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# Organisational Role Stress and Employee Burnout in Pharmaceutical Industry

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## Abstract:

*'Burnout' causes total lessening of a person's both physical and mental resources caused by excessive and prolonged level of job stress thereby affects their job performance. Many job related characters such as role conflict and role ambiguity are related to burnout. While many empirical studies are done on the employees' burnt out at international level, in India we have one authentic study by Sharma. The study analyses the effects of burnout in four dimensional aspects such as stress personality, organisational role stress, emotional intelligence, personal effectiveness and adjustments. The present study has adapted and operationalises sharma's model and looks into one of the dimensional aspects of burnout namely 'organisational role stresses'. this study has taken random sample of 175 employees of thirty six years from a leading Pharmaceutical sector. Using regression Analysis and Anova test on various predictors such as role ambiguity, resources inadequacy, inter-role distance, role isolation and personal inadequacies are able to explain the phenomenon of burnt out significantly. Among them 'role ambiguity' appears to high contributor to the process of burnout of the employees. There is lack of clarity or poor understanding about the role of executives which creates stress and thereby the burnout. The study concludes that burnout is an important issue in the pharmaceutical industry, especially among the middle level executives.*

## Introduction

'Burnout' is a big concern in many organisations. It specifies the feeling of emotional exhaustion of persons in a work setting which is an impact of the outcome of stress. It is a phenomenon which causes total lessening of a person's both physical and mental resources caused by excessive and prolonged level of job stress. Such exhaustion causes both physical and behavioural aspects of person (employee) and thereby affects their job performance. **Burnout** has been defined as a syndrome of emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment, which can occur among individuals who work with people in some capacity (Leiter, 1991). It is a psychological response to work **stress** (Halbesleben et.al, 2004). A number of studies that have mentioned in the international literature on 'burnout' by Maslach Burnout Inventory (MBI).

## Organisational Role Stress and Burnout

**Organisational role stress** has been one of the most researched subject which has been found to be correlated with burnout. Many job related characters such as **role conflict** and **role ambiguity** are related to burnout (Lee et.al, 1993). According to Mirvis et.al (1999), burnout is related to many job characteristics. Empirical evidences have shown different association between organisational conditions and burnout (Jackson et.al, (1987). Hansung et.al (2008) examine

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the interactive effects of job stress and burnout. The study reveals that the role stress has a positive direct effect on burnout. There are also similarities between perceived stress and perceived burnout in an organization (Gill, 2006). Many job characteristics such as job satisfaction, task characteristics are related to burnout (Drory, 1998). A Study by Kirk-Brown (2004) also related to burnout and work setting and its outcome. Burnout is always referred to as a function of organisational demand and its functions (Leiter et.al, 1991). It is related to **role** conflict, **role** ambiguity, and **role** overload on satisfaction, performance, and turnover intentions which are examined by Fogarty et.al (2000). The **role stress** components such as role ambiguity and **role** conflict are having a positive relationship with burnout (Gil-Monte, et.al, 1993). Ambiguity and burnout are the natural outcome in an organisational setup (Meyerson, 1994). Burnout outcomes such as emotional exhaustion and depersonalisations are directly likened to job (Schaufeli, 2009). Organizational role stress many times leads to burnout symptoms like emotional exhaustion, depersonalisation etc. (Ashill et.al, 2009). According to Friesen et.al (1989) various work stress is related to various job factors such as 'job clarity'. The associations between job characteristics such as **role** conflict, **role** ambiguity and **role** overload and its' association with dimensions of job **burnout** such as emotional exhaustion, depersonalisation and reduced personal commitment are established by Bhanugopan et.al (2006). Based on a study conducted among the professionals of Information System (IS), King (1997) noted that role ambiguity and role conflict are two important aspects of organisational stress. According to Thomas et.al (2004) decreased role stress in the organization can reduce burnout. Organisational job demands significantly contributed to the prediction of burnout (Peeters et.al, 2001).

It is also worthy to be noted that many empirical studies on these aspects were conducted more at the international level. A comprehensive study in the Indian context conducted by Sharma (2007) deserves special mention. Sharma's study was basically on executive burnout in the Indian context pertaining to manufacturing and service industries. The study analyses the effects of burnout in four dimensional aspects such as stress personality, organisational role stress, emotional intelligence, personal effectiveness and adjustments.

## Significance of the study

The above literature pointed out the significance of the relationship between organisational role stress and burnout. In this context, the present study identifies various predictor variables of organisational role stress of burnout and examines its significance in the organization.

The present study has adapted and operationalises one of the dimensional aspects of burnout namely 'organisational role stresses' as mentioned in the article of Sharma. Box 1 shows the list of independent and dependent variables selected for the study. The operational definition of each variable is given in the appendix 1.

### Box 1: Selected Variables

Independent Variables	Dependent Variables
Inter- role distance	Ambiguity
Role stagnation	Dissatisfaction and Powerlessness
Role expectation	Inadequacy
Role erosion	Depersonalization
Role overload	Physical and Emotional Exhaustion
Role isolation	<b>Burnout (Avg.)</b>
Personal inadequacy	
Self-role distance	
Role ambiguity	
Resource inadequacy	

### Organisational Role Stress (Avg.)

Source: Sharma (2007), 'Indian Model of Executive Burnout', *Vikalpa: The Journal of Decision Makers*, Vol.32 (2).

### Objectives of the study

1. To analyse the relationship between organisational role stress and executive burnout.

2. To identify the predictor variables of organisational role stress in determining executive burnout.
3. To analyse the implications of predictor variables of organisational role stress.

### **Samples**

The study has been conducted among the middle level executives of one of the leading pharmaceutical company in India. Samples of 175 were selected randomly. Average mean age of the employees is calculated as 36 years. A pilot study was initiated to understand the feasibility of such studies in the industry. Based on its responses, a detailed study was conducted. Data were collected through personal survey with a structured questionnaire of five rating scale. Questionnaire consists of details of all the selected variables. All the variables are placed separately. The study has been conducted for a period of three months. Apart from administering questionnaire, discussions and interviews with the executives were also undertaken. This has helped to understand the depth of the problem. The validity of samples is verified through alpha ( $\alpha$ ) test. Reliability co-efficient of the samples is .8346. SPSS is used to analyse the collected data. Regression is mainly used to identify the predictor variables of burnout.

### **Results and Discussions**

Table 1 shows the descriptive statistics of the data. Mean and standard deviation of the selected variables are given (Appendix 2, Table 1). The calculated test value indicates that all the variables are statistically significant ( $p < .005$ ). The correlation values between dependent variables (burnout) and independent variables (Organisational Role Stress) show that majority of the variables are significant either at 1% or 5% ( $p < .01$  or  $P < .05$ ). The correlation between the averages of the variables of organisational role stress and burnout is .688 ( $p < .01$ ) (Appendix 2, Table 2).

The study basically looks into the different dimensions of burnout pertaining to predictors of organisational role stress. Each dimension of burnout (dependent variable) is considered for predictor

variables and derives the results. Adjusted  $R^2$  values for all the dimensions of predictive variables are considered. Standardised coefficient beta ( $\hat{\beta}$ ) tells the strength of each variable. ANOVA test shows the statistical significance of each predicted variable. Step-wise regression and total adjusted  $R^2$  value for each dependent variable is calculated and predicted the results (Appendix 2, Table 3). Step-wise regression has helped to identify the prominent predictor variables of each dimension of burnout.

### **Predictors of Burnout**

Regression analysis shows that there are five predictors of burnout such as role ambiguity (.404), resources inadequacy (.485), inter-role distance (.531), role isolation (.555) and personal inadequacies (.571). The total variance is explained as 57.0%. Among different predictors, the co-efficient value of 'role ambiguity' is high with .508.

### **Predictors of Ambiguity**

Step-wise regression has derived only one predictor of 'ambiguity' namely 'role ambiguity' (.782). The co-efficient beta is .885 and the total variance explained is 77.4%.

### **Predictors of Inadequacy**

Predictors of inadequacy are role expectations (.125), inter-role distance (.166), self-role distance (.200), resources inadequacy (.215). The co-efficient value of role expectation is highest with .243. The total variance explained is 20.9%.

### **Predictors of Dissatisfaction and Powerlessness**

Predictors of dissatisfaction and powerlessness are role ambiguity (.157), role isolation (.202), resources inadequacy (.232), personal inadequacies (.255) and self-role distance (.286). The coefficient value is highest with role ambiguity (.330). The variance explained is 28.6%.

### **Predictors of Depersonalisation**

Predictors of depersonalisation include resources inadequacy (.055), self-role distance (.077) and role stagnation (.095). The coefficient value is highest with

resources inadequacy (.190). The total variance is 26.9%.

### Predictors of Physical and Emotional Exhaustion

There are three predictors of physical and emotional exhaustion such as inter-role distance (.212), role ambiguity (.269) and resource inadequacy (.284). The coefficient value is .374 for inter-role distance and the total variance is 26.9%.

Analysis showed that many variables of organisational role stress are important predictors of burnout. Among different predictors, ambiguity, resources inadequacy, inter-role distance, role isolation and personal inadequacies are found significant. The overall R<sup>2</sup> value also justifies the significance of role of organisational role stress. A comparative analysis of R<sup>2</sup> value of different predictors of burnout shows that 'role ambiguity' is crucial in determining 'ambiguity'. In this context it is important to analyse the implications of the results of the analysis. Implication is based on the results of the predictors of burnout (average).

### Implications

1. The predictor, role ambiguity reveals a situation about poor communication within the organisation about employees role. There is lack of clarity or poor understanding about the role of executives which creates stress and thereby the burnout.
2. Resource inadequacy is another important predictor of burnout. This is a situation where an employee is not in a position to perform

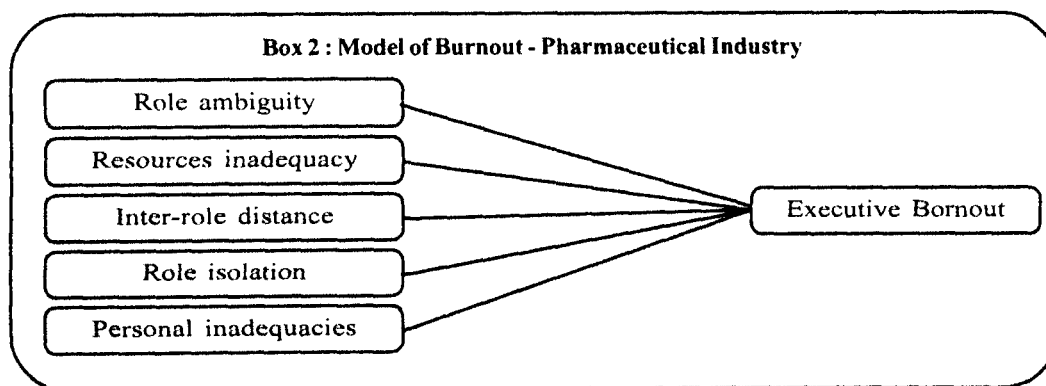
his/her duties due to inadequate resources. The impact of such situation is high among the talented employees.

3. Inter-role is an important predictor of burnout. This is due to the conflict between organisational and non-organisational role. Such situation confuses an employee about the priority settings about his role in the organisation.
4. Role isolation is more about an employee's psychological feeling from his/her role in the organisation he/she works and role of others in the same establishment. Such a feeling of isolation erupts and it keeps away one from all his/her duties and responsibilities.

Personal inadequacy is a feeling of lack of necessary skills in performing one's duties in the organisation. This is a situation where one starts losing his confidence in his/her capacity to perform which ultimately lead to burnout situation.

### Conclusion

The study concludes that burnout is an important issue in the pharmaceutical industry, especially among the middle level executives. It is closely related to organisational role stress. Major predictors of organisational role stress are role ambiguity, resources inadequacy, inter-role distance, role isolation and personal inadequacy (see box 2). Suggesting solutions to overcome from such stress needs a wider framework which is beyond the scope of this study.



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## **Appendix: 1**

### **Operational Definition of Variables –**

#### **Adapted from Sharma ( 2007) Indian Model of Executive Burnout, Vol.32 (2), April- June**

#### **Burnout (Sharma Burnout Scale)**

**Inadequacy:** Feeling of insufficiency and inability to meet deadlines.

**Ambiguity:** Persistent lack of clarity about one's role and responsibilities.

**Dissatisfaction and powerlessness:** Discontentment, lacking influencing ability, and feeling of worthlessness and depression.

**Depersonalization:** Indifference, apathy, and alienation from others.

**Physical and emotional exhaustion:** Manifestation of symptoms of loss of energy, fatigue, headache, anxiety, and irritability.

#### **Organizational Role Stress**

1. **Inter role distance (IRD):** Conflict between organizational and non-organizational roles.

2. **Role stagnation (RS):** Feeling being stuck in the same role with no opportunity for the furthering or progress of one's career.

3. **Role expectation (RE):** Stress generated by different significant persons (superiors, subordinates, and peers).

4. **Role erosion (REro):** Feeling that some functions which should belong to one are transferred to or performed by some other role; or the credit for functions being performed by the role occupant goes to someone else.

5. **Role overload (RO):** Too many expectations from significant roles in the 'role set' in quantitative and qualitative terms.

6. **Role isolation (RI):** Psychological distance between the occupant's role and other roles in the same role set.

7. **Personal inadequacy (PI):** Feeling of lack of necessary skills and training for effectively performing the functions expected from the role occupant.

8. **Self-role distance (SRD):** Stress arising out of a mismatch between the person's self-concept and his/her role.

9. **Role ambiguity (RA):** Lack of clarity about the expectations regarding the role due to lack of information or understanding.

10. **Resource inadequacy (R.In):** A feeling that a role occupant is not provided with adequate resources for performing the functions expected from his/her role.

**Appendix 2**  
**Table 1 : Descriptive Statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Stress Personality	175	1.00	5.00	3.405	1.03999
Inter-role distance	175	1.00	5.00	3.6000	1.11417
Role stagnation	175	1.00	5.00	3.9371	1.07828
Role expectations	175	1.00	5.00	3.5829	1.11042
Role erosion	175	1.00	5.00	3.4686	1.07633
Role overload	175	1.00	5.00	3.7429	1.14327
Role isolation	175	1.00	5.00	3.9200	1.00824
Personal inadequacies	175	1.00	5.00	4.0686	.97432
Self-role distance	175	1.00	5.00	4.2857	.88964
Role Ambiguity	175	1.00	5.00	3.7486	.97361
Resource inadequacy	175	1.00	5.00	3.4057	1.03999
<b>Organisational role stress (Avg)</b>	175	2.40	5.00	3.7760	.54424
Emotional competencies	175	1.00	5.00	3.6343	.99595
Emotional maturity	175	1.00	5.00	4.3829	.92023
Emotional sensitivity	175	1.00	5.00	3.2514	1.09580
<b>Emotional Intelligence(Avg)</b>	175	2.00	5.00	3.7562	.59514
Inadequacy	175	1.00	5.00	3.7829	.86353
Ambiguity	175	1.00	5.00	3.6514	.95814
Dissatisfaction and powerlessness	175	1.00	5.00	3.7086	.89743
Depersonalisation	175	1.00	5.00	3.8857	.76457
Physical and emotional exhaustion	175	1.00	5.00	3.7543	1.06251
<b>Burnout (Avg.)</b>	175	2.00	5.00	3.7571	.55801
Self-disclosure	175	1.00	5.00	4.3657	.72157
Openness to feedback	175	1.00	5.00	3.4000	1.01710
Perceptiveness	175	1.00	5.00	2.6171	1.08635
<b>Personal effectiveness(Avg)</b>	175	1.67	5.00	3.4610	.60992
Emotional adjustment	175	1.00	5.00	3.6114	1.14364
Family adjustment	175	1.00	5.00	3.2057	1.07370
Health adjustment	175	1.00	5.00	3.0743	1.15479
Occupational adjustment	175	1.00	5.00	3.7886	.84818
Social adjustment	175	1.00	5.00	2.4400	1.05351
<b>Adjustment (Avg.)</b>	175	1.20	4.60	3.2240	.69885

**Table 2: Co-relation Between Dependent and Independent Variables**

Independent/ Dependent Variables	Ambiguity	Dissatisfaction and Powerlessness	Inadequacy	Deperson- alization	Physical and Emotional Exhaustion	Burnout (Avg.)
Inter role distance	.278**	.296**	.333**	.162*	.465**	.423**
Role stagnation	.346**	.254**	.121	.193*	.252**	.364**
Role expectation	.257**	.287**	.361**	.147	.224**	.415**
Role erosion	.349**	.267**	.178*	.100	.262**	.360**
Role overload	.100	.201	.890**	.131	.075	.212**
Role isolation	.322**	.349**	.244**	.085	.202**	.402
Personal inadequacy	.130	.273**	.168*	.142	.089	.279**
Self-role distance	.171*	.040	.171*	.217**	.002	.230**
Role ambiguity	.885**	.408**	.133	.131	.362**	.638
Resource inadequacy	.027	.189*	.271	.247**	.190*	.277**
Organisational Role (Avg.)	.545**	.493**	.401**	.296**	.413**	688

\*\* Correlation is significant at the .001level (two tailed)

\*Correlation is significant at the .005 level (two tailed)

**Table 3: Predictors of Executive Burnout in Pharmaceutical Industry**

Predictors of Burnout	Adjusted R2	Standardized Coefficient beta	Significance of F change	Dimensions of Executive Burnout
Role Ambiguity	.404	.508	.000	<b>Burnout (Avg.) = 57.0%</b>  <b>Variance Explained</b>
Resources Inadequacy	.485	.231	.000	
Inter-role distance	.531	.225	.000	
Role isolation	.555	.151	.000	
Personal inadequacies	.571	.131	.000	
<b>Total R<sup>2</sup> .570</b>				
<b>Predictors of Ambiguity</b>				<b>AmbiguityVariance Explained = 77.4 %</b>
Role Ambiguity	.782	.885	.000	
<b>Total R<sup>2</sup> .774</b>				



<b>Predictors of Burnout</b>	Adjusted R2	Standardized Coefficient beta	Significance of F change	<b>Dimensions of Executive Burnout</b>
<b>Predictors of Inadequacy</b>				<b>Inadequacy</b>
Role Expectations	.125	.243	.000	<b>Variance</b>
Inter-role distance	.166	.234	.000	
Self-role distance	.200	.160	.000	<b>Explained</b>
Resources Inadequacy	.215	.146	.000	<b>= 20.0%</b>
<b>Total R<sup>2</sup> .209</b>				
<b>Predictors of Dissatisfaction and Powerlessness</b>				<b>Dissatisfaction and Powerlessness</b>
Role Ambiguity	.157	.330	.000	
Role Isolation	.202	.250	.000	
Resources Inadequacy	.232	.209	.000	<b>Variance</b>
Personal Inadequacies	.255	.202	.000	<b>Explained = 28.6%</b>
Self-role distance	.286	-.207	.000	
<b>Total R<sup>2</sup>.286</b>				
<b>Predictors of Depersonalization</b>				<b>Depersonalization</b>
Resources Inadequacy	.055	.190	.000	<b>Variance</b>
Self-role distance	.077	.158	.000	<b>explained =8.3%</b>
Role stagnation	.095	.154	.000	
<b>Total R<sup>2</sup>.083</b>				
<b>Predictors Physical and Emotional Exhaustion</b>				<b>Physical and Emotional Exhaustion</b>
Inter-role distance	.212	.374	.000	
Role ambiguity	.269	.265	.000	<b>Variance</b>
Resources Inadequacy	.284	.140	.000	<b>explained is =26.9%</b>
<b>Total R<sup>2</sup> .269</b>				