THE INFLUENCE OF WORK RELATED LOCUS OF CONTROL ON ROLE STRESS AMONG DOCTORS WORKING IN GOVERNMENT HOSPITALS IN NORTH 24 PARGANAS OF WEST BENGAL: AN EMPIRICAL STUDY

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Abstract:

Work stress has become a very common syndrome among doctors these days. So, the consequences of occupational stress too has become crucial issue for the companies and the employees as a whole. Stress faced by the doctors at the hospitals can have negative consequences on the well-being of medical practitioners and hospitals as a whole. The primary objective of the current study is to analyze the influence of work related locus of control on role stress among doctors working in government hospitals in North 24 Parganas of West Bengal.

One’s belief as to whether external or internal forces control one’s destiny is represented by a continuum which is known as locus of control. The sample consists of 300 doctors working at the government hospitals. The study has been conducted using a standard questionnaire. We had sent the questionnaire to 320 doctors out of which we got 300 positive response.

The study has been conducted using a standard questionnaire. Statistical treatment includes regression and factor analysis.
Introduction:

An unavoidable part of our lives is tension(stress). Academics, clinicians, managers and scientists have all been involved in researching this issue because it has a direct influence on the employee's effectiveness. For optimal efficiency, an optimum amount of stress is required. Job stress has been described as the body's non-specific response to any demands made on it (Selye, 1976). Robbins (2001) defines stress as a complex situation in which the person is faced with an opportunity, restriction, or demand related to what he or she wants and for which the result is perceived to be both uncertain and significant. Organizational factors have been reported to cause organisational stress for workers at work (Greenhaus and Beutell, 1985). These variables are known as organisational stressors because they serve as agents that activate different stress reactions (Van Onciul, 1996).

Indian healthcare is at a critical juncture as it focuses on related issues of consumerism, cost effectiveness and efficiency. Indian healthcare is expanding at a pace of 15 percent annually, which is faster than most other service sectors. Over the past few decades, stress in the workplace has become an increasingly hot subject. Workplace stress decreases productivity, raises management stresses and makes workers sick in several ways, proof that stress continues to rise. Workplace stress influences brain performance, including memory, attention and learning processes of work performance.

The corporate life of today is marked by stress and pressure. Workers encounter stress at work that has detrimental effects for both the worker and the organisation. Occupational stress is the main cause of accidents that occur to people working around the world (Iglehart, 2000). The large part of these injuries is caused by healthcare professionals, often doctors who work intermittently. Stress and injury associated with this job can have a negative impact on the personal as well as professional life of a medical professional. With lack of sleep quality, presence around the clock, problems such as depression, hypertension and isolation is a common problem seen among doctors (Klein and others, 2011).

Stress, exhaustion, burning out and depression have had lasting psychological impacts on doctors that have had a negative impact on their health and relationships (Fahrenkpf and others, 2008).
The pattern was exposed by studies carried out not only in the US but also in the Middle East and data available from conservative societies such as the King of Saudi Arabia, but precise findings could not be inferred from these regions due to the lack of penetrative contact and conservative approach.

The only personality trait that acts as a stress moderator to which researchers have given the greatest importance is the locus of control (Kobasa, 1993). Control is best described as a tendency to feel and act as though you are superior and not powerless.

Individuals with an internal locus of control assume that their reinforcements are focused on their own behaviour, talents and traits. Although people with external influence assume that their reinforcements are under the control of powerful others, chance or destiny (Rotter, 1966). Internally, the person with an internal locus of control is better. They have greater internal power and they are very much in charge. They believe they can handle any form of stress with elan. They are self-reliant. They often tend to have greater desire for accomplishment and are centred on the target. In their actions, these people are extroverted, confident, sociable and very rational.

People with an external locus of control are weaker, with far less internal force. They tend to blame their destiny, god, and fate each time they encounter unfortunate circumstances in their lives. They are vulnerable to greater mental stress and depression. They get demotivated swiftly. Studies have shown that people with an external locus of control tend to report more depressed moods when they come across stressful life events.
Literature Review:

A study done by Afzalur Rahim tested three main effects:

1. The after effects of job stressors (role conflict, role ambiguity, role overload and role insufficiency) on strain (depression, anxiety, cognitive disturbance and anger)

2. The effects of locus of control and social support on job stress and strain.

3. The moderating (interaction) effects of locus of control and social support on the relationship between stress and strain.

The method used to test the relationship among them was questionnaire method. It was tested with questionnaire data from two random samples of 238 entrepreneurs and 288 managers. The result which came out from a multivariate analysis of variance showed that the entrepreneurs and managers differed significantly on stress, locus of control and social support.

Rotter (1954) first suggested the idea of locus of control, which was initially the locus of control of reinforcement (2011). Locus of control defined as the general belief that the accomplishments, failures and results of individuals are controlled by the acts and behaviours of individuals (internal); or maybe the achievements, failures and results of individuals are controlled by other factors such as chance, luck and fate (external) (P. Spector, 1988). In both aspects of internal and external control, several studies have been done to clarify the locus of control; in truth, control is an essential factor for well-being (Meier, Semmer, Elfering, & Jacobshagen, 2008). So the locus of control is split into internal and external controls.

According to Rotter (1966), the locus of control is seen as a generic assumption that individuals contribute results to their efforts and abilities or external factors such as fate, chance and density. Therefore, there are two aspects of locus of control: internal and external (Di Zhang & Bruning, 2011). Studies suggest that people with an internal locus of control will cope better in stressful circumstances or on the other hand, have more capacity to embrace the challenges and events they encounter in their workplace (Lam & Schaubroecck, 2000). Likewise, Meier, et al (2008) found that individuals with an internal locus of control do not experience musculoskeletal pain, in fact they show high job control to prevent physical diseases, in comparison to individuals with low job control who suffer musculoskeletal pain. In addition, growing internal control locus is positively correlated with adaptation in stressful workplaces (Parkes, 1986). Finally, it was found that the Job Locus of control relates to health outcomes such as tension (Berg, Hem, Lau, Häseth, & Ekeberg, 2005) and well-being (P. E. Spector, et al., 2002). It is seen as an aspect that addresses job demands and provides workers with better well-being and efficiency (Daniels, Beesley, Cheyne, & Wimalasiri, 2008).
Research Methodology:

After considering the objective and type of the study, we have used only Primary Data.

Research Design:

Descriptive research: The research has been conducted using a standard questionnaire.

Sampling:

The population of interest of the study would comprise active medical practitioners (Doctors) working in the government hospitals of North 24 Parganas, West Bengal.

Population size: Infinite
Total Respondents: 300

In order to calculate the correct sample size we have used Raosoft size calculator.

Margin of error that we can accept = 6%
Confidence level needed = 95%
Population size (In case of infinite population Raosoft recommends to use 20,000) = 20,000

Response distribution = 50%
So, recommended sample size is 264.

We had sent the questionnaire to 320 doctors out of which we have got 300 positive response.
### Data Analysis:

#### REGRESSION

**Variables Entered/Removed**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>externallocusofcontrol, Internallocusofcontrol</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

- a. All requested variables entered.
- b. Dependent Variable: ROLESTRESS

#### Model Summary

<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>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.764</td>
<td>.584</td>
<td>.581</td>
<td>.58218</td>
<td>.584</td>
<td>208.422</td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), externallocusofcontrol, Internallocusofcontrol
- b. Dependent Variable: ROLESTRESS

#### ANOVA

<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>1</td>
<td>Regression</td>
<td>141.281</td>
<td>2</td>
<td>70.640</td>
<td>208.422</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>100.662</td>
<td>297</td>
<td>.339</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>241.943</td>
<td>299</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), externallocusofcontrol, Internallocusofcontrol
- b. Dependent Variable: ROLESTRESS
Coefficients

<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  (Constant)</td>
<td>1.125</td>
<td>.132</td>
<td></td>
<td>8.513</td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>.093</td>
<td>.036</td>
<td>.106</td>
<td>2.569</td>
</tr>
<tr>
<td>External locus of control</td>
<td>.575</td>
<td>.033</td>
<td>.714</td>
<td>17.386</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROLESTRESS

From the model summary we can see that Adjusted R square value is .581 which is greater than 50%, therefore, we can say that ILOC (namely Internal locus of control) and ELOC (namely External locus of control) explains the model more than 50%. Also Derbin Watson test value lies between 1.5 to 2.5, i.e. 1.975. It says that there is no auto-correlation between the ILOC (Internal locus of control) and ELOC (External locus of control).

Also we can see that the significant value of F change shown in ANOVA table is .000 which is less than .05. So we can say that the model is absolutely fitted as the p value is less than .05.

From the co-efficient table factor 1 (Internal locus of control) and factor 2 (External locus of control) is significantly influencing the role stress as the significant value is less than .05 in both the cases.
From the co-efficient table we have fitted the regression model which is as follows:

Role stress = 1.125+.093*ILOC (Internal locus of control) +.575*ELOC (External locus of control)

From the above fitted regression we have found that factor1 (Internal locus of control) is positively and significantly influencing the role stress that means if we change one unit in ILOC (Internal locus of control) then the role stress will be increased in multiplication of .093. Likewise if we change one unit in ELOC (External locus of control) then the role stress will be increased in multiplication of .575

**FACTOR ANALYSIS:**

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.879</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>2.580E3</td>
</tr>
<tr>
<td>df</td>
<td>45</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

In our study, we have identified 10 variables that affect the stress levels of doctors based on the available research work conducted in the respective area. In fact, dealing with all such 10 variables at a time is a difficult task. Therefore, we can go for factor analysis to club said variables into few groups which will be convenient to use. For this purpose we can consider Kaiser-Meyer-
Olkin(KMO) statistics to take decision whether factor analysis will be appropriate for the available dataset or not. If KMO is 0.87 or higher, we can proceed with factor analysis.

From the above data we have found that the KMO value is .87. So, we can say that the value is excellent. It implies that sample size is adequate. It also appears that significant value is .000 which is less than .05 hence, Bartlett’s test is highly significant and we may proceed with factor analysis.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>5.389</td>
<td>53.893</td>
<td>53.893</td>
</tr>
<tr>
<td>2</td>
<td>2.169</td>
<td>21.692</td>
<td>75.584</td>
</tr>
<tr>
<td>3</td>
<td>.678</td>
<td>6.778</td>
<td>82.362</td>
</tr>
<tr>
<td>4</td>
<td>.494</td>
<td>4.937</td>
<td>87.299</td>
</tr>
<tr>
<td>5</td>
<td>.400</td>
<td>4.005</td>
<td>91.304</td>
</tr>
<tr>
<td>6</td>
<td>.272</td>
<td>2.716</td>
<td>94.020</td>
</tr>
<tr>
<td>7</td>
<td>.242</td>
<td>2.418</td>
<td>96.439</td>
</tr>
<tr>
<td>8</td>
<td>.159</td>
<td>1.593</td>
<td>98.032</td>
</tr>
<tr>
<td>9</td>
<td>.104</td>
<td>1.038</td>
<td>99.070</td>
</tr>
<tr>
<td>10</td>
<td>.093</td>
<td>.930</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

From this table we have found TWO factors, (ILOC and ELOC) namely Internal locus of control and External locus of control. These three factors explains total 75%.
From the above Rotated Component Matrix, it appears the first factor has been clubbed with matters, effort, senior, accidental, responsible and acceptable. We have named this factor as Internal locus of control (ILOC). The 2nd factor has been clubbed with chance, appreciated, rewarded and success. It has been named as (ELOC) External locus of control.
Conclusion:

After doing all the analysis we have come to the conclusion that both Internal as well as External locus of control influences the role stress among doctors working in government hospitals in North 24 Parganas of West Bengal.

References:


