Relationship between Occupational Stress and Organizational Commitment
(Empirical Evidence from Pharmaceuticals Industry)
Nazim Ali* & Shahid Jan Kakakhel**

Abstract
The aim of this study is to test the relationship between occupational stress and organizational commitment. Data were collected from three hundred and thirty four (334) medical information officers (also known as medical representatives) of national and multinational pharmaceuticals companies working in KPK, Pakistan. Physiological stress scale (Seaward, 2005), Psychological stress scale (Ismail et al., 2009) and organizational commitment questionnaire (Porter et al., 1974) were used to measure physiological stress, psychological stress and organizational commitment respectively. The results of correlation revealed that both physiological and psychological stress had a significant inverse relationship with organizational commitment. Multiple regression also proved that both independent variables which are physiological stress and psychological stress were responsible for fifty six percent variance in organizational commitment. We hope that this study will contribute to the existing treasure of literature.

Keywords: Occupational Stress; commitment; pharmaceuticals firms; Pakistan

Introduction
Stress is often termed as a feeling of being overloaded. It is “the nonspecific response of the body to any demand” (Hans Seyle, 1956). It may be defined from two perspectives, language and organization. In terms of language, it is derived from Latin word “stringere” which means to make tense, to describe hardship and/ or problem (Cartwright & Cooper, 1997). In terms of organization, it means work stress or job stress. Work stress and job stress are the two words which are interchangeably used (Abu Al Rub, 2004). Work stress is of two types: psychological stress and physiological stress. Psychological stress means an emotional reaction such as apprehension, job alienation, anxiety, frustration, depression etc (Millward, 2005). Physiological stress is

* Dr. Nazim Ali, Assistant Professor, Department of Management Studies, University of Malakand, Dir Lower. Email: nazimali100@yahoo.com
** Dr. Shahid Jan Kakakhel, Assistant Professor, Department of Management Sciences, Abdul Wali Khan University, Mardan
referred to as a physiological reaction of the body such as abdominal pain, chest pain, heart palpitation, fatigue, migraine, backache, as well changes in drinking, sleeping, eating etc (Beehr et al., 2001).

Employees’ commitment to their organization is indispensible to the success of organization because uncommitted employees don’t pay attention to their work and consequently it leads to poor performance. A study conducted by Luchak & Gellatly (2007) found that high level of organizational commitment culminates in high level of work efforts and high performance because both variables were positively related to each other. Besides, low level of commitment to organization gives rise to high absenteeism (Paré and Tremblay, 2007) and high employees’ turnover intention (Allen & Meyer, 1996) that ultimately culminates in actual turnover. Furthermore, high level of turnover is very costly to every organization. As organizational commitment is very important to be studied and its predictors are necessary to be identified, this study is conducted to find out the predictors of organizational commitment by taking a sample of national and multinational pharmaceuticals companies because prior to this study no research was conducted to investigate the factors contributing to organizational commitment of the workers of pharmaceuticals firms.

Literature review
Plethora of research is available on the relationship between occupational stress and organizational commitment but those studies were conducted in developed countries. For example, Cooper and Baglionif (1998) in their article titled “Understanding Nursing Student's Stress: A Proposed Framework” concluded that occupational stress is a strong predictor of organizational commitment. Similarly Chen (2002) did his PhD research titled “A Study of Role Stress. Social Support and Organizational Commitment of Clinical Nursing Faculty” by taking a sample of nurses and concluded that occupational stress has a significant impact on organizational commitment of nurses. Kobasa & Antrogersky. (1998) have also confirmed the significant relationship between occupational stress and organizational commitment in their article titled “Commitment and Coping strategies in Stress Resistance among Lawyers. A few evidence on the relationship between occupational stress and organizational commitment can be seen in studies conducted in developing countries. For example, a study conducted by Al-Hawajreh (2011) which was titled “Exploring the Relationship between Occupational Stress and Organizational Commitment among Nurses in Selected Jordanian Hospitals” concluded in the light of results that occupational stress had a significant relationship between occupational...
stress and employees’ commitment. In the light of the above discussion the following hypotheses are developed.

H1: The relationship between Physiological Stress and Organizational Commitment is statistically significant.
H2: The relationship between Psychological Stress and Organizational Commitment is statistically significant.

**Research Methodology**

**Data collection**
Data were collected through adapted questionnaires from medical information officers (MIOs) working in national and multinational pharmaceuticals companies working in KPK, Pakistan. Almost 550 questionnaires were distributed to MIOs within one month. Total questionnaires returned within 2 months after 2 reminders were 360 showing a return rate of 60.72. Twenty six (26) questionnaires were found to be incomplete, therefore they were eliminated. And 334 questionnaires were used for research purpose.

**Measurement**
Physiological Stress: Physiological stress was measured through physiological stress scale (Seaward, 2005). Five point likert scale ranging from “never/does not meet” to “always/exceeds all expectation” was used to measure Physiological stress. Cronbach alpha for this scale was 81 percent that is very good.

Psychological Stress: In order to measure Psychological stress 4 items developed by Ismail et al (2009) were used. 5 point likert scale ranging from “never/does not meet” to “always/exceeds all expectation” was used to note the responses. The cronbach alfa that shows reliability was 83 percent.

Organizational Commitment
Nine items scale adapted from Porter et al. (1974) was used to measure organizational commitment. Responses were collected on five point likert scale ranging from disagree to strongly agree. The scale showed a good reliability that was 0.85.
Results

Demographics

Chart 1: Age Distribution

Chart 2: Gender

Chart 3: Marital Status
Chart 4: Qualification

![Chart 4: Qualification](chart4.png)

Chart 5: Tenure

![Chart 5: Tenure](chart5.png)

Table 1: Correlation between Occupational Stress and Organizational Commitment

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Physiological</th>
<th>p</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC Pearson Correlation</td>
<td>-.624**</td>
<td>-.594**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>334</td>
<td>334</td>
<td>334</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).
Table 1 indicates a significant negative correlation between physiological stress and job satisfaction. Hence, H1 that states that the relationship between Physiological Stress and Job Satisfaction is statistically significant is accepted. Similarly Psychological stress showed a significant negative correlation with job satisfaction. Therefore H2 that states that the relationship between Psychological Stress and Job Satisfaction is statistically significant is accepted in this sample.

Table 2

<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></td>
<td>.748&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.560</td>
<td>.557</td>
<td>1.03375</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), p, Physiological

The value of the R Square (coefficient of determination) is .560. It shows that 56% variance in organizational commitment can be accounted for by psychological stress physiological stress.

Table 3

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. &lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>449.348</td>
<td>2</td>
<td>224.674</td>
<td>210.242</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>353.721</td>
<td>331</td>
<td>1.069</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>803.069</td>
<td>333</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), p, Physiological

Table 3 indicates that the model is significant because the value of F is very high and significant.

Table 4

Coeficients<sup>a</sup>
Relationship between Occupational Stress and Organizational Commitment

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant) 5.146 .143</td>
<td>35.996 .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physiological -.425 .034</td>
<td>-.482</td>
<td>- 12.472</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Psychological -.437 .039</td>
<td>-.436</td>
<td>- 11.295</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: OC

Table 4 indicates that physiological stress has a significant negative impact (-48%) on organizational commitment and psychological stress has – 43 percent impact on organizational commitment. Higher t values indicate high relationship between variables. All t values are negative and significant. Therefore H1 and H2 are accepted.

Conclusion and Recommendation

The purpose of this study was to investigate the relationship between occupational stress and organizational commitment. Data were collected from three hundred and thirty four (334) medical information officers (also known as medical representatives) of national and multinational pharmaceuticals companies working in kpk, Pakistan. Physiological stress scale (seaward, 2005), Psychological stress scale (Ismail et al., 2009) and organizational commitment questionnaire (Porter et al., 1974) were used to measure physiological stress, psychological stress and organizational commitment respectively. The results of correlation revealed that both physiological and psychological stress had a significant inverse relationship with organizational commitment. Multiple regression also proved that both independent variables which are physiological stress and psychological stress were responsible for 56% variance in organizational commitment.

The management of pharmaceuticals companies operating in kpk, Pakistan are requested to pay attention towards increasing organizational commitment and decreasing occupational stress so as to improve the performance of medical representatives.
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References


