Empirical Analysis of Job Stress on Job Satisfaction among University Teachers in Pakistan

Dr. Nadeem Bhatti
Head of Faculty, North American College
730-Yonge Street, Suite No. 207, Toronto, Ontario, M4Y 2B7, Canada
E-mail: nadbhatti@yahoo.com

Dr. Muhammad Aamir Hashmi
Assistant Professor
IER-University of the Punjab-Lahore

Shoukat Ali Raza
Assistant Professor
IER-University of the Punjab-Lahore

Faiz.M.Shaikh
Assistant Professor, SZABAC-Dokri-Larkana-Sindh-Pakistan
E-mail:faizanmy2000@hotmail.com

Kamran Shafiq
COMSATS-Abbott bad
E-mail: kamranhashmi@ciit.net.pk

Received: November 23, 2010 Accepted: January 10, 2011 doi:10.5539/ibr.v4n3p264

Abstract

This research investigates the relationship between job stress and job satisfaction among University teachers in Pakistan. Data were collected from 400 respondents from cross sectional method from all four provinces by using simple random technique. The determinants of job stress that have been examined under this study include, management role, relationship with others, workload pressure, homework interface, role ambiguity, and performance pressure. The sample consists of public universities in Pakistan. The results show there is a significant relationship between four of the constructs tested. The results also show that there is significant negative relationship between job stress and job satisfaction. It was revealed that 70 percent of the faulty members are not satisfied from their salaries. Job stress has negative impact on their health.

Keywords: Job stress, Academician, Public sector Universities

1. Introduction

Job life is one of the important parts of our daily lives which cause a great deal of stress. Due to the competitive nature of the job environment most of the people in the world are spending their time for job related work purposes resulting ignore the stressor those are influencing their work and life. Usually people are more worry about their outcome of their work that can even affect the way they treat other people and how they communicate with their peers and customers. For example, people with a higher percentage of occupational stress may not be satisfied with their job and therefore they will not feel happy working in the organization. They may feel frustrated or "burned out" when they are having problems with peers or customers. This may leave a negative impact to the organization itself. Therefore, it is very important for employer and employees to realize the stress and the stressor that cause all the negative effects. The number of university in Pakistan has increase tremendously for the past few years. Due to the increasing number of universities in Pakistan, university academic teachers may face more problems in their job as the managements are facing competitive pressure from other universities. Almost universities are now setting new

goal to compete with other universities as well as the academic teachers are involving with the ultimate goal. This may causes the university academic teachers to face plenty of stress and therefore affect their satisfaction and even their physical or mental health.

The aim of this study is to identify the stressors issues that will influence the academic teachers' job satisfaction. We selected teaching because educators have been consistently identified as a group experiencing high stress at work (Sigler and Wilson, 1988).

2. Literature Review

Numerous studies found that fob stress influences the employees' job satisfaction and their overall performance in their work. Because most of the organizations now are more demanding for the better job outcomes. In fact, modern times have been called as the "age of anxiety and stress" (Coleman, 1976).The stress itself will be affected by number of stressors. Nevertheless, Beehr and Newman (1978) had defined stress as a situation which will force a person to deviate from normal functioning due to the change (i.e. disrupt or enhance) in his/her psychological and/or physiological condition, such that the person is forced to deviate from normal functioning. From the definition that has been identified by researchers, we can conclude that it is truly important for an individual to recognize the stresses that are facing by them in their career. Some demographic factor may influence the way a university academic teachers act in their workplace.

Management role of an organization is one of the aspects that affect work-related stress among workers (Alexandros-Stamatios et. al., 2003).Workers in an organization can face occupational stress through the role stress that the management gave. Role stress means anything about an organizational role that produces adverse consequences for the individual (Kahn and Quinn, 1970). Management will have their own role that stands as their related. Role related are concerned with how individuals perceive the expectations other have of them and includes role ambiguity and role conflict (Alexandros-Stamatios et. al., 2003). Family and work are inter-related and interdependent to the extent that experiences in one area affect the quality of life in the other (Sarantakos, 1996). Home-work interface can be known as the overlap between work and home; the two way relationship involves the source of stress at work affecting home life and vice versa affects of seafaring on home life, demands from work at home, no support from home, absent of stability in home life. It asks about whether home problems are brought to work and work has a negative impact on home life (Alexandros-Stamatios G.A et al., 2003). For example, it questions whether the workers have to take work home, or inability to forget about work when the individual is at home. Home-work interface is important for the workers to reduce the level of work-related stress. According to Lasky (1995) demands associated with family and finances can be a major source of 'extra-organizational' stress that can complicate, or even precipitate, work-place stress. Russo & Vitaliano (1995) argued that the occurrence of stressors in the workplace either immediately following a period of chronic stress at home, or in conjunction with other major life stressors, is likely to have a marked impact on outcome. Several studies have highlighted the deleterious consequences of high workloads or work overload. According to Wilkes et al. (1998) work overloads and time constraints were significant contributors to work stress among community nurses. Workload stress can be defined as reluctance to come to work and a feeling of constant pressure (i.e. no effort is enough) accompanied by the general physiological, psychological, and behavioral stress symptoms (Division of Human Resource, 2000). Al-Aameri AS. (2003) has mentioned in his studies that one of the six factors of occupational stress is pressure originating from workload. Alexandros-Stamatios G.A. et al. (2003) also argued that "factors intrinsic to the job" means explore workload, variety of tasks and rates of pay. Rapidly changing global scene is increasing the pressure of workforce to perform maximum output and enhance competitiveness. Indeed, to perform better to their job, there is a requirement for workers to perform multiple tasks in the workplace to keep abreast of changing technologies (Cascio, 1995; Quick, 1997). The ultimate results of this pressure have been found to one of the important factors influencing job stress in their work (Cahn et al., 2000). A study in UK indicated that the majority of the workers were unhappy with the current culture where they were required to work extended hours and cope with large workloads while simultaneously meeting production targets and deadlines (Townley, 2000). Role ambiguity is another aspect that affects job stress in the workplace. According to Beehr et al. (1976), Cordes & Dougherty (1993), Cooper (1991), Dyer & Quine (1998) and Ursprung (1986) role ambiguity exists when an individual lacks information about the requirements of his or her role, how those role requirements are to be met, and the evaluative procedures available to ensure that the role is being performed successfully. Jackson & Schuler (1985) and Muchinsky (1997) studies found role ambiguity to lead to such negative outcomes as reduces confidence, a sense of hopelessness, anxiety, and depression.

3. Link between Job Stress and Job Satisfaction

Several studies have tried to determine the link between stress and job satisfaction. Job satisfaction and job stress are the two hot focuses in human resource management researches. According to Stamps & Piedmonte (1986) job satisfaction has been found significant relationship with job stress. One study of general practitioners in England

identified four job stressors that were predictive of job dissatisfaction (Cooper, et al., 1989). In other study, Vinokur-Kaplan (1991) stated that organization factors such as workload and working condition were negatively related with job satisfaction. Fletcher & Payne (1980) identified that a lack of satisfaction can be a source of stress, while high satisfaction can alleviate the effects of stress. This study reveals that, both of job stress and job satisfaction were found to be interrelated. The study of Landsbergis (1988) and Terry et al. (1993) showed that high levels of work stress are associated with low levels of job satisfaction. Moreover, Cummins (1990) have emphasized that job stressors are predictive of job dissatisfaction and greater propensity to leave the organization. Sheena et al. (2005) studied in UK found that there are some occupations that are reporting worse than average scores on each of the factors such as physical health, psychological well-being, and job satisfaction. The relationship between variables can be very important to academician. If a definite link exists between two variables, it could be possible for a academician to provide intervention in order to increase the level of one of the variables in hope that the intervention will also improve the other variable as well (Koslowsky, et al., 1995). In this study, we would like to examine what extent of interrelation between the job stress and job satisfaction among university academic teachers setting in

Pakistan.

5. Methods

5.1. Sample

A survey instrument in the form of close-ended questionnaire was developed for the purpose of collecting the main data for the study. This study was conducted in public universities in Pakistan. Factors such as precision and confidence, population size, time and cost constraints were taken into consideration in selecting sample size. Using the non-probability sampling technique, a total of 400 respondents were selected as a sample of the study from that university. The respondents come from various faculties in order to give better mixture between business and non-business academician as well as in term of racial mix between respondents to increase the generalization of the result. The actual field survey was conducted over a period one month whereby personal interviews were employed to obtain the required information from the respondents. The reasons of using the personal interview are threefold. Firstly, it allows the interviewer to screen the eligibility of the respondents. Secondly, it also allows a closer supervision and better interaction between the interviewer and respondents in answering the questionnaire. Lastly, the interviewer was able to assist the respondents when they found difficulty in understanding any of the questions in the questionnaire. Two hundred and three academicians completed the questionnaire and the rest did not return it for unknown reasons. The response rate was 67.66% which was very much acceptable in social science research (Fowler, 1988). The participants were 62.56% female and 37.44% male with mean age of 37.6 years. More than 50% of them were married (107 respondent or 52.71%), 71 single, 17 separated, 8 divorced. The sample represented 192 were Malays, 7 Chinese, 3 Indian and only 1 foreigner. The average experience of the participants in their present profession was 7.2 years.

5.2. Instrument Development

This instrument used in this study is composed of 3 parts. The first part deals with job stress. Job stress is measured by “Job Stress Questionnaire, JSQ” proposed by Caplan et al. (1975) and Sahu and Gole(2008). This scale included four dimensions from Caplan et al (1975), namely (1) workload, (2) role conflict, (3) role ambiguity and (4) performance pressure which comprised thirteen items. Each of job stressors was measured on a six-point Likert Scale in which 1 indicated “strongly disagree”, 2 indicated “disagree”, 3 indicated “somewhat disagree”, 4 indicated “somewhat agree”, 5 indicated “agree” and 6 indicated “strongly agree”. The main reason for this choice of all six job stressor was widely used in previous studies. Part 2 includes job satisfaction which is measured using Job Descriptive Index (JDI) (Smith et al., 1969), a reliable facet measure over time (Kinicki et al., 2002), applicable across a variety of demographic groups (Golembiewski and Yeager, 1978; Jung et al., 1986) and measured on a six point scale wit least satisfied (1) to very satisfied (6). The structure this section differed from previous studies insofar as it considered satisfaction as a positive phenomenon. Consequently, there was no facility for dissatisfaction. Part 3 includes a number of demographic questions such as gender, age, marital status, race, and education level.

5.3. Data Analysis Method

Various statistical methods have been employed to compare the data collected from 500 respondents. These methods include cross-sectional analysis, description analysis and regression analysis. Each method has used to analysis the relationship of different variables. Firstly, the method of this study will also involve Cross-sectional types of research methodology based on the guideline given by Hussey and Hussey (1997). Their reports mention that cross-sectional studies are a positive methodology designed to obtain information on variables in different contexts, but at the same time. Secondly, Descriptive analysis refers to the transformation of raw data into a form that would

provide information to describe a set of factors in a situation that will make them easy to understand and interpret (Sekaran, 2000; Zikmund, 2000). This analysis will be given information for the data through the frequency distribution, central tendency, and the dispersion. Data are collected on demographic variables are processed and reported in percentages. Thirdly, multiple regression analysis is an extension of bivariate regression analysis, which allows for the simultaneous investigation of the effect of two or more independent variables on a single interval scale dependent variable (Zikmund, 2000). The dependent variable for this study is Job satisfaction, whose types of measurement are interval. For this study, there are several independent variables relating to Job satisfaction, and job stresses whose types of measurement are interval and simultaneously investigates the several independent variables single variable a multiple linear regression is fitted for these variables.

6. Results and Analysis

6.1. Reliability

The internal reliability of the items was verified by computing the Cronbach's alpha (Nunnally, 1978). Nunnally (1978) suggested that a minimum alpha of 0.6 sufficed for early stage of research. The Cronbach alpha estimated for current management role scale was 0.889, relationship with others scale was 0.890, workload pressure scale was 0.890, homework interface scale was 0.908, role ambiguity scale was 0.901, performance pressure scale was 0.894, overall job stress 0.805 and the overall job satisfaction scale was 0.729. As the Cronbach's alpha in this study were all much higher than 0.6, the constructs were therefore deemed to have adequate reliability.

6.2. Normality of Data and Multi-Collinearity

This study involves a relatively large sample (203 academicians) and therefore, the Central Limit Theorem could be applied and hence there is no question on normality of the data. Two major methods were utilized in order to determine the presence of multi collinearity among independent variables in this study. These methodologies involved calculation of both a Tolerance test and Variance Inflation Factor (VIF) (Kleinbaum et al, 1988). The results of these analyzes are presented in Table 1. As can be seen from this data, i) none of the Tolerance levels is <or equal to .01; and ii) all VIF values are well below 10. Thus, the measures selected for assessing independent variables in this study do not reach levels indicate of multi collinearity. The acceptable Durbin – Watson range is between 1.5 and 2.5. In this analysis Durbin – Watson value of 2.015, which is between the acceptable ranges, show that there were no auto correlation problems in the data used in this research. Thus, the measures selected for assessing independent variables in this study do not reach levels indicate of multi collinearity.

6.3. Hypotheses Testing

To test seven hypotheses the data were analyzed using multiple linear regression analysis following the guidelines established by Hair et al. (1998). The purpose of regression analysis is to relate a dependent variable to a set of independent variables (Mendenhal and Sincich, 1993). Table III present the result of predictors of ICT adoption. The regression coefficient of job stressors on job stress was estimated. The overall model is significant at the 1% level. The independent variables explain 50% of in the variance the job stress. Of the independent variables, workload pressure (+), homework interface (+), role ambiguity (+), and performance pressure (+) are the predictors statistically different from zero and had a significant and direct effect on job stress. The remaining management role (+), relationship with others (-) had no significant direct effect on job stress. Table II presents the results of the individual hypotheses being tested.

6.3.1. The Results of Hypothesis 1

The H1 (management role) is not in agreement with a wide range of previous findings (Alexandros- Stamatios et. al., 2003 and Susan C., 2003, Kahn and Quinn, 1970). Multiple regression analysis shows results of management role (beta = 0.053, p-value = .364). The unimportance of management role may be due to that management of that university is very much supportive to their academics.

6.3.2. The Results of Hypothesis 2

Surprisingly, the results of this study shows that the association between relationship with others and job stress is not significant with β=0.055 (ρ=0.239). The unimportance of relationship factor may be due to fact that all the faculty members are very much friendly and cooperative. However, we can expect to get stronger association if the conflict arises from their colleagues.

6.3.3. The Results of Hypothesis 3

Several studies have highlighted the deleterious consequences of high workloads or work overload. A study of work stress among professionals found that teachers were most likely to experience work overload and that is one of the cause of work stress (Chan et al. (2000). As expected, the results of this study shows that the relationship between workload pressure and job stress is significant with β=0.283 (ρ=0.001). The result further indicates that the direction

of the associations is positive in which it implies that the more the more work overload is given the academician, the possibility of them to face of job stress will be higher.

6.3.4. The Results of Hypothesis 4

According to Lasky (1995) demands associated with family and finances can be a major source of 'extra-organizational' stress that can complicate, or precipitate, work-place stress. The multiple regression analysis shows that the association between homework interface and job stress is significant with β=0.218 (ρ=0.01). The result attests that the occurrence of stressors in the workplace either immediately following a period of chronic stress at home, or in conjunction with other major life stressors, is likely to have a marked impact on outcome (Russon & Vitaliano, 1995). Furthermore, with the positive coefficient value, it could be concluded that the higher the problem in the home, the chances for the job stress will be greater.

6.3.5. The Results of Hypothesis 5

Most research suggests that role ambiguity is indeed negatively correlated with job satisfaction, job involvement, performance, tension, propensity to leave the job and job performance variables (Rizzo, House, & Lirtzman 1970; Van Sell, Brief, & Schuler 1981; Fisher & Gitelson 1983; Jackson & Schuler 1985; Singh 1998). The result of this study shows that the association between role ambiguity and job stress is significant with β=0.180 (ρ=0.01). The support for hypothesis 5 reflects that more complex and rapid changes of organization exist in the faculty, the possibility of job stress will be higher.

6.3.6. The Results of Hypothesis 6

The support of H6 (performance pressure) is in line with the results found by Chan et al. (2000).

Multiple regression analysis shows relative advantage having β=0.209 (ρ=0.001)is the strongest predictor of job stress. It is expected since past literature has consistently shown that performance pressure now a day is one of most significant and positive influence on job stress (Townley, 2000).

6.3.7. The Results of Hypothesis 7

To support hypothesis 7 we also used multiple regression analysis to understand the effects of job stress versus job satisfaction. With job satisfaction as dependent variable and job stress as independent variable, a regression equation to represent this relationship is computed. Regress results are shown Tables III and IV. Table III depicts the computer F-value and R square to understand the overall significance of the regression model. Research model yielding significant p-values ($p<0.01$) and R square around 10 percent of the variance in job satisfaction was explained. Table IV lists detailed data on the statistical coefficients of the regression model. Therefore, hypothesis 7 is supported by the collected data.

7. Conclusions

Based on the finding of the study, there are a few key points that can be used to conclude this research paper. It is very important that the university understands the needs of its employees and provide what is best for the employees. Constant appraisal programs and appreciation should be given to reinstate and motivate the employees. Motivation is a key factor as well in affecting job stress among employees. Employees who are highly motivated will feel happier and are more willing to work for the organizations. Unhealthy job stress among the people responsible in assisting the future generation's education will ultimately affect their intellectual and social abilities. Failure of the educational institutions in providing a healthy working environment or even a working environment with the minimal level possible of unhealthy job stress would lead to many more problems in the near future, especially in the employees' work performance in teaching students and administrative part of the university. At the end of the day, both employer and employees are responsible when it comes to the issue of handling stress. Because it is the institution, internal and external environment that cause the stress, the employees face the stress, and the employers and students that will experience the effect of the stresses experience by the university teachers.

References

Al-Aameri A.S. (2003). Source of job stress for nurses in public hospitals, *Saudi Medical Journal,* 24(11), pp.1183-1187.

Alexandros-Stamatios G. A., Matilyn J.D., and Cary L.C. (2003). Occupational Stress, Job satisfaction, and health state in male and female junior hospital doctors in Greece, *Journal of Managerial Psychology*, 18(6), pp. 592-621.

Beehr, Terry A. (1995). *Psychological Stress in the Workplace,* London and New York.

Beehr, T.A. & Newman, J.E. (1978). Job Stress, Employee Health and Organizational Effectiveness: A Facet Analysis, Model and Literature Review, *Personnel Psychology*, 31, Pp.665-669.

Beehr, T.A., Walsh, J.T., & Taber, T.D. (1976). Perceived situational moderators of the relationship between subjective role ambiguity and role strain, *Journal of Applied Psychology,* 61, pp.35-40.

Caplan, R.D., Cobb, S., French, J.R.P., Jr., Harrison, R.V., and Pinneau, S.R. (1975). Job Demands and Worker Health, *HEW Publication No*. (NIOSH), pp. 75-160.

Cascio, W.F. (1995). Wither industrial and organizational psychology in a Changing world? *American Psychologist*, 50, pp.928-939.

Chan, K.B., Lai, G., Ko, Y.C. & Boey K.W. (2000). Work stress among six professional groups: the Singapore experience, *Social Science Medicine*, 50(10), pp.1415-1432.

Coleman J.C. (1976). *Abnormal Psychology and Modern Life* (Indian reprint), Taraporewalla, Bombay.

Cooper, C.L. (1991). Stress in organizations. In M. Smith (Ed.). *Analyzing Organizational Behaviour.* London: MacMillan.

Cooper, C., U. Rout and B. Faragher. (1989). Mental Health, Job Satisfaction, and Job Stress among General Practitioners, *B Medical Journal*, 298, pp366-370.

Cordes, C.L., and Dougherty, T.W. (1993). A review and integration of research on job burnout, *Academy of Management Review*, 18, pp.621-656.

Cummins R.C. (1990). Job stress and the buffering effort of supervisory support, *Group and Organizational Studies*, 15(1), pp.92-104.

Dyer, S., & Quine, L. (1998). Predictors of job satisfaction and burnout among the direct care teachers of a community learning disability service, *Journal of Applied Research in Intellectual Disabilities,* 11 (4), pp.320-332.

Dyer, S., & Quine, L. (1998). The effects of job demands and control on employee attendance and satisfaction, *Journal of Organizational Behaviour*, 12, pp.596-608

Fisher, C.D., & Gitelson, R. (1983). A meta-analysis of the correlated of the role conflict and ambiguity, *Journal of Applied Psychology*, 68, pp.320-333. *European Journal of Social Sciences – Volume 8, Number 1(2009)* 130

Fletcher, J.B., & Payne, R. (1971). Stress and Work: A Review and a Theoretical Framework, Part 1, *Personnel Review*, 9, pp. 1-20.

Golembiewski, R.G., & Yeager, S. (1978). Testing the applicability of the JDI to various demographic groups, *Academy of Management Journal*, 21, pp.514-519.

Hussey, J. and Hussey, R. (1997). *Business Research, A practical Guide for Undergraduate and Postgraduate Students,* Macmillan Press Ltd, London.

Igharia, Magid and Greenhaus, Jeffrey H. (1992). Determinants of MIS Employees' turnover Intentions: A Structural Equation Model, *Communications of the ACM*, 35(2), pp.34-49

Jackson, S.E., & Schuler, R.S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings, *Organizational Behavior and Human Decision Processes*, 36, pp.16-78.

Jung, K.G., Dalessio, A., Johnson, S.M. (1986). Stability of the factor structure of the Job Descriptive Index, *Academy of Management Journal*, 29(3), pp.609-616.

Kahn, R.L., & Quinn, R.P. (1970). Role stress: A framework for analysis, In A. McLean (Ed.), *Occupational mental health*, New York: Wiley.

Table 1. Test of Co linearity

Variable	**Tolerance**	**VIF**
Management role	876	3.336
Relationship with others	876	3.777
Workload pressure	809	2.8654
Homework interface	987	6.767
Role ambiguity	590	2.888
performance pressure	786	3.4333

Table 2. Regression Results

Variables	Beta	t-value	p-value
Constant	1.781	.076	
Management role	.053	.909	.364
Relationship with others	-.062	-1.032	.303
Workload pressure	.283	4.013	.000
Homework interface	.218	2.768	.006
Role ambiguity	.180	2.674	.008
Performance Pressure	.209	3.429	.001

Table 3. Summary of Regression Analysis Effects of Job Stress toward Job Satisfaction

Regression Statistics F-Value P-Value Adj-R2 Durbin-Watson Test

Values 24.098 **0.00 0.103 1.869 **p<0.01

Table 4. Relationship between Job Stress and Job Satisfaction

Variables Standardized Error of Coefficient t-value Standardized Regression Coefficient (beta) (p-value)

Job stress 0.035 -4.909 -0.327 (0.00)** **p<0.01