

The Effect of Emotional Intelligence Training on the Quality of Working life in Nurses

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Abstract: Emotional intelligence is a social skill and an important component of communication. It can be expressed as the ability to correctly identify emotions, to make proper decisions and to solve problems. Based on the conducted researchs, emotional intelligence is an important factor in achieving success in life including occupation and education. This study was designed and implemented to determine the effects of emotional intelligence on the quality of nurses' working life. This quasi-experimental study was conducted in 2015 on 70 of hospital nurses. Samples were randomly collected and divided into 2 groups (35 nurses in each group) and training sessions of emotional intelligence were conducted. Before the first session and after session 12, the quality of working life was measured by Walton's standard questionnaire of working life in both groups. The average age of the control and the experimental group was 30.83 ± 3.785 and 29.54 ± 3.407 respectively. Quality of working life in the experimental group had significant positive changes in comparison with the control group ($P < 0.001$) after the completion of training sessions. Based on the results, nurses' quality of working life improved after training. It seems that it is possible to improve university students and nurses' quality of working life by holding special workshops of emotional intelligence in training centers.

Key words: Emotional intelligence training, quality of working life, nurse.

1. Introduction

Emotional intelligence is a social skill and an important component of communication [1, 2]. In fact it can be expressed as the ability to correctly recognize one and other's emotions and then understanding, evaluating, and using it to make proper decisions, to solve problems and to have a better life [2, 3]. The concept of emotional intelligence (EI) was first expressed by Salovey and then it was developed by Goleman [4]. Numerous definitions of emotional intelligence have been provided, but in short, it is how people deal with good and bad events of life and their ability to make proper decisions in critical situations [5] which is composed of four main skills including self-awareness, self-management, social awareness and relationship management, two first components

are focused on the person and two second components are focused on the person's relationships [6-8]. Based on the conducted studies, emotional intelligence is an important factor in achieving success in life including jobs and education [9]. This skill creates more sustainable relationships and logic-based approaches when dealing with problems; it also increases individual's performance in critical situations. Walton defines quality of work life as staff reaction against their jobs, particularly its necessary consequences in satisfying job requirements and mental health [10]. Quality of working life is one of the most important issues in any organization [11] in fact it is a multi-dimensional structure including concepts such as welfare and health services, incentive programs, job fitness, job security, considering the role of the individual in the organization, providing growth and development, participation in decision-making [12].

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Maintaining and developing the nursing employee is of the greatest challenges facing hospitals and public health agencies. Particularly in most cases the quality of health care is assessed with the quality of nursing [13]. According to socio-technical systems, assessing the quality of nurses' working life (QNWL) is focused on identifying opportunities to improve the work and working environment until organizational objectives are achieved. Moreover, some evidence indicates that improving working life is required for productivity improvement [14]. Literature related to the quality of working life is limited and more research in this area has been associated with job satisfaction [15]. In a study that was conducted on nurses working in military hospital, the average score of nurses' quality of working life was $1/6 \pm 66/1$ which 81% of them had average quality of working life, in 13% of them quality of working life was low and only 6% of them had a high quality working life [16]. In a study conducted on nurses of training hospitals of Urmieh' University of Medical Sciences, working life quality of 30.9% of nurses was low, 67.6 of nurses had average quality of working life and only 1.5% of nurses had favorable level of working life quality [17]. In some studies the relationship between emotional intelligence and quality of work life has been assessed but this subject has not been studied in nurses yet. In a study, the average of emotional intelligence in official and tuition teachers were 129.22 and 132 respectively and the average quality of their working life was 54.740 and 50.060 respectively, also there was a significant relationship between emotional intelligence and quality of working life of them [18]. Also in a study conducted on the staff of Jondi Shapoor university of Ahvaz and school principals of Khoramshahr, it was observed that there was a positive and significant relationship between emotional intelligence and the quality of working life [19, 20].

2. Aim

This study aimed to determine the effects of

Table 1 The content of emotional intelligence program sessions.

Sessions	Context of each session
1	Introduction and recognizing of emotions
2	Awareness of own emotions
3	Identify and awareness about emotions' causes
4	Understanding the consequences of emotion and decision making
5	explaining the methods of emotions' management
6	Managing own emotions and self-assertiveness
7	Control and regulation of other's emotions
8	Management other emotions and problem solving
9	Empathy and how to deal with other's emotions
10	Training about interpersonal relationships and coping with stress
11	Social awareness and own contribution for change
12	Summing up of the previous sessions and give recommendations

emotional intelligence on the quality of nurses' working life.

2. Methods

This quasi-experimental study was conducted on nurses of Mazandaran University of Medical Sciences in 2015. After confirming this study in the ethics committee of Mazandaran University of Medical Sciences, a pilot study was carried out on 30 nurses with the same quality of the original study. Based on the results, 70 individuals were selected as the study's sample (with confidence of 95% and test power of 80%). After that, nurses were randomly selected from Imam Khomeini Hospital (n = 23), Fatemeh Zahra Hospital (n = 17) and Bou-Ali Hospital (n = 30). The inclusion criteria involved the age range of 24 to 35 years, the absence of acute and chronic physical and mental illnesses (examined by a psychologist), no drug use and having full consent and exclusion criteria included all events preventing the continuation of the study (i.e. physical and mental illnesses) (none of the samples exit the study). The samples were randomly divided into two 35-member groups (experimental and control), at first 70 random numbers between 0 and 1 were made by a computer and then were printed automatically. An envelope containing a number was

given to each nurse, people who had numbers lower than 0.5 were put in the experimental group and nurses with numbers higher than 0.5 were assigned to the control group. After that a consent form was obtained from subjects to begin the study. Some of the parameters of the consent form include ensuring of non-disclosure of information, withdrawal from the study at any time based on the request of subjects and giving the results to participants. After describing the study's goals, emotional intelligence was taught to the experimental group by a psychologist using standard checklist of emotional intelligence (according to Table 1) [21]. The training period lasted for 12 sessions (2 sessions each week) and each session was at least 1 hour [21]. In order to continue the process of training, a booklet was given to the participants. booklet contents includes issues such as the definition and recognition of emotional intelligence, the benefits of strengthening emotional intelligence in life, stress management techniques, the concept of character and excitement, etc. According to Table 1, each of the mentioned dimensions was taught in two training sessions by a psychologist. Before and after the full course of training, quality of work life was assessed in both control and experimental groups by Walton's standard questionnaire. *Walton's quality of work life questionnaire* [22] pay attentions to adequate payment, safe and healthy workplace, providing ongoing opportunities for growth and security, following the rules in the occupational organizations, Social affiliation of the work life, integration and social cohesion in the occupational organizations, providing immediate opportunities for the development and use of human capabilities. The questionnaire composed of 32 questions that scored based on 5 point Likert-scale (from 1 to 5). Scores lower than 60 show low, 60-120 an average and scores higher than 120 indicate high quality of work life. Walton reported that the reliability of this test has been 0.88 [23]. Ali Mahdad in his study determined the internal confidence of this standard tool to be 0.87 [24]. The reliability of this questionnaire in

present study was assessed on 15 nurses and Cronbach's alpha was measured to be 0.92. Kolmogorov-Smirnov test was approved normality of the data ($P = 0.867$).

3. Data Analysis

The analysis were performed using SPSS 21.0 (released 2007; SPSS for Windows, SPSS Inc., Chicago, IL, USA). Basic descriptive for quantitative variables was presented using mean (SD) and n (%) for qualitative variables. Chi-square test was used to determine the relationship between the main and demographic variables and also independent and paired t-tests were used to compare the variance of scores in a group and across groups before and after intervention. Significance level was considered at $P < 0.05$.

4. Results

In present study, 70 nurses with demographic variables that was showed in Table 2 were selected from 3 training- therapeutic hospitals and were divided into experimental and control groups. By performing Chi-square test (Table 2), there were no significant differences found considering gender, marital status, inadequate economic status, housing, education and working shifts in the both groups. The employment status of members of experimental and control groups was contractual (45.7% and 37.1% respectively) which had no significant difference across groups ($P = 0.483$). Nurses' scores of quality of work life are listed in Table 3 for each group. Also the two groups were not significantly different before the intervention. As an indicated in Table 3, emotional intelligence training in the experimental group had a significant positive effect on the quality of work life of nurses (< 0.001). Before the implementation of the training program in the experimental group, 33 (94.2%) of nurses had an average level of quality of working life and after completion of the training program all nurses gained higher scores. The results of paired t test in the intergroups comparison of experimental and control groups, before and after of training are reported in Table 4.

Table 2 Association of demographic characterize between groups.

Variable	Control	Experimental	P
Age	30.83 ± 3.785	29.54 ± 3.407	0.471
Sex	Male	10 (28.57%)	0.796
	Female	22 (62.9%)	
Marital	Married	8 (22.86%)	0.54
	Single	11 (31.42%)	
Economic efficiency	Bad	21 (60%)	0.271
	Intermediate	3 (8.58%)	
	Good	0	
	Well	30 (85.71%)	
Residence status	Private house	5 (14.29%)	0.54
	Rent house	35 (100%)	
Academic degree	BS.c	0	0.493
	MS.c	4 (11.42%)	
work Shift	Fixed	31 (88.58%)	1
	Non-fixed	27 (77.14%)	

Table 3 Comparison the OWLs scores in both groups.

variable	Control (Mean±SD)	Experimental (Mean ± SD)	P value
Pre test	87.17 ± 14.005	86.09 ± 14.762	0.753
Post test	87.14 ± 14.105	91.23 ± 15.251	< 0.001*

* $P < 0.01$.

Table 4 Comparison the OWLs scores, before and after of intervention.

Variable	t	Df	P value	95%CI
Control group	0.33	34	0.974	-1.740,1.797
Experimental group	-9.245	34	< 0.001*	-6.273,-4.012

* $P < 0.01$.

As an indicated in Table 4, there is a significant difference ($P < 0.001$) between pre test and post test of experimental groups based on nurses' quality of working life.

As shown in Figure 1, the average change occurred in the intervention group was significantly higher than the control group.

5. Discussion

Job is an important part of each individual's life and most of the awakening time is allocated to it. So, a high quality work life is a prerequisite for increasing satisfaction and empowerment of an organization's employees. High work quality is required in any organization to attract and retain the human resources

[25]. One important result of this study showed that emotional intelligence training had a significant positive effect on the quality of working life (< 0.001). Before the implementation of the training program, in the experimental group 33 (94.2%) of nurses had an average level of quality of working life and after training all nurses gained an average level of quality of work life with higher scores. Also the results of paired t-test in intergroups comparison of the experimental and control groups indicate that emotional intelligence training increases the quality of Work life up to 9.245 times ($P < 0.001$, CI: 4.012-6.273). In the study of Dehghan Nayyeri [26] and Habibzadeh [27] on nurses, most of them had average quality of work life (41.9% and 67% respectively), respectively which their results

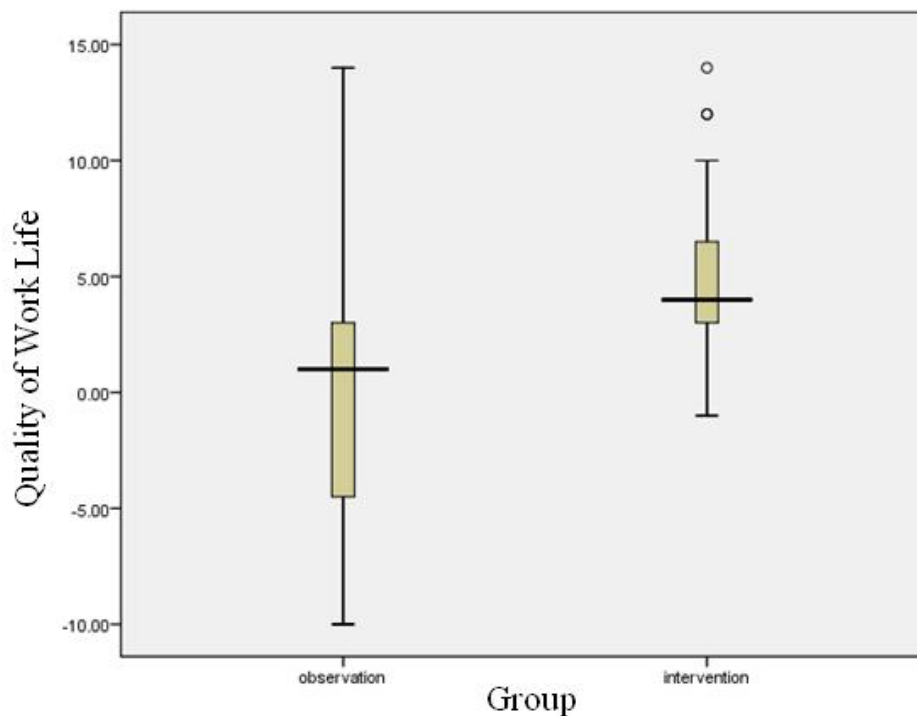


Fig. 1 Across groups changes scores of QWL.

are consistent with scores gained before the training in the present study. Sharareh Azarang and colleagues [28] reported that in their study, the quality of work life of most nurses (66.3%) was excellent. The probable cause of this contradiction can be a difference in the type of study and working environment of nurses. Karimi `study in Australia showed that emotional intelligence is effective on individuals' performance in the workplace but it is not a strong factor and promoting emotional intelligence reduces managers' stress and it improves their comfort. In O'Boyle's study, emotional intelligence has been considered a part of job performance, but not all of it, which is consistent with the present study [30]. In the past it was believed that when people enter the workplace, they need to forget their emotions and feelings but today various studies have found that emotional intelligence is effective in making decisions and finding reasonable causes and also it can improve the performance. Therefore its training can improve one of the most important parts of each person's life which is their job [31]. Another finding of the study showed

that age ($P = 0.471$), sex ($P = 0.746$) and marital status ($P = 0.54$) have no effects on the quality of working life in both experimental and control groups. In many of the studies, age and gender did not affect the quality of working life [25, 32]. In the present study, in two groups, there was no significant relationship among economic situation, residency status, level of education and working shifts. In the study of Meena, there was a significant relationship between economic status and quality of working life [33]. While in the study of Nowrouzi, there was no association between economic condition and working shifts [34]. The cause of this contradiction can be multifactor influence on the quality of work life and stress imported from around on the nurses which can change the quality of working life [35].

6. Conclusions

Based on the results of present study, the quality of work life of nurses improved after training. In seems that it is possible to improve the emotional intelligence level of university students and medical staff by

holding special workshops in training centers that help persons to have a better quality of work and performance.

7. Limitations of the study

The limitations of this study include the nature of education and probable relation of nurses with each other. The study design was quasi-experimental in present study. In this regard, because of the importance of this issue it is suggested that randomized controlled trials studies with more details be carried out in other parts of the country and the world.

Acknowledgments

The authors would like to thank all the nurses of Mazandaran University of Medical Sciences for their participation in this study. In addition, we wish to thank the Research and Technology Deputy and Student Research Committee of Mazandaran University of Medical Sciences for their financial supports. The plan code was 42 that is approved in 2015.

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