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ASSOCIATION OF RESILIENCE WITH EMOTIONAL INTELLIGENCE IN NURSING WORKPLACE

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ABSTRACT

Despite the development of hospital instruments, nurses' abilities are also important. Hence, knowing and nurturing psychological functions of the specialists in health systems are necessary. One hundred and sixty two nurses were selected and invited to answer the Bar-one's questionnaire and CD-RISC's scale. Multivariable linear logistic analysis and Pearson's correlation coefficient test were employed in this study. Results showed all components of emotional intelligence including intrapersonal skills, interpersonal skills, compatibility, Stress management, and general mood were directly related to nurses' resilience ($p < 0.001$). The components of general mood have the highest impact on explicating the resilience of nurses ($r = 0.380$, $p = 0.001$). By increasing Nurses' abilities like emotional intelligence and resilience, nurses can solve problems in workplace and do their jobs better.

Keywords: *Emotional Intelligence, Resilience, Nursing*

INTRODUCTION

Clinical practice in nursing included nurses' partnership in both thinking and doing (Han *et al.*, 2007), and according to the viewpoints of Carper (2004), nursing is composed of four patterns of experimental knowledge (the science of nursing), aesthetics (the art of nursing), personal knowledge, and ethics (moral knowledge) (Freshwater and Stickley, 2004). Moreover, some researchers have claimed that emotional intelligence is a core component of the art of nursing (Bulmer-Smith and Profetto-McGrath, 1624). Emotional intelligence in traumatic situations helps motivate individuals, controls impulsive behavior, and prevents damage to rational thinking (Yoo *et al.*, 2013). Behnke and Greenan (2011) believed that in a general view, emotional intelligence consists of the individual's ability to use the knowledge acquired, abstract thinking, problem solving, as well as interpreting and managing the personal's responses in specific situations (Behnke and Greenan, 2011). Also, Mayer (2000) has stated that the people with high emotional intelligence tend to be organized, intimate, successful, motivated, and optimistic people (Mayer, 2000).

There has been a fundamental change in some psychologists' frames of mind which focuses on a branch of psychology called perfectionism psychology, health psychology or positive psychology (Schultz, 1990). The optimal goal of this approach is the identification of different constructs and practices which ensure the human fulfillment and well-being. Among these skills, resilience has a special place in the fields of evolutionary psychology, family psychology, and mental health (Campbell-Sills L, Cohan S, Stein MB, 2008). Resilience is defined as an ability based on which people are able to pursue their objectives in spite of the frustration, sorrow, life's contradictions and even the positive events, advancement and taking more responsibilities (Siebert, 2009). Moreover, psychological resilience has considered as an effective coping and adaptation even though it is accompanied by loss, hardship, or sorrow (Singh and Yu, 2010). Some factors like resilience and emotional intelligence may moderate the bunch of stress and lead to better problem salving by mankind. Actually, the ability to integrate emotional information into cognitive activities is important to effective functioning across the life course and job (McLafferty *et al.*, 2012). One of the situations in which an individual can develop their emotional skills is the workplace, like a hospital. In addition, some researchers have noted that benefiting from emotional intelligence integration in academic study gives nurses the chance of self-perception and creation of the best way to communicate with others (2004). Bar-on in 1997 also noted that developing the coping strategies is the most important issue in the subject of emotion control (Bar-On, 1996).

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The theory of emotional intelligence and its related studies in psychology and business literature have appeared for more than fifteen years, it is new to discuss the subject of emotional intelligence in the nursing field (2009). This study attempted to assess whether emotional intelligence predicts the resilience in nursing staff and vice versa. Based on the findings of this study can change these psychological capitals (emotional intelligence and resilience) purposefully to enhance the level of organization quality through the educational programs.

MATERIALS AND METHODS

Methods

Participants: In a cross-sectional study, 162 nursing staffs were selected by accessible method based on the personnel list in intensive care units (ICUs) and coronary care units (CCUs) at the Tehran Heart Center in the year 2012.

Study measurements: Data was collected using two questionnaires: (a) Bar-on questionnaire (revised in 1997): An overall scale for emotional intelligence, 5 combined scales and 15 sub-scales were devised (Bar-On, 1997). Five domains of Bar-on emotional intelligence skills consist of intrapersonal skills, interpersonal skills, compatibility, stress management, and general mood. Internal consistency of this tool was provided by Cronbach's coefficient alpha as 76% indicating acceptable reliability. For subtests, the coefficient ranged between 0.69 (for social responsibility) and 0.86 (for self-esteem); (b) Connor and Davidson's resilience scale (CD-RISC) (2003): It is a self-reporting scale of resilience and mental flexibility in which a higher score indicates more resilience. This scale includes items which show challenge, commitment and control, along with other features of resilience such as goal setting, patience, faith, tolerance of negative emotion, and sense of humor. In addition, some other factors such as positive evaluation, spirituality, active coping, self-efficacy, meaning/learning, and accepting the limits are measured by resilience scale. This scale consists of 25 items which was devised by Connor and Davidson (2003) to measure the power of dealing with pressure and threat (Connor and Davidson, 2003). The reliability of this tool was also obtained appropriately with the Cronbach's α coefficient value of 0.94 (Pietrzak *et al.*, 2010).

Statistical analysis: The data were presented as mean \pm SD for quantitative variables and number (percentage) for categorical variables. Normality of the distribution of variables was examined by the Kolmogorov-Smirnov test. Correlation between the quantitative variables was examined by the Pearson's correlation coefficient test. Multivariable linear logistic analysis was employed to determine variables which predicted nurses' resilience. For analysis, SPSS software (version 19.0) for windows was used. A p-value of ≤ 0.05 was considered as significant.

RESULTS AND DISCUSSION

Results

After collecting and analyzing the data, it was found that the frequency distribution of scores on the five components of emotional intelligence and the resilience scores were normal. The descriptive indicators of Emotional Intelligence Questionnaire scores and resilience are presented in Table 1. The mean scores of emotional intelligence and resilience ranged from 40.62 for stress component to 113.04 for intrapersonal skills.

The correlation matrix of variables' scores was calculated. As shown in Table 2, all components of emotional intelligence have a strong positive association with nurses' resilience ($p < 0.001$). In other words, with increasing the nurses' emotional intelligence scores, their resilience scores also increase and vice versa. In order to determine the contribution of each component of emotional intelligence in predicting the nurses' resilience, a multiple regression analysis method was used with respect to the satisfied assumptions of linearity, normality, variance constancy, and multiple-linearity. Assuming that R^2 is the percentage of shared variance of components of emotional intelligence in predicting the nurses' resilience, the results indicate that all the components of emotional intelligence predict 62% of the variance in nurses' resilience.

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The results of the table 3 show that among the sum of the components of emotional intelligence, intrapersonal skills ($p = 0.005$), the general mood ($p = 0.001$), and stress management ($p = 0.014$) are able to predict resilience of nurses positively and significantly. It is indicated that the component of general mood ($\beta=0.380$) have the highest impact on explicating the resilience of nurses.

Discussion

Kumpfer (1999) investigated this question: “is a resilient person necessarily intelligent?” and found that intelligence was a key factor in resilience (Kumpfer, 1999). Researchers in one study entitled “the relationship between emotional intelligence and resilience in university students” stated that the total score of emotional intelligence and its sub-scales had a positive and significant relationship with resilience (Javadi and Prow, 2008). Another similar study showed the importance of resilience and emotional intelligence in the university setting, and concluded that a person matures could better cope with stress (McLafferty et al., 2012). The research of Bulmer-Smith and colleagues (2009) also emphasized that training nurses in emotional intelligence improved their efficacy (Bulmer-Smith and Profetto-McGrath, 2009).

Table 1: Descriptive indicators of emotional intelligence and resilience

Emotional intelligence	Number	Mean	Standard deviation	Minimum	Maximum
intrapersonal skills	162	113.04	14.79	67	146
interpersonal skills	162	75.63	7.51	49	89
Compatibility	162	65.59	8.06	43	84
Stress management	162	40.62	8.91	18	59
general mood	162	47.23	7	21	60
Resilience	162	91.36	13.77	49	120

Table 2: The results of correlation coefficient for the components of emotional intelligence and resilience of nurses

	Resilience	Intrapersonal skills	Interpersonal skills	Compatibility	Stress management	General mood
Resilience	1					
intrapersonal skills	0.704*	1				
interpersonal skills	0.374*	0.388*	1			
Compatibility	0.625*	0.681*	0.421*	1		
Stress management	0.604*	0.580*	0.225*	0.636*	1	
general mood	0.739*	0.767*	0.470*	0.646*	0.596*	1

$n=162$ $P\text{-value} < 0.001$

Table 3: Regression coefficients for predicting nurses' resilience

Variable	Statistic b	Standard error	r	Statistic t	Level of significance
fixed	6.143	7.622		0.806	0.422
Intrapersonal skills	0.219	0.078	0.235	2.817	0.005
Interpersonal skills	0.041	0.105	0.022	0.390	0.697
Compatibility	0.174	0.130	0.102	1.331	0.185
Stress management	0.264	0.106	0.171	2.493	0.014
General mood	0.747	0.166	0.380	4.493	0.001

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The findings of some researches also indicated the impact of emotional intelligence on mood and its regulation and management (Ciarrochi *et al.*, 2000; Aspinwall, 1999). Emotional intelligence is able to influence the success of employees for creating an appropriate interaction with colleagues in workplace, the strategies they use to manage conflict and stress, and overall job performance. Furthermore, stress tolerance, leadership potential, and supervisor ratings of interpersonal facilitation in employees with higher emotional intelligence can be better than those with lower emotional intelligence (Brackett *et al.*, 2001).

According to the results obtained in this study, it can be suggested that nurses who have higher levels of emotional intelligence, have greater resilience too, and vice versa.

Emotional intelligence can be trained for the better and it leads to success in workplace. It leads to use of the abstract thinking, problem solving, as well as interpreting and managing the personal's responses in specific situations. Besides resilience is not a passive acceptance of conditions, rather than resilient people try to make an effort to be consistent with the conditions and gradually control the conditions. Therefore, by promoting and training emotional intelligence and resilience in nurses, can change these characteristics purposefully to enhance the level of organization quality through the educational programs. Proficient nurses need to increase their resilience and enjoy the benefit of their emotional intelligence to be able to deal with difficult situations, manage the crisis and solve the problems (by implement direct or problem – oriented coping strategies). As a result, they will be able to increase their efficiency and better adaptability to the environment. They can have more Cooperative with different groups in hospital.

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Conflict Interest

The authors declare that they have no competing interests.

Contributions

Study Design: FB, FH

Data Collection and Analysis: FH, ARK

Manuscript Writing: FH

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