



THE INFLUENCE OF ROLE OVERLOAD, ROLE CONFLICT AND ROLE AMBIGUITY ON OCCUPATIONAL STRESS AMONG NURSES IN SELECTED IRANIAN HOSPITALS

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ABSTRACT

The aim of this study was to investigate the level of occupational stress and the influence of role overload, role conflict, and role ambiguity on occupational stress among Iranian nurses. This study adopts a quantitative correlational study methodology. The study sample comprised of 135 nurses selected randomly from the emergency and surgery departments at Yasuj hospitals in south west of Iran. The data was collected through self-administrated questionnaire using drop and collect method. The result showed that the level of occupational stress was relatively high. The result also showed that there was a significant, linear and positive relationship between role overload, role conflict, role ambiguity and occupational stress. Finally, multiple regression analysis was used to determine the predictors of occupational stress. About 37% variance in occupational stress was explained by role overload, role conflict, role ambiguity. The result also indicated that role conflict was the strongest predictor to predict occupational stress. The findings of this study provide support to the Job-Demand Control Model and provide practical contribution to alleviate the level of stress among nurses.

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Keywords: Occupational stress, Role overload, Role conflict, Role ambiguity, Yasuj hospitals, Job stress.

1. INTRODUCTION AND PROBLEM STATEMENT

Occupational stress is a serious phenomenon that refers to any characteristic of workplace that makes a threat for employees. Job demands may be the main cause of stress at workplace in which the employees do not know how to manage themselves in order to meet their job needs. Job stress has destructive consequences on both individual and organization (Larson, 2004; Malik, 2011). The negative effects of stress on individuals are tiredness, depression, anxiety, sleep disorders and difficulty in making decision (Adeoye and Afolabi, 2011; Malik, 2011). Also, stress leads to low productivity, dissatisfaction, low commitment, absenteeism, and employees 'turnover in organizations (Michael and Petal, 2009). Nursing profession is essentially stressful than other comparable professions in which they work in long hours to take care of patients (Adeb-Saeedi, 2002). Usually, nurses become tired, fatigue, and depressed for their working in long hours especially in night shifts (Sawada, 1997). Hence, work in long hours or role overload lead to occupational stress (Widmer, 1993). Rosse & Rosse (1981) noted that role conflict (incompatible demands from supervisor or colleagues) and role ambiguity (lack of clarity of supervisor or colleagues' expectations) significantly lead to job stress and consequently intention to leave job. Although the effects of occupational stress on nurses have been examined in developed countries (Espeland, 2006), not much attention has been paid to these factors in developing countries such as Iran. The previous studies examined different factors like working in long hours, low levels of recognition and reward, organizational justice and poorly management that associated to occupational stress (Wu *et al.*, 2007), but the effects of role overload, role conflict and role ambiguity on occupational stress have been less studied. Therefore, it is necessary to fill this gap in the literature. To sum up, the main objective of this study was to investigate the influence of role overload, role conflict and role ambiguity on occupational stress among Iranian nurses. Theoretically, the present research contributes to body of knowledge and practically, the results of current study would be effective and valuable to guide policy makers and health care managers in Yasuj hospitals to prevent or reduce occupational stress among nurses.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Theory of Occupational Stress

About two decades, job demands-control-support model (JDCS) by ((Karasek, 1979) has been known as an appropriate model to describe occupational stress. The job demands- control model consists of two main dimensions: demands and control. The demands refer to the amount of work, required skills which an employee should have in the workplace. The control refers to the general belief that the employee be able to give idea and make decision about different aspects of work such as time, method, and location (Brough and Williams, 2007; Panari *et al.*, 2010). Additionally, the job demands-control model was expended to have the third dimension (social support) that may be from organization or supervisor (Rodwell *et al.*, 2011). Thus, it is known as job demands-control-support model (Karasek and Theorell, 1994). Briefly, the model explains that the employee's strain will be increased with high job demands and low control. If the employees consistently perceive high job demands while they do not have adequate control to overcome on the situations, they will be in the risk of negative outcomes like low job performance and

dissatisfaction (Dollard and Winefield, 1998; Mansell and Brough, 2005). Based on the JDCS model, the job demands in the present study refer to role overload, role conflict and role ambiguity. The managers of Iranian hospitals can reduce stress among nurses by making equilibrium between demands and control by increasing level of self-confidence and supervisor support among nurses.

2.2. Factors that Contribute to Occupational Stress

Previous studies have shown different factors associated to occupational stress. For example, work overload that refers to when the employees' role expectations exceed the resources or time available to fulfill assigned responsibilities (Bacharach *et al.*, 1991). Also, role conflict refers to incompatible requirements and expectations that the employees receive from their supervisor or coworker (Rosen *et al.*, 2010). Role ambiguity is another factor that leads to job stress, thus it occurs when the expectations, objectives, responsibilities have not been clearly designed for employees. Therefore, the employees become ambivalent to predict their supervisor's reactions to their tasks as "success" or as "failure" (Karasek Jr, 1979; Beehr and Bhagat, 1985). Finally, long hours, work overload, time pressure, difficult or complex tasks, lack of breaks, lack of variety and poor work conditions (for example, space, temperature, light) are causes of occupational stress (Malik, 2011).

Based on the literature review and above discussion the following hypotheses have been proposed:

1. There is a relationship between work overload and occupational stress.
2. There is a relationship between role conflict and occupational stress.
3. There is a relationship between role ambiguity and occupational stress.

3. METHODOLOGY

The present study was a quantitative correlational study. The data of this study gathered from 135 nurses who were working in Yasuj hospitals and the total population was 494 nurses. Appropriate instruments were chosen to measure the variables. Role overload consists of three quantitative items developed by (Beehr *et al.*, 1976) and four qualitative items developed by (Sverke *et al.*, 1999). Role conflict and role ambiguity questionnaires were developed by (Rizzo *et al.*, 1970) with 14 items. The scale that used for occupational stress was 14 items developed by Savery, Soutar, & Weaver(1993). All the items were rated on 5-point likert-type scale from 1 strongly disagree to 5 strongly agree.

In this study, cronbach's alpha was used to determine degree of reliability. The reliability for role overload, role conflict, role ambiguity and occupational stress were .89, .84, .91, and .87 respectively. Also, the pilot study was done among 20 nurses who were in target population but they were not in the sample. The data was collected by using drop and collect method and analyzed by descriptive and inferential statistic such as Pearson product moment correlation coefficient and regression analysis.

4. RESULTS

Descriptive statistical analysis was used in order to have a better understanding of the variables. Based on the demographic profile, about 58.5 % of respondents were female and 41.5%

were male. Also, the most numbers of respondents were between 26 to 35 years old. In addition, about 67.4% of the respondents got married and about 32.6% of respondents were single.

4.1. The Relationship between Variables

A Pearson product-moment correlation coefficient was computed to assess the data in order to determine the direction and the strength of linear relationship between the role overload, role conflict, role ambiguity, and occupational stress. The direction of the relationship, either positively or negatively correlated was based upon the plus (+) or minus (-) signs obtained from the analysis. The correlation of coefficient or the r -value measuring the strength of the variables ranges between -1.0 to +1.0. A correlation of 0 denotes no relationship; a correlation of -1.0 denotes a perfect linear negative relationship and a correlation of +1.0 denotes a perfect linear positive relationship. The interpretation of the strength of the relationship is based on (Cohen, 1988). Thus, $r = .10$ small, $r = .30$ medium, $r = .50$ large.

Table- 1. The Means, Standard deviations and Correlations between variables

Variables	M	SD	1	2	3	4
1. Role conflict	3.58	.51	1			
2. Role overload	3.81	.59	.323**	1		
3. Role ambiguity	3.91	.71	.232**	.323**	1	
4. Occupational stress	3.68	.48	.453**	.433**	.440**	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

According to the above table, there was a medium significant, positive and linear relationship between work overload and occupational stress ($r=0.43$, $p<0.01$). Also there was a medium significant, positive and linear relationship between role conflict and occupational stress ($r=.453$, $p<0.01$). In addition, there was a medium, significant, and positive relationship between role ambiguity and occupational stress ($r=.44$, $p<0.01$).

4.2. Role overload, Role conflict and Role ambiguity as Predictors of Occupational Stress

Multiple linear regression analysis was used to assess the ability of three variables such as role overload, role conflict, and role ambiguity to predict level of occupational stress. Based on table, the model was able to explain 37% of the variance in occupational stress, $F(3,131) = 25.164$, $P < 0.001$. Role conflict was the strongest predictor to occupational stress ($Beta = .297$, $p < 0.001$).

Table- 2. Regression Analysis

Variable	B	T	P value	R-square	F
					25.164
Role conflict	.297	3.993	.000	.37	
Role Ambiguity	.293	3.928	.000		
Role overload	.243	3.186	.002		

Dependent Variable: occupational stress

5. DISCUSSION

Based on the results of the current study, there was a significant and positive relationship between role overload and occupational stress. The findings of the current study support the relationship between role overload and occupational stress in previous studies. For example, nurses who work in longer hours, more shifts, and deal with more injured and dying people that are demands in JDCS model, feel more stress and tiredness and they may decide to leave their nursing profession in early retirement age (Parikh *et al.*, 2004; Monroe, 2009). Also, there was a significant positive relationship between role conflict and Occupational Stress. It means that the nurses who encounter to different tasks at the same time, they experience more stress. Hence, the results confirm the previous studies. For instance, the employees who have to do different activities and tasks at their workplace, they find that it is difficult to make a balance based on JDCS model, therefore, they feel stress in which they cannot control the situation to make a balance (Mahalik and Lagan, 2001). In addition, there was a significant, positive relationship between role ambiguity and occupational stress. The nurses who are unaware of their objectives and goals are more in the risk of high stress. These findings confirm previous research. For example, a study that conducted by Idris showed that the role ambiguity that refers to the uncertainty, inadequate knowledge of employees about their responsibilities, authority, objectives and goals of their organization increase the level of stress among employees (Idris, 2011).

6. CONCLUSION

In general, the objectives of the present study have been achieved. The study has been contributed to body of knowledge by presenting the effects of role overload, role conflict and role ambiguity on occupational stress. The findings of the current study verified that role overload, role conflict, role ambiguity and occupational stress are significantly and positively related. Therefore, long hour working, incompatible request, and, ambivalence in responsibilities will increase the level of stress. In short, the current study has provided empirical evidence to literature by demonstrating the relationship between role overload, role conflict, role ambiguity and occupational stress. In addition, the health care managers can identify role overload, role conflict, role ambiguity as stressors in order to decrease them among nurses.

7. LIMITATIONS AND RECOMMENDATION FOR FURTHER RESEARCH

The current study had several limitations. First, this study was carried in hospitals of one city of Iran. Thus, the results cannot be generalized to other hospitals in Iran. Second, the method was only quantitative approach and the questionnaire was used to collect data. Finally, the results were relied on respondents' perception and individual attitude in which only selected variables were predicted to be related to occupational stress.

The current study only investigated the variables such as role overload, role conflict, role ambiguity, locus of control and supervisor support that have effects on occupational stress in context of Iran. Hence, it is recommended that future researchers follow these suggestions:

- Expand the study into other organizations to enhance the consistency of results.

- Include other variables such as organizational culture, organizational structure, and personal factors to examine occupational stress in order to increase the accuracy of understanding the factors that contribute to stress.

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