INTERACTIVE INFLUENCE OF JOB STRESS AND JOB DEMANDS ON EMPLOYEE NEOTERIC WORK BEHAVIOR: AN EVIDENCE FROM NON-GOVERNMENT ORGANIZATIONS

Mujtaba Ahmad¹ and Asma Imran²

Abstract

This study aims at the inspection of the influence job demands (stressors) on the innovative work behavior of employees working in non-government organizations, along-with the mediational influence of job stress resulted from high level of job demands. Following suggestions of Gardner and Cumming’s, (1988), Theory of Activation, which revealed that the job demands up to specified magnitude improve cerebral behavioral performance and trigger neoteric work behavior. Assessment of job demands was done by using the scale adopted from Van Yperen and Hagedoorn (2003), scale for measurement of job stress adopted from Cavanaugh et al. (2000) while for the measurement of innovative work behavior the scale adopted from Khaola and Sephelane (2013) was used. Cross-sectional design was implemented for testing hypotheses in non-contrived environment via administration of questionnaires among 510 employees of non-government sector following the Census method i.e. survey of the whole population. Statistical tools were applied and the results retrieved were the same and in line with the propositions supporting these affiliations.

Keywords: Job Demands, Job Stress, Neoteric Work Behavior, Cross-Sectional Design.

JEL Classification: Z000

Introduction to the Study

In modern days, organizations demand more neoteric work behavior from their employees, and it is because of the truth that the phenomenon of neoteric work behavior has become prerequisite for the existence of both employees and organizations who are in run for survival in modern day’s dynamic business settings, however research in this area is still in nascent phases and numerous organizations of emerging nations around the globe are unable to ensue neoteric practices (Scott & Bruce 1994; Spiegelaere et al., 2012; Martin et al., 2007; Jong & Hartog, 2007; Pasha & Iqbal, 2002).

¹ Secondary School Teacher, KP Elementary & Secondary Education, GHS Chuinj, Govt. Of KPK, Chitral, Pakistan. Email: ahmad_mujtaba33@yahoo.com
² Assistant Professor, Department of Management Sciences, COMSATS University, Islamabad, Lahore Campus, Pakistan. Email: drasaimran@ciitlahore.edu.pk
As globally justified frequently, employees of several organizations feel stress while at work because of the complex and incongruous nature of the load of work i.e. job demands which inevitably result in many problems related to behavior, thus resulting in a net underperformance of the organization. Health and fitness issues arising due to job stress resulting from job demands consist of tension and depression, skeletal disorders, and disease of heart, and the consequence of all such problems is low novel behavioral performance and outcomes at job, plus it also influences the somatic, mental and communal robustness of employees (International Labor Organization [ILO], 2002; Bano & Khan, 2014; Butt, 2009). Suli (2010) recommended that, if the endurance level of the employees is not taken care of while increasing their job demands for triggering neoteric work behavior may result in low job performance. Another work on innovation and Ven (1986) states clearly that catastrophes are required at times for making employee act and employees don’t go beyond their action thresholds and work innovatively unless confronted with direct source of problems, the role of stress was also highlighted by him in triggering neoteric work behavior of employees, and that being so, a recommendation was made by Ven (1986) to investigate the influence of job stress on novel working behavior capacities of employees. Ganster (2005) also advocated the same as, according to him job demands consequently lead to job stress and due to that some of the influences of job demands may be mediated by job stress. Nevertheless, as far as I know, no previous exploration has revealed this association of job demands and neoteric work behavior of employees in existence of stress at job as arbitrator (mediator) of the link of job demands and neoteric work behavior of employees employed in non-profit sector, current exploration fill this gap in knowledge via addressing the questions, that what is the impact of job demands and job stress on employee’s neoteric work behavior? And how neoteric work behavior may get instigated via job stress? Conflicts and ambiguities regarding job are caused by high level of demands of jobs in employees of non-government organizations which lead to complexity and job stress, as revealed by the scrutinized literature. The current situation in non-governmental organizations is forcing employees of these organizations to renovate their procedure of operation, because of the fact that working in such organizations is a job regarded as stressful; because of the demanding nature of job where contrasting demands of job, long working hours and both somatic and physical demands result in stress at job, and for management of such high level job demands it is vital to behave innovatively and come up with invention and implementation of neoteric ideas (Khurshid et al., 2012; Butt, 2009; Bano & Khan, 2014; Suli, 2010; Janssen, 2000). Thus, the current study focuses on the neoteric work behavior of employees employed in non-government sector of Pakistan.

**Literature Review**

Jobs that are broad demand more from the employees and require exuberant amount of exertion and consequently may lead employees to behave and work innovatively, as such challenging jobs might help employees to gain more understanding regarding their jobs and come up with neoteric answers to challenging jobs (Dorenbosch et al., 2005).

According to the study conducted by Jong et al. (2000), jobs which pose a high level of stress
might lead to fitness issues while dynamic jobs which combine complex job demands and control may lead to better health outcomes. A positive association was found by Janssen (2000) between demands of the job and neoteric work behavior of employees but only then when the employees feel that their efforts are rewarded fairly. Zhu Suli (2010) in the presence of positive affections found a positive link between job demands (mental stressor) and neoteric work behavior of employees. Another pair of researchers Fritz and Stonnentag (2009) showed an affirmative affiliation of the connection of work load (job demands as stressors) and neoteric work behavior of employees. Furthermore, Martin et al. (2007) revealed via their study that the affiliation between workloads and neoteric work behavior is an affirmative one in presence of high-level job control. On the basis of these affiliations stated above the current study also hypothesize an association that is affirmative between job demands and neoteric work behavior of employees (Spiegelaere et al., 2012).

Thus, from that it can be proposed that:

**H1:** There is a positive affiliation between job demands and neoteric work behavior of employees. Job stress according to Leung and Chan (2007) is not just the repercussion of job demands which can be measured and are qualitative in nature, nevertheless, one of the personal stressors at job is the behavior of employees which is also exaggerated by it. A model of demand control presented by Jong et al. (2000) showed that combination of demands of job without control at job may result in adverse effects on the wellbeing of the employees and may result in negative outcomes as the like of stress at job and job strain, however, in combination they may predict affirmative outcomes that is sense of satisfaction and challenge, from these it is clear that a consequence of demands of job is stress at job, which in absence of job resources and control might lead to adverse situation and may also result in strain at job and illness (Jong et al., 2000; Bekker & Demerouti, 2007). Ganster (2005) also explored the affiliation among job demands and job stress, and he documented that job stress is the outcome of workload (job demands), as job stress is the reaction to the complex nature of conflicting demands of job. Another study done by Bakker and Demerouti (2007) revealed that the load of work that is the demand of the job result in strain and stress at job. A study conducted by Srivastava (2012) showed that some of the dimensions affiliated to job demands resulted in job stress. The longitudinal study of Idris (2011) also revealed that with the passage of time job stress and job strain were predicted by role ambiguity and role overload. In accordance to Leung et al. (2007) individual related stressors may also take active part along with strain and load of work at job hence, on the basis of such postulations this is presumed by the current study that:

**H2:** The association among Job demands and job stress is affirmative.

Stress management, conflict and obscurity are vital for guaranteeing creativity, and stress at job might be one of the most suited phenomena that has an impact on creativity (Tang & Chang, 2010). According to Van De Ven (1986) who suggested and affirmed that, to perform the extra role i.e. neoteric work behavior employees need to be challenged personally i.e. with stress at job, as employees may not act and go beyond their limitations unless and until they are confronted with challenge. The very same proposition was also affirmed by Bakker and Demerouti (2011) who, via
their study, reported that the nature of work must be complex, challenging and extra demanding so that employees may convert their resources at job into enjoyment, due to which there is need of jobs which pose challenge to the employees. Suli (2010) investigated and revealed a positive link between stressors (psychological) and demands of jobs. Another research by Fritz and Stonnetag (2009) also showed that there is an affirmative association among stressors and work behavior that is pro-active. Via study Janssen (2000) showed that there is a positive link between psychological stressors and neoteric work behavior of employees. A multifaceted affiliation was established by Byron et al. (2010) regarding affiliation related to job stressors and job related neoteric behavioral outcomes. Tang and Chang (2010) via their investigation revealed both positive and negative link among job stressors and creativity. hence, on the basis of the above stated investigations, it is presumed by the present study that:

H3 Stress at the job has positive affiliation with the neoteric work behavior of employees.

For exploration of affiliations concerned with job demands (stressors) a theory called Activation theory is frequently used by investigators in the field of psychology. An elevated level of stimulation is caused in employees via elevated level of job demands which lead to stress at job and this prominent state and level of stimulation consequently result in motivating employees to get accustomed accordingly. In response to this state of stimulation the employees may alter dually, firstly they may amend and change themselves accordingly in order to deal with increased level of stress at job via improvement of their skills, abilities, and expertise. However, the other way is the regulation of the job itself (Suli, 2010; Gardner & Cummings, 1988; Ganster, 2005). A complicated affiliation among job stressors and neoteric work behavior of employees showed by Byron et al. (2010) which according to him depends upon the basis and form of the job stressors. According to the research of Tang and Chang (2010) job stress is triggered by both the qualitative and quantitative load of work along with exaggeration via stressors. As maintained by the investigation carried out by Janssen (2000) an escalating affirmative link was explored and revealed between job demands and behavioral repercussion i.e. neoteric work behavior, but only in the presence of the feeling that they have been rewarded fairly for their work. Hence, on the basis of the background stated above it is presumed by the current study that, demands of job have a positive link with job stress and job stress hence, is presumed to be affirmatively affiliated with employee neoteric work behavior (Ganster, 2005; Janssen, 2000; Suli, 2010; Martin et al., 2007). Therefore, on these bases it can be postulated that:

H4: Job stress mediates the association concerning job demand and neoteric work behavior of employees.

Research Model

The results of the current study supported all the affiliations and hypotheses depicted by the research model research and also in line with the past researches.
The procedure of collection of numerical data and the use of statistical techniques was employed. The best suited qualitative approach was applied in order to minimize errors, control biases, unnecessary influences and conduction of analysis via objective assessment and employment of techniques that are statistical. According to Butt (2009) the lack of coping resources which help in coping stress is one of the major causes of job stress in Non-government organizations of Pakistan, the non-government sector workers are confronted with the problem of stress at job because they have to cope with inconsistent job demands, hence, the study will gather data from employees working in Non-government sector of Chitral. The target population of this study comprised of employees operating at all levels in those Non-government organizations, which are operational in district Chitral. In this study, no sampling technique was used and all of the population was studied as a whole by following the census method. The reason of using census method was that the population of the study was small. The data was collected through self-administered questionnaires on a 5-point Likert scale, with the help of which the respondent's attitude’s intensity and experiences about the variables of interest could be indicated. A pilot test was carried out among the targeted population because of the fact that pilot test is useful for identification of problems in research related to methodology and tools for data gathering. While for encouragement of the respondents to come up with genuine and correct responses their information’s confidentiality was assured. Employees of the non-government sector of Chitral were administered with 510 questionnaires. Out of the total submitted 240 responses were gathered back. Which signifies that a response rate of 47% was achieved. Finally, 177 questionnaires were left for analysis after removal of questionnaires that were incomplete and had substantial outliers.

Research Setting and Design

The objectives and hypotheses of the current study are defined completely in detail via following prearranged configuration, hence, the present study is a formalized research. The purpose
of the research is enquiry and inspection of interactions among the study’s variables of interest, therefore, the study is statistical by nature. The study is carried out in real environment; hence, it is a field study. Data collected at one point in time, therefore, from point view of time dimension the study is cross-sectional. While with respect to communication mode, the study is Interrogative, because of the fact of administration of survey questionnaires via the study for data gathering. The study had a particular set of objectives and assessed the affiliations among the interest variables therefore, this is a correlational study with a descriptive nature of design.

Measures of the Study

An 11-itemed scale for the first time developed by Ganster and Fuslier in 1989 and later on used by Yperen and Hagedoorn (2003) was adopted and used for measurement of job demands i.e. qualitative. A 5-point Likert scale was used for the demonstration of all of the items ranging from ‘1 (never)’ to ‘5 (always)’. The Cronbach's alpha value noted for the questionnaire was satisfactory at .757. For measurement of job stress a scale used by Cavanaugh et al. (2000) was adopted. Items relevant to job stress i.e. Challenge and hindrance related job stressors were included in the scale. A 5-point Likert scale was used for the demonstration of all of the items ranging from ‘1 (no stress)’ to ‘5 (Great deal of stress)’. The Cronbach's alpha value noted for the questionnaire was satisfactory at .704. A 9-itemed scale used by Khaola and Sephelane (2013) in their study was adopted for measurement of neoteric work behavior of employees. Also used by Janssen (2000) in his study for measuring neoteric work behavior. A 5-point Likert scale was used for demonstration of all of the items ranging from ‘1 (never)’ to ‘5 (always)’. The Cronbach's alpha value noted for the questionnaire was high at .814.

Analysis and Results

For checking the convergent validity factor analysis was employed. Principal component analysis with varimax rotation was implied for conducting factor analysis so that every single dimension can be analyzed. All of the assumptions of the factor analysis were fulfilled, as all the scale items included in the analysis were above the set standard of factor loading of .50. The KMO value should be above or equal to .60 and the test of Bartlett should be significant as implied via assumptions. Regression analysis was used for testing all the hypotheses. For checking divergent validity (statistical measurement of affiliation among two variables) bivariate correlation was implied. Table 1 shows Means, Standard Deviations and Correlations.
Table 1
Means, Standard Deviations and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD</td>
<td>.511**</td>
<td>.000</td>
<td>.249**</td>
<td>3.367</td>
<td>.557</td>
</tr>
<tr>
<td>JS</td>
<td></td>
<td>.427**</td>
<td>.000</td>
<td>3.170</td>
<td>.575</td>
</tr>
<tr>
<td>IWB</td>
<td></td>
<td></td>
<td></td>
<td>3.876</td>
<td>.553</td>
</tr>
</tbody>
</table>

The initial proposition of the exploration stated that job demands affirmatively effect the neoteric working behavior of non-profit sector employees. In the first step of regression analysis, control variables were entered. Sequentially to check variation in the neoteric work behavior of employees' job demands was entered as predictor variable. 0.057 (F=11.56; P<0.01) was the adjusted R2 value and for job demands the beta value was 0.247 (t= 3.401; P<0.01). Which signifies that a variation that is significant is explained by job demands in neoteric work behavior. The results obtained were in line with and supported the study’s first hypothesis. The table below shows some of the vital obtained values of regression analysis.

Table 2
Summary of Regression of Job demands and Employee Neoteric Work Behavior

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Beta</th>
<th>Standard Error</th>
<th>Standardized Beta</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.044</td>
<td>.227</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>JD</td>
<td>.247</td>
<td>.073</td>
<td>.249</td>
<td>.001</td>
</tr>
<tr>
<td>R²=.062</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR².057</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In accordance to the statement of the second hypothesis there is a positive affiliation amid job demands and job stress. With a value of beta 0.528 (p=.000) the results revealed that there is an affirmative link between job demands and job stress. Plus, the value of ΔR² showing 25.7 % of the variation is resulted by job demands in job stress. Therefore, hypothesis 2 was also supported by the study.

Table 3
Regression Summary of Job Demands and Job Stress

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Beta</th>
<th>Standard Error</th>
<th>Standardized Beta</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.393</td>
<td>.229</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>JD</td>
<td>.528</td>
<td>.067</td>
<td>.511</td>
<td>.000</td>
</tr>
<tr>
<td>R²=.261</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR².257</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Third hypothesis of the study was also supported and in line with the results. It was confirmed by the third hypothesis that job stress is a predictor of neoteric work behavior of employees. The value of beta i.e. .427 (p = .000) shows that 17.8% of variation was resulted in employee neoteric work behavior due to variation in job stress. Regression analysis outcomes are as under in the table;

### Table 4
Summary of Regression of Job Stress and Employee Neoteric Work Behavior

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Beta</th>
<th>Standard Error</th>
<th>Standardized Beta</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.575</td>
<td>.212</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Job Stress</td>
<td>.411</td>
<td>.066</td>
<td>.427</td>
<td>.000</td>
</tr>
<tr>
<td>R² = 0.182</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR² = .178</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Baron and Kenny (1986) steps of regression analysis were used for checking the hypothesis regarding mediational impact of job stress among job demands and neoteric work behavior of employees. The regression analysis results are illustrated by Table 5. And as revealed by results of the regression analyses:

1. The mediator was predicted by job demands at first step i.e. job stress (β=.511, p<.01).
2. The criterion variable of neoteric work behavior was significantly predicted i.e. (β = .249, p<.01) by job demands.
3. Simultaneously both job demand and job stress were entered at third step. The affiliation concerned with job demands and neoteric work behavior of employees was significant in the existence of the mediating variable i.e. job stress with increment in value of beta I.e. (β = .406, p<.01).

However, the interdependence between work load i.e. job demands and neoteric work behavior of employees in absence of the mediator no more remained significant which clearly shows the full and complete mediational influence of stress caused at job amid job demands and employee neoteric work behavior. Sobel test was carried out and the value of the test i.e. (z = 4.885, p = 0.000) showed full mediation in the model. Hence, form the results it was revealed that the association among job demands and neoteric work behavior of employees is fully mediated by Job stress. Therefore, hypothesis 4 of the study was also supported by the results obtained.
Table 5

Summary of Regression of the Mediating Influence of Job stress on Employee Neoteric Work Behavior

<table>
<thead>
<tr>
<th></th>
<th>Standardized Beta</th>
<th>Standard Error</th>
<th>Probability Value</th>
<th>Co-efficient of Determination</th>
<th>F-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD — JS (a)</td>
<td>.511</td>
<td>.067</td>
<td>.000</td>
<td>.261</td>
<td>61.860</td>
</tr>
<tr>
<td>JS — IWB (b)</td>
<td>.427</td>
<td>.066</td>
<td>.000</td>
<td>.182</td>
<td>39.035</td>
</tr>
<tr>
<td>JD — IWB (c)</td>
<td>.247</td>
<td>.073</td>
<td>.001</td>
<td>.062</td>
<td>11.565</td>
</tr>
<tr>
<td>JS — IWB (c’)</td>
<td>.406</td>
<td>.007</td>
<td>.000</td>
<td>.182</td>
<td>39.035</td>
</tr>
<tr>
<td>JD</td>
<td>.042</td>
<td>.079</td>
<td>.602</td>
<td>.184</td>
<td>19.573</td>
</tr>
</tbody>
</table>

Discussion

Major objective of the study was to investigate the influence of demands of job on Neoteric work behavior of employees along with the mediational influence of job stress between work load i.e. demands of the job and neoteric work behavior of employees. Several regression analyses were carried out for testing the hypothesized affiliations.

The first hypothesis perceived that employees with high level demands at job would exhibit a higher level of behavioral performance i.e. Neoteric work behavior up to a certain level which is in line with results of Tang and Chang (2010) and Spieglære et al. (2012) who found a positive relationship among dimensions of job demands and creativity. The findings of study are in line with activation theory presented by Gardner and Cummings (1986) according to which arousal in job demands to a certain level stimulate employee behavioral performance and employees get engaged in higher behavioral performances, an affirmative affiliation among job demands and neoteric work behavior was found by Martin et al. (2007). Janssen (2000) via his study showed that employee Neoteric work behavior is a strategy used to cope with high level of job demands.

The premise of the second hypothesis was that employees who perceive higher level of job demands would feel higher level of job stress. The results of the present study regarding this hypothesis are in line and consistent with the research carried out by Leung et al. (2007) who found that job stress is caused due to both qualitative and quantitative job demands. The findings are also in line with the study of Idris (2011) who studied job demands as predictors of severe form of stress. Also, in line with Ganster (2005) who suggested that job stress is a consequence of job demands. As stated by the third hypothesis employees who regard job stress as a problem resolving and coping strategy will show and indulge in more neoteric work behavior. Results of the study supported the results of the study carried out by Fritz and Stonnentag (2009) who via his investigation revealed a
positive link between job stressors and Neoteric work behavior of employees, in addition results are also in line with the study of Byron et al. (2010) who also revealed a positive affiliation among job stressors and employee neoteric work behavior.

The Fourth hypothesis was regarding the influence i.e. mediating of job stress amid job demands and neoteric work behavior of employees. The relationship between job demands and neoteric work behavior of employees is well established and it is also documented by Ganster (2005) and Ven (1986). The results of this mediational influence of job stress amid job demands of job and neoteric work behavior of employees are consistent with research study conducted by Janssen (2000) who showed an affirmative affiliation amid load of work i.e. job demands and neoteric work behavior of employees, added to that the investigation done by Leung et al. (2007) also found an affirmative linkage between demands of job and stress at job, another study conducted by Fritz and Stonnentag (2009) also showed an affirmative affiliation between job stressors and employee neoteric work behavior. Hence, supporting this enhancing mediating influence of job stress amid job demands and neoteric work behavior of employees.

Conclusion

From the above discussion it is clear that the present research provide support for the proposed usefulness of a model mediated by job stress in connection to the link between job demands and neoteric work behavior of employees. Results of the regression analyses supported our predictions that job demands effect employee neoteric work behavior directly plus via the mediated pathway of job stress, in addition to that the direct impact of job demands on neoteric work behavior, job demands on job stress, job stress on neoteric work behavior were also investigated and supported by the interpretation and analyses of predictions. Hence, it is revealed via the results of the study that high level of demands of job trigger and help in activation and arousal of neoteric capacities of employees both via direct route and via the mediated pathway in presence of job stress i.e. mediator. Hence, the current study will be beneficial for further researches relevant to demands of the job and neoteric work behavior of employees via providence of a beneficial framework that is theoretical, so that propositions form literature can be integrated.

Limitations & Implications

The sample majorly was constituted of male employees i.e. 68.4%, hence, samples should be pinched from various professions and forms of labor for replication of the present study by using added consistent gender dissemination. The study design is cross-sectional which is another limitation of the present investigation, as the dynamic nature of stressors and outcomes would be apprehended in a much better way if longitudinal design is applied. The cumulative dimensions of demands of the job are used by the current study, nevertheless future studies associated to such interactions may add more dimensions of job demands to their studies (Martin et al., 2007). Moreover, the forthcoming
studies could be improved by having assessments over time and across denominations; including studies that cross-culturally replicate the present study and make comparisons with culturally diverse organizations. The current study also has some implications on applied level, job demands are under the control of organizations, therefore, for achievement of success, gaining competitive advantage and growth of organizations, organizations must foster neoteric work behavior at individual level, and they must handle increasing job demands for increasing the neoteric capacities of employees (Martin et al., 2007). Hence, administrative management can implement current research model in various organizations, so that employees could handle job demands up the extent of endurance level of employees, because job demands beyond the endurance level of employees may prevent and influence behavioral performance i.e. neoteric work behavior (Suli, 2010).

References:

Bano, R., & Khan, T. Evaluation and assessment of job stresses and its relation with employees’ performance in not-for-profit organizations working in rural settings of Northern Pakistan.
De Spiegelaere, S., Van Gyes, G., Vandekerckhove, S., & Hootegem, G. V. (2012). Job design and innovative work behavior: enabling innovation through active or low-strain jobs?. Available at SSRN 2158618.
behavior, 10, 81-122.


