



Relationship between Stress and Performance of Health Workers

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Abstract

In recent times, stress has become a key area of research owing to the fact that, it is considered as a serious problem affecting not only health workers but workers in general. The origin of this problem is attributed to the growing competition, financial crisis and recession of 2008 round the world. Stress can be understood as, a condition which happens when one realizes the pressures on them or the requirements of a situation are wider than their recognition that they can handle. This paper therefore examines the relationship between stress and performance of health workers. Partial Least Square equation modelling SEM PLS was used to analyse the data collected, findings and recommendations were discussed with a view to manage the problem of stress, with particular reference to health workers performance in Nigeria.

Key words; Stress; performance; role stress; job stress; job security

Introduction

The current global competition and the 2008 economic recession has forced organisations to embark on many strategies in order to be able to cope with the situation. These strategies ranges from layoffs, restructuring, downsizing, right sizing, and mergers. This situation has gave birth to conflict between workers and the employers which has also causes stress among workers (Manzoor et al., 2012). Evidence from researches, observations and investigations has reveal that, workers in every sector (public, private, large or small) are undergoing a great deal of stress which consequently leads to deteriorating employees' health and decrease in performance.

Stress as a concept originated from Physics referring to the force placed on object to cause its damage, bending or breaking, in the case of human being stress connotes the body reaction to the demands placed upon it, either favourable or unfavourable (Mansoor, Fida, Nasir & Ahmad, 2011) . Letter the term come to be used in psychology and life science. Hans Selly was belief to be one of the founding fathers of the term in 1936. He define Stress as the force, pressure or tension subjected upon an individual who resists these forces and attempt to uphold its true state (Dar, Akmal, Naseem & Khan, 2011). Bashir (2010) pointed out that stress can be understood

more comprehensively as, a condition which happens when one realizes the pressures on them or the requirements of a situation are wider than their recognition that they can handle.

Stress is broadly classified into two, positive and negative. The positive stress is regarded to be helpful because its leads to increase performance, while negative stress is a direct opposite of the former. Regardless of the type, stress whether positive or negative was said to be caused by so many factors which includes, perceived loss of job, security, lack of safety, family problem, lack of autonomy, lack of resources and equipment, complexity of repetitiveness, sitting long periods of time or heavy lifting, work schedules, work place relationship etc. (Ongori & Agolla, 2008). Stress causes an imbalance in one's life because it leads to depression and thus damages health, attitude and work behavior (Ali, Raheem, Nawaz & Imamuddin, 2014). Furthermore the National Institute of Occupational Safety and Health (NIOSH), designed a model that shows relationship between job stress and health. The model listed factors that causes stress like, physical environment, role conflict, role ambiguity, job control, interpersonal conflict, employment opportunities, workload, responsibility for people, underutilisation of abilities, cognitive demands and shift work. These have Negative impact on workers thereby leads to decrease in performance and contribute to low motivation and moral, high turnover, sick leave, accident, low job satisfaction, quality products and services, poor internal communication and conflicts (Ongori & Agolla, 2008).

Performance simply refers to the ability of a worker to complete a give tasks set by the organisation within a given period and resources allocated. It can also be the ability of individual successfully completing the task which are set by an organisation, according to the predetermined standards along with the efficient utilisation of resources in changing environment (Zafar, Ali, Hameed, Ilyas & Younas, 2015). Koopmans, Bernaards, Hildebrandt, Buuren, Beek and Vet (2013) define performance as the performance of employees in an organizational setting in order to achieve goals and objectives of the organization.



Pugh (1991) sees performance as the degree to which individuals achieve their goals in an organization through hard work. It is also the level of individuals' output as a result of an activity (Erat et al., 2012). Performance is also defined as the amount of individual contribution to the development effort as captured by the number of defects fixed by individuals in an organization (Ehrlich & Cataldo, 2012). Campbell (1990) defined performance as behaviors or activities that are related to the objectives of the organization. For the purpose of this paper, performance refers to the performance of an employee in an organization in order to achieve the goal and objectives of the organization.

Workers Performance is a very vital issue that organizations whether public or private cannot afford to play with because it determines how such an organization can be able to compete with its counterparts. Researchers have suggested four possible relationships between stress and performance, i.e. when performance decreases with stress, Negative relationship has occurred, if stress leads to increase in performance than Positive relationship exists, when performance increases initially and later diminishes it is called Curvilinear relationship and in some cases no relationship can be found between stress and performance (Manzoor, Awan, & Mariam, 2012).

Health workers on the other hand engaged in activities that cover the entire aspects of human life ranging from, social, economic, recreational, emotional settings as well as Healthcare (Hossain, 2005; Yellowies & Hardy, 2014). They lead people to a successful life because of their readiness to respond in emergency cases and disasters. Health workers are also in the forefront for providing needed assistance or help to every life of individual, group or society (Riaz & Sarfaraz, 2015). Health practitioners employed professionalism based on scientific understanding of skills in social relations. This involves knowledge of human development and conduct as well as economic, cultural and social dynamics. In their attempt at making sustaining significant change to people and community, Health workers applied varieties of techniques skills and actions. They play the roles of adviser, advocator and a counsellor all with a view to assist people to have a successful life in the society through helping them with a solution to their problems (Parast & Allai, 2014; Pawar, 2014; Riaz & Sarfaraz, 2015).

This critical task carried out by health workers, made them to be more prone to stress as pointed

out by Milliken, Clements and Tillman (2007) that, stress in the health workers is a product of so many factors like, critical nature of their work, shortage of man power, working double shifts, inadequate rest, working closely with deadly diseases and knowing that an accidental needle stick or body fluid splash can easily result in infection, watching people suffer and coping with family grief in the front lines of human need, seeing some co-workers permanently disabled because of on-the-job injuries, touching bathing, applying dressing and wound care to who are indecent or rude, providing physical care to these who are unclean, job layoffs, mergers, company failures, job insecurity, difficulties with co-workers, unfair evaluations, and potential for lawsuits.

Problem Statement

A lot of researches have been conducted on the impact of stress on job performance, different results were revealed. However, most of the studies conducted were based on different sectors. For example Textile, banking, institutions, cement industries (See, Manzoor et al., 2012, Bashir & Ramey 2011, Chag et al., 2009, Jamal, 2011, Dar et al 2011, Ongory et al 2008, Ali et al., 2014). It seems that, the health workers were neglected, a huge gap existed which needs to be covered. The purpose of this study is therefore to cover the gap that exists by examining the relationship between stress and performance of health workers in Nigeria. Again, the past studies restricted themselves on some few stressors. Example (workload, job ambiguity, work conflict). (See, Bashir & Ramey 2010; monsoon, Awan & Marram 2007; Chag et al., 2009; Jamal, 2011; Dar et al., 2011; Ongori et al., 2008; Ali et al., 2014). It is therefore necessary to extend the study to cover other potential stressors in a view to have a generalised results. The present study, therefore intends to use job stressors (social influence stress, insecurity, work family stress and role conflicts).

Literature Review

Performance; Performance means the ability of an individual to complete a given task given to him by the organisation within a given time and with the allocated resources. Zafar et al. (2015) sees workers performance as that situation which an individual successfully completes the tasks which are set by an organisation according to the predetermined standards along with the efficient utilization of resources in a changing environment. To measure work performance and job stress, four relationships have been suggested. When performance diminishes with stress, negative linear relationship is there. Positive linear relationship is



also found, when stress causes better performance. If stress initially improves productivity, and then it diminishes when feelings of distress prevails on employee, then curvilinear or u-shaped relationship is found. Sometimes, no certain relationship is found between stress and performance (Manzoor et al., 2012).

Stress; The concept of stress originated from physics and it was first introduced by Selye in 1936. He defines stress as the force, pressure, or tension upon an individual who resists these forces and attempt to uphold its true state. The HSE (Health Safety Executive UK), defines stress as an undesirable response people have to tremendous or other types of demands placed upon them (Bashir, 2010). In same vein, Stress has been defined by (Kar & Praharaj, 2013) as a lively circumstance in which people face constraints, opportunities, or loss of something they desire and for which the consequence is both unpredictable as well as crucial. Stress is the response of people to the unreasonable/excessive pressure or demands placed on them. Stress is also viewed as a condition which happens when one realizes the pressure on them or requirement of situation are wider than they can handle, and if these requirements are huge and continue for a long period of time without any interval, mental, physical or behavioural problems may occur (Mansoor et al., 2011). Stress is also seen as the body's reaction to a change that requires a physical, mental or emotional adjustment or response. Stress can come from any situation that makes you feel frustrated, angry, nervous or anxious (Redman et al., 2012). To put it in simpler form stress means any outside force or event that has an effect on our body or mind (Kar & Praharaj, 2013).

Scholars have try to separate between Positive and negative stress. For example Bashir (2010) belief that there are some stress that are good i.e. stress that leads to performance, he said some stress are bad i.e. stress that causes harm both to individual worker and the organisation. This idea what also noted by (Manzoor et al., 2012). She refers to the positive stress eustress, distress as negative stress. She maintained that, Eustress is the form of stress that is positive and beneficial. We may feel challenged, but the sources of the stress are opportunities that are meaningful to us. Eustress helps provide us with energy and motivation to meet our responsibilities and achieve our goals. Distress is a continuous experience of feeling

overwhelmed, oppressed, and behind in our responsibilities.

Work –family conflict; it is commonly known that the mismatch between work and family has negative effect on workers well-being and health generally (Kinnunen, Feldt, Geurts, & Pulkkinen, 2006). Work-family conflict can resort to a severe stress at work which lead to some undesirable outcomes (Karatepe & Tekinkus, 2006). Therefore, balancing between work, housework and child-care responsibilities help greatly to reduce work-family conflict as outlined by Posig and Kickul (2004).

Role Stress; these are pressures confronted by workers in the organization (Fisher, 2001). It is of two types into role ambiguity and role conflict (Fisher, 2001; Viator, 2001). Role ambiguity refers to the situations where there is deficiency of comprehensible view from the role (Aziz, 2004). While Role conflict occurs when obedience with role responsibilities that makes it more unbearable for individuals to obey with another (Robbins & Judge, 2008). Role conflict also arises a person is exposed to contradictory demands by his supervisor or his subordinate, the person feels stress i.e. it is situation where by a worker is been confronted with too much demand either from his co-workers, or his boss. It can also be an employer is been given conflicting orders by his superiors (Chia kang wai & Yap, 2013).

Job Security; This is another factor that causes stress. This occurred when a worker is not certain about his fate in an organisation. The fear he has that he can be sacked at any time, thinking of where to start again, what is going to happen to family, how will he feed them if loose the job, all these can cause stress to the worker

Social influence stress; is According to Venkatesh and Davis (2000) social influence stress is a situation where by an individual worker is being influenced by others who are important for him. Social stress on workers' conduct plays a serious role in society areas, affecting events' outcome (Chia kang wai & Yap, 2013). Social stress can either be obedience and conformity pressure. Obedience stress is unsuitable influence from superiors within the organization (Lord & DeZoort, 2001). Inappropriate command from superiors will cause workers to diverge from professional ethics. Conformity stress is the stress instigated by coworkers (Lord & DeZoort, 2001). Based on the above discussion this paper therefore hypothes that;



- H1. The less work family conflict the higher the performance of health workers
- H2. The higher job security, the higher the performance of health workers
- H3. The less role stress the higher the performance of health workers
- H3. The less social stress the higher the performance of health workers

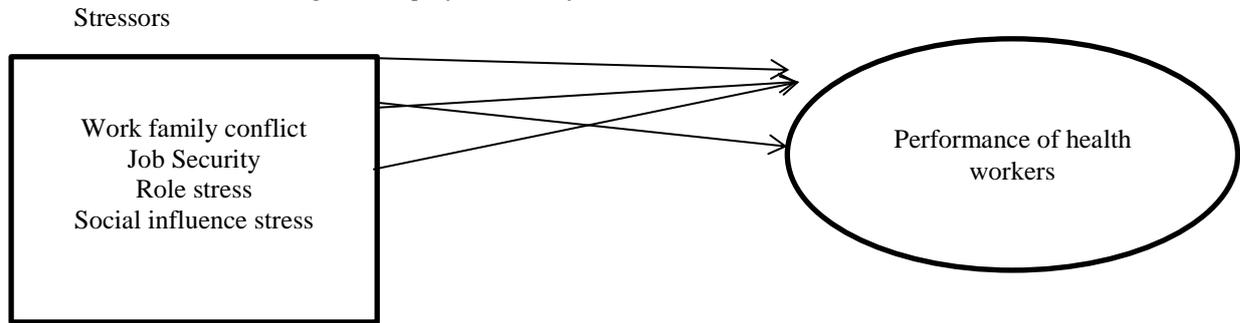


Figure 1 Framework

Methodology

The study employed a random sampling technique to select 550 health workers from three public Hospitals in Northwestern Nigeria. Data collection was administered by self, with the help of research assistants. A total of 348 valid responses was achieved. Table 1, shows the demographic attributes of the respondents.

Table 1
Demographic Profile of Respondents

S/N	Characteristics	Frequency	Percentage	Valid percentage
	Gender	Male	226	65
		Female	122	35
2	Age	20-39 years old.	258	74
		40-59 years old.	74	21.3
		60 years and above	16	4.6
3	Marital Status	Married	262	75.2
		Single	86	25
4	Work Experience	1-10 years	124	36
		11-20 years	148	42
		20 years and above	76	22
5	Qualification	SSCE certificate	82	34
		Diploma/NCE	171	49.1
		Degree/HND	78	22.4
		Post Graduate	17	5

Table 1 revealed that about 65 per cent of the respondents are male as compared to 35 per cent female. While 74 per cent of the respondents are within the 20-39 year age bracket, 21.3 per cent falls between within the 40-59 age category. Only about 4.6 per cent of the respondents were in the category of 60 and above age. The table also indicate that 75 percent of the respondents are married, while 25 of the respondents are single. It was further disclosed by the result on table 1 that, 36 percent of the respondents have 1-10 years work experience, 42 percent of them have spent 11-20 years and 22 percent have worked for 20 years and above. With regard to qualification, 34 per cent of the respondents are possessed SSCE, 49.1 per cent

have a Diploma/ NCE, 22.4 percent have first degree/ HND and only 5 per cent possessed a post graduate degree.

Instruments

The study covered variables such as stressors (work family conflict, job security, role stress and social influence stress) as independent variables and performance as the dependent variable. A five-point item scale was used to measure entire variables and scales ranges from 1 = strongly disagree, 2= agree, 3= neutral, 4= disagree and 5=strongly agree. The items were adapted from previous studies of (Chia kang wai & Yap, 2013; Rizzo, House, & Lirtzman, 1970; Hyatt, 1995;





House, Wells, Landerman, McMichael, & Kaplan, 1979; Mohd Nor, 2011; Ramasodi, 2010; McNamara & Liyanarachchi, 2008). The present study conducts multivariate analysis using Smart-PLS version 3.2.7 to examine the model as well as assess the study hypothesis. Using the PLS-SEM modelling method gives the researcher an opportunity to assess the entire measurement model and examine relationship with their respective measurements (Hair, Black, Babin & Anderson, 2010). Hence, this study employed PLS-SEM algorithms to assess the measurement and structural models.

Validity and Reliability of Measures

The paper used PLS-SEM algorithms to assess construct's reliability and validity through an assessment of the measurement model. Reliability and validity assessment of constructs are the criteria used in PLS analysis to assess the goodness

of the fit models (Hair, Hult, Ringle, & Sarstedt, 2013). Therefore, the paper conducted a reliability analysis to determine the measure's internal consistency. Table 2 gives a summary of results obtained from the validity and reliability based on the Composite reliability, and Average Variance Extracted. All the composite reliability of the model are above benchmark of 0.70 and above, because they varies between 0.924 and 0.874 for the constructs (Hair et al., 2014). Furthermore, the result reveal that the Average Variance Extracted (AVE) falls within 0.503 and 0.582, signifying that the minimum standard 0.50 is fulfilled (Hair, et al., 2013). The significance of the path coefficient (R^2) was also presented in the Table. It shows that 55.1 percent of variance was explained by the variables for direct relationship. Hence, all the constructs were believed to have adequate reliability.

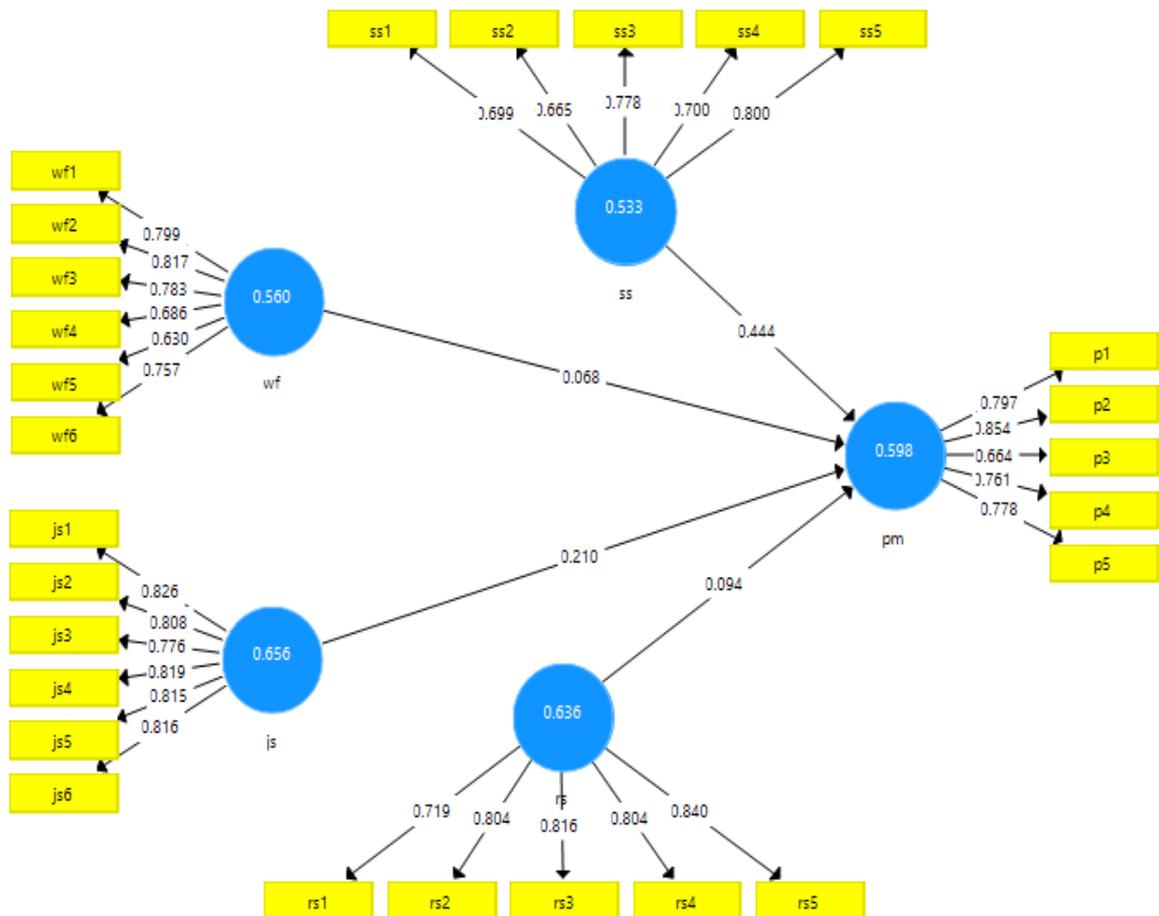


Figure 2 Measurement Model



Table 2

Showing the AVE, CR and R²

Constructs	CR	AVE	R2
Performance (PM)	0.881	0.598	0.551
Role stress (rs)	0.897	0.636	
Social influence stress	0.850	0.533	
Work family stress (wf)	0.883	0.560	
Job security (js)	0.920	0.656	

Table 3

Latent Variable Correlations and Square Roots of AVE

Constructs	1	2	3	4	5
Js	0.810				
Pm	0.655	0.773			
Rs	0.747	0.628	0.798		
Ss	0.740	0.713	0.731	0.745	
Wf	0.683	0.564	0.695	0.648	0.748

One of the methods of establishing discriminant validity is through Fornell and Larcker criterion, which is achieved by comparing the squared correlations among the variables and the AVE for the separate constructs (Fornell & Larcker, 1981). Table 3 presents the results of discriminant validity test through Fornell and Larcker criterion. From the result, it is clear that squared correlations of all the variables in this study were below the AVE by the indicators measuring the constructs. This means that, both discriminant and convergent validity are achieved by this model.

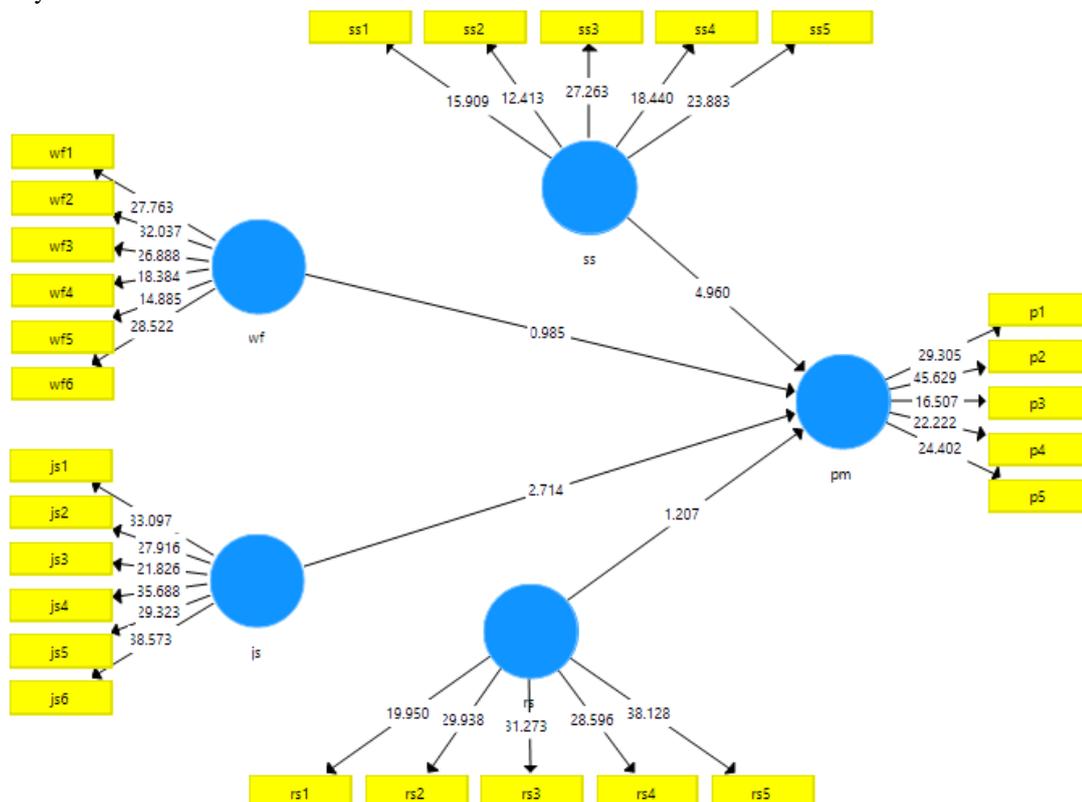


Figure 4 *Structural Model*



Hypothesis Testing

The PLS-SEM bootstrapping mechanism was employed to evaluate the path coefficients' significance (Figure 3). The study hypothesised that 1. The less work family conflict the higher the performance of health workers, 2. The higher job security, the higher the performance of health worker3. The less role stress the higher the performance of health workers 4. Th less social stress the higher the performance of health workers. The PLS-SEM bootstrapping results confirmed a significant positive relationship between JS and PM ($\beta = 0.21$, $t = 2.71$, $p < 0.000$), it also confirmed significant positive relationship SS and PM ($\beta = 0.44$, $t = 4.96$, $p < 0.000$). However, a negative relationship was established between RS and PM, and between WF and PM based on the result obtained as can be seen in Table 4.

Table 4

Table 4.4 Summary of Findings and Hypothesis Testing

Hypotheses	Construct	Beta	Standard Error	T Statistics	P-value	Decision
H1	JS -> PM	0.21	0.07	2.71	0.00	Supported
H2	RS -> PM	0.09	0.07	1.20	0.22	Not supported
H3	SS-> PM	0.44	0.09	4.96	0.00	Supported
H4	WF-> PM	0.07	0.06	0.98	0.21	Not supported

Discussion

The study investigated the relationship between stress and performance of Health workers in public sector in northwestern Nigeria using four stressors (JS, RS, SS and WF). The results of demographic data was calculated using the SPSS software version 23. The PLS-SEM analysis revealed an empirical proof of a significant positive correlation among the latent variables (JS and PM), (SS and PM). The results were in agreement with the findings of previous studies on the relationship between the constructs (Ali, Raheem, Nawaz, & Imamuddin, 2014; Bashir, 2010; Dar, Akmal, Naseem & Khan, 2011; Manzoor, Awan and Mariam, 2012; Ongori & Agolla, 2008).

Conclusion

The study examined the relationship between stress and performance of health workers in some selected public hospitals in northwestern Nigeria. 348 valid responses were obtained from 550 questionnaires distributed. Data analysis was conducted using SmartPLS-SEM and empirical evidence indicate a strong backing for two out of the four hypotheses statements, while the remaining two were not supported. Based on earlier

researches, there are several contradictory findings on job stressors such as role stress, job security, work family stress and social influence stress towards performance. As extension of past study, this current study revealed job security and social influence stress were positively related to performance. While role stress and work family stress are negatively significantly associated with performance. In relation to this, it can be concluded that the higher job security, the higher the performance of health workers and the less social stress the higher the performance of health workers. Therefore organization should be aware that these critical factors could lead to decrease in performance and ultimately reduce the service quality. Consequently, in relation to jwork family stress and role stress, employers must address these issues by providing leisure time and clear descriptions, job direction, and job expectation from top management. Based on the above findings, the paper recommend that inclusion of a moderating or mediating variable that will help to strengthen and resolved the contradictory results. In other words, more research is encouraged to better understand how these moderators or mediators may interplay with other variables.

References

- Ali, W. U., Raheem, A. R., Nawaz, A., & Imamuddin, K. (2014). Impact of Stress on Job Performance : An Empirical study of the Employees of Private Sector Universities of Karachi , Pakistan. *Research Journal of Management Sciences*, 3(7), 14–17.
- Alston, M. (2001). *Social Work Fields of Practice*. Australia page.: Oxford University Press.
- Anastas, J. W., & McClain, A. (2014). Standards for Social Work Practice in Health Care Settings National Association of Social Workers.
- Aziz, M. (2004). Role stress among indian information technology sector. *Women in Management Review*, 19 (7), 356-363.



- Bashir, U. (2010). Impact of Stress on Employees Job Performance A Study on Banking Sector of Pakistan. *Impact of Stress on Employees Job Performance A Study on Banking Sector of Pakistan*, 2, 122–126. <http://doi.org/0975-5853>
- Brand, S. (2015). Scope of Social Work Practice Social Work in Health.
- Chia kang wai, T.T.T., & Yap, Y.(2013) The relationship between work stress and auditors' job performance. A Thesis submitted to Faculty of business and finance, accounting department Universiti Tunku Abdul rahman
- Dar, L., Akmal, A., Naseem, M. A., Ud, K., & Khan, D. (2011). Impact of stress on employees job performance in business sector of Pakistan. *Global Journal of Management and Business Research*, 11(6), 0–4.
- Fisher, R. T. (2001). Role stress, the Type A behavior pattern, and external auditor job satisfaction and performance. *Behavioral Research in Accounting*, 13, 143–170.
- Fornell, C. &, & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measure ... *Journal of Marketing Reserach*, 18(1), 39–50
- Friedlander, W. . A. (1997). *Introduction to social Welfare, Prentice*. New Jersey: Hall inc. Englewood, Cliff.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6 ed.). New Jersey: Pearson Prentice Hall.
- Hair, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2013). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hyatt, T. A. (1995). *The effects of audit firm structure and auditors' locus of control on job stress, job satisfaction and performance*. Unpublished doctor dissertation, University of Arizona, Tucson, United States
- Hossain, I. (2005). Medical Social Work Practice in Bangladesh: Problems and Prospects. *Pakistan Journal of Social Sciences*, 3(3), 503–509.
- House, J. S., Wells, J. A., Landerman, L. R., McMichael, A. J., & Kaplan, B. H. (1979). Occupational stress and health among factory workers. *Journal of Health and Social Behavior*, 20 (2), 139-160.
- Innocent, E. O. (2014). Building a Solid Health Care System in Nigeria: Challenges and Prospects. *Academic Journal of Interdisciplinary Studies*, 3(6), 501–510. <http://doi.org/10.5901/ajis.2014.v3n6p501>
- Karatepe, O. M., & Tekinkus, M. (2006). The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, 24 (3), 173 – 193.
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, 47, 149-162.
- Lord, A. T., & DeZoort, F. T. (2001). The impact of commitment and moral reasoning on auditors' responses to social influence pressure. *Accounting, Organizations and Society*, 26 (3), 215-235.
- Lynne M. H. (2001). *International Social Work: Professional Action in an Interdependent World*. Oxford: Oxford University Press.
- Maclaren, V. . (1996). Urban Sustainability Reporting. *Journal of the American Planning Association*, 62(2), 184–202.
- Manzoor, A., Awan, H., & Mariam, S. (2012). Investigating the Impact of Work Stress on Job Performance: A Study on Textile Sector of Faisalabad. *Asian Journal of Business and Management Sciences*, 2(1), 20–28.
- McNamara, S. M., & Liyanarachchi, G. A. (2008). Time budget pressure and auditor dysfunctional behavior within an occupational stress model. *Accountancy Business and the Public Interest*, 7 (1), 1-43.



- Mohd Nor, M. N. (2011). *Auditor Stress: Antecedents and relationships to audit quality*. Unpublished doctor thesis, Edith Cowan University, Perth, Western Australia.
- Muhammad Mansoor, M. A. J. U. I., Sabtain Fida, M. A. J. U. I., Saima Nasir, M. A. J. U. I., & Zubair Ahmad, M. A. J. U. I. (2011). The Impact of Job Stress on Employee Job Satisfaction A Study on Telecommunication Sector of Pakistan. *Journal of Business Studies Quarterly*, 2(3), 50–56.
- Ongori, H., & Agolla, J. (2008). Occupational Stress in Organizations and Its Effects on Organizational Performance. *Journal of Management Research* (... , 8(3), 123– 135. Retrieved from <http://search.ebscohost.com/login.aspx?direct>
- Parast, S. M., & Allai, B. (2014). The Role of Social Work in Health Care System. *Journal of Social Science for Policy Implications*, 2(2), 59–68.
- Pawar, M. (2014). Social Work Practice With Local Communities in Developing Countries : Imperatives for Political Engagement. *SAGE Open*, 1, 1–11. <https://doi.org/10.1177/2158244014538640>
- Peeters, J. (2011). The place of social work in sustainable development: Towards ecosocial practice. *International Journal of Social Welfare*, 21, 1468–2397. <https://doi.org/10.1111/j.1468-2397.2011.00856>.
- Posig M., & Kickul, J. (2004). Work-role expectations and work family conflict: Gender deferences in emotional exhaustion. *Women in Management Review*, 19(7), 373-386.
- Ramasodi, J. M. B. (2010). *Factors influencing job satisfaction among healthcare professionals at south rand hospital*. Unpublished master dissertation, University of Limpopo, Limpopo Province, South Africa.
- Rehman, M. U., Irum, R., Tahir, N., Ijaz, Z., Noor, U., & Salma, U. (2012). The Impact of Job Stress on Employee Job Satisfaction: A Study on Private Colleges of Pakistan. *Journal of Business Studies Quarterly*, 3(3), 50–56.
- Riaz, S., & Sarfaraz, S, F. (2015). Need and Importance of Medical Social Work Practice in Pakistan with Special Reference to Karachi City. *Advances in Social Sciences Research Journal*, 2(12), 73–80.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15 (2), 150-163.
- Robbins, S. P. & Judge, T. A. (2008). *Essentials of organizational behavior* (9th ed.). New Delhi: Pearson-Prentice Hall.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 45 (2), 186-204.
- Viator, R. E. (2001). The association of formal and informal public accounting mentoring with role stress and related job outcomes. *Accounting, Organizations and Society*, 26 (1), 73-93.
- Whitaker T., Weismiller, T., Clark, E., & Wilson, M. (2006). *Assuring the Sufficiency of a Front Line Workforce: ANational Study of Licensed Social Workers. Special Report: Social Work Services in Health Care!Settings. Washington DC. National Association of Social Workers*. Washington DC
- .Yellowiees, J., & Hardy, F. (2014). *Queensland Branch Position Paper on the Role of Social Work in Health Care*. Queensland: AASW.
- Zafar, Q., Ali, A., Hameed, T., Ilyas, T., & Younas, H. I. (2015). The Influence of Job Stress on Employees Performance in Pakistan. *American Journal of Social Sciences Research*, 1(4), 221–225.