



Impact of Job Stress and Job Satisfaction on Employee Performance: Comparative Analysis between Private and Government Hospitals in Lahore

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Abstract

The international literature shows that a large number of factors influence employee's performance such as satisfaction from the profession, work environment, compensation policies, and job stress. This survey study focuses on job satisfaction and job stress as influencing factor for the job performance. The aim of this research study is to examine the relationship between job-related stress, job satisfaction and employee performance in nursing sector of Lahore, Pakistan. Further, for this study, the hospitals were divided into two major groups; that are, Private hospitals and Government hospital. Stratified random sampling technique was used to select hospital from these two categories for data collection. Primary data was collected through close-ended questionnaires. The questionnaires were distributed among 500 nurses and response rate gathered was 82.4%. Furthermore, the reliability of the questionnaire was tested through Cronbach's alpha coefficient. Moreover, the data was analyzed through, correlation, regression analysis, Granger Causality test and Independent Sample T- test by using Statistical Package for Social Sciences (SPSS16.0) and Eviews. The results drawn from the study shows that nurses of government hospitals are more satisfied with their job and perform better than the private hospital nurses. They also feel high level of stress due to challenge stressors that help in achieving goals timely and efficiently. Correlation analysis revealed that Job-related stress and job satisfaction are directly related to the job performance, however, job satisfaction has stronger relationship with performance. Regression analyses revealed that only job satisfaction has a significant impact on the performance of the nurses and job-related stress is not found to significantly affect job performance among nurses. Thus, job satisfaction has a higher impact on job performance than job-related stress. This study is considered to be policy oriented as it would guide the management of both private and government hospitals in Lahore in maintaining a required level of stress in the hospitals that would help to increase their employees' (nurses) performance level; making the administration realize the necessity of nurse's satisfaction for better performance.

Keywords: Job Stress, Job Satisfaction, Job Performance, Correlation, Regression Analysis

JEL Codes: J28, C30

1. Introduction

Tracey explains human resources as, the people that operates and supervises an organization, unlike the financial and material resources of an organization. Managing human resource is an art in itself and it requires enormous moves and efforts by the organization and their management/ HR department to make best use of their resource. Management always struggles tries its best to have satisfied, happy and passionate workforce. According to a research conducted in United States (2000), it was concluded that the nursing is one the strongest pillars of health care system. The international literature shows that a large number of factors influence employee performance such as satisfaction from the profession; work environment, compensation policies, and job stress etc. this study focus on job satisfaction and job stress as influencing factor for job performance. Careful detection of international literature shows that job performance is directly and strongly related to stress and burnout (Gandi, et.al 2011). Job satisfaction is also related to job performance in nursing profession (Hanan, 2009) its evidence are available worldwide (Nabirye, et al. 2011). The impact of job satisfaction and job stress on job performance is not something that has arisen recently addressed. In contrast, research has been made on this relationship in the past to detect the subject (Emery & Trist, 1960), (Organ, 1977), (Ostroff, 1992), (Peterson & Luthans, 2006). Job performance is the total output that employees give to the organization. In other words, it is the sum of the abilities, opportunities and motivation. (Leveck & Jones, 1996). Different types of relationship have been found between work stress and job performance. First is the inverse relation between stress and job performance, in which with the increase in the level of stress decreases the job performance of employees. Second is a direct relation, where rise in the level of stress increases job efficiency. Third, mild level of stress boosts employee performance to peak in the beginning but then brings employee into distress situation (Dar, et.al. 2011). According to its relationship with productivity and performance of employee (Ali and Audi, 2016; Ali and Audi, 2018), Job stressors are of two types "Challenge Stressors and Hindrance Stressors". Challenge stressors help in achieving goals timely and efficiently. The ability of nurses to practice in a professional manner is also influenced by the organizational structure of their work environment. Hence this study aims to find out the difference in level of job stress, job satisfaction and job performance. Moreover, this paper investigates the impact of job-related stress and job satisfaction on job performance exploring attitudes, perceptions and self-evaluation of nurses working in private and public hospitals of Lahore.

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2. Literature Review

Larocco et al., (1980) has worked on social support, occupational stress, and health. Through the study they focused on the used work load fit, role ambiguity fit, complexity fit and responsibility fit as independent variables. Fako, along with his fellow researchers (2004), in their research based on a case study of work-place stress of nurses working in clinics. The results showed that most of nurses in Botswana were experiencing work-related stress. Saif and Rehman (2009) conducted a research on the impact of occupational stress on employees' somatic symptoms, job anxiety and employee's turnover intention. Based on the results of this study the seven-version scale is considered reliable and serves as a valid instrument for measuring psychosocial pressure in work environment. These outcomes and measures were applicable to all services and manufacturing. Heston et al., (1996) worked on Job Satisfaction and Stress among Band Directors. Their study focused on Midwestern state. The study concluded that only those band directors were considered themselves satisfied with their job that had strong positive interpersonal relationships with students, parents, administrators, and other faculty members. Berland, Natvig and Gundersen conducted a research in 2008 on patient safety and job-related stress: A focus group study in Norway. This study concluded that stress has an adverse effect on the nurses especially who work with critically ill patients because patient's safety can be compromised due to the stress factor of nurses. This study supported the theoretical framework of Karasek and Theorell (1990), according to which imbalance between job demands in the nursing profession and the opportunity nurses have for control and support can cause stress. Fawzi in 2004 studied job stress, job performance, and social support among hospital nurses working in United States of America. this study put light on the importance of social support from coworkers. There is positive relation between social support and job performance. Riaz, Ahmad, Murtaza and Khan in 2006 study the Impact of Job Stress on Employee Job Satisfaction. The findings of this study showed increased level of stress among nurses and decreased level of job satisfaction results in high level of performance.

3. Methodology

The research method used in conducting the study is Quantitative method. It is a Positivist research that includes quantitative approach for collecting the data that includes questionnaires. It consists of 33 close-ended questions. Further, the scale used in the study is the Likert Scale; that is, 5-point scale. Population of this research study includes all registered nurses working in government and private hospitals of Lahore. Stratified sampling technique is used for data collection. This study analyzes two groups of nurses (nurses worked in government hospital verses nurses worked in private hospitals). Although data is collected from each nurse individually but the data collected from all government hospitals is aggregate for analysis separately from data of private hospital nurses. Three variables are used in this study (job related stress, job satisfaction and job performance). Job-related stress and job satisfaction are explanatory variables or independent variables. Sample size for this study is 412 nurses.

3.1 Hypothesis

H1: There is a significant difference in level of Job-related stress in both private and public hospital.

H2: There is a significant difference in level of job performance in both private and public hospital.

H3: There is a significant difference in level of job satisfaction in both private and public hospital.

H4: There is a significant relationship between job-related stress and job performance.

H5: There is a significant effect of job-related stress on job performance.

H6: There is a significant relationship between job satisfaction and job performance.

H7: There is a significant effect of job satisfaction on job performance.

3.2 Model

$$\text{Job Performance} = \alpha_0 + \beta_1 \text{ job Stress} + \beta_2 \text{ Job Satisfaction} + \epsilon$$

4. Results and Discussion

The Cronbach's alpha coefficient for job-related stress, job satisfaction and job performance are 0.679, 0.602 and 0.897 respectively. Overall Cronbach's alpha coefficient for all 33 items is clearly 0.844, signifying that the items have a relatively high internal consistency.

Table 1

Reliability Statistics		
	Cronbach's Alpha	N of Items
Stress	.679	10
Satisfaction	.602	10
Performance	.897	13
Total	.844	33

According to the table 2 all variables comprised of 412 observations. This shows the stress level among nurses. Stress under this study has range from 2.80 and minimum and maximum values are 1.00 and 3.80 respectively

and mean value is 2.54 and .616 is the standard deviation. Satisfaction show the job satisfaction level among nurses. Satisfaction under this study has range of 2.60 and minimum and maximum values are 1.00 and 3.60 respectively and mean value is 2.20 But the standard deviation is .511. Performance show the job performance level among nurses. Performance under this study has range of 2.08 and minimum and maximum values are 1.0 and 3.08 respectively and mean value is 1.73 But the standard deviation is .53.

Table 2

Descriptive Statistics						
	N	Range	Minimum	Maximum	Mean	Std. Deviation
Stress	412	2.80	1.00	3.80	2.5408	.61697
Satisfaction	412	2.60	1.00	3.60	2.2081	.51189
Performance	412	2.08	1.00	3.08	1.7384	.53011
Valid N (listwise)	412					

Table 3

Group Statistics						
	Hospital	N	Mean	Std. Deviation	't'	Sig. Level
Stress	Private Hospital	206	2.3053	.65622	-8.375	0.000
	Government Hospital	206	2.7763	.47015		
satisfaction	Private Hospital	206	2.0420	.59312	-6.956	0.000
	Government Hospital	206	2.3742	.34367		
Performance	Private Hospital	206	1.6721	.58366	-2.553	0.011
	Government Hospital	206	1.8046	.46252		

Table 4**Granger Causality Test**

Null Hypothesis:	Obs	F-Statistic	Prob.
SATISFACTION does not Granger Cause STRESS	410	2.49083...	0.0841...
STRESS does not Granger Cause SATISFACTION		3.29795...	0.0379...
PERFORMANCE does not Granger Cause STRESS	410	1.56387...	0.2105...
STRESS does not Granger Cause PERFORMANCE		2.32831...	0.0987...
PERFORMANCE does not Granger Cause SATISFACTION	410	0.67232...	0.5110...
SATISFACTION does not Granger Cause PERFORMANCE		1.03393...	0.3565...

Above mentioned table shows the p value for satisfaction granger causing stress is 0.084 that is greater than 0.05 so the null hypothesis is accepted and it is concluded that satisfaction does not cause stress. The p value for stress granger because satisfaction is 0.03 which is less than 0.05 so, the null hypotheses is rejected and it is concluded that stress causes satisfaction. p value for performance granger causing stress is 0.21 that is greater than 0.05 so the null hypothesis is accepted and it is concluded that performance does not cause stress. The p value for stress granger causing performance is 0.09. which is greater than 0.05. So, the null hypothesis is accepted and it is concluded that stress does not causes performance. p value for performance granger causing satisfaction is 0.51 that is greater than 0.05 so the null hypothesis is accepted and it is concluded that performance does not cause satisfaction. The p value for satisfaction granger causing performance is 0.35. which is greater than 0.05. So, the null hypothesis is accepted and it is concluded that satisfaction does not causes performance.

Table 5

Correlations				
		stress	satisfaction	performance
Stress	Pearson Correlation	1	.547**	.237**
	Sig. (2-tailed)		.000	.000
	N	412	412	412
Satisfaction	Pearson Correlation	.547**	1	.406**
	Sig. (2-tailed)	.000		.000
	N	412	412	412
Performance	Pearson Correlation	.237**	.406**	1
	Sig. (2-tailed)	.000	.000	
	N	412	412	412

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

Above table show the results of 412 responses of private hospital nurses and government hospital nurses. such table is consisting of different variables. Different variables are used to analyses this study. Job related stress, job satisfaction and job performance are the variables which are used in our study.to check the relationship between the variables, such technique name as correlation is used. The correlation coefficient of job stress and job

satisfaction is .547 which shows strong positive correlation exist between job related stress and job satisfaction, furthermore the P value is 0.00 which is less than 0.05 level of significance and reject the null hypothesis. As the level of job stress increases level of job satisfaction is also increased. Regression analysis is conducted to investigate the impact of independent variables (job-related stress and job satisfaction) on dependent variable (job performance). This regression is also applied to further test the hypothesis of this study.

Table 6

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.406 ^a	.165	.161	.48564
a. Predictors: (Constant), satisfaction, stress				

The value of adjusted R square is .161 which shows that 16.1% of variation in job performance is due to job stress and job satisfaction.

Table 7

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.037	2	9.518	40.359	.000 ^b
	Residual	96.460	409	.236		
	Total	115.497	411			
a. Dependent Variable: performance						
b. Predictors: (Constant), satisfaction, stress						

Table 7. explains the results of F-test. null hypothesis for the F-test states that variation in the dependent variable is not due to model of this study (R Square is equal to zero). The f value is 40.35 and p value is 0.00 that is less than .05 thus, null hypothesis is rejected and alternate hypothesis is accepted. which states that independent variables of this model statistically significantly predict job performance.

Table 8

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.791	.117		6.738	.000
	stress	.018	.046	.021	.397	.692
	satisfaction	.408	.056	.394	7.295	.000

Job performance= .018(job related stress) + .408 (job satisfaction) +.791. Unstandardized beta for job satisfaction is 0.408. While unstandardized beta for job related stress is quite less that is .018. coefficient of job satisfaction is significantly different from zero because its P value less than .05. but coefficient of job-related stress is not significantly different from zero because its P value is greater than 0.05. that is 0.692. thus, job satisfaction contributes to the model but job stress does not.

5. Discussion

Nursing is a major component of health care in Pakistan. Much of the recent literature on Health care focuses on nurses.it is the major issue in Pakistan and become the subject of scholarly discussion amongst academics and practitioners (Dr. Shaikh Tanveer Ahmed). Nursing is among the stressful professions. Findings of this study shows a significant difference in the level of job-related stress between private hospital nurses and government hospital nurses. Stress level among private hospital nurses is statistically significantly different from government hospital nurses. Nurses of Government hospitals feel high level of stress reflected by the mean score of 2.77. on the other hand, private hospital nurses reported less level of stress reflected by the mean score 2.30. Job satisfaction is considered one of the key factors to determine performance in healthcare services specially nursing profession (Hanan, 2009). Findings of this study show a significant difference in the level of job satisfaction between private hospital nurses and government hospital nurses. Satisfaction level among private hospital nurses is statistically significantly different from government hospital nurses. Nurses of Government hospitals feel more satisfied than private hospital nurses. High level of satisfaction among government hospital nurses is reflected by the mean score of 2.37. On the other hand, private hospital nurses are less satisfied reflected by the mean score 2.04. The ability of nurses to practice in a professional manner is also influenced by the organizational structure of their work environment. Findings of this study portrays a significant difference in job performance level between private hospital nurses and government hospital nurses. Job performance level among private hospital nurses is statistically significantly different from government hospital nurses. It is drawn from the results that the nurses of government hospitals perform better than private hospital nurses. High performance level among government hospital nurses is reflected by the mean score of 1.80, while private hospital nurses reported less performance,

level reflected by the mean score 1.67. Pearson correlation is applied to investigate the relationship between job-related stress, job satisfaction and job performance. Result shows moderate positive correlation exist between job related stress and job satisfaction. While correlation between job related stress and job performance is very weak (.165), due to increase/ decrease in job- related stress, increase/decrease in job performance is very little. The relationship between job- related stress and performance is positive in which by raising the level of stress increases job efficiency one other hand, correlation between job performance and job satisfaction is moderate (.413). Job satisfaction and job performance move in the same direction, increase/ decrease in job performance. Also, related to the increase or decrease in job performance at moderate level. Job satisfaction has stronger relationship with job performance than job-related stress. Both job related stress and job satisfaction have direct positive relationship with job performance. This study investigates the impact of job-related stress and job satisfaction on job performance exploring attitudes, perceptions and self-evaluation of nurses working in private and public hospitals of Lahore. Regression test is applied to test the impact of job-related stress and job satisfaction on job performance. Regression shows that 16.1% of variation in job performance is due to job stress and job satisfaction. Beta for job satisfaction (.408) is quite larger than beta of job-related stress (.018). This shows that change in job satisfaction brings larger change in job performance as compare to job related stress. p values for job-related stress and job satisfaction also shows that Job satisfaction has statistically significant impact on job performance. On the other hand, job- related stress does not have statistically significant impact on job performance. Performance level of nurses is not affected by the stress level. Magnitude of stress level does not change the performance level among nurses

Table 9: Testing Hypothesis

Hypothesis	Result	Rejected/ Accepted
H1: mean stress for private hospital nurses is not equal to mean stress for public hospital nurses.	Significant	Accept the alternate hypothesis
H2: mean satisfaction for private hospital nurses is not equal to mean satisfaction for public hospital nurses.	Significant	Accept the alternate hypothesis
H3: mean performance for private hospital nurses is not equal to mean performance for public hospital nurses.	Significant	Accept the alternate hypothesis
H4: there is a significant relationship between job related tress and job performance.	Significant	Accept the alternate hypothesis
H5: job-related stress has significant effect on job performance.	Not Significant	Reject the alternate hypothesis
H6: there is a significant relationship between job satisfaction and job performance.	Significant	Accept the alternate hypothesis
H7: Job Satisfaction have significant effect on job performance	Significant	Accept the alternate hypothesis

6. Conceptual Contribution

Findings of this research supports the cognitive theory of stress by Lazarus and Folkman (1984) and Herzberg's Two Factor Theory of Motivation (1959). Cognitive theory of stress states that environmental factors affects the employee's stress level. This study concluded that stress level among private hospital nurses is significantly different from Government hospital nurses. Thus, environmental factor (hospital type) affect the stress level among individual (Audi et al., 2022; Audi and Ali, 2017; Audi and Ali, 2017; Audi et al., 2021; Audi and Ali, 2016; Audi et al., 2021; Audi et al., 2021; Audi et al., 2021; Haider and Ali, 2015; Kaseem et al., 2019; Roussel et al., 2021; Sajid and Ali, 2018; Senturk and Ali, 2021; Mehmood et al., 2022; Ali et al., 2022; Ahmad et al., 2022; Sulehri and Ali, 2020; Ali et al., 2021). According to the two-factor theory of motivation absence of hygiene factors (salary, company policies and security) results in low level of satisfaction that does not motivate employees to work hard. Results of this research study showed that private hospital nurses are less satisfied due to poor hygiene factors (low salary packages, poor hospital policies regarding retirement and pension, no sense of job security) while, government hospital nurses are more satisfied due to good hygiene factors (high salary packages, better hospital policies regarding retirement and pension, good sense of job security). This low level of satisfaction ultimately affects the performance level. Thus, private hospital nurses perform less than government hospital nurses.

7. Conclusions

Government hospital nurses are more satisfied with their job as compare to the private hospital nurses. Performance level of government hospital nurses is also better than private hospital nurses. While, Stress level among government hospital nurses is also high due to Challenge stressors that help in achieving goals timely and efficiently. However, correlation analysis revealed Job-related stress and job satisfaction are directed related to the job performance. The relationship between job satisfaction and performance is stronger than relationship between job-related stress and performance. The relationship between job-related stress and job performance is weak. Which also reflected in the regression analysis, job-related stress is not found to significantly effect job performance among nurses. While the relationship between job satisfaction and job performance is moderate. This

is also supported with the results of regression analysis, Job satisfaction has statistically significant impact on job performance. By comparing the unstandardized beta for job-related stress and job satisfaction it was seen that beta for job satisfaction is greater than beta for job related stress which means that job satisfaction has a higher impact on job performance than job-related stress. The findings of this study revealed that on average, Government hospital nurses feel more stress as compared to the private hospital nurses. Thus, it is recommended, to foremost reduce the level of stress for the nurses serving in the government hospitals. For this, the hospital management should develop a committee dedicated for managing the workload and time pressure of the nurses. Furthermore, the committee should play a role of a moderator between the nurses and the management to understand the real needs of the nursing department. As a result of this modification the nurses would have a well – organized and less stressful environment at their workplace. In addition to this, work environment plays a vital role in coping with the job-related stress. A positive and a supportive environment leads to an improved performance. Hence, it is suggested that the assigned authorities should improve these factors in order to release the nurses from the stress. Management could also work on hiring policy to reduce work load. hiring more nurses to reduce on the work overload would result in less stressful working conditions. It was analyzed through the data collected that the private hospital nurses were less satisfied with their job as compared to the nurses of the government hospital. It is recommended that private hospitals should improve the elements i.e. attractive salary package, salary increment, good communication, recognition for excellent work and better promotion policy that result in job satisfaction of the nurses as of the government hospitals. The results portrayed a positive relationship between job-related stress and job performance. Hence, based on the results, the private hospitals are suggested to work on the positive stressors such as, coping with new technology in performing the tasks outside of their core competence, emotional involvement with their job and workload fluctuation; in order to improve the job performance.

8. Future Directions for the Researches

Based on the research study, the following directions are recommended for future researches: For conducting a study to assess the relationships between occupational stress, job-satisfaction and job performance various instruments could be adapted other than self-reports or closed-ended questionnaires by the respondents. Other techniques for data collection that can be used are open-ended questionnaires and unstructured interviews to get a deeper insight of the participants. To be more specific the variables could assess through different measures such as, occupational stress could be assessed using physiological measures and pre-determined checklist and observations could be used to assess the nurses' job performance. More studies should be conducted on a larger scale (province wise) to identify sources of occupational stress and factors that enhance job satisfaction and job performance for the hospital nurses in Pakistan. As job satisfaction was found to have a significant effect on job performance, studies to identify factors which influence job satisfaction among the hospital nurses should be conducted in order to improve nurses' performance. Since there were significant differences between the public and private hospitals for all the three major variables, more studies should be conducted to identify the factors which lead to these differences. Future research is needed to examine differences in best practices for human resource management between public hospitals and private hospitals.

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