and Khoso (2014) found that workload, role conflict and inadequate monetary rewards are the major reasons of stress among personnel in higher education sector of Pakistan that decreases their performance at work.

Stress at work is a multi-dimensional phenomenon that can express itself differently, affect personnel differently, in different working environment. All studies cited above were conducted in education or banking sector. In present study our empirical context is water and sanitation agencies (WASAs) in five major cities of Punjab, Pakistan. Pakistan is the world’s sixth most populous country in the world and major portion of its population live in the province Punjab, with approximately 56% of its total population. The socioeconomic growth of the country is projected by the economic growth and social development of five main cities of Punjab (Lahore, Faisalabad, Rawalpindi, Gujranwala and Multan) because 50% of urban population of Punjab lives in these cities. The WASAs working in these mega cities provide basic municipal services to the citizen in the field of drinking water supply, sanitation and drainage. The effective and efficient working of WASAs is essential for community and environment health. The goal of this research is to examine the relationship between role stress and job satisfaction of WASAs personnel. Two objectives underlie the pursuit of this goal. First is to examine the negative impact of role ambiguity and role conflict on job satisfaction. Second is to examine the significant relationship between role stress (ambiguity and conflict) and job satisfaction of personnel working in WASAs. The findings of this study showed that there is a positive significant relationship between role ambiguity and job satisfaction whereas there is very weak but negative relationship exists between role conflict and job satisfaction of personnel in WASAs.

**Literature Review**

Globalization has changed all aspects of human life including how organizations operate in highly competitive and complex working conditions. Rapid organizational growth further adds to organizational complexity, now it is very difficult for personnel to be familiar with and have expertise in all fields relevant to their roles. Classical organizational theory maintains that each role should be well structure and personnel should possess the sphere of competences to perform that role. These roles should be clearly defined so that employee know exactly what is expected of them. Clear definition of role requirements gives superior license to expect personnel to be responsible for performing their roles. Max Weber (1947) expanded on Taylor’s classic organizational theory and emphasized on uniformity of command and control in order to reduce ambiguity in the organization. Based on Role Theory, researchers have focused on role ambiguity and role conflict as the two main components of role stress (e.g., Harris et al. 2006)

Role ambiguity is the contradiction that occurs when role expectations are not clear to an employee due to lack of information about the role. In such condition, an employee is unable to direct his efforts, and unable to

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1 Urban Development Task Force Report, Planning Commission, 2011
2 Urbanization level in the province of Punjab – 2010, The Urban Unit
predict if the outcome of his actions are according to the role expectation of his supervisor (Beehr & Bhagat, 1985). In order words, focal person feels that he is entrap in a situation where the job obligation is uncertain and not stated in straightforward manner. While, Cooper et al. (2001) defined role conflict as a set of incompatible demands from an individual regarding a single role or multiple roles which can bring negative emotional reactions due to the perceived inability to be effective on the job.

Literature of role stress implies that role ambiguity and role conflict reduce the job satisfaction. For example, Fry et al. (1986) found that role ambiguity and role conflict lowers job satisfaction among sales representatives. Singh (1998) revealed that ambiguity and conflict lower performance and job satisfaction of personnel. Job satisfaction is significantly negatively correlated with role ambiguity and role stress but no significant correlation between role overload and job satisfaction among nursing graduates (Chang & Hancock, 2003). The study of Parking ton & Schneider (1979) suggest that discrepancy between the way the personnel describe the kind of service orientation they think the employer should have and the way they describe upper management’s service orientation is strongly related to the way personnel experience their work. The larger the discrepancy, the more is role ambiguity and role conflict of personnel. Babin and Boles (1998) and Karatepe et al. (2006) argued that role stress has stronger effects on job satisfaction for certain types of personnel than others. Like gender differences can moderate the relationship between role stress and job satisfaction. Similarly, Fisher and Gitelson (1983) argued that organizational level have moderating role in the relationship between role stress and job satisfaction. Wanigasekara, (2007) observed that the female personnel at work, feel lack of support from their supervisor that reduced their level of achievement and personal growth as compared to male personnel. Whereas, male personnel of middle level reported higher stress due to personality clashes with others than other level of personnel. However, Boles et al. (2003) found conflicting outcomes when testing the moderating effect of gender differences on the relationship between role stress (conflict and ambiguity) and job satisfaction. The results of his study revealed the negative effect of role ambiguity and role conflict on job satisfaction among male personnel but no effect was exist among female personnel. The literature review of role stress and job satisfaction leads to the formation of hypothesis for the study:

H1: Role ambiguity has a negative significant impact on job satisfaction among the WASAs personnel
H2: Role conflict has a negative significant impact on job satisfaction among the WASAs personnel

**Research Design**

<table>
<thead>
<tr>
<th>Role Ambiguity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Research Methodology**

The population of this study is the personnel working in five water and sanitation agencies of Punjab, Pakistan including WASA-Lahore, WASA-Faisalabad, WASA-Rawalpindi, WASA-Gujranwala and WASA-Multan. The target respondents are officers of grade 17, 18 and 19 working in WASA-Lahore, WASA-Faisalabad, WASA-Rawalpindi, WASA-Gujranwala and WASA-Multan. The respondents selected for this study were required to have worked for at least 03 years in the organization. A brief summary of number of officers working in five WASAs of Punjab, Pakistan is given below:

<table>
<thead>
<tr>
<th>Official Grade</th>
<th>Lahore</th>
<th>Faisalabad</th>
<th>Rawalpindi</th>
<th>Gujranwala</th>
<th>Multan</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>91</td>
<td>76</td>
<td>14</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>18</td>
<td>41</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>19</td>
<td>7</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>98</td>
<td>27</td>
<td>14</td>
<td>31</td>
</tr>
</tbody>
</table>

The role stress measure was based on the five point likert scale developed by Rizzo, House, and Lirtzmann (1970). The Job Satisfaction questionnaire was adapted from the study of Weiss et al (1967). The questionnaire was distributed to the officers mentioned above through emails or hard copies. Out of 310 distributed questionnaires only 74 measureable data was received from the respondents. Others questionnaire were either incomplete or did not respond at all. Cronbach’s alpha, ANOVA, Pearson’s Correlation and regression analysis were used to get the results of the study.
Results and Discussion

Table No. 5.1. Reliability Analysis of Questionnaire

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>No of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Ambiguity</td>
<td>0.670</td>
<td>07</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>0.717</td>
<td>06</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.719</td>
<td>21</td>
</tr>
<tr>
<td>Overall</td>
<td>0.70</td>
<td>34</td>
</tr>
</tbody>
</table>

It has been presented in the above Table No. 5.1 that Cronbach’s Alpha value of scale of Role Ambiguity, Role Conflict and Job Satisfaction. The Cronbach’s Alpha value of overall scale is in acceptable range which is 0.7 & above and it shows that the scale used for these variables is reliable and affirm accurate results of the study.

Table No. 5.2. Pearson’s Correlations Analysis

<table>
<thead>
<tr>
<th></th>
<th>Role Ambiguity</th>
<th>Role Conflict</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Ambiguity</td>
<td>Pearson Correlation</td>
<td>-0.053</td>
<td>0.308**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.654</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Role Conflict</td>
<td>Pearson Correlation</td>
<td>-0.53</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.654</td>
<td>0.169</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Pearson Correlation</td>
<td>0.308**</td>
<td>-0.162</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.008</td>
<td>0.169</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>74</td>
<td></td>
</tr>
</tbody>
</table>

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

The results in Table No. 5.2 revealed the value of Pearson’s Correlation among role ambiguity, role conflict and job satisfaction. It summarizes the values of Pearson’s Coefficient of correlation and its significance. It is evident from the results that there is a positive and significant association exist between role ambiguity and job satisfaction as the value of Pearson’s Correlation Coefficient is 0.308 and p-value is 0.008 which is less than 0.01 and relation is significant at 99% confident level. Therefore, our H1 is rejected because relationship is positive. Results also revealed that there is a negative but very weak association exist between role conflict and job satisfaction. Therefore our second hypothesis H2 is accepted.

Table No. 5.3. Regression Analysis

<table>
<thead>
<tr>
<th>Dependent variable: Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>------------------------------------</td>
</tr>
<tr>
<td>Overall</td>
</tr>
<tr>
<td>Role Ambiguity</td>
</tr>
<tr>
<td>Role Conflict</td>
</tr>
</tbody>
</table>

Dependent variable: Job Satisfaction

In Table No. 5.3, regression analysis between Role ambiguity, Role Conflict and Job Satisfaction illustrates the value of R-Square which is 0.116. p-value is 0.009 which is less than 0.01 and it shows that role ambiguity provide significant information for predicting job satisfaction of personnel whereas the p-value of role conflict is 0.196 which shows that role conflict provide little information for predicting job satisfaction as the relationship is very weak between these two variables.

Discussion

Water supply and sanitation system is the vital need of a developed society. The organizations providing these municipal services can serve as agent for overall socio-economic development and improvement of environment health. It is a common belief that organizational performance is based upon the performance of its personnel. The study has been conducted to enhance understanding of professionals about the performance of WASAs personnel. The results of the study suggested that there is a positive and significant correlation exists between role ambiguity and job satisfaction of personnel. Furthermore, there is a negative but very weak impact of role conflict on job satisfaction of personnel in WASAs. It means that job satisfaction of personnel in WASAs is not effected by role ambiguity whereas role conflict effects the job satisfaction of personnel. The decision makers should take appropriate measures to overcome the role conflict of personnel in WASAs by reducing incompatible demands and expectations. The study has contributed towards filling a gap in the organizational development and management literature by enhancing the understanding of relationship between role stress and job satisfaction. It is a guide for leaders of public sector organizations who are working to enhance organizational performance through job satisfaction of personnel.
Conclusion

The study has concluded that role stress has to do with job satisfaction of personnel and predicts the significant variance in job satisfaction of personnel in WASAs. The organizations that want to enhance the job satisfaction of their personnel should reduce unsuitable role demands and expectation of supervisors from their subordinates because role conflict has a negative impact on job satisfaction of personnel at work. A stressful working environment may results in increase of absenteeism and turnover of personnel, therefore it is important to overcome the stress at work specifically stress related to role of an employee in the organization. It is a natural phenomenon that only the satisfied employee can do their best efforts in achieving organizational goals and to increase overall organizational performance. The results of this study are partially similar with the findings of Singh (1998) and Chang & Hancock (2003) that role conflict reduce the job satisfaction of personnel but this study have witness also contradictory results that role ambiguity has positive relationship with job satisfaction of personnel in WASAs.

Stress at work is a multi-dimensional phenomenon because it can express itself differently at different times in different places. Therefore a longitudinal research study may be conducted in future with data collection from respondents at different time intervals. Similarly employees working in other public sector organizations may also be taken as respondents of this study to study the impact of role stress on job satisfaction in different working environment. Furthermore, it would be interesting to study effect of other types of role stress like work overload on job satisfaction of personnel.

References

characteristics on job outcomes of salesperson. Journal of Marketing, 62 (July), 69-86.

Appendix

Reliability test of variables scale

<table>
<thead>
<tr>
<th>a. Role ambiguity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability Statistics</strong></td>
</tr>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.670</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Role Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability Statistics</strong></td>
</tr>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.717</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability Statistics</strong></td>
</tr>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.719</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d. Overall questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability Statistics</strong></td>
</tr>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.695</td>
</tr>
</tbody>
</table>

## Correlation between variables

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Role Ambiguity</th>
<th>Role Conflict</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-.053</td>
<td>.308**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.654</td>
<td>.008</td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>74</td>
<td>74</td>
</tr>
</tbody>
</table>

| Role Conflict | Pearson Correlation | .053 | 1 | -.162 |
| Sig. (2-tailed) | .654 | .169 |
| N | 74 | 74 | 74 |

| Job Satisfaction | Pearson Correlation | .308** | -.162 | 1 |
| Sig. (2-tailed) | .008 | .169 |
| N | 74 | 74 | 74 |

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

## Regression

<table>
<thead>
<tr>
<th>Model Summary</th>
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</thead>
<tbody>
<tr>
<td>Mode</td>
</tr>
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</tr>
</tbody>
</table>

a. Predictors: (Constant), Role Conflict, Role Ambiguity

<table>
<thead>
<tr>
<th>ANOVAb</th>
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</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1 Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Role Conflict, Role Ambiguity
b. Dependent Variable: Job Satisfaction

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Role Ambiguity</td>
</tr>
<tr>
<td>Role Conflict</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Job Satisfaction