The Relationship between Emotional Intelligence and Coping Styles Against Stress Among Nurses

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Abstract— Emotional intelligence is commonly understood as one's ability to recognize own emotions and the emotions of others, and to use this understanding to successfully navigate important interactions. By means of emotional intelligence, thoughts will be facilitated and it could link excitement and cognitive abilities. This study is intended to investigate the relation between emotional intelligence and coping style against stress among nurses working in the hospitals of Kermanshah city in Iran. The study is cross correlation. The samples included 350 male and female nurses working in hospitals of Kermanshah city in Iran who were selected by quota. For data collection the questionnaires of demographic information, emotional intelligence, and coping styles were utilized. Data were analyzed by using SPSS version 12. The results showed that there was a meaningful statistical difference between the nurses' emotional intelligence and coping styles (P<0.001). the score of emotional intelligence in nurses with problem-focused coping style was more than the ones who uses emotional-focused and avoidance coping style. There was a meaningful statistical difference between emotional intelligence and demographic information such as age, level of education, and taking tranquilizers (P<0.001). However, there was no meaningful statistical difference between emotional intelligence and gender, work experience, location of work, marital status and shift work. The results showed that emotional intelligence could increase the application of problem-focused coping style against stress. Therefore, it is recommended to use emotional intelligence as a training priority in both academic and clinical fields in order to increase the utilizing of problem-focused coping style.

Index Terms— Coping style, Emotional intelligence, Nurse.

I. INTRODUCTION

Emotional intelligence is a recent construct that has been introduced to study social behavior. Emotional intelligence has been proposed as a new perspective in the study of emotions; in particular, this approach maintains that the intelligent use of emotions is essential to explaining both physical and psychological individual adaptation [1].

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ability to recognize own emotions and the emotions of others, and to use this understanding to successfully navigate important interactions [2]. Goleman the American psychologist drew attention to the fact that the emotional intelligence has a larger impact on achieving success than the intelligence quotient. According to his theories, emotional intelligence means first of all becoming aware of one's own and their optimum control [3].Emotional feelings intelligence, as defined by Goleman, is a type of social intelligence consisting of several personal and social competencies, including self-awareness, self-regulation, motivation, empathy, and social skills [4]. An individual with a higher emotional intelligence level was more adaptable to social pressures and environmental changes than was an individual with a lower emotional intelligence level [5]. It is theoretically grounded in Salovey and Mayer's (1990) concept of emotional intelligence that sees it as a subset of social intelligence concerning the capacity to: monitor one's own and other's feelings and emotions, discriminate among them, and use this information to guide one's thinking and actions. This conception of emotional intelligence therefore described it as a cognitive process of social judgment; a useful ability to measure in prospective and practicing nurses [6]. Many studies have shown that measurements of emotional intelligence tended to correlate with academic and professional success, including in the medical setting and workplace [7]. Results of a study conducted at the University of Alberta showed a higher level of stress and depression among students in the health sciences than among other graduate students. The competitive nature of the health sciences, combined with certain academic weaknesses, serves to create poorly adaptive perfectionism in students within these programs that leads to unrealistic and excessive concerns about performance [8]. Amalia Petkovic and colleagues declares that emotional intelligence could increase the sense of control on inner feelings and this could provoke the logical reactions [9].

Emotional intelligence is commonly understood as one's

Folkman and Lazarus have declared that coping refers to the cognitive and behavioral efforts of individuals to manage their internal and external demands which are appraised as taxing or exceeding the resources of the individual [10]. According to Folkman and Lazarus, coping strategies can be divided into the following eight styles: confrontive coping, distancing, self-control, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving and positive reappraisal [11]. According to Endler and Parker (1999), coping styles can be categorized into three general types. Problem focused coping is task-oriented and involves strategies aimed at taking action to modify the situation or generating alternative solutions.

Emotion-focused coping is person-oriented and is directed at regulation emotions cued by the stressor; this style of coping may comprise affective responses such as outbursts or fantasizing reactions. Last, avoidance coping responses are either task-oriented (e.g. distracting oneself with another task) or person-oriented (e.g. social diversion, such as seeking out others), and are generally directed at distancing oneself from the stressful situation [12]. In the work setting, positive coping can generate positive emotions and behaviors which lead to a state of communicative well-being, a professional and personal development, and more personal experiences and resources that increase competence [13]. Based on the study of Stecker (2004) nursing students undergo more stress than students studding in other health-related department. Studies show that there is already a certain level of stress in nurses' academic training, that is during the undergraduate program and, more specifically, when students initiate supervised training at hospitals [14]. The high level of stress may result in psychological distress, physical complaints, behavioral problems, and decrease in the academic achievements of nursing students. In order to support students' well-being, the use of methods to increase their adaptation to the university and their academic achievements is recommended [15].

Considering that as the protector of public health, nurses play a key role in the country's healthcare system, analyzing the relation of these two variables has a remarkable effect on empowerment of nurses. There for this study aimed to investigate the relationship between emotional intelligence and coping styles of nurses at hospitals in the city of Kermanshah in Iran. If the relation between these two variables is confirmed, it could be announced as an intellectual paradigm in dealing with stressors.

II. MATERIALS AND METHODS

This study is descriptive and correlational. The study population is consisted of all nurses working in hospitals in Kermanshah city in Iran. The samples of this study were 350 male and female nurses who work at the hospitals of Kermanshah city. Quota and simple sampling were utilized. This means that after determining the total number of nurses who work in the hospitals of Kermanshah city and also in accordance with sample size the quota of each center were determined, then each of nurses who wish to participate in the study, were selected by simple sampling (Table no. 1).Questionnaires were filled by the participants. Inclusion criteria were having at least a bachelor's degree in nursing and working as a nurse at hospital. The exclusion criteria were also the unwillingness of nurses to participate in the study and incomplete questionnaires. After explaining the purpose of study, the confidentiality of participants' personal data, being optional for participating or not participating, and obtaining informed consent, three questionnaires of demographic data, emotional intelligence and coping styles against stress, were given to the participants.

Demographic questionnaire: this questionnaire was consisted of 8 questions that gathered the personal and occupational information about the participants such as age, gender, level of education, job experience, location of work, marital status, Taking tranquilizers, and shift work.

Emotional intelligence questionnaire of Shiring: this questionnaire was consisted of 23 questions with 5 score



Likert scale (from always to never). Some questions are scored and interpreted positively, while others are scored and interpreted negatively. Jerabak (1996) announced the reliability of this questionnaire %94 with the splitting method and %91 with Cronbach's alpha. The reliability of this questionnaire was reported %75 to %85 by Dehshiri (2004), Khanzadeh (2006), Ghanbari and colleagues (2006), and Miri (2007) [16]. Also Safarinia and Selgi (2011) said that the Cronbach's alpha of the entire test is %84 and for each component is %79 to %86 [17]. By means of Cronbach's alfa, the internal consistency of the test has been reported to be %85 [18]. In this study the reliability of the questionnaire reported 0.79 with Cronbach's alfa [19].

The questionnaire of coping styles against stress: this questionnaire was designed by Endler and Parker, in order for coping styles to be analyzed in stressful conditions. This questionnaire includes 48 questions with 5 score Likert scale (never=1 to very much=5), that each 16 questions analyzed one the coping style (problem-focused, emotional focused, and avoidance). For computing the score of each subscale, the score of all phrases for that subscale are accounted. The dominant style of each person is determined according to his or her scores in each dimension of coping styles. The validity of this scale has been reported to be 0.83. In addition, the validity of problem-focused subscale, emotional-focused subscale, and avoidance subscale was reported 0.85, 0.55, and 0.83 by Ghoreyshi Rad (2010) [20]. According to the studies carried out by Endler and Parker and the studies that has been done in Iran, this test has a high power to analyze coping style in stressful conditions [21]. The data have been analyzed by SPSS 12, descriptive tests (frequency, average, variance, standard deviation), and Inferential tests (parametric and non-parametric such as ANOVA, Tukey test, Kruskal-Wallis, Mann-Whitney, and independent T).

III. FINDINGS

350 persons participated in this study, 252 of whom were female, 201 of whom were between 20-30 years of age, 324 of whom had bachelor's degree, 137 of whom has at least 5 years of job experience, 183 of whom were married, and 290 of whom had rotation shift work.

Table 1. Absolute and relative frequency of participants

 based on the hospitals and place of work

· · ·	<u> </u>		
Hospital	Number	of	Percent
	participants		
Imam Khomeini	38		10.85
Imam Reza	155		44.3
Imam Ali	35		10
Taleghani	41		11.72
Farabi	24		6.85
Mohammad	50		14.28
Kermanshahi			
Motazedi	7		2
Total	350		100

The average of emotional intelligence for nurses was 107.8057 ± 11.62804 with variation range of 33-165. 77.71 percent of nurses had a good emotional intelligence. Considering the fact that, the emotional intelligence of all nurses were above 66, the weak category was removed from the tables (Table number 2).

Emotional	Number of	Percent
Intelligence	participants	
Middle (67-99)	74	21.15
Good (100-133)	272	77.71
Excellent	4	1.14
(134-165)		
Total	350	100
Average		
-	107.8057	
Standard		
Deviation	11.62804	

Table 2. Absolute and relative frequency of emotional intelligence among participants

The results of ANOVA showed that there is a significant statistical difference between the score of emotional intelligence and coping styles of participants (P<0.001) (Table number 3).

Table 3. Absolute and relative frequency of emotional intelligence based on the coping styles

Coping styles Emotional intelligence	Problem -focused	Emotio nal-focuse d	Avo idance	Mixed
Middle	17	24	24	9
	(9)	(37.5)	(38.7)	(25.7)
Good	168	40	38	26
	(88.9)	(62.5)	(61.3)	(74.3)
Excellent	4 (2.1)	0 (0)	0 (0)	0 (0)
Total	189	64	62	35
	(100)	(100)	(100)	(100)
Average	111.77	101.23	104. 29	104.63
Standard	10.969	10.046	10.6	6.946
deviation			7	
Test's	One Way ANOVA, F=16.60, df ₁ =3, df ₂ =346			
Results	P<0.001			

According to this result, Tukey test was utilized in order to make comparison between the averages of each group. The results revealed that there is a significant statistical deference between the score of emotional intelligence and problem-focused coping style, emotional-focused coping style and avoidance coping style (P<0.001). Also there is a significant statistical deference between the emotional intelligence and problem-focused coping style and between emotional intelligence and mixture of different coping style (P<0.002). But there is no significant statistical deference between emotional intelligence and emotional-focused coping style and avoidance coping style (P=0.387), also between emotional-focused coping style and mixed coping style (P=0.441), between avoidance coping style and mixed coping style (P=0.999). In addition, it was determined that the emotional intelligence is higher in the participants who use problem-focused coping style than among participants who use emotional-focused coping style, avoidance coping style, and mixed coping style (Table number 4).

Table 4. Comparison of Emotional Intelligence in terms of coping styles with stress

Style	Number	Average	S.D.	Test's result
Problem	189	111.77	10.969	Tukey HSD
focused	64	101.23	10.046	P<0.001
Emotional				Meaningful
focused				_
Problem-f	189	111.77	10.969	Tukey HSD
ocused	62	104.29	12.618	P<0.001
Avoidanc				Meaningful
e				
Problem-f	189	111.77	10.969	Tukey HSD
ocused	35	104.63	6.946	P=0.002
Mixed				Meaningful
Emotional	64	101.23	10.046	Tukey HSD
-focused	62	104.29	12.618	P=0.387
Avoidanc				Not
e				Meaningful
Emotional	64	101.23	10.046	Tukey HSD
-focused	35	104.63	6.946	P=0.441
Mixed				Not
				Meaningful
Avoidanc	62	104.29	12.618	Tukey HSD
e	35	104.63	6.946	P=0.999
Mixed				Not
				Meaningful

IV. DISCUSSION

In this study 77.71 percent of participants got a good score for emotional intelligence. This finding is similar to the studies of Delpasand and colleagues (2011), Molayi and colleagues (2012), and FahimDowin and colleagues (2007) [16,22, 23]. Also it is similar to the results of Kim and Han (2015). In that study, the emotional intelligence of nursing students was reported 5 (between 1 to 7) [24]. But there is a difference between the findings of present study and the findings of Rushdi Mohamed and Ramzi Yousef (2014). In their study the relation between emotional intelligence and the styles of conflict management were analyzed among nursing managers. They said that a good majority of nursing managers have middle range emotional intelligence [25]. Probably it is due to the fact that lack of proper training plans in organizations could decrease the ability of emotional intelligence utilization. Their study was about nursing managers, but the present study was done about all nurses. This issue could be resolved by organizing the classes, workshops and training seminars.

The results showed that 189 (%54) participants use problem-focused coping style, 64 persons use emotional-focused coping style and 62 persons use avoidance coping style. In addition, 35 participants got a same score for two styles in a same time which was categorized in other group which it is called; mixed coping style. That is quite evident that problem-focused coping style is more prevalent than other styles among participants. Other styles such as emotional-focused coping style and avoidance coping style stand at second and third positions. These findings are similar to the study of Shikai (2007). Shikai declared that most of the nursing students use problem-focused coping style. But there is another critical difference. Shikai said that second position goes to avoidance coping style and the third position goes to

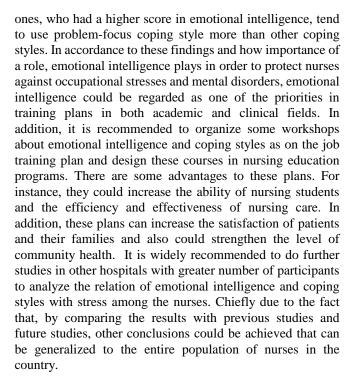


emotional-focused coping style [40]. Maybe it is because of the differences in research community and cultural aspects. Montes-Berge and Augusto reported that a great majority of nursing students tend to apply problem-focused coping style [27]. Moreover, Ni and colleagues (2010) reported the average of active coping styles (problem-focused coping style) among nursing students are more than other styles [28]. In a study, Chon and Fong reported that the nursing students in Hong Kong use active coping style. It means that they do physical activities in order to decrease their tension. After this style, other students prefer to concentrate on optimistic thoughts, then utilizing problem-focused coping style, and the rest of the students use avoidance coping style [29]. The result of their study is different from present study. It is due to some differences such as the aims of research, nursing experiences, and different kinds of stress. In their study the main source of stress was clinical stress during internship. The main causes of stress during internship are physical activity and sense of fear about lack of clinical skills and causing physical harm to the patients. But in present study the participants have been chosen from nurses with clinical experience that is responsible for dealing with stress. But in another study which have been carried out by Khodayari Fard, Shokouhi, and GhobariBonab (2009), most of the students used problem-focused coping style. This alignment can be due to cultural similarities and the participation of final-year students with high clinical experiences [30].

This study showed that there is a meaningful relation between the average score of emotional intelligence and coping styles among the nurses (P<0.001). Moreover, the score of emotional intelligence was higher among the nurses who utilize problem-focused coping style than the ones utilizing emotional-focused coping style, avoidance coping style or mixed coping style. In fact, these findings reveal that the nurses who have high score in emotional intelligence, tend to use problem-focused coping style against stress and tension. These findings are similar to the study of Molayi and colleagues (2012). In accordance with their study, there is a correlation between the emotional intelligence of nursing students and coping styles [16]. Also in other study, Bastian (2005) reported that there is a relation between emotional intelligence, problem solving skill, and the ability of coping [31]. In addition, Rogers and colleagues (2006) said that emotional intelligence is one of the moderator factors in coping styles [32]. Rogers and colleagues showed that there is a significant and direct relation between emotional intelligence and active cognitive and behavioral coping style. Norbakhsh, Besharat, and Zarei (2010) said that there is a direct and meaningful relation between emotional intelligence and active coping styles, but there is a (Ineffective) significant and reverse relation between emotional intelligence and emotional-focused coping styles [33]. Based on the study of Kim and Han (2015), there is a positive relation between problem-focused coping style and emotional intelligence [24]. Furthermore, Mohammad khani and Bashgharah (2008) declared that there is a meaningful and direct relation between emotional intelligence and effective coping styles [34].

V. CONCLUSION

According to the results of this study, a good majority of participants got a good score in emotional intelligence and the



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