The Impact of Occupational Stress on University Employees’ Personality

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Abstract

This study is an effort to understand the impact of occupational stress which is classified into four constructs i.e. pressure at work, support at work, job satisfaction, and nature of job, on the personality of employees working in public as well as private sector universities. To conduct the study, a survey questionnaire was floated to six universities: two public sector and four private sector. These universities were selected on convenience bases and respondents from these universities were selected based on purposive sampling technique. The data was found reliable through cronbach alpha. In order to analyse data, correlation followed by multiple regression were applied as statistical tools. Analysis showed that all variables of occupational stress have significant impact over employees’ personality and overall model is significant at 99.9% confidence interval.

Keywords: employees’ personality, occupational stress, pressure at work, support at work, job satisfaction, nature of job.
Background of the Study

Selye (1920) is considered as the father of the term stress. Although the term stress, inherently attributes to the feelings and has been used frequently in social psychology. Stress was put into hot caucus among scholars; debating that if stress syndrome is physiological reaction or psychological outcome. In an attempt to answer the question John Mason conducted an experiment on monkeys by putting the two groups of monkeys into unique situation and found that physiological reaction to a specific event was as stronger as physiological. Debate was not over yet, scholars found that everyone may not react in same manner to stress due to uniqueness in behaviour. Thus, the need to study the stress from the perspective of personality was felt.

Every individual irrespective of age, processes information in a unique way and deals with stress accordingly. It has both physical and emotional implications on individuals. Some factors that are responsible for stress at work include the introduction of new technologies, changing policies, changing economic conditions, market dynamics, changes within the organization, work load, layoff, workforce diversity, job security and many others. These factors influence the stress level among the workforce which has its impact on individual and organizational productivity. Stress in a working environment can be classified into sociological issues and psychological issues. These issues either moderate or alleviate stress among employees.

Among the different forms of emotions felt by individuals, stress is one that is influenced by perception related anxiety.
Internal and external factors contribute significantly to the level of occupational stress. Irrespective of the field of inquiry, an individual is always influenced by some level of stress. Employees working in educational institutions are no exceptional to this rule. The stress levels vary for employees working for a public and private sector. One of the reasons is the difference in organizational structure and other aspects of how work is performed among these institutes. Furthermore, the work productivity is affected by how individuals process and perceive information. It is generally perceived that women are more emotional than their male counterpart and hence are more prone to stress. The objective of this study was to analyse the effect of occupational stress on employee’s personality by focussing on university’s employees in the public and private sector. To carry out this study, the teaching and not teaching staff constituted the respondents of this study. These departments included business, fashion and engineering. A close-ended questionnaire was used to gather responses from employees working in those identified departments. The questionnaire focused on five dimensions which were employee personality, pressure at work, support at work, job satisfaction and nature of job. Thus, this research will try to answer the following research question:

How does occupational stress influence on employees’ personality working at academia?

The following hypotheses are extracted from the research question and the given literature review:

H1: There is a significant influence of pressure at work on employees’ personality.
H2: There is a significant impact of support at work on employees’ personality.
H3: There is a significant impact of job satisfaction on employees’ personality.
H4: There is a significant influence of Nature of Job on Employees’ Personality

### Literature Review

#### Occupational stress

Stress can either be positive or negative. Not all stresses are negative. Some level of stress is necessary for development, motivation, changes for growth of the employees and the organization (Ellis, 2006). Stress in the workplace is a source of contention for organizations and employees. Gender also plays a significant role in the level of stress at work as women experience higher levels of stress as compared to men. Due to this, the females cannot perform multiple roles thus affecting their progress (Gyllensten & Stephen, 2005).

Work-related stress was once associated with senior positions on the organizational hierarchy, but now it is acknowledged that it is for employees at all levels (Beheshtifar, Malikeh, Nazarian, & Rahele, 2013).

Scholars placed emphasis and showed their concern regarding occupational stress. Stress at work has been considered as important as work performance or financial security of a firm. It is assumed that work place can prove to be a source of stress for individuals (Vokia & Bogdanie, 2008).
Job stress is harmful physically and emotionally for the employee. When jobs do not match the capability and potential of employees, it results in a negative impact. It creates job stress for employees which results in repercussions on the employee’s health. High level job stress among employees results in a negative impact on the organization and employee satisfaction (Rehman, 2008).

Stress among individuals is a significant issue faced by employees in developed countries. It is directly and indirectly linked with working and employment factor. In 2005, research conducted by European agencies revealed that stress is the second most influential factors among others causing work related health problems. Factors like downsizing and outsourcing, temporary contracts, job insecurity are a source of great stress in employees at a workplace. It also impacts the personal life and wellbeing of individuals. Studies conducted on stress among employees conclude that it also becomes a cause for other health problems and mental disorders (Rivera-Torres & Araque-Padilla, 2013).

Employees experience stress due to environmental and organizational pressure. Every individual must have the ability to cope up with such kinds of pressures. An individual’s belief about the ability they possess to cope up with job pressure helps them to deal with job stress. When job demands increase, the perceived ability of individuals helps them to cope up this pressure, thus decreasing stress levels. Moderators such as social support, coping skills and individual difference help in reducing the range of stress (Torres, Padilla, & Montero-Simo, 2013). Stress can be dealt with rational viewing such as inputs, coping and stress outcomes. Inputs are potential stressors caused by external stimuli. Coping and stress
outcomes include behavioural, physiological and psychological responses (Elisabeth & Greenfeld, 2013).

Occupational stress is a serious health concern in today’s world (Lu, et al., 2003). In more recent times, occupational stress has become a topic of great interest for applied research in psychology, social sciences and medical sciences (Cooper & Payne, 1988). Steers (1981) observe that occupational stress has become an interesting topic for study of organizational behavior for the following reasons:

1. Stress has harmful psychological as well as physiological effects on individuals at the work place
2. Stress contributes as a major cause of employee turnover and absenteeism
3. Stress as experienced by a single employee at work can have safety repercussions on other employees
4. Individual and organization can be managed more effectively by controlling dysfunctional stress (Malikeh & Rahele, Nazarian, 2013).

**Employee personality and pressure at work**

In behavioural sciences, personality is considered as composite of all that an individual is (Desa, Yusoff, Ibrahim, & Kadir, 2014) “personality represents those characteristics of the person or of the people that generally account for consistent pattern of responses to the situation” (Pervin, 1980, p. 6). The physical appearance of an employee in the working environment tells the story of the conditions s/he is bristling with. Thus formulation of the personality keeps uttering the stories through unspoken language (Tse, 2012). The too many demanded services cause the employees caught by stress
(Shani & Pizam, 2009). Realizing the significance of personality and its response to the stress the research scholars Kim, Shin, and Umbreit (2007) have studied the big five personality dimensions and found that personality attributes explain substantial portion of burnout elements. Desa, Yusooff, Ibrahim, and Kadir (2014) in malysian context while studying the relationship between personality and stress among university administrators found signficant and strong relationship between personality and work related stress. Todate yet there is still dearth of emprical evidences in Pakistan regarding personality of an individual in work setting, therefore the study has developed hypotheses assuming personality as dependent variable.

Employee personality and its traits has been a well-researched topic. For example, a recent study has found that the character strength as personality trait can be improved through training of employees to mitigate the negative work related behaviours (Harzer & Ruch, 2015). The work load sources and perceived workload can be moderated by personality traits (Chiorri, Garbarino, Bracco, & Magnavita, 2015). The leadership personality traits (neuroticism and conscientiousness) among mangers or the individuals having leadership role in any working environment can infuse stress among subordinates (Robertson , Healey, Hodgkinson, Flint-Taylor, & Jones, 2014). The employees’ physiological reaction to the work related stress among armed forces has been studied and found work relation, organization culture at pressure at work are strong predictors of stress (Nekoranec & Kmošena, 2015). The increasing awareness about work related stress and its coping strategies have necessitated to the world health organization to develop a report in this regard (Houtman & Jettinghoff , 2007). In South African
perspective the pressure at work and occupational stress among black teachers has been studied and found the time pressure, student misbehaviour, and administrative issues as strong predictors of personality of teachers (Ngidi & Sibaya, 2002). In Pakistani perspective Tahseen (2015) has documented dearth of medical allowances, excessive paper work, unavailability of internet access as strong predictors of work related stress among teachers. However this study does not cover the aspect pressure at work among university teachers; therefore, we have formulated the following hypothesis:

H1: There is significant influence of pressure at work on employees’ personality

**Employee personality and support at work**

Every physical being in the working environment has a tale to tell. The employees’ tale often appended with cues and clues showed want of support at work. In Pakistan the perceived organizational support has been studied as moderating variable between teachers’ affective well-being and occupational stress (Malik & Noreen, 2015), although this study has covered the cognitive domain of affective well-being however, it does not focus on support at work and employee personality. The work related stress among teachers may be strongly felt if the support at work is denied; however it may not so much impact on the employees working in administrative positions in higher education institutions (Sabherwal, Ahuja, George, & Handa, 2015). The rich empirical evidences have covered the perceived organizational support as predictor of work related stress; however there is still lacking of empirical evidences about support at work and employee personality among employees
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in university; thus we have formulated following hypothesis to test:

H2: There is significant impact of support at work on employees’ personality

**Employee personality and job satisfaction**

Job satisfaction is the factor which has been studied with almost every aspect of human resources practice. This has necessitated us to include this research construct as the variable of interest for this study. The association between occupational stress and job satisfaction has been studied and it was found the occupational stress is significantly associated with job satisfaction level of educators in Malaysia (Yaacob & Long, 2015). The occupational stress among secondary school teachers of Tigary Region was studied and found administration and parent relationship was strong predictor of occupational stress (Gebrekirstos, 2015). Among personality traits the experience to openness and extraversion was studied as significantly associated with job satisfaction level among bakers (Ijaz & Khan, 2015). Realizing the significance of job satisfaction and its reflection on personality traits we have formulated following hypothesis:

H3: There is significant impact of job satisfaction on employees’ personality.

**Nature of job and employee personality**

Personality traits and its allied reactions often signify the influence of human relations; working environment; pressure at work and nature of the job. This rationality caused us to empirically investigate the nature of job and employee personality nexus.
Workload, training and denial of monetary benefits significantly predicted the occupational stress among bankers (Aliya, Maiya, Farah, & Hina, 2015). The attitude and personality in the working environment always contribute more than the anticipation of the organization. An individual in working environment through his/her personality often describe the nature of the job s/he performing, thus nature of job is strong predictor of employee personality. Surprisingly this important aspect of employee exhibition has yet not won the attention of the academic and professional scholars. Therefore we have formulated following hypothesis:

H4: there is significant influence of Nature of Job on Employees’ Personality.

**Conceptual Framework**

The model of the study is going to establish a relationship between Independent and Dependent variables as depicted graphically:

**Research Methodology**

The data for this study were collected by using survey method; hence the primary data collection source has been applied. The collected responses were transformed using data screening approach to eliminate outliers; and the treatment for missing responses. A
statistical technique multiple linear regression using SPSS v 20 was applied to produce theoretical and experimental results.

**Data collection tool**

The data for this research was collected through the close ended questionnaire which was based on likert scale -2 to 3 excluding zero. The self-constructed questionnaire comprised of 25 items which explained the constructs; pressure at work, support at work, job satisfaction, nature of job and employee personality.

**Sampling technique and sample size**

Purposive sampling technique was adopted for this study. However, universities were selected following convenience sampling. The sampling technique helps the researcher to evaluate actual value quickly and furthermore, it also saves time. The sample size for the research consists of 200 respondents that were collected from different private and public sectors universities, they are:

- Karachi University
- Indus University
- Federal Urdu University
- Greenwich University
- Iqra University
- Karachi School of Arts

**Model**

Since nature of the research is casual, linear regression is applied to figure out the impact of exogenous variables over Employees Personality. Where
Y = Employees’ Personality  
X1 = Pressure at Work  
X2 = Support at Work  
X3 = Job Satisfaction  
X4 = Nature of Job  
e = Error term

**Results and Discussion**

For conducting reliability test to investigate internal consistency among items cronbach’s alpha reliability test through SPSS 20 was performed the results are depicted in Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th>No Of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW</td>
<td>0.766</td>
<td>5</td>
</tr>
<tr>
<td>SW</td>
<td>0.533</td>
<td>5</td>
</tr>
<tr>
<td>JS</td>
<td>0.546</td>
<td>5</td>
</tr>
<tr>
<td>NJ</td>
<td>0.581</td>
<td>5</td>
</tr>
<tr>
<td>EP</td>
<td>0.505</td>
<td>5</td>
</tr>
<tr>
<td>OS</td>
<td>0.514</td>
<td>4</td>
</tr>
</tbody>
</table>

The above table shows the output of the reliability test using SPSS. The Cronbach’s Alpha indicates the reliability of the study data. Reliability is based on inter item correlation so higher the correlation better the internal consistency of a construct.

The cut-off for Cronbach’s Alpha is 0.6. Here, pressure at work (PW) has substantially higher value whereas rest of the constructs; stress at work (SW), job satisfaction (JS), nature of job(NJ) and employee personality(EP) are having closer to the bench mark. Occupational stress (OS), which is the combination of PW, SW, JS, and NJ is also having a reasonable coefficient for reliability.
In table 2, all constructs have more than 1 average score as 1 is the middle score on likert scale -2 to 3 excluding zero. Moreover, all variables have slightly negative skewness which is close to zero followed by excess kurtosis which is close to zero and that fulfil the assumption of normality.

Correlation analysis was conducted to assess association among the study variables. Its main objective is to test the strength of association between the variables.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>EP</th>
<th>PW</th>
<th>SW</th>
<th>JS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW</td>
<td>.361**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SW</td>
<td>.426**</td>
<td>.415**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>.186**</td>
<td>.794</td>
<td>.149</td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td>.386**</td>
<td>.220**</td>
<td>.319**</td>
<td>.218**</td>
</tr>
</tbody>
</table>

The correlation table shows that employees’ personality (dependent variable) has a positive and significant association with
all the independent variables that is pressure at work, stress at work, job satisfaction, and nature of job. They all are significant at 99% confidence interval as sig value is less than 0.01 for all variables.

Table 4

*Goodness of fit by adjusted R square*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.542a</td>
<td>.294</td>
<td>.280</td>
<td>.60576</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), NJ, JS, PW, SW

Overall correlation of the model is 54.2% which is quite reasonable. The model observes 28% explanatory power that is goodness of fit as shown by adjusted R square. Moreover, the difference between R square and adjusted R square is less than 5%, which depicts that there is no sample error.

Table 5. Analysis of variance for overall model significance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>29.831</td>
<td>4</td>
<td>7.458</td>
<td>20.325</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>71.553</td>
<td>195</td>
<td>.367</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.385</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: EP  
b. Predictors: (Constant), NJ, JS, PW, SW

Table 5 shows two results; one is overall regression model is significant at 1% level of significance, and second is goodness of fit or explanatory power of the model is significant as F-statistics is greater than -4 cut-off for F which is further endorsed by sig value which is less than 0.01.
The above given table 6 explains the change of independent variable causes the change in dependent variable. The variable PW reading ($\beta=.153$, $p<0.05$) every single unit change in pressure at work (PW) causes change in employee personality by .153. The variable SW reading ($\beta=.231$, $p<0.05$) every single unit change in SW causes change in employee personality by .231. The variable of JS reading ($\beta=.109$, $p>0.05$) every single unit change in JS causes change in employee personality by .109. The fourth response NJ ($\beta=.217$, $p<0.05$) each single unit change in NJ causes change in employee personality by .217. All the variables are significant at 1% except Job Satisfaction, which is significant at 10%. Furthermore, there is no multi collinearity in the model as VIF- variance inflationary factor is less than 2- a strict cut off for collinearity.

Based on given above table a regression model can be as under:

$\hat{EP} = .153(PW) + .231(SW) + .109(JS) + .217(NJ)$

In the given above regression model we have:

$\hat{EP}$ = Employee Personality as dependent variable.
PW=Pressure at work as a predictor of employee personality.
SW=Stress at work as an independent variable.
NJ=Nature of job as an stimulus variable
JS=Job satisfaction as an explanatory variable.

**Hypotheses assessment summary**

<table>
<thead>
<tr>
<th>No.</th>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$H_1$: there is significant influence of Pressure at work on Employees’ Personality</td>
<td>Reject</td>
</tr>
<tr>
<td>2</td>
<td>$H_2$: there is significant impact of support at work on employees’ personality</td>
<td>Reject</td>
</tr>
<tr>
<td>3</td>
<td>$H_3$: there is significant impact of Job Satisfaction on Employees’ Personality</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>4</td>
<td>$H_4$: there is significant influence of Nature of Job on Employees’ Personality</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Rejection criteria: sig value < 0.05

Based on 95% confidence interval, pressure at work, support at work, and nature of job are significant constructs whereas job satisfaction is insignificant one.

**Discussion**

Occupational stress among employees is an important concern from the perspective of employee performance in the workplace. The interpretation of the research conducted, explains the constructs effecting employees personality that might be similar to the studies conducted previously on the same subject.

Prior researches have focussed on variables such as pressure at work, stress at work, job satisfaction, and nature of job. The current study reveals that pressure at work does influence an employee’s
personality and it does result in high occupational stress at the workplace. Contrary to this result, Baer and Oldham (2006) concluded that pressure at work does not influence an employee’s personality as pressure at work might be due to creativity, new experience or change taking place at the workplace which helps to enhance employee’s personality instead of putting them under pressure. Previously, studies on support at work are in agreement with the results of this study that there is a direct influence of support at work on employee’s personality. Another variable of this research study is job satisfaction. The hypothesis for job satisfaction and employee’s personality is retained as according to the results, job satisfaction does not influence employee personality. Again, contrary to our study, contradicting results have been observed by Judge, Bono and Locke’s study (2000) according to which there is a strong and considerable bonding between the two factors. Furthermore, the construct nature of job also has seen supportive studies whereby the nature of job and employee’s personality has an association. Different jobs demands different physical and mental capabilities from employees. Not every personality can fit into every job as the requirements differ depending on the task at hand from those who are responsible to carry out these jobs. Hence it is important to select appropriate employees who possess the necessary skills for a particular job (Sverke & Hellgren, 2002).

Arroba and James (1987) describe stress as “response to an inappropriate level of pressure”; it is a response to pressure, not the pressure itself” (p. 21). It is observed as a result of complex interactions between environmental and organizational demands and the coping ability of individual’s to these demands. Stress is said to have risen from a disparity between the perceived demands made on an individuals
and their perception of their ability to cope up with these demands. High demands following by greater coping perceptions lead an individual to lesser stress (Lazarus & Folkman, 1984). Some moderators of stress that help in reducing it include developing coping skills, social support, individual differences such as good self-esteem, resilience, hardiness and personal control, along with generally well known physiological release mechanisms such as exercise (Carson, 1998; Collins, 2007).

The personality of an employee is always affected by variables such as pressure at work, job satisfaction, support at work and nature of job. Employees are a valuable asset for any business entity as their productivity helps organizations attain their goals. Flexibility in an employee’s personality proves to be fruitful for organizations. When employees are inflexible, they resist environmental change thus resulting in employee turnover. An employee’s intent to exit is influenced by personal characteristics, role related characteristics, facility characteristics, turnover opportunities, and job characteristics. Individual personalities that resist positive change in the organization retard progress, therefore employee personality is an important factor which should be given due leverage at the time of selection. Personality influences how employees perceive their organization’s environment, and thus shape their behaviour according to those interpretations. Dominant and social personalities were both found moderating the relationship between organizational climate and employees’ leaving intentions (Liew & Kaur, 2008).

The policy makers in the United States are increasingly focusing on the policies regarding the support of low income parents. Employees work hard to earn a better living for themselves
and for their families. So it has been a big support when organizations provide for their employees and aim at the betterment of their employees and their families. For women employees, it’s a huge challenge to be a working woman and look after the household needs as well. Keeping the needs of such working mothers, organizations arrange for child care services to look after the offspring of their women workforce. Child care services provide quality environment and education to such children. Furthermore, child care subsidies play a pivotal role in the developing a positive work approach in the mindsets of parent employees which improves their work efficiency and productivity (Adams & Rohacek, 2002).

**Conclusion**

Occupational stress among employees is an important concern from the perspective of employee performance in the workplace. It is difficult to explain the factors affecting an employee’s personality directly or indirectly. This research, explains the constructs affecting employees personality that might be in support of the studies conducted before on the same subject. Many researches have focussed on the same variables that are pressure at work, stress at work, job satisfaction, and nature of job. As hypotheses of our research states, our research depicts that Pressure at work does influence employees’ personality which results in high occupational stress at the workplace.

**Limitations**

This study encountered some limitations. Further research in the field is suggested. There is ground for future research pertaining to the improvement of the model by replicating the proposed model with increased number of universities while including all university departments and non-faculty staff as well.
The current study exhibits limitations that should be considered for future studies. There are other variables that influence occupational stress that affect employees’ personality. The current model is not designed to include all the possible factors influencing the effect of occupational stress on employees. The results of this study was based on the study of six universities, therefore the it has limited generalization.

References


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