THE EFFECT OF TRAINING EMOTIONAL INTELLIGENCE ON OCCUPATIONAL PERFORMANCE AND PUBLIC HEALTH OF NURSES WORKING IN HOSPITALIZATION WARDS OF SHAFA HOSPITAL OF RASHT CITY

Fateme Rangrazian, Shohreh Ghorbanshiroodi and Javad Khalatbari
Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran
*Author for Correspondence

ABSTRACT
Nurses are one of the main elements in medical-health care services systems in every country whose occupational requirements oblige them to directly deal with public health of community members. The present study aims at determining the effect of training emotional intelligence on occupational performance and general health of nurses working in various wards of Shafa hospital of Rasht city. This is a trial pretest-posttest survey with control and experimental group. The statistical sample of study includes all nurses working in wards of Shafa hospital of Rasht in 2012-2013 constituting 280 individuals. The instrument used in this study is Motowidl and Van (1994) occupational performance questionnaire and general health questionnaire (GHQ-28) (1972). From the statistical sample, 200 individuals were randomly selected, after completing questionnaires, 30 subjects with score above cutting line 26 in general health questionnaire and scores below cutting line 54 in occupational performance questionnaire were randomly placed in two 15-member control and experimental groups. The experimental group received two training sessions of emotional intelligence for one month, two sessions in a week and the control group received no training. Finally, posttest was performed for both groups. Data was analyzed using MANOVA. The results indicated that teaching emotional intelligence has meaningful effect on occupational performance and general health in a mixed variable with effect size of 0.68 (P<0.001). Furthermore, teaching emotional intelligence is effective on occupational performance with effect size of 0.39, physical signs with effect size of 0.38, anxiety symptoms with effect size of 0.25, social performance with effect size of 0.22 and depression symptoms with effect size of 0.29. Teaching emotional intelligence can improve occupational performance and general health.

Keywords: Training Emotional Intelligence, Occupational Performance, General Health, Nurse

INTRODUCTION
The personnel of hospitals are individuals who directly and closely are in contact with all community members. This close relation doubles their responsibility toward the health and life of individuals (Barret and Yates, 2002). From hospital occupations, nursing is a sample of occupations where the individual spends long hours with patients. Communicating with patient leads to expression and discharge of emotional reserves of nurse and consequences like distortion of quality of patient’s care and reduction of patient’s satisfaction (Aziz and Hosseinin, 2004). Nurses are one of the main elements in medical-health care services systems in every country (Marbaqi and Harv, 1995) whose occupational requirements oblige them to directly deal with public health of community members and made their services directly influence on health and disease consequences and its related indices (Lane and Mc Donald). They are considered due to offering the greatest direct services to patients, in one hand, and their inevitable role in quality of care of patients, on the other hand, with the aim of promoting the quality and efficiency of patients care (Dargahi, 2007).

Working environment and the related activities to nurse’s jobs are threatening factors which create anxiety and its resulting harms. These stresses could have negative effect on mental goodness and performance of nurses (Mayer and Salovey, 1990). Emergency situations, patient’s care, lack of required facilities and instruments, mental-emotional pressures of hospital environments, dealing with patient’s
problems including refractory or acute diseases and death, dealing with anxious or grieved families of patients, unpredictability of their type of activity, continuous evaluation of their performance by colleagues, physicians and even patients, long working hours, night work, physical activities, few holidays, short times for social communication with friends and families, lack or insufficiency of social support network and increase of people expectation, not benefitting from clear occupational future are among the stressful factors and mental and performance tensions on nurses. This situation leads to weakness of physical performance and mental capacity of nurses, reduction of occupational performance and consequently increase of probability of working errors (Rahim, 2004). Competent performance of nurses requires benefitting from desired confrontation methods and items like emotional intelligence and believes related to self-efficacy. These factors are among effective factors on the nurse-patient relation (Shaker, 2010).

Emotional intelligence is a set of linked cognitive and emotional abilities (Siarochi et al., 2001; quoting from Siarochi et al., 2002) which helps individuals to be fully aware of those feelings which facilitate thoughts by perception, evaluation and expression of emotions (Mayer et al., 2001). Moreover, it helps them make rational decisions and show responsible behavior by making balance between their own thoughts and emotions (Berkering et al., 2008). In other words, emotional intelligence plays a great role in formation, expansion and continuance of human interactions and one of the main factors of emotional intelligence is how and when individual uses communication strategies (Mosavi, 2009). Emotional intelligence is considered as a supportive factor against work pressures. Emotional intelligence reduces the negative effects of occupational pressures by managing emotions and feelings of employees and facilitating their positive feeling and strengthens them against early exhaustion which has mutual relation with mental health.

According to World Health Organization (WHO, 1994; quoting from Atash, 2007), mental health is the ability to have balanced and coordinated relation with others, changing and correcting individual and social environment, solving contrasts and personal inclines logically, fairly and properly (quoting from Shraga and Shirom, 2009). According to WHO, emotional intelligence has positive relation with mental health (Zerinder, 2010). Kumar et al., (2012) study on the employees of telephone center in India confirmed the results of previous studies on that emotional intelligence is along with better mental health and less exhaustion. Fakhri et al., (2012) showed that there is direct meaningful relation between general health and emotional intelligence and creativity.

The results of most studies show that emotional intelligence is not a fixed and unvaried ability, it has the ability to grow and change. Moreover, it is possible to increase it through special training and improve its qualitative and quantitative level (Slaki and Cartwright, 2003; Ulutas and Ömeroglu, 2007; Bar- En, 2006) since individuals can have control over their emotions and especially they can change emotional reactions and attitude about events (Miller and Nikerson, 2008).

Farh et al., (2012) showed in a sample including 212 individuals from different organizations that individuals who have received training of emotional intelligence have higher cognitive abilities and understand their occupational requirements and complexities and have better management in the related areas to their occupation. Birami study (2008) has been done with the aim of investigating the efficacy of training emotional intelligence on self-expression, self-efficacy and general health which indicate the meaningful effect of these trainings on dependent variables.

Although human being are different due to natural and genetic reasons in regulation and expression of emotions, learning through teaching can lead to increase of abilities and skills of individuals at any level. Thus, concerning the definition of public health, knowing effective factors on it plays a great role in promotion of mental health of individuals and quality level of offered services (Soltani, 2008). Concerning the significance of promotion of mental health of nurses and its role on the quality of nursing services, the present study seeks to respond to following question:

Is training emotional intelligence effective in occupational performance and general health of nurses working in wards of Shafa hospital of Rasht?
MATERIALS AND METHODS

The present study is a trial one with two-group pretest-posttest plan. The statistical sample of this study includes all nurses working in various wards of Shafa hospital of Rasht in 2012-2013 (N=280). Since this is a trial survey and requires control of distracting variables, for selection of sample group, first 200 individuals were randomly selected from the personnel of different wards of Shafa hospital and filled occupational performance and general health questionnaires. Then, 40 subjects with scores higher than cutting line (26) in Goldberg general health questionnaire and scores below cutting line (54) in Motowidlo and Van (1994) occupational questionnaire were randomly selected and placed in two 15-member control and experimental groups.

After selecting statistical sample and specifying control and experimental groups, the experimental group was trained for 8 sessions in emotional intelligence. The training sessions were performed as follow:

First Session: Introduction of members, familiarization with emotional intelligence and its elements and self-awareness.

Second Session: Familiarization with the concept of self-esteem and using its promotion strategies, deviated thoughts and methods of positive thinking, definition of self-expression, the benefits of having self-expression skills, promotion strategies of self-expression and listening skill.

Third Session: Familiarization of members with the concept of autonomy and self-actualization and the ways to achieve them, familiarization with sympathy and its role in communication, providing the strategies for achieving it including domination of body language.

Fourth Session: Familiarization of individuals with social responsibility and its significance in promotion of personal and social growth and familiarization with communication skills and providing solutions for effective communication and investigating the stages of an effective interpersonal relation.

Fifth Session: Familiarization with stress, negative thinking and its consequences and providing coping strategies to control it, the role of negative believes and illogical in stress, explaining the coping methods with stress and required actions in control of stress.

Sixth Session: Familiarization with problem solving and introducing strategies for problem solving and decision making including: definition of problem solving, confrontation, responsibility and coping with problems, the specification of strong individuals in problem solving, steps of problem solving and focusing on problem or concentration on its solution.

Seventh Session: Familiarization with reality test and flexibility.

Eighth Session: Familiarization with optimism and happiness, end of training sessions.

Research Instrument

GHQ-28: this questionnaire includes 28 items and has been constructed by Goldberg and Hiller through factor analysis. It has four scales that measure physical signs, anxiety, depression and disruption in social communication, each scale includes seven items. In this test, everyone would receive 5 score, 4 scores for subscales and one score which is the sum of subscales and is considered as overall score. To estimate the reliability of GHQ, these studies become meta-analytic and the results indicated that the average sensitivity of GHQ24 is 84% (between 77% and 89%) and the mean specificity is 82% (between 78% and 85%) (Williams and Goldberg, 1987). The reliability coefficient of Persian version of GHQ with 28 items has been estimated to be 0.91 through retest method with time interval 7 to 10 days on a group including 80 members. This is meaningful in error level of 0.001 (Palahang, 1995). He has reported the overall reliability coefficient of this test as 0.88 and the reliability coefficient of subscales as 0.50 to 0.81. The reliability of this questionnaire has been obtained through internal congruency method (Cronbach's Alpha) for physical symptoms as 0.852, for anxiety and insomnia as 0.78, distortion in social performance as 0.79 and acute depression as 0.91 and the overall reliability of 0.85 (Bahmani and Asgari, 2006).

Occupational performance questionnaire: this questionnaire has been constructed by Motowidlo and Van (1994) with 6 items and 3 subscales. The first two questions are related to general occupational performance, the second two items deal with interpersonal occupational performance and the last two items deal with technical occupational performance which is responded to base on Likret 10-point scale from 1 (weak) to 10 (excellent). Motowidlo and Van (1994) have reported Cronbach's Alpha of this
questionnaire as 0.66 for general occupational performance, 0.71 for technical occupational performance, 0.71 for interpersonal occupational performance and 0.9 for the whole questionnaire. The translation and preparation processes of this questionnaire have been performed by Khaksar and Fakhri (2007), he also performed the normalization of this test. The statistical sample includes all employees of Morche Khort in Isfahan province. He used construct validity to determine the validity of questionnaire. The correlation coefficient of each question with overall score of questionnaire was above 0.6 in Khaksar study (2007). Furthermore, the correlation of this questionnaire was obtained between 0.64 to 0.73 (P<0.001) by evaluation of performance by supervisor as an evidence for concurrent validity.

RESULTS AND DISCUSSION

Result

The present study has been carried out with the aim of investigating the role of emotional intelligence training on occupational performance and general health of nurses working in various wards of Shafa hospital in Rasht. Concerning the research plan, MANCOVA was used for analysis of data and the results are presented in the below table.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Experimental group</th>
<th>Control group</th>
<th>MANCOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test M</td>
<td>Post-test M</td>
<td>Pre-test M</td>
</tr>
<tr>
<td>Physical symptoms</td>
<td>13.45</td>
<td>10.8</td>
<td>13.56</td>
</tr>
<tr>
<td>Depression symptoms</td>
<td>18.87</td>
<td>12.3</td>
<td>18.44</td>
</tr>
<tr>
<td>Social performance</td>
<td>17.64</td>
<td>11.5</td>
<td>17.77</td>
</tr>
<tr>
<td>Depression symptoms</td>
<td>14.93</td>
<td>10.95</td>
<td>14.49</td>
</tr>
<tr>
<td>Occupational performance</td>
<td>42.18</td>
<td>51.1</td>
<td>42.59</td>
</tr>
</tbody>
</table>

As indicated in table 1, after modifying the scores of experimental and control groups according to above table and based on Benferron balanced Alpha (0.01), it would be clear that training emotional intelligence is effective on occupational performance and general health (P<0.01).

Table 2: The test of combined effect size based Wilk's Lambda

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Df1</th>
<th>Df2</th>
<th>Sig</th>
<th>η</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilk's Lambda</td>
<td>0.324</td>
<td>12.11</td>
<td>5</td>
<td>29</td>
<td>0.001</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Concerning the results of above table and based on Benefron balanced Alpha (0.01), it is observed that the effect of training emotional intelligence on occupational performance and general health in a combined variable Partial η= 0.68, Wilk's Lambda= 0.324, G (35,2)= 26.9 has been meaningful (P< 0.001). That is, training emotional intelligence is effective on occupational performance and general health of nurses working in different wards of Shafa Hospital and the square parabola shows the size of this effect as 0.68. Furthermore, the results of table (1) show the effect of training emotional intelligence on each variable based on Benefrom balanced alpha (0.01) as following. Training emotional intelligence is effective on occupational performance with F (1, 33) = 21.87 and effect size (0.39) (P<0.001). Furthermore, the results related to effect of training emotional intelligence on subscale of general health includes the following: training emotional intelligence is effective on physical symptoms with F (1, 33) = 21.15 and effect size (0.38) (P<0.001); training emotional intelligence is effective on anxiety symptoms with F (1, 33) = 19.49 and effect size (0.25) (P< 0.003). Training emotional intelligence is effective on...
social performance with $F(1, 33) = 9.38$ and effect size (0.22) ($P < 0.004$). Training emotional intelligence is effective on depression symptoms with $F(1, 33) = 13.95$ with effect size (0.29) ($P < 0.001$).

**Discussion**

The results obtained from data analysis showed that training emotional intelligence is effective on occupational performance and general health of nurses working in wards of Shafa hospital of Rasht in a combined variable with effect size (0.68). Moreover, it is effective on each variable including occupational performance with effect size (0.39), physical symptoms with effect size (0.38), anxiety symptoms with effect size (0.25), social performance with effect size (0.22) and depression symptoms with effect size (0.29).

In the studies which have been carried out so far, the relation between the constructs of emotional intelligence and occupational performance has been shown (Khaksar, 2007). Based on the theories mentioned on the relation between emotional intelligence and occupational behaviors, emotions are among those variables which can be involved in most working behaviors in form of collaboration focused on more optimum performance. Since in most working environments, especially in hospitals which are representative of a collaborative work, individuals are not able to work independently and should act through collaboration to achieve the general aims of organization. Thus, it seems that individuals with related abilities to emotional intelligence theory, such a problem-solving, emotional self-awareness …, have higher ability in displaying optimum occupational performance. In similar studies (Safari, 2009), it has been specified that among the elements of emotional intelligence, self-awareness, self-motivation and social skills have meaningful relation with occupational performance. Thus, training emotional intelligence directs individual toward better occupational performance. Concerning reduction of workplace moodiness, Bennett and Sawatzky (2013) asserted that nurses who benefits from higher emotional intelligence have higher awareness of their feeling and show less negative behaviors such as moodiness and tenacity which leads to healthy work place in hospital offering beneficial clinical services. In Littlejohn study (2012), it was shown that nurses and other health care providers with lower emotional intelligence are more emotionally suffering in their interactions and show more improper and aggressive behavior than their colleagues. Furthermore, these individuals have lower possibility for progress and experience more stress in work place. These results are in line with the results of present study. Miola (2010) study is not in line with this study from one aspect. Emotional intelligence hadn't higher effect on occupational performance of his sample.

In explaining the above finding, it is possible to say that emotional intelligence leads to positive incline to work and occupation and the individual's performance; moreover, his internal and external relations improve. Furthermore, emotional intelligence has high positive effect in formation of working environment. High emotional intelligence acts as facilitator and makes individuals and employees to perform their tasks much easier since they have source of sympathy and support and this feeling that their work is easy leads to their satisfaction.

The other result obtained from the study indicates the positive effect of emotional intelligence on physical symptoms of nurses working in wards of Shafa hospital. This result is in line with the findings of Mayer and Salway (2000). The reason for this relation can be expressed in this way that components of emotional intelligence such as management of emotions, evaluation of self and other’s emotions, sympathy and emotional flexibility are the specifications which are present in healthy individual more than others.

Control of emotions in fact leads to more mental calmness in individual and reduces fatigue. Furthermore, emotional flexibility gives this possibility to the individual to show proper reactions in difference situations in life which can lead to reduction of anxiety and guarantee the mental-physical health of individual. These individuals see stressful events as a challenge and opportunity for learning rather than a threat for security. Thus, they experience less physiologic and emotional distortions. In this plan, individuals learn to have proper and constructive relation with others through restraint instead of showing impulsive reactions or physical and mental harms to themselves. Higher emotional intelligence provides this possibility for individual to be able to deal with management, cognition, regulation and evaluation of...
emotions in unconscious realm. Based on this, it is possible to say that the one who has higher emotional intelligence uses confronting strategies with proper and developed defensive mechanism in stressful and difficult situation, thus, his compatibility and health increase.

Another result showed that training emotional intelligence is effective on social performance of nurses working in various wards of Shafa hospital. It is possible to say that this effect happens through making individuals familiar with interpersonal relationship skill, basic social skills and special social skills, knowledge of verbal and nonverbal components of communications, internal transfer of individuals, interpersonal communication, awareness and knowledge of the specifications of a good relation (Pajjarz and Shanek, 2005).

Furthermore, it is believed that emotional intelligence affect general health through components of understanding interpersonal relations and sensitivity against communicating with others. In teaching the items of emotional intelligence, in addition to practicing communication skills (inner and interpersonal), the individual’s ability to create and maintain social networks increase which helps general health. Since one of the main components of emotional intelligence is to offer desired social behaviors according to environmental changes, nurses who are one of the main members of treatment team, require benefiting from proper emotional intelligence for communicating with patients and training them and their families. In addition to familiarization with the concepts of emotional intelligence and using its strategies such as control of feelings and emotions, nurses are able to have effective communication with patients.

The results of study also showed that training emotional intelligence is effective on depression symptoms of nurses working in various wards of Shafa hospital of Rasht. According to Davnez studies (2002), individuals with higher emotional intelligence are better able to get along with problems through differentiating various stress sources and distinguishing the content of issues related to self and others. Moreover, in this way, they are better able to spend less time on inefficient cycle of thoughts that leads to depression. Thus, training emotional intelligence to individuals could create the psychological capacity of differentiation, expression and confrontation with problems and their life events in individuals, which later on affect depression.

In overall, promotion of emotional intelligence leads to better occupational performance and general health in nurses. The mechanism of this improvement could be considered in better ability to control emotions, better interpersonal interactions, better restraint, higher self-esteem and higher motivation for achieving objective and task doing.

Emotional intelligence as a psychological factor is related with health since in emotional intelligence, there are skills which facilitates processing of emotional information and leads to thought coherence. Thus, individuals who pay attention to their own feelings, identify and understand them and reconstruct their moods, can minimize the effect of stressful events and easily confront with them, thus they are benefiting from higher physical and mental health. In other words, the components of emotional intelligence including control of emotions, evaluation of self and other’s emotions, sympathy and emotional flexibility are the features which are more present in healthy individuals than others. Control of emotions leads to higher mental clam in individual and reduces the fatigue. Furthermore, emotional flexibility gives this possibility to individual to react properly in different life situations, which can lead to reduction of anxiety and guarantee physical-mental health of individual. Concerning the results of the study and the effect of training emotional intelligence on occupational performance and general health, it is recommended to consider training emotional intelligence to new-entering personnel to hospital.

REFERENCES
Research Article


Fakhri M, Mirzaian B and Bani Hashemian K (2012). The correlation of general health and emotional intelligence and creativity in students of medicine, Islamic Azad University, Sari Branch. Qom University of Medical Sciences Journal 6(2) 53-57.


Dargahi H, Gharib M and Goodarzi M (2007). Quality of work life in nursing employees of Tehran university of medical sciences hospitals. Medical Journal of Faculty of Nursing and Midwifery (Hayat) 13(2) 13-23 [InPersian].


Research Article


