Investigating the Relationship between Job Compatibility and Controlling Job Stress with Nurses' Performance: A Case Study on Shiraz State Hospitals, 2020

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ARTICLE INFO

OPEN ACCESS

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ABSTRACT

Introduction: Performance is the criterion for judging the effectiveness of individuals, groups, and organizations. The aim of this study was to investigate the relationship between job compatibility and control of job stress with nurses' performance in 2020.

Methods: The present study was performed by descriptive-correlation method with applied nature in 2020. The statistical population includes nurses working in Shiraz government hospitals. The sample size was calculated according to the Cochran's formula of 196 nurses and the sampling method was performed in Stratified Sampling. In this study, researchers' self-made questionnaire with three main sections and 13 questions and 5-option Likert scale was used, from completely agreeing to completely disagreeing. Cronbach's alphas reliability was calculated 77.4 in the questionnaire and its validity was obtained using the opinion of experts. Statistical analysis was performed using SPSS22 software and Spearman ,correlation coefficient regression model were used at 0.95 confidence level.

Results: The mean and standard deviation of job compatibility variable were 3.368 and 1.15. Job Stress Control variable were 3.084, 1.17 And the performance of nurses variable were 3.408 and 1.02 .There was a significant relationship between job compatibility and performance (r=0.731, p<0.001) and also between stress control and performance (r=0.651 , p<0.001).

Conclusion: Job compatibility leads to effective performance of people's duties and a positive attitude towards the new job role which has a positive effect on performance and also reduces high stress and productivity and it causes physical and psychological damage, so by controlling Job stress, personal and organizational performance also improves.

Keywords: Job compatibility, Stress management, Nurses' performance

How to cite this paper:

Mousavi SA, Alvani J. Investigating the Relationship between Job Compatibility and Controlling Job Stress with Nurses' Performance: A Case Study on Shiraz State Hospitals. J Community Health Research. 2020; 9(2): 100-106.

Introduction

As a work organization, the hospital is among the most complex and dynamic socio-technical systems. In this system, the treatment staff interacts with each other, and the existing technologies and the work environment are also engaged in their duties. Human resources working in this organization, like any other organization, is the most important component to achieve organizational goals. Thus, nurses, as the largest source of human force, have a special place in the hospital's medical care as the presence of an efficient nursing force ensures the success of the hospital, and the nurse's optimal job performance will ensure the quality of medical services provided to patients and leads to the patient's satisfaction. Nurses running hospitals and increasing the quality of their job performance is an important factor in accelerating the process of treatment and patients' recovery. On the other hand, their poor performance causes errors in the patient's recovery process, increases the length of hospital stay, and increases costs, which can lead to severe injury or even death. Therefore, factors affecting the variables influencing nurses' job performance can have a significant impact on the quality of health care services. In the last decade, the issue of stress or its effects on organizations has received a lot of attention and its causes and effects have been studied and researched for a long time (1). Stress is costly both for those suffering from it and for the institutions and organizations in which those people work (1). One of the psychological consequences of job stress is the decrease in job satisfaction, which leads to leaving the service, quitting the job, and reducing the person's commitment to the organization (2). Strong stress levels can cause goals and ways to achieve them. Change can create amazing opportunities and failures. It can both lead to the growth of a team and the dismissal of individuals and the search for new jobs (3). Job stress can be thought of as a combination of stressors and similar conditions when most people agree that it is stressful. In other words, job stress is the stress that a person endures in the workplace (4).

Occupational stress occurs when the working environment is happened to be greater than the individual's abilities and resources which increases the pressure on the individual (5). Job adaptation is the adaptive state and psychological issues of a person to the desired job after employment. Job compatibility includes describing and explaining behaviors that lead to the effective and good performance of the tasks and a positive attitude toward the new job role. Job adaptation is one of the most challenging organizational and basic concepts discussed in many management policies to increase organizational productivity and efficiency. Job compatibility includes the description of behaviors that lead to a good performance and a positive attitude towards the new job role (2). Job compatibility is considered as one of the effective factors in job satisfaction and lasting employment. Be and in many cases leave his workplace (2). The process of comprehensive performance measurement of executive bodies is in the efficiency, effectiveness, empowerment, and accountability within the framework of management principles to achieve the goals and tasks of the organization in the executive programs (6). Performance means employees' efforts to accomplish their job or achieve set goals. Each job has responsibilities that must be done according to defined standards. Performance appraisal is defined as determining, measuring, and scoring performance standards. This helps to determine the qualifications, characteristics, quality, skills, capacity, and future potential of the employees. The ultimate growth and success of organizations require the coordination of business performance with the expected results (7) . These results are achieved only when your organization is consistently working with business goals (7). This research is subject to innovation due to the novelty and lack of similar studies. Therefore, the main question of this research is whether there is a significant relationship between job compatibility and control of job stress with nurses' performance or not.

Methods

This descriptive research is taken from a research project in Islamic Azad University, Kazerun branch with IR.IAU.KAU.REC.1398.176 ethics code registered in the National Ethics Committee of Biomedical Research. The statistical population of this study is the nurses of Shiraz state hospitals including Namazi, Shahid Faghihi, and Hafez hospitals. Sample size was calculated based on Cochran's formula with p= q =0.5 , d=0.05, α=5% and z=1.96.

Using stratified sampling, 230 questionnaires were distributed in person by researchers among nurses, followed by 196 complete and flawless questionnaires. The measurement tool in this study is the researcher's self-made questionnaire with 13 questions. The Cronbach's alpha coefficient of job compatibility variable with 4 questions was 74.8, controlling job stress with 4 questions was estimated as 76.2, and nurses' performance with 5 questions was 78.8, and the total end of the questionnaire was calculated to be 77.4 The validity of the questionnaire has been quantified and the opinions of 8 university professors in the field of psychology and management have been used. The calculated CVR and CVI values were 0.75 , 0.84. The questionnaire also used a five-option Likert scale from strongly agree to strongly disagree. In terms of demographic characteristics, the nurses participating in the study included 124(63%) women and 72(37%) men, 45(23%) of whom were single and 151(77%) were married. In terms of education, 48(25%) associates, 126(64%) bachelors, 20(10%) masters and 2(1%) doctorates. Considering age, 39(20%) people were in the age group of 20 to 30 years, and 86(44%) people were in the age group of 31 to 40, 51(26%) people aged 41 to 50 years, and 20(10%) people were in the age range of 51 to 60 years. The Kolmogorov-Smirnov test was used to determine if the data were normal because the data is non-normal, Spearman correlation coefficient test, . The software used for statistical analysis is SPSS ver. 22. Significant level was considered 0.05.

Results

According to Table 1, the mean value of the job compatibility variable was 3.368, the mean value of the job stress control variable was 3.084, and the mean value of nurses' performance variable was calculated to be 3.408. Also, the standard deviation values of job adaptation were 1.151, job stress control was estimated as 1.176, and the performance of nurses was calculated as 1.028, respectively.

Table 1. Mean, median, and standard deviation

Variable	mean	Std.Deviation
Job compatibility	3.368	1.151
Stress control	3.084	1.176
Nurses' performance	3.408	1.028

Table 2. Calculating Cronbach-Alpha coefficient of the variables

Variable	Number	Cronbach's alpha coefficients
Job compatibility	4	74.8
Stress control	4	76.2
Nurses' performance	5	78.8
Total	13	77.4

The Cronbach-Alpha coefficient was used to measure the internal coordination of attitudes, judgments, and criteria in a questionnaire. This method is one of the methods for calculating the reliability of the questionnaire. The result of this test is a basic condition for confirming the questionnaire. According to Table 2, a total of 13 questions were asked which Cronbach's alpha coefficient performance of job compatibility with 4 questions was 78, job stress control with 4

questions was 76.2, performance with 5 questions was 78.8, and Cronbach's alpha coefficients of the

total was calculated to be 77.4 in the self-made questionnaire.

Table 3. The sample demographic characteristics

variable	levels	N	Percentage
Gender	Male	72	37%
	Female	124	63%
Marital status	Married	45	77%
	Single	151	23%
Education	Associate degree	48	25%
	Bachelor degree	126	64%
	Master degree	20	10%
	Doctorate	2	1%
Age	People in the age range of 20-30 years	39	20%
	People in the age range of 31-40 years	86	44%
	People in the age range of 41-50 years	51	26%
	People in the age range of 51-60 years	20	10%

Table 3 indicates the demographic characteristics of the sample which included 124 women and 72 men, 45 of whom were single and 151 were married. In terms of education, the sample was involved with 48 associates, 126 bachelors, 20 masters, and 2 doctorates. Considering age, 39 people aged 20-30 years, 86 people were in the age range of 31-40 years, 51 people were in the age group of 41-50 years, and 20 people aged 51- 60 years.
In this study, the data had an abnormal distribution. The correlation between job compatibility and performance variables was 0.731 and the correlation between the job stress control and performance variables was 0.651. In the case of regression model R^2 = .887 and R2Adj=.885. It has been calculated at a significance level of 0.001.

Research regression model

$$NP = \beta_0 + \beta_1 JC_i + \beta_2 JSC_i + U_{j1}$$

In this model, np is the performance of nurses, JC is job compatibility and JSC is job stress control.

Table 4. Results of regression model coefficients

model	Non-standard beta coefficients	standard error	Standard coefficients	Statistics t	The significance level
(stable) 1	0.295	0.094	. . . .	3.117	0.001
job compatibility	0.617	0.050	0.685	12.446	0.001
job stress control	0.290	0.058	0.277	5.037	0.001

As can be seen in Table (6), the value of the regression coefficient for the independent variable of job compatibility was 0.617, and statistics t was 12.446 which are calculated at a significance level of 0.001. The value of the regression coefficient for the independent variable of job stress control was calculated to be 0.290 and the t statistic was 5.037.

Discussion

This study aimed to investigate the relationship between job compatibility and job stress control with nurses' job performance. Recently, human resources and employees are the most important resources available at any organization and the generator of sustainable competitive advantage. Therefore, having employees with effective performance is one of the most important factors for the success of the organization in achieving its goals. The present study seeks to answer the question of whether there is a significant relationship between job compatibility and control of work stress with nurses' performance.

Consequently, two hypotheses were developed to answer the main question. In the first hypothesis, the correlation between adaptation and performance was calculated to be 0.731 which means that nurses' job compatibility of 0.731 has a positive effect on nurses' performance. In other words, it will not work well until the nurse can adapt to his/her job. So, he/she will most likely have problems both at work, in family, and personal life. In the second hypothesis, the correlation between stress control and performance is calculated, and the effect of stress control on performance is calculated as 0.651. Thus, stress management allows nurses to control their stress. Stress varies from nurse to nurse, it may be stressful for one, but it may not be stressful to another at all (8). On the other hand, dramatic changes in the management knowledge have made the existence of an evaluation system inevitable; in such a way that the lack of evaluation in different aspects of the organization namely the use of resources and facilities, employees, goals, and strategies is considered as one of the symptoms of the organization's problem. Every organization requires an evaluation system to assess the aptness and quality of its activities, especially in complex dynamic environments. On the contrary, the lack of evaluation and control systems in an organization is considered as the result of not communicating with the internal and external organizational environment which leads to the death of the organization eventually. The phenomenon of organizational death may not be felt easily because it occurs suddenly by top managers of organizations. Studies indicate that the lack of having a feedback system makes it impossible to provide the necessary information for growth, development, and improvement of organizational activities (9). All nurses attempt to take care of patients and improve their condition. In the meantime, the effort, commitment, and kindness of some nurses are more colorful than others. Various variables such as compatibility, cooperation at work, nice behavior affect their job positively and incompatibility and misbehavior affect their behavior and their job negatively (10). When one person is called compatible, he/she has learned the techniques that

enable him/her to interact with his/her environment and to behave acceptably with the members of his/her community to satisfy her needs. A person in a particular social situation can adapt to that situation in many ways (11). Psychologists also consider a person's compatibility with the environment and consider personality traits to be normal, which leads to a person's compatibility with their environment, ie. living in peace with others. This issue has gained a place in society, but many other psychologists believe that if reformism is applied in the sense of conformity to the actions and thoughts of others, it is no longer possible to describe a healthy personality. Besides, they are more focused on positive traits such as individuality, creativity, and the flourishing of potential talents. Changes in work activities, such as new technologies or goal changes may be stressful. Stress is common in our daily lives. People's anxieties about work, family, children, family members or their divorces, social problems, economic situation, and various needs, expectations of employers, technological advances, and the widespread concern about the of data and information, management problems are all the same (12). Every moment of the day, the person always has various emotions, tensions, worries, fears, and hopes which sometimes correspond to his physical, and mental capacity and are not compatible with them (13). Managers need to know about work-related stress. Chronic stress can have serious physical and psychological consequences for employees because it endangers the health of employees and their contribution to the advancement of the organizational goals. Studies show that the effects of stress are more severe, especially on management personnel. Stress is the main reason for leaving the service, job loss, and underemployment, and it harms the effectiveness of the organization. Appropriate and effective employee's performance is one of the keys to organizational success. Good performance means productivity, quality, profitability, and customer service. That is why successful organizations make great efforts to find out factors affecting the performance and behavior of employees to identify

and manage these factors. To improve the employee's performance and behavior, in a way that leads to the success of the organization, the factors that affect performance and behavior must be organized and managed(14).

Conclusion

According to the results of the present study, it can be stated that to have the desired job performance by employed nurses, special attention should be paid to their job compatibility and work stress and they can be expected to perform better by participating in training courses. It is also a good idea for policymakers in this area to have nurses with optimal job performance, especially in the more sensitive parts of the hospital to increase job compatibility and reduce work stress and to properly control these stresses. Therefore, to improve performance and improve the behavior of nurses, in a way that leads to the success of the organization, the factors affecting performance and behavior must be recognized and managed. The most important factor in achieving the goals of any organization is human resources, and the success and progress of any organization depend on this factor.

Ethical considerations

This article is an excerpt from the research plan of Islamic Azad University, Kazerun Branch, with the ethics code of IR.IAU.KAU.REC.1398.176, registered in the National Ethics Committee of Iranian Biomedical Research.

Authors' contribution

The main idea of researching and designing the conceptual model of designing and distributing questionnaires and collecting them with the author was the responsibility of SA. M and analyzing the data and concluding with the second author. J.A lvani.

Conflict of interest

Authors declare no conflict of interest.

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