Work Stress Experienced by the Teaching Staff of University of the Punjab, Pakistan: Antecedents and Consequences

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Abstract

Work stress in any profession is likely to be experienced by the employees employed there and university teachers are no exceptions in this regard. This study tends to examine the relationship between role conflict, role ambiguity and attitudinal outcomes of the job i.e. job satisfaction and organizational commitment of teaching staff in the largest and most populated university of Pakistan i.e. University of the Punjab. The data were collected from 160 teachers teaching in five different faculties of the university by using personally administered questionnaires. The findings of the study suggests that there is a positive and significant relationship between role stress i.e. role conflict and role ambiguity and work stress however work stress is negatively and significantly associated with job satisfaction and organizational commitment of the teaching staff of the university under examination. Future research is needed in terms of what strategies teachers may use to cope with the work related stress in the university set up of Pakistan with a larger sample size and with examination of other causes and effects of work stress as well.

1. Introduction

Stress in general and work stress in particular is said to cause people and employees in all types of businesses and industries the fatigue, depression and tension which is of psychological and physiological in nature. This is a universal problem almost every employee encounters with. This problem arises mainly due to globalization which eventually results in competition and this further compels the companies to stay competitive and to increase their productivity even in not-so-good-times of economy. With this increased pressure of staying competitive, a lot of companies start downsizing as a cost-reduction strategy, and as a result, employees that stay in the organizations and are not the victim of downsizing, experience work-related stress due to the increased performance pressure, conflicting demands placed on them, their role is not very clear as to what to do, what not to do, who to report and what targets are to be achieved and also they have to work longer hours and feel overloaded in their role which also means that they take their work to home and then another conflict arises that is generally known as work-life conflict or work-family conflict.

A lot of research is already conducted on how to cope with the stress and to reduce its negative consequences and researchers are continuously suggesting the ways and stress coping strategies by their studies in different fields of businesses but employees are feeling more of the work induced stress these days than ever before. We not only need to identify the possible antecedents and consequences of work stress but also there is a need to identify those stress coping strategies that help employees out in real and which also can help employers to know what actually makes their employees feel stressed and show negative behaviors in the workplace which can even take their companies to court. Stress not only causes employees to show negative attitudes and behaviors in their workplace but also it has a very negative and disastrous affect on the health and well-being of employees. The stressful work can lead an employee to experience fatigue, exhaustion which can be mental and physical, hypertension, coronary heart disease, depression which can be fatal. In this study, we tend to examine a relationship between work stress and its attitudinal outcomes. We have taken role stress i.e. role conflict and role ambiguity as the causes or antecedents of work stress and on the contrary job satisfaction and organizational commitment are selected as the attitudinal consequences, outcomes or effects of work stress experienced by teaching staff of University of the Punjab, Lahore. We will now turn to the introduction of the university under examination.

1.1 University of the Punjab, Lahore

University of the Punjab commonly referred to as PU, was established in 1882 in Lahore, and is considered the best, the largest and the oldest seat of higher education in Pakistan. It is the first university to be established in Muslim majority region of India at that time.

From then, it is imparting and creating quality education for masses and it is doing so with an emphasis on low tuition fees considering the economic conditions of the country. The fact that two Nobel laureates namely Dr. Abdus Salam and Har Gobind Khorana, are from this University, speaks volumes for its academic and research excellence. The university provides a pleasant environment for academic activities and for research and it still is the first choice of students seeking admissions in higher education degrees. It is spread over an area of 1800 acres in the heart of Lahore which has beautiful and lush green landscape. A canal is there to divide the academic institutes, colleges and department from hostels where a large number of students are accommodated. University of the Punjab has five campuses namely Allama Iqbal Campus (Old Campus), Quaid-e-Azam Campus (New Campus), Gujranwala Campus (PUGC) ,Khanaspur Campus (Summer Campus located at a height of seven thousand feet in the Himalayan range near Ayubia) and Jehlum Campus (the newly built campus), thirteen faculties, nine constituent colleges and over sixty three departments, institutes, centers and more than five thousand affiliated colleges. It has over 620 permanent faculty members, who are recognized best in their fields, involved in teaching and research activities. The university has over thirty thousand on-campus students and external candidates are estimated to be Four Lac and Fifty Thousand (Punjab University Website).

2. Literature Review

2.1 Work Stress

Work stress is one of the most widely researched areas in organizations worldwide. It consistently attracted researchers' attention because it has been shown to play a role in certain job related attitudes i.e. job satisfaction and organizational commitment; and behaviors such as employee turnover (Sager, 1994). Not very surprisingly; modern age is referred to as "age of anxiety and stress" (Coleman, 1976). As noted by Robbins *et al.* (1998) & Siu *et al.* (1999), work stress has been recognized as one of the crucial workplace problems in different countries around the globe. Work stress is considered important because almost every job causes stress to the job incumbent (Cooper *et al.,* 1988). Many authors took initiative to define work stress in their studies. French *et al.* (1976) defined work stress in his study as "any characteristic of the job environment which poses a threat to the individual, either due to excessive demands or insufficient supplies to meet his needs". Sauter and Murphy (1999) defined work stress as the "harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources or need of the worker". From these definitions, we may conclude that stress that is experienced at work is (often) negative in nature and thus it is very vital for employees to know what makes them feel stressed and how they can mitigate the negative outcomes of the work stress.

Stress at work is caused by a number of factors identified by many researchers such as insecurity of job (Jordan, Ashkanasy & H¨artel, 2002), role conflict (Alexandros-Stamatios *et. al*., 2003), role ambiguity (Beehr, 1987; Yousef, 2002), pressure of time (Salas & Klein, 2001), interpersonal conflicts (Narayanan, Menon & Spector, 1999), work overload (Sullivan & Bhagat, 1992; Wilkes *et al.* 1998), performance pressure (Cahn *et al.* 2000). Khoury and Analoui (2010) found that the determinants of work stress were little or no support from management, lack of appreciation and benefits, limited participation in decision making, work overloads and employers being not very kindhearted in guiding how to cope with stress. Salleh *et al.* (2008) while conducting research on work stress in furniture industry found five key antecedents to job related stress i-e., support, adaptability, job security, conflict and integrity and concluded that these predictors have the potential of affecting job stress. Integrity was found having inverse relationship and highest correlation with job stress. Among the many factors causing stress; work overload, lack of resources and lack of coordination and comfort with the immediate supervisor and with colleagues causes more of the work stress as compared to the other sources (Kazmi *et al.,* 2008).

Isikhan *et al.* (2004) discovered that the factors affecting work stress of physicians and nurses were employees' age, marital status, career, and injustice in growth opportunities, work-home interference, conflicts with colleagues, little or no recognition of efforts from supervisors, role responsibilities, work overload and problems with equipment. Chiang *et al.* (2010) found in his study on work stress of hotel and catering industry employees that job demands, job control and work-life balance significantly affected job stress in such a way that high job demands when combined with low job control and minimal work-balance practices contributed to higher level of work stress. Married couples who had two careers experienced more work related stress, work-home conflict, role ambiguity, role conflict and work overload than those couples who had single career (Elloy & Smith, 2003). By going through the literature, we have chosen to study the antecedents of the work stress namely role stress i.e. role conflict and role ambiguity.

By finding support from the literature of these antecedents or causes of work stress we will end up with our literature review by identifying some of the key effects, repercussions or consequences of work stress namely job satisfaction and organizational commitment of the teachers experiencing stress at work. Starting from the role stress i.e., the stress associated with an individual's role in the organization, has become an appeal to academicians, researchers and practitioners and has attracted a wide range of research (Ford *et al*., 1975; Dubinsky & Mattson, 1979; Johnston *et al*., 1990b; Michaels *et al.*, 1987, 1988). Role stress is often studied in relation to its two important components, role conflict and role ambiguity, and has been found having significant effect on many job associated attitudes and behaviors (Jackson & Schuler, 1985; Michaels & Dixon, 1994). From the studies conducted by Sager (1994) and Goolsby (1992), we may infer that role stress i.e., role conflict and role ambiguity, is considered as an essential cause of work-related stress.

2.1.1 Role Conflict

One of the components of role stress is role conflict that can be a potential cause of work related stress and should be carefully studied and analyzed to make an effort to reduce its impact in causing work stress. Contradictory demands within a single or between multiple roles refer to as role conflict (Gupta & Jenkins, 1985; Lewis & Cooper, 1988). Many studies confirmed the relationship between role conflict and job stress and found it direct and positive (Fisher & Gittleson, 1983; Johnston *et al.*, 1990a; Netemeyer *et al.*, 1990; Sager, 1994).

2.1.1 Role Ambiguity

Role ambiguity is "created when role expectations are not clearly understood and the employee is not sure what he or she is to do" (Robbins *et al.,* 2009). It is obvious that if an employee is unclear about what he/ she has to do regarding his/ her job and lacks clear direction about his or her role in the organization will surely experience work stress. An employee who is uncertain about his or her role and lacks the sufficient information to perform the job adequately may experience role ambiguity which further results in increased job stress (Fry *et al.*, 1986; Johnston *et al*., 1990a; Netemeyer *et al.*, 1990; Sager, 1994). Moreover, Sager (1994), found a positive relationship between role conflict and role ambiguity. The logic behind the said work of Sager is that ambiguity in role will obviously lead towards an employee experiencing role conflict. This role ambiguity and role conflict relationship was supported by Brown and Peterson (1993).

2.2 Stress and job satisfaction

It is of great importance to various researchers, academicians and practitioners to investigate the relationship between work stress and job satisfaction. Many efforts have been made to investigate and create a link between work stress and job satisfaction. Let us first understand what actually job satisfaction is by reviewing some of the definitions of the concept. Job satisfaction is defined by Oshagbemi (2000) as ''individual's positive emotional reaction to particular job''. Warr (2002, p. 1) has defined job satisfaction as "the extent to which people are satisfied with their work". Higher the level of work stress experienced by employees would lower the level of job satisfaction (Landsbergis, 1988). Fletcher and Payne (1980) found that job dissatisfaction was a cause of work stress, while higher job satisfaction reduces the effects of work stress. In his study, Yousef (2002) found that role ambiguity and role conflict have a direct and negative relationship with job satisfaction. Wu and Norman (2006) found that there was a negative relationship between job satisfaction and role stress (role conflict and role ambiguity). Netemeyer et al. (1990) and Teas (1983), found that role conflict affected job satisfaction stronger than that of role ambiguity. Stress and job dissatisfaction are increased when employees are on jobs in which there were conflicting and multiple demands or in which there was an ambiguity about the jobholders' responsibilities, duties, and authorities (Cooper & Marshal, 1976).

Job satisfaction was negatively related to work overload in different studies (Bradley & Cartwright, 2002; Davidson *et al*., 1997; De Jonge & Schaufeli, 1998; De Jonge *et al.,* 1995), likewise, there was a negative relationship found between job satisfaction and time pressure (Robinson, Roth, & Brown, 1993; Landeweerd & Boumans, 1994; Bennet et al., 2001; Seo, Ko, & Price, 2004). Schaefer and Moos (1993) found that job satisfaction was also negatively related to system stressors i-e workload and scheduling. However, Ehrenfeld (1991) found a positive relationship between the number of work activities being performed and job satisfaction. Autonomy was found significantly related to job satisfaction (Ehrenfeld, 1991; Landeweerd & Boumans, 1994; De Jonge *et al.*, 1995; De Jonge & Schaufeli, 1998; Tonges, Rothstein, & Carter, 1998; Tumulty, Jernigan, & Kohut, 1994). Social support is considered as a vital factor which affects employees' job satisfaction in a positive manner i-e higher the social support, higher will be the satisfaction with the job.

Researchers confirmed this assumption and found significant relationships between job satisfaction and overall or general social support, (Smith & Tziner, 1998; Tovey & Adams, 1999), colleagues' support (Chu et al., 2003; Decker, 1997; Parkes & Von Rabenau, 1993; Robinson, Roth, & Brown, 1993), support from the supervisors (Bennet et al., 2001; Decker, 1997; De Jonge & Schaufeli, 1998; De Jonge, Schaufeli, & Furda, 1995; Landeweerd & Boumans, 1994; Parkes & Von Rabenau, 1993; Robinson, Roth, & Brown, 1993; Seo, Ko, & Price, 2004; Tumulty, Jernigan, & Kohut, 1994), organizational support was also found having significant positive relationship with job satisfaction(Kirkcaldy & Martin, 2000; Bradley & Cartwright, 2002) and likewise subordinates' support was also found having its positive influence on job satisfaction (Bradley & Cartwright, 2002). However, relationship stressors and interpersonal conflicts were found having negative relationship with the job satisfaction (Bennet et al., 2001; Schaeffer & Moos, 1993; Tumulty, Jernigan, & Kohut, 1994).
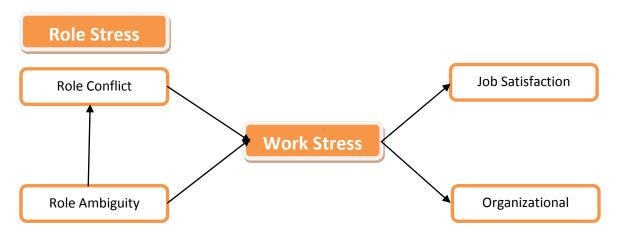
Job satisfaction was also related with the factors like role ambiguity, job complexity, communication, work-home interference, promotion opportunities and pay besides the job demands, control over the activities and social support. Significant relationships were found between job satisfaction and role clarity in different researches (Landeweerd & Boumans, 1994; Robinson, Roth, & Brown, 1993; Tovey & Adams, 1999; Tumulty, Jernigan, & Kohut, 1994; Chu *et al.*, 2003). Communication with colleagues, patients and relatives was found having minor but significant relationship with job satisfaction. Work-life conflict or work-home interference is said to have a significant relationship with job satisfaction (Bennet et al., 2001; Kirkaldy & Martin, 2000; Bacharach, Bamberger, & Conley, 1991).

2.3 Stress and Organizational Commitment

Organizational commitment is one of the most important job-related outcomes that is attitudinal in nature and is negatively related to work stress in many studies conducted by different researchers. A negative relationship was found between work stress and organizational commitment in many studies which means higher the work stress, lower the level of organizational commitment (Jackson & Schuler, 1985; Sager, 1994). Vakola and Nikolaou (2005) found that employees who experienced stress at work exhibited decreased organizational commitment. Yousef (2002) found that role ambiguity which is considered as one of the stressors was directly and negatively influenced the organizational commitment i.e. affective and continuance commitments. Furthermore, he found that job satisfaction mediates the relationships of role conflict and role ambiguity with the dimensions of organizational commitment except that of its one dimension of continuance commitment.

3. Research Methodology

3.1 Research Model

3.1 Hypotheses

H1: *Role conflict is positively related to work stress.*
H2: *Role ambiguity is positively associated with work stress.*
H3: *A positive relationship exists between role conflict and role ambiguity.*
H4: *Work stress is negatively related to job satisfaction.*
H5: *Work stress is negatively associated with organizational commitment.*

3.3 Research Design

3.3.1Population, Sample and Sampling Technique

Population of the study comprised of all the faculty members of University of the Punjab, Lahore, Pakistan. As mentioned in the introduction, the university has 5 campuses, 13 faculties, 63 departments, 9 colleges and over 620 permanent faculty members. To limit the scope of the study and due to the time constraints, we have selected faculty members by using multi-stage sampling technique which comes under the head of probability sampling technique. At the first stage of sampling, we have selected one campus (Quaid-e-Azam Campus) out of five and this campus was mainly selected because it has the main strength of departments, students, employees and teachers in it. In the second stage of sampling, we have selected 5 out of 13 faculties i.e. the Faculty of Commerce, Faculty of Economics and Management Sciences, Faculty of Engineering and Technology, Faculty of Law and Faculty of Science by using simple random sampling. In third and last stage of sampling, we have selected 200 faculty members on the basis of stratified sampling technique. A total of 200 questionnaires were distributed among the selected faculty members and out of which 160 questionnaires (which constitute the sample of this study) were returned directly to the researchers having a response rate of 80 %. Out of 160 faculty members, there were 67 females who completed the questionnaire and this constitutes a percentage of 41.87.

3.3.2 Instrument Development

A comprehensive questionnaire comprising of 36 statements was developed to measure the responses of teaching staff of the university against two independent and two dependent variables. This questionnaire was divided into two main heads in which first covered the statements of the variables and second head was for statistical information or demographics like department/college name, experience of employees in years, experience with current job in years, age, qualification, marital status and level of job. Following table illustrates the variables (constructs), items in that variable, scale ranges, reliability of the questions used in the questionnaire and their source.

Constructs	Items	Scale Range	Reliability	Source
Role Conflict	8	1-7	0.87	Rizzo et al.(1970)
Role Ambiguity	6	1-7	0.95	Rizzo et al.(1970)
Work Stress	9	1-7	0.87	Parker & Decotiis (1983)
Job Satisfaction	7	1-7	0.71	Cook et al. (1981)
Organizational Commitment	6	1-7	0.78	Marsden et al. (1993)

3.3.4 Data Analysis Tool

Data was entered and analyzed using the software of SPSS 17.0 and Amos 16.0. We have applied Structural Equation Modeling (SEM) to our proposed research model and gained meaningful results. The reason why researchers use SEM for data analysis part of their research is that with SEM, it is easy to examine the extent to which the model is fit and the sample is representative of the population under examination (Byrne, 2001). SEM is a statistical measurement tool for analyzing, testing and evaluating causal relationships by combining quantitative and qualitative assumptions of the data. One of the benefits of SEM is that it has the specialty of constructing latent variables which are not measured directly but are estimated in the model from several measured variables.

4. Findings of the Study

Table-1 Model fitness index

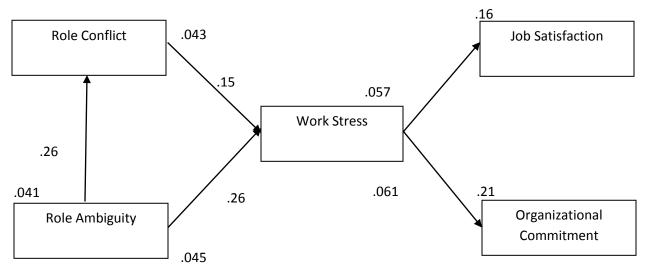| Index of Fit	Chi-Square (df)	P	GFI	AGFI	NFI	CFI	RMR
Value	43.456	.000	.855	.811	.912	.901	.002

Table-1 shows index of the model fit. Most values of the model fitness meet the general fitness standards of the model fitness. The generally accepted standards of the model fit are; Chi-square value (significant level > 0.05), goodness of fit index (GFI > 0.80), adjusted GFI (AGFI > 0.80), Normed fit index (NFI > 0.90), comparative fit index (CFI > 0.90), and root means square residual (RMR < 0.05). Table shows that all the values meet the model fitness standards, so the model used in the study is acceptable.

<div align="center">Table-2 Regression Weights (Results of Hypothesis Tests)</div>

Path	Estimates	S.E.	C.R.	P	Hypothesis	Results
Role Ambiguity-Role Conflict	.257	.041	5.021	.000	H1	Accept
Role Ambiguity_ Stress	.262	.043	5.829	.001	H2	Accept
Role Conflict-Stress	.149	.045	2.657	.004	H3	Accept
Work stress-Satisfaction	.162	.057	5.529	.001	H4	Accept
Work stress-Commitment	.212	.061	5.459	.002	H5	Accept

The results of hypotheses tests of the relationship between constructs of role conflict, role ambiguity, work stress, job satisfaction and organizational commitment are shown in table-2 and figure-2. In order to accept the hypothesis the P value should be <0.05. Results shown in Table-2 clearly depict that all values of estimates and critical ratio (C.R) are positive which confirms our all stated hypotheses and shows that both role conflict and role ambiguity are positively related to work stress experienced by teachers and a positive relationship exists between role ambiguity and role conflict and in the last work stress is negatively associated with both job satisfaction and organizational commitment of teachers. We can say that if institutes of higher learning i.e. universities want to satisfy their most important assets, the teachers, they need to facilitate them in terms of reducing and coping with their work stress experienced largely by the conflicting demands placed on teachers and ambiguity in assuming their roles.

<div align="center">Figure-1   Structural Equation Model</div>

Findings of the study suggest that there is positive relationship between role stress i.e. role conflict and role ambiguity and work stress. The findings also suggest that role ambiguity leads towards role conflict and work stress is negatively associated with job satisfaction and organizational commitment.

5. Conclusion

The results of this study indicates that when roles of the teachers in the universities are ambiguous, it will always leads towards the conflicting demands placed on them and both of these role stress dimensions i.e. role conflict and role ambiguity are positively associated with the work stress experienced by the teachers in university.
Findings also suggest that higher the work stress experienced by the teachers, lower will be their satisfaction with the job and also lower will be their commitment with the organization i.e. organizational commitment.

We can infer from these findings that institutes of higher learning like other organizations also need to have formal job descriptions written for their teachers so that their roles should be clear and not ambiguous and which also will clear who reports to whom directly and indirectly so as to minimize the conflicting demands placed on the teachers. If this issue is properly addressed, role stress can be wiped out which will result in a decrease in work stress as a whole. When work stress is lower; this obviously will lead towards teachers' satisfaction with their jobs and commitment with their institutes. It is said that human resources are such assets for an organization which doesn't appear in the balance sheet but the companies' existence solely depend on their ideas, their creativity and their efforts towards the achievement of organizational goals. Similarly teachers are considered to be one the most important pillars on which university structure stands. If universities want to satisfy their teachers with their jobs and want them to get committed to their college, institute, center or department and with the university as a whole, the institutional heads need to facilitate them to feel relaxed and not stressed or burned out with their work and this effort, as mentioned earlier, can be made by having properly imposed and detailed job descriptions which entails the duties and responsibilities of the teachers in detail, who reports to whom, expectations in terms of work and performance, and what should be a teacher's role in achieving the goals of the institute he is working in.

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