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**Research Article** 

# Nurses' Job Involvement and Their Personality Traits in Teaching Hospitals Affiliated to Shiraz University of Medical Sciences, 2013

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**Background:** Job involvement is a work-related attitude which helps to increase the effectiveness of the organization. On the other hand, individuals corresponding to a specific personality type behave in a certain way and have certain expectations, objectives and needs. **Objectives:** The aim of the study was to determine the level of nurses' job involvement and its association with their personality traits in teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013.

**Materials and Methods:** This was an applied, cross-sectional and analytical-descriptive study. A sample of 110 nurses was determined using a multi-stage sampling method including cluster sampling, stratified sampling proportional to size, and simple random sampling methods. The required data were collected using two questionnaires that measured nurses' job involvement and their personality traits. Collected data were analyzed using the SPSS16.0 software on the basis of statistical tests including Kolmogorov-Smirnov (KS), ANOVA, independent-samples t-test, Pearson correlation coefficient, and multiple linear regression (Stepwise method). A P < 0.05 was considered statistically significant.

**Results:** The results showed that the studied nurses' personality traits and job involvement were moderate. Moreover, the results of the multiple linear regression indicated that the studied nurses' job involvement had significant and positive associations only with achievement orientation (P < 0.001) and being formal and official nurses (P = 0.034).

**Conclusions:** According to the results of the present study and to increase employees' job involvement, hospital administrators should establish an equitable employee performance system and provide appropriate rewards and incentives, adequate career advancement and job promotion opportunities, opportunities for making mistakes and learning from those mistakes for employees and providing a greater job security for contract employees.

Keywords: Employee Performance Appraisal; Personality; Nurses; Hospitals, Teaching

## 1. Background

Job involvement refers to the degree to which people are identified psychologically with their jobs (1). High job involvement is a desirable feature. People with high job involvement have a higher job satisfaction, show a positive attitude at work and express high commitment to their organization and colleagues. Such people rarely think about quitting their job, and they are expected to work for their organization for many years (2). Job involvement is an important variable which helps to increase the effectiveness of organization, so that the higher the level of employees' job involvement in an organization, the more effective this organization would be (3). Litinger (1982) has linked job involvement to the achievement motivation. He has described employees with high job involvement as the goal-oriented people. However, those employees with low job involvement are

characterized by an intense fear of failure (4). Job involvement is defined as a measure of the extent to which employees are engaged in their jobs. If the employees have the authority of decision-making, responsibility and the speed of work, their job involvement would be increased (5). Job characteristics such as variety, autonomy, task identity, feedback can result in job involvement (6, 7). Job involvement can provide information leading to a better use of human resources, because it results in the employees to search for the meaning of their jobs (8). To increase the employees' job involvement, a comprehensive and realistic approach should be taken with respect to its predictors. The most realistic perspective on job involvement among various ones is that it is a function of personality and organizational climate (3).

Personality is a set of relatively stable characteristics

 $Implication \ for \ health \ policy/practice/research/medical \ education:$ 

Nurses' job involvement had significant associations with some personality traits and employment status. This finding could prove useful in selecting the right personal for a specific medical or surgical department and also for the employers to elaborate an equitable employee performance system and provide appropriate rewards and incentives, and also adequate career advancement opportunities.

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which distinguishes an individual from others (9). Matching the organizational and job characteristics with the employees' personalities can provide more employees' satisfaction and intrinsic motivation as well as improve their efficiency, creativity and accountability (10). It is obvious that individual variations can cause many differences in human behavior and the most important reason for these differences is human personality, because the results of some researches have shown that many organizational problems are associated with employees' personality traits. That is to say, these personality traits would commit persons to behave differently in various situations (11). Personality can be considered as the most fundamental topic of psychology because it discusses about domains such as learning, motivation, perception, thinking, emotions and intellect. In other words, these factors are the building blocks of personality (12). Management experts, also, consider personality, besides environmental and organizational factors, as a factor influencing the success of the organization. They believe that employees should have two important characteristics: specialized characteristics which means having plenty of knowledge and expertise, and personality traits, which means having specific traits such as self-confidence, risktaking and internal locus of control (13).

By conducting a careful study on personality, some instructions or guidelines can be found to improve employees' performance and increase the effectiveness of their recruitment and promotion processes (14). Overall, the individuals corresponding to each type of personality behave in a certain way, have certain expectations, motivations, and objectives, and have unique and different abilities, behavioral skills and needs. Therefore, the working environment and conditions for each type of personality should be different (9). The results of some studies have shown that personality traits have effects on job stress (15), organizational commitment (16), entrepreneurship (17), etc. In the present research, the studied personality traits were "risk-taking orientation", "internal locus of control orientation" and "achievement orientation". "Risk-taking orientation" refers to a condition in which a person accepts doing something or taking responsibility where the individual is likely to fail. Taking risk may be dependent on individual awareness of the issue or the person may even be unaware of its possible consequences (18). "Internal locus of control orientation" refers to the extent to which a person thinks that he or she can control his or her own destiny and considers himself or herself as the main reason for the personal failures and successes (8, 19). "Achievement orientation" is willingness to work at high standards for achieving success in competitive situations (19) and the extent to which a person goes after responsibility, self-challenge and self-realization (8). On the other hand, researchers in the fields of industrial and organizational psychology and management have acquired a growing awareness about the differences in the employees' attitudes towards their jobs and the behavior related to their attitudes. Job involvement is a work-related attitude which has been defined as a psychological response to work and its related responsibilities (20-22).

The results of several studies have shown that job involvement has significant associations with employees' commitment (5), achievement measures (including achievement striving, intrinsic motivation to accomplish, and need for achievement) (23, 24), professional burnout, social support from colleagues, performance feedback, leadership, job control, task variety, learning and development opportunities and training facilities (10), job satisfaction and job circumstances (24, 25), work role salience, the personal-psychological class of antecedents (24), self-expression, and the circumferential dimension of the organizational career (26). However, personality traits play an important role in ensuring how people react in special situations. Therefore, understanding the association between personality traits and job involvement is necessary (27). Considering the effect of job involvement on increasing the organizational efficiency and effectiveness, determining the personality traits that have strong associations with job involvement are very important, because these characteristics should be used in the organizational processes of selection and recruitment of required employees according to the job specifications.

## 2. Objectives

Due to the low number of similar studies in Iran, especially in health sector, this study aimed to determine the level of nurses' job involvement and its associations with their personality traits in teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013.

### 3. Materials and Methods

This was an applied, cross-sectional and analytical-descriptive study. The population study was represented by all nurses working in teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013. A sample of 99 nurses was initially determined using the findings of previous studies, the results of the pilot study, as well as the following formula, assuming  $\alpha = 0.05$ ,  $\beta = 0.3$  and r = 0.25. However, for increasing the accuracy of this study and according to the potential loss of data, 110 nurses were finally selected.

This sample was selected using a multi-stage sampling method. Each of the studied hospitals was considered as a cluster among which seven hospitals were randomly selected. Then, 110 nurses were selected in these seven hospitals using the stratified sampling proportional to size method and the simple random sampling method using random numbers table. The required data were collected using two questionnaires:

- Nurses' job involvement was measured using a 20-item

questionnaire developed by Gholipoor (2008) with confirmed validity and an inter-item consistency score ( $\alpha$  = 0.84) which was found to be adequate for the analysis purpose (28).

- Nurses' personality traits were measured using another questionnaire developed by Hosseini Aghdam (2012) with a validity and inter-item consistency score ( $\alpha$  = 0.86) confirmed as well (19). This questionnaire consisted of 24 items including risk-taking orientation (eight items), internal locus of control orientation (eight items), and achievement orientation (eight items).

Four-point Likert scales were used to measure nurses' job involvement and their personality traits, whereby 1 refers to strongly disagree and 4, strongly agree. Also, respondents were questioned about their demographic profiles such as gender, age, marital status, education level, job experience, and service unit. In this study, for job involvement and personality traits and its studied dimensions, the mean of 2.8 - 4 was considered as desirable, the mean of 1.6 - 2.8 as moderate, and the mean of less than 1.6 as undesirable status. Informed consent was obtained from all nurses participating in this study. The SPSS 16.0 software (SPSS, Chicago, Illinois, the USA) was used for statistical work-up. Several statistical tests including Kolmogorov-Smirnov (KS), ANOVA, independent-samples t-test, and Pearson correlation coefficient and multiple linear regression (stepwise method) were used to analyze the collected data. A P  $\leq$  0.05 was considered statistically significant.

## 4. Results

The results of the Kolmogorov-Smirnov (KS) test showed that the data distributions were normal (P > 0.05). Most participants were female (95.5%), married (56.4%), officially employed and formally (76.4%) working in the surgery unit (42.7%) and had a bachelor degree or higher (88.2%) (Table 1). The mean and SD of studied nurses' personality traits were 2.03  $\pm$  0.4, which was moderate. Among personality traits dimensions, risk-taking orientation and achievement orientation had the highest (2.42  $\pm$  0.57) and lowest (1.70  $\pm$  0.50) mean and SD, respectively, which were moderate as well. Moreover, the mean and SD of job involvement were  $2.21 \pm 0.31$  which was moderate (Table 2). The results of Pearson correlation coefficient showed that job involvement did not have any significant correlations with age and job experience. However, there was a positive and significant correlation between personality traits and age (r = 0.209, P = 0.028). Also, among personality traits dimensions, risk-taking orientation (r = 0.205, P = 0.032) and internal locus of control (r = 0.244, P = 0.010) had positive and significant correlations only with the age. On the other hand, the results showed that personality traits and job involvement did not have any significant associations with nurses' gender, marital status, education level and service unit (P > 0.05).

Although nurses' personality traits did not have any significant association with their employment status, there was a significant association between job involvement and employment status (P = 0.039), so that the job involvement in official and formal nurses was greater than that in contract nurses ( $2.25 \pm 0.31$  vs.  $2.11 \pm 0.25$ ). Furthermore, the results of Pearson Correlation Coefficient showed that nurses' personality traits and their dimensions had positive and significant correlations with their job involvement (P < 0.05) (Table 3).

Table 1. Demographic Characteristics of Studied Nurses <sup>a</sup>

Variable Frequency, No. (%)

Variable	Frequency, No. (%)
Gender	
Male	5 (4.5)
Female	105 (95.5)
Total	110 (100)
Marital status	
Single	48 (43.6)
Married	62 (56.4)
Total	110 (100)
<b>Education level</b>	
Associate	11 (10)
Bachelor and higher	97(90)
Total	110 (100)
<b>Employment status</b>	
Contract nurses	26 (23.6)
Official and formal nurses	84 (76.4)
Total	110 (100)
Service unit	
Internal medicine	35 (31.8)
Surgery	47 (42.7)
Intensive care	19 (17.3)
Others	9 (8.2)
Total	110 (100)

 $<sup>^{\</sup>rm a}$  The mean and SD of age and job experience were 30.81  $\pm$  7.46 and 8.26  $\pm$  7.12, respectively.

**Table 2.** Dimensions of Personality Traits and Job Involvement for Studied Nurses

Variable	Values, Mean ± SD		
Personality traits			
Risk-taking orientation	$2.42 \pm 0.57$		
Internal locus of control	$1.96 \pm 0.59$		
Achievement orientation	$1.70 \pm 0.50$		
Total	$2.03 \pm 0.40$		
Job involvement	2.21 ± 0.31		

Finally, the results of multiple linear regression showed that nurses' job involvement had significant associations only with achievement orientation (P < 0.001) and being official and formal nurses (P = 0.034) (Table 4).

#### 5. Discussion

Today, the necessary condition for the survival of any organization is paying enough attention to the human resources. Identifying various factors that influence the job involvement of employees working in the private and public institutions is useful in decision making. Because increasing employees' job involvement can result in an improvement in organizational efficiency and effectiveness, determining the employees' personality traits that affect their job involvement becomes very helpful and important. In addition, when recruiting needed employees managers can select those who have characteristics that influence and increase their job involvement to achieve the organization's goals and objectives faster (14). Therefore, this study aimed to determine the level of nurses' job involvement and its association with their personality traits in teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013.

The results of this study showed that the studied nurses' personality traits and job involvement were moderate. Also, the results of multiple linear regression indicated that the studied nurses' job involvement had significant and positive associations only with achievement orientation and being formal and official nurses. Employees who have a high need for success and achievement try to be more involved in the tasks and activities through accepting greater responsibilities and taking higher risks to

reach their goal of achieving success. In addition, formal and official nurses, due to their job security, care about their work and tasks and commit to their jobs more than contract nurses. They devote more time to their work and spend a lot of time performing their tasks as well as accomplishing their tasks with more encouragement and self-confidence. The findings of Mills (2011) (23), Li et al. (2007) (8) and Aryee's studies (1994) (24) confirm the results of the present study.

However, the results of some other research conducted to study the association between job involvement and personality traits have indicated that job involvement has significant associations with factors including independence, perseverance, internal locus of control (27), agreeableness, extroversion and openness interaction (29), obstinacy, orderliness, rigidity and superego (30), etc. The limitation of the present study was its cross-sectional design and the use of a single method (i.e. questionnaire) for data collection. Based on the results of the present study and to increase employees' job involvement, hospital administrators and managers should establish an equitable employee performance system and provide appropriate rewards and incentives, adequate career advancement and job promotion opportunities, as well as opportunities for making mistakes and learning from those mistakes for employees, so that they can meet their predetermined goals. Last but not least, when it is not possible to employ the required human resources formally and officially or change the available employment status of the employees from contract basis to a formal and official one, a greater job security for contract employees should be provided so that they can perform their duties with more encouragement and self-confidence.

Table 3. The Studied Nurses' Personality Traits and Their Dimensions' Correlations with Their Job Involvement

Personality Characteristics	Job Invol	Job Involvement		
	r	P value		
Risk-taking orientation	0.292	0.002		
Internal locus of control	0.253	0.008		
Achievement orientation	0.406	< 0.001		
Total	0.434	< 0.001		

Table 4. Associated Factors with the Studied Nurses' Job Involvement using Multiple Linear Regression

Model	Regression Coefficients	Standard Errors	Beta	t	P value
Constant	1.549	0.133		11.658	< 0.001
Risk-taking orientation	0.079	0.040	0.170	1.966	0.062
Internal locus of control	0.013	0.044	0.028	0.290	0.772
Achievement orientation	0.196	0.050	0.381	3.963	< 0.001
Being formal and official nurses	0.136	0.063	0.190	2.145	0.034

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## **Authors' Contribution**

Ramin Ravangard, Zahra Sajjadnia and Zolaykha Mohamadi developed the conceptualization and design of the study. Zolaykha Mohamadi and Zahra Ghanavatinejad collected the data. Zahra Sajjadnia analyzed and interpreted the data. Both Ramin Ravangard and Zahra Sajjadnia cooperated in writing and editing of the materials and methods, results and discussion sections of the manuscript.

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The authors declare that there are no conflicts of interest.

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