



Predicting Job Stress Based on Elements of Coping Styles in Nurses

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ABSTRACT

Using coping methods can help to dominate on physical, mental, and social relationships, individual contradiction problems, and can be considered as one of effective factors in general and mental health of nurses. The objective of the present research is predicting job stress based on elements of coping styles in nurses. By correlative methodology for this research, 120 female 20-45 years old nurses in Tehran city were selected by simple random sampling method based on Cochran formula. The research instrument includes job stress questionnaire and coping style questionnaire of Lazzarus & Folkman; the Pearson correlation coefficient test, and linear regression were used to test hypotheses and generalize the obtained information from tests. Findings showed that participants' scores were near normal range and Cronbach's alpha coefficient was 0.58 which indicated scores internal consistency. The obtained results showed that coping elements in 0.05 significant level with f-value of 12.403 significantly predicted job stress. In addition, regression coefficient among support, responsibility, and managerial solution elements was negative and positive with two other relationships including job stress and escape-avoidance. Therefore, it can be concluded that elements of support, responsibility, escape-avoidance, and managerial solution significantly predict nurses' job stress among coping elements.

Keyword: Job Stress, Coping Styles, Nurses

INTRODUCTION

One of the most criterions of developing communities is providing medical cares for public. One of the most important pillars of medical cares may be emergency cares, particularly pre-hospital cares. Pre-hospital cares start from patients' bed-beside and end to hospital. In nurses' health system, they are health frontlines. They face with serious physical and mental pressures in several days that may be effective in their work quality and health. Undoubtedly, these mental pressures will be influential on their working quality. It is clear for everyone that this influence is actually a threat for community health and spirit of residents of related emergency regions [4]. Nurses should cope with effective mental pressures on their private and professional lives in order to face with their professional problems and providing their mental health, use the present conditions for their undertaken tasks the best, and change the negative experiences to positive ones [3]. The truth is that stress is made experience by an individual that is his/her perception from an occupation. It means each person can only control himself/herself stress [6]. Lazzarus&Folkman[1984] showed that cognitive processes are used to solve problem in coping process and an individual uses the problem-orientation and efficient coping styles to solve the problem. In this regard, coping strategies are studied with problem directly, and satisfaction and psychological happiness are usually obtained along with finding solutions for problem. Tavakoli [2001] concluded by studying the effect of coping strategies and its styles that using excitement-orientation coping strategy has relationship with pathological syndrome. In recent years, stress resources and its coping styles have been studied extensively and showed that using effective coping styles has important role in reducing stress. The used coping styles by people influence on their health. The stress coping styles are making a process for people control resulted problems by their stress and negative excitement. The coping

styles are continuous attempts to adapt people with unbalanced conditions. The moderated excitements and stress will be removed if coping styles are used. [9] In other words, with more and more resources for coping, it is less probable for people to be caught in damage [1]. The coping strategies are introduced as one of mental health principal elements and have been determined as attempts to increase appropriation between an individual and environment or attempts to manage mental pressure maker factors. [7]

According to Research Institute of Stress, the related sadness to stress alone have one hundred billion dollar for American government annually, and the imposed loss by this way was estimated about 17 billion dollar annually. Seven million work days are damaged in England annually. Above all, the economic loss statistics is the effect of stress on people physical and mental health and their relationships with other in whole life time. [2] Nurse is one of important members of an active team in hospital actions, and nursing has attracted society attention as one of allied health profession. Since stress is an inseparable part of today life, particularly in work place, it puts pressure on various professions according to various dimensions. Identification effective factors and resources on expressing stress among employees of an organization can help to much better facing with this phenomenon. The coping styles can help to cope with physical and mental, and social communicational problems, individual contradictions, and can be known as one of effective factors in people mental and public health. [8].

Researchers concluded that some features and behaviors are classified by personality types are important in coping with stress such as personality type A, that refers to depressed and dependent personality, and there are personalities types that can resist against stress and face with it accurately such as resistant and adventure personality [10]. Many people that work in cities are mostly sent to missions that may know the injured or patients and this may be unpleasant and bothering for them. Involving with occasions with death threats of people greatly influences on their emotions and increase destructive effects of stress on them. Factors such as work shift turns, high work load, conflict with colleagues, a constant presence in the harrowing scenes, viewing suffrage and death, factors that reduce the speed of access to the victim such as traffic dangers and anxieties, and tensions increased accident are caused by the crowd scene to stress destructive effects, professional responsibilities, and related issues to administrative system are the significant stresses of this profession. [5] These factors are divided to internal and external factors [1].

Internal factors: the fear of patients companions or hospital colleagues for making mistakes in decision makings about specific action are important and intensive internal factors for stress in pre-hospital emergency technicians.

External factors: the most important factors increasing job stress in pre-hospital emergency technicians and decreasing their efficiencies are external factors. According to the mentioned descriptions, it is tried to cope with nurses' job stress. The hypotheses of the present research are coping styles [confronting coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem solving, and positive reappraisal] that significantly predict job stress in nurses.

MATERIALS AND METHODS

Methodology

The methodology of this research according to purpose is applied, and it has correlative form that is a one of descriptive (non-experimental) method.

Statistical Population and Sampling Method

The statistical population of this study is all female 25-45 years old nurses in hospital who were employed in hospitals of Tehran city in 2015. The sample was selected by simple random sampling method. According to Cochran formula, 120 people were randomly selected for statistical population, in this research, Pearson correlation coefficient test and linear regression were used to test hypotheses and generalize obtained data from sample.

Research Instrument

A- The HSE Job Stress Questionnaire:

The job stress questionnaire was proposed to measure the related stresses to work. This questionnaire has 7 sub-criteria of demand, control, authorities' support, weak support, communication, job stress role, and changes. This questionnaire was proposed by Health and Security of England institute (HSE) to provide a proper instrument for job stress measurement. This questionnaire has 35 questions including five-point spectrum including never, seldom, sometime, often, and always from 1 as undesirable to 5 as desirable. The expressions 3 ◊ 5 ◊ 6 ◊ 9 ◊ 12 ◊ 14 ◊ 16 ◊ 18 ◊

20 , 21 , 22 و 34 were scored reversely. The validity and reliability of HSE job stress questionnaire was evaluated by Azad, Gholami, and Fesharaki (2009) with pretest, post-test of test and control groups. 749 military employees were selected from all over the country by multi-stage cluster-sampling method. The samples participants responded to HSE questionnaire. In this step, the Pearson correlative coefficient, Cronbach’s alpha coefficient, and Spss software (v. 15) were used simultaneously to evaluate structure validity after evaluating content validity. Findings showed that questionnaire correlation coefficient of HSE questionnaire was $r=-0.48$. Results also showed strong correlation among the extracted factors from functional analysis and questionnaire items as 0.22, 0.85, 0.73, 0.75, and 0.92 for role, communication, authorities’ support, colleague support, control, demand, and changes, respectively. The validity of questionnaire was 0.78 and 0.65 by Cronbach’s alpha coefficient and split-half method, respectively. Results of this research indicated that the HSE job stress questionnaire is valid and reliable questionnaire to test job stress. (7)

B- Lazzarus Folkman Coping Style Questionnaire:

This questionnaire was introduced by Lazzarus Folkman in 1974 including 66 articles with 8 criterions of coping (confronting coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem solving, and positive reappraisal). The functional analysis of this test elements showed that all test scales are in two main classes including excitement-orientation (confronting coping, distancing, self-controlling, and escape-avoidance) and problem- orientation scales (seeking social support, accepting responsibility, and planful problem solving) (9). This questionnaire asked participants to answer to the questions based on four-point scale (didn’t use, to some extent used, mostly used, a lot used) without time limitation besides imagining the experiences situations to use confronting strategies. In addition, in order to measure each confronting methods, 5-8 articles were considered. Finally scores of each scale were calculated and so the confronting methods can be compared which are used by participants in confronting with stress. The coping strategies questionnaire has 66 article which was made based on coping strategies questionnaire made by Lazzarus and Folkmanin 1988 and evaluated extensive range of people thoughts and actions while confronting with internal and external stressful conditions. 16 expressions of this test are deviation tests and 50 other expressions evaluate individual confronting strategy. The reliability of the test was used for nurses in Esfandiyari et al. (2012) research. The Cronbach’s alpha coefficients of sub-scales were reported as following: the confronting coping sub scale was 0.74, distancing was 0.64, self-controlling was 0.69, seeking for social support was 0.81, accepting responsibility was 0.71, escape-avoidance was -0.75, the planful problem solving was 0.69, and positive reappraisal was obtained 0.84.

Findings

44% of participants were single and 56% were married. The mean job stress of nurses was 96.02 with standard deviation is 8.47. In addition, the highest mean of elements was 14.26 which were related to confronting coping with standard deviation of 3.05 and the minimum mean was related to escape-avoidance with 7.62 with standard deviation of 2.03. The participants’ scores distribution was normal and Cronbach alpha coefficient was 0.5 that shows internal consistency of cores. After testing research hypotheses, they were tested by regression and the results are shown in table (1).

Table (1) the hierarchical multi-variate regression for job stress prediction based on coping strategies elements

Variable	b	SE	β	R ²
Coping elements				
Confronting coping				
Self-controlling	-0/284	0/410	-0/081	
Escape-avoidance	0/725	0/187	0/301*	
Seeking social support	-0/543	0/320	-0/210**	
Distancing	0/49	0/39	0/132	
Accepting responsibility	-2/083	0/510	-0/417*	
Reappraisal	-0/039	0/171	-0/024	
Planful problem solving	-1/421	0/437	-0/201*	0/301*

In this research, job stress was dependent variable, the obtained results showed that coping elements significantly predicted job stress with F-value of 12.403 in 0,05 significance level. The above table shows that life elements including confronting coping, self-controlling, escape-avoidance, seeking social support, distancing, accepting responsibility, reappraisal, and planful problem solving determine 30% job stress variance, because multiple correlation square was also 0.30. The regression β coefficient showed that the related regression coefficient was related to seeking social support, accepting responsibility, escape-avoidance, and planful problem solving were

significant in 0.05. The regression coefficient between seeking social support, accepting responsibility, and planful problem solving was negative and two other relations including escape and job stress were positive. Therefore, it can be concluded that among coping elements, the seeking social support, accepting responsibility, and planful problem solving elements significantly predict nurses' job stress.

DISCUSSION AND CONCLUSION

Testing hypotheses showed that the coping elements (confronting coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem solving, and positive reappraisal) significantly predict job stress in 0.01 level. It means they have role in determination the variance of job stress, the regression coefficient between escape-avoidance and job stress was positive and coefficient of support, accepting responsibility and planful problem solving was negative. Generally, research hypotheses were confirmed and concluded that among coping elements, four elements of support, accepting responsibility, escape-avoidance, planful problem solving significantly predict nurses' job stress. The results of the present research are in agreement with results of the previous studies such as Barrick and Mount (2010), Seward (2012), Peterson (2015), Barzideh *et al.* (2012), AlaviArjmand (2012), and Hazavei (2012). The excitement-orientation coping relates with sense of little control of stressful condition and distancing from stressful condition instead of fighting with them; therefore, the scape-avoidance coping strategy that is excitement strategy denies and deviates from the reality. Therefore, it reduces mental health and increases job stress. The planful problem solving copes with job stress by changing others behaviors or situations, reappraisal the attitudes, and acquiring new skills. Social support strengthens to cope with problems and accepts their conditions to tolerate less job stress by not putting them alone and perception of situations. Stress influences on work life quality, consequently satisfaction, and finally promotion or leave the present job rank. Results of the related studies in this field on employees of pant production laboratory in England indicated positive and significant relationship between job stress, work life quality, and their professional satisfaction and their job leave or promotion. Therefore, it can be concluded that employees with stressful jobs have work life quality and life quality reduction by making depression and job dissatisfaction to stay on that jobs, so lack of human force occurs (10). The problem-orientation coping related with optimism, psychological welfare, life satisfaction, spirituality, happiness, individual development, self-following, and positive relationship with others. On the other hand, the mentioned factors can be effective in using the problem-orientation coping strategy. The planful problem solving is effective on increasing mental health and decreasing job stress. In problem-orientation coping strategies, an individual try to solve a problem by step by step planning implementation. If this attempts fails, the solution will be repeated by changes. This coping style reduces stress actually in a not so long process by principal method and modification the confrontation strategies with stressful problem and prevents from its undesirable effects. Therefore, it can be predicted that people can perceive less stress in various situations by problem-orientation strategy. Accepting responsibility finally reduces stress and creates happiness by influencing on skills and awareness, resisting against various problems, and making sense of satisfaction. Actually, coping is influenced by factors such as relatively constant intrapersonal differences, and environmental factors are mainly considered as the general structure of cognitive evaluation. Some of these factors have significant effects in using adaptable and non-adaptable coping strategies in the way that some of these factors have adaptable coping usage and some others facilitates the non-adaptable coping styles. Work life quality is one of presumption to motive people, reduce their working stress, improve their job satisfaction, and consequently reduce work stress. The job satisfaction has multi-dimension conception and production of general evaluation of work content and space. All aspects of job satisfaction relate with work life quality, and improving work life quality increases job satisfaction and reduces job stress.

According to findings, it is suggested to have more studies on more extensive samples with random sampling selection; proper instruments are prepared to evaluate the relationship in various nurses groups besides longer at least 6-month comparison. Findings of this research are scrutinized by educational experts and organizational specialists, and effectiveness of family, medical, educational, and job environmental should be examined on increasing job stress.

REFERENCES

- [1] Esfandiyari, G. (2012). Personality characteristics and coping styles employed in nursing. MA thesis. Azad University of Abhar.
- [2] Barzideh, M. Chubineh, AR. Tabatabai, SHR (2012). Dimensions of job stress and its relationship to public health nurses. *Business Journal of Medicine*. Fourth period. S17-27.

- [3] Shafiesarvestani, F, and courage, Abbas. (2009). The relationship between coping with job stress and job satisfaction Shiraz education advisers. *New Approaches in Educational Administration Quarterly*. Year 1. (2) (60-39).
- [4] Mirzaee, O., real, Said, and Kushan, M.. (2009). The effect of communication skills training on the perceived stress of nursing students. *University of Medical Sciences*. Volume 17, Number 2 (95-88).
- [5] Hazavehei, MM. Hosseini, Z. and Moghimibieghi and A. Hamidi, Y (2012). Job stress and coping strategies on nurses Hospital of Hamadan on the pattern of the referendum, *Journal of Knowledge Horizon*, a second Ghabad.sal University of Medical Sciences and Health Services, Volume 18, Ss78-86.
- [6] Aftab, H. &Javeed, A. (2014). The impact of job stress on the counterproductive work behavior: a case study from the financial sector of Pakistan. *Journal of Contemporary Research in Busines*.vol 4:590-604.
- [7] Albee, G. (2011). Anticipation of performance among musicians: Physiological arousal, confidence, and state-anxiety. *Psychology of Music*, 18, 171-182.
- [8] Allen, M. J. & Yen, W. M. (2012). *Introduction to measurement theory*. Belmont, CA: Wadsworth.
- [9] Mardani, Hamule M. and Shahraki. Vahed, A. (2012). Relationship between hospital personnel's personality characteristics and organizational climate, Najafabad, Iran. *Journal of Health Administration*.vol 12 (38); 23-30.
- [10] Peterson, L. (2015). 10 stressful jobs in the world. *Journal of News Forbes*, 11, 57- 215.