



# The Effect of Spiritual Intelligence Training on Communication Ability for Nurses

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Received 2019 April 16; Revised 2019 December 28; Accepted 2020 January 28.

## Abstract

**Background:** Effective communication in nursing is one of the requirements for having proper recognition of patient care and treatment progression. Considering that, spiritual intelligence can affect some human behaviors such as amnesty, humility, and wellbeing. The purpose of this study was to investigate the effect of spiritual intelligence training on communication skills of nurses.

**Methods:** This is a semi-empirical research study of pre- and post-test kind along with control group. Accordingly, 94 nurses were selected by available method and were then randomly divided into two groups of experimental and control. Both groups completed the demographic characteristics form and the questionnaire of Queendom communication skills. The experimental received 12 sessions of spiritual intelligence training within two months. One month later and immediately after the intervention, both groups completed the questionnaires for another time. The control group received no training. Data were analyzed using SPSS16 and descriptive and inferential statistics.

**Results:** Comparing the total mean scores of nurses' communication skills before the intervention, we observed no significant statistical difference between the two groups ( $P = 0.41$ ). The total mean scores for communication skills and two components of listening and regulating affections after the intervention were significantly higher for the experimental group ( $P = 0.001$ ,  $P = 0.001$ , and  $P = 0.03$ , respectively). The experimental group received significantly higher changes mean score before and after the intervention compared to the control group ( $P < 0.05$ ) (116.83; 120.11; 118.98).

**Conclusions:** According to the results, although spiritual intelligence has only improved the total score of communication skills and listening skill, we expect that effects of SQ on creating communication skill need more time and practice.

**Keywords:** Communication Skills, Spiritual Intelligence, Nurses

## 1. Background

Communication skills are a basic component of nursing and facilitate the development of a positive nurse-patient relation (1). Communication is a complicated process of transmitting and receiving verbal and non-verbal messages (2). Besides being of important patients' needs, effective communication is a vital side of nursing cares. This gives patients good information in regards to their diseases and types of treatment, and at the same time, brings better conceptions of patients' worries and mental supports, improves physical, mental and behavioral outcomes, and brings relief for patients (3). According to Smithers, identifying patients' problems, hospitalization in order to plan and deliver quality nursing care, and developing better work communication with the medical team

are enumerated as the advantages of communication (4).

Not making effective communication has been recognized as the most important reasons of not being aware of patients' mental-spiritual and social needs (5). On the other hand, lack of communication skills would also have a strong impact on patients' satisfaction (6).

Improving communication skills for nurses would, on one hand, raise their job satisfaction, and, on the other hand, help them make a positive change in the patients' clinical state and elevate their satisfaction (6-8). Several factors, including sex, sociocultural differences, roles and responsibilities, space and domain, physical and mental conditions and feelings, values, and environment affect communication. Research reviews have disclosed that spiritual intelligence can be effective in communicating with patients (9).

Spiritual intelligence (SQ) is a collection of capabilities, capacities and virtual resources applied to daily life in order to raise the persons' adaptability (10). Wigglesworth (11) defines the spiritual intelligence as an ability to behave along with compassion, kindness, wisdom, and keeping internal and external comfort regardless of conditions. King (12) refers to four major components of spiritual intelligence: critical thinking, personal meaning production, transcendental perception, and creating knowledge and awareness. Emmons (13) thinks that SQ composes of five major components including capacity to transcend, ability to experience deep intelligence, ability to spiritualize daily activity, ability to benefit from spiritual resources to solve problems, and capacity for devoutness. McSherry et al. (8), believes that SQ increases the power of flexibility and self-awareness to display more patience against life problems.

King (12), confirms the correlation between SQ and effective communication with others. The power of displaying good and right behaviors (e.g. forgiveness, remission, thankfulness, humility, endearment, etc.) is considered a component of spiritual intelligence (13). Such behaviors can give a rise to positive and constructive relationships between people and intensify the sense of trust and intimacy among them. In hospital settings SQ can help nurses communicate with their patients. Medical teams spend most of their time to improve the society's health. However, many societies do not consider that the physicians' and nurses' physical and mental health is also at risk because of continuously dealing with patients' pain and discomfort (14).

Strong SQ helps the medical team provide meaningful and purposeful services and better cope with work pressures (15). Rezaian et al. (9), disclosed that spiritual intelligence gave the chance of effectively communicating with patients and consequently satisfying them. SQ is acquired and grows by searching the true meaning of situations, raising questions and listening to intuitive or internal messages, thoughtfulness, developing self-awareness, taking lesson from mistakes, being honest to oneself (16, 17).

Given the role of communication skills in improving the quality of health and medical cares, the importance of communication in nursing profession, and as most studies descriptively show the correlation between SQ and communication skills, we did not find interventional research the effect of SQ on communication skills. Therefore, the researcher had to pose a hypothesis derived from these studies in the context of an interventional research aiming to determine the effect of spiritual intelligence training on communication skills for nurses.

## 2. Methods

This is a randomized controlled trial research study of pre- and post-test along with a control group aimed at finding the effect of spiritual intelligence training on nurses' communication skills.

**Sampling:** After receiving the legal permits from Birjand Medical Sciences University and referring to the nursing office, we reached the list of nurses working in Valiasr Hospital. Individuals having participation conditions were then engaged in the study. Accordingly, 102 nurses, in proportion to nurses available in any ward, emergency, special care, and general were selected by the available method. Eight nurses from both groups left the intervention because of family problems or their working shifts, and finally 94 engaged in the study. They were randomly divided into two groups of experimental and control by permuted block randomization. The entrance criteria included not being responsible as matron or supervisor, inclination to participate in the study, holding at least a bachelor's degree in nursing, not having participated in any spiritual intelligence workshop, not having participated in any communication skills workshop, not working in any of ICU, PICU, and NICU wards, or surgery room.

Both groups completed a demographic characteristics form (including information on age, sex, marital status, work experiences, the ward working in, education, employment conditions) and the Queendom Communication Skills questionnaire.

The Queendom Communication Skills questionnaire has been developed to assess adults' communication skills. This scale includes 34 questions graded on Likert scale from one (never) to five (always). The score ranges from 34 to 170. Some phrases are scored inversely according to their content and nature. Its five secondary communication skills include listening (effective listening, active engagement in a conversation, an activity that helps speaker to better communicate its intention), ability to transmit and receive messages (understanding verbal and non-verbal messages), insight into communication process (insight in communication), communication decisiveness (communication accompanied by decisiveness), and sentimental control (regulating affections).

This questionnaire, in Iran, enjoys acceptable validity and reliability. To be applied to the Iranian culture, the Farsi translated version was distributed among three professors of psychology and sociology to verify the content reliability of questions in order to assess the communication skills in Iranian culture. The validity of the whole questionnaire was estimated by Cronbach's alpha at 0.69. The validity for university and high school students was

calculated at 0.71 and 0.66, respectively. The reliability of the whole questionnaire was estimated by the bisection method at 0.71 (Chari and Fadakar, 2006).

Nurses did not have to write down their names on questionnaires and their information will be treated with complete confidentiality and applied to the research objectives. The experimental group received 12 90 minute sessions of spiritual intelligence training. The training protocol was selected based on studies conducted by Zohar and Marshal (18), Sisk and Torrance (19), and Moeinei (20). The control group did not receive any training. The training content encompassed teaching how to heighten self-awareness (relation with transcendent being, or other ones), be honest to oneself, act on intuitive direction, teach its meaning and role in life (mission in the life, feeling of sacredness in the life), teach morality and its importance (love, kindness, humility, kindheartedness, connection and moral services), teach self-controlling, teach well-behaving accompanied by kindness, sympathy, wisdom, and high sense of flexibility. Sessions were held within two months. One month later and immediately after the intervention, both groups completed questionnaires one more time.

**Analysis:** Data were entered into SPSS16 to be analyzed by descriptive statistics (frequency, percentage, and graph). Inferential statistics was practiced to test the research hypotheses (chi-square test independent *t*-test, one-way analysis of variance (ANOVA) and iterative values test (repeated measure) ( $P$  value < 0.05).

### 3. Results

This research was carried out on 94 nurses in two groups of control and experimental. A total of 47 were in the control group and 47 in the experimental group. Most participants included women (84%), married (81%), those with over five years of work experience (60%), and with a mean age of  $32.5 \pm 6.03$  (see Table 1).

Since there is a statistically significant difference in sex distribution in the groups, the confounding effect of sex has been eliminated.

Comparison of mean score of total communication skills was in female (115.81) and male (118.30) groups ( $P = 0.41$ ). The mean scores of age in the intervention group was  $35.98 \pm 6.71$  and  $32.57 \pm 6.03$  ( $P = 0.06$ ) in the control group. The mean scores of work experiences in the intervention group was  $10.38 \pm 6.81$  and  $7.8 \pm 5.3$  ( $P = 0.3$ ) in the control group.

Independent *t*-test showed that before intervention, there was no significant difference between control and

experimental groups on communication skills ( $P = 0.41$ ) (see Table 2). However, after intervention, the experimental group's mean score significantly increased ( $P = 0.001$ ) (see Table 2). The experimental group's mean score, one month after intervention, also significantly increased ( $P = 0.001$ ) (see Table 2).

The results of intragroup variance analysis disclosed that there was no significant difference between nurses in the control group on communication skills before and after intervention and in the follow-up process ( $P = 0.43$ ) (see Table 2). However, the mean scores of communication skills for nurses in the intervention significantly increased after the intervention ( $P = 0.04$ ) (see Table 2).

According to the results of independent *t*-test for the intervention group, the mean scores of listening and regulating affections significantly rose after the intervention ( $P < 0.001$  and  $P = 0.03$ , respectively). Although other components also increased, the growth was not as much significant (see Table 2).

The mean scores of listening and regulating affections also significantly rose one month after the intervention ( $P < 0.001$  and  $P = 0.01$ , respectively) (see Table 2). The results of intragroup variance analysis disclosed that there was no significant difference between nurses in the control group on communication skills before and after intervention and in the follow-up process ( $P = 0.43$ ) (see Table 2).

The mean scores of regulating affections were significantly higher after the intervention than before the intervention and one month after the intervention than immediately after the training. However, the rise of scores one month after the intervention were not as significant ( $P = 0.16$ ) (see Table 2).

The mean scores of understanding the message and decisiveness significantly rose after the intervention comparing with the scores before the intervention, however, the difference was not statistically significant ( $P < 0.05$ ) (see Table 2).

Given the mean scores of listening before the intervention did not show a significant difference ( $P = 0.04$ ), the intervention group received higher scores in listening before and after the intervention than the control group ( $P = 0.01$ ).

The results of the post-test of the Bonferroni test showed that in the intervention group, the mean score of overall communication skills after training was higher than the mean score of general communication skills before training and the mean score of listening skills after training and in the follow-up phase compared to the mean score of pre-listening skills. There was a significant increase in education ( $P < 0.05$ ).

Statistically, no significant difference was observed on

**Table 1.** Demographic Characteristics of Participants<sup>a</sup>

Variable	Group		P value (Chi-Square)
	Experimental (N = 47)	Control (N = 47)	
<b>Marital status</b>			0.1
Single	6 (12.8)	11 (23.4)	
Married	41 (87.2)	36 (76.6)	
<b>Sex</b>			0.04
Male	2 (4.3)	8 (17)	
Female	45 (95.7)	39 (83)	
<b>Ward</b>			0.1
Emergency	7 (14.9)	14 (29.8)	
Intensive care	14 (29.8)	9 (19.1)	
General	26 (55.3)	24 (51.1)	
<b>Age, years</b>			0.06
≤ 30	15 (31.9)	18 (38.3)	
31 - 40	18 (38.3)	24 (51.1)	
> 40	14 (29.8)	5 (10.6)	
<b>Work experiences, years</b>			0.3
≤ 5	17 (36.2)	21 (44.7)	
6-10	10 (21.3)	10 (21.3)	
11 - 15	11 (23.4)	13 (27.7)	
> 15	9 (19.1)	3 (6.4)	

<sup>a</sup>Values are expressed as No. (%).

mean scores of communication skills and the components with variables such as age, sex, work experience, and marital status ( $P > 0.05$ ).

Due to the difference in the score of listening component before the intervention as well as the emotion regulation component immediately and during the follow-up, the mean score of changes of these two components in the two groups was studied immediately, after, and during the follow-up (see Table 3).

According to results obtained by one-way variance analysis, there was a significant difference between the mean scores of communication skills and the component of regulating affections after training at least two sub-groups of the intervention group on the working ward. Tukey post hoc test also disclosed that the mean scores of communication skills among the nurses of general ward were significantly higher than scores received by nurses working in the emergency ward. The scores of regulating affections received by nurses working in the general ward were higher than those working in the intensive care ward ( $P < 0.05$ ).

#### 4. Discussion

Interrelationship between those delivering nursing as well as medical care and patients is the most effective factor in elevating the patients' satisfaction of the health care system (21). Findings have shown that nurses are mostly weak at communication skills (22,23). This research was aimed at examining the effect of spiritual intelligence training on communication skills for nurses.

Here, no significant statistical difference was observed between two groups on the mean scores of communication skills and their components before spiritual intelligence training. However, after the intervention, there was a significant difference on the mean scores of communication skills and two components of listening and regulating affections. This means that the intervention strongly improves nurses' communication skills. Research reviews have disclosed that the effect of spiritual intelligence training on communication skills has not been widely studied. Thus, the similar results (analog studies) were employed. In a descriptive research study and aiming to find the role of spiritual intelligence, emotional intelligence, and the

**Table 2.** Comparing the Mean Scores of Communication Skills Before, Immediately After and One Month Later for Control and Experimental Group<sup>a</sup>

Components of Communication Skills	Before (N = 47)	After (N = 47)	One Month After (N = 47)	Iterative Analysis of Variance (P Value)
<b>Listening</b>				
Experimental	24.45 ± 2.34	25.96 ± 2.28	25.55 ± 2.78	0.004
Control	23.28 ± 2.95	23.19 ± 2.92	23.13 ± 2.82	0.95
Independent t-test P value	0.04	< 0.001	< 0.001	
<b>Regulating affections</b>				
Experimental	27.02 ± 4.10	28.17 ± 2.59	27.79 ± 2.51	0.16
Control	27.02 ± 3.25	26.87 ± 3.21	26.47 ± 2.39	0.38
Independent t-test P value	0.93	0.03	0.01	
<b>Understanding the message</b>				
Experimental	31.43 ± 2.87	31.60 ± 3.32	31.45 ± 3.06	0.96
Control	31.36 ± 3.48	31.09 ± 3.26	30.83 ± 3.04	0.66
Independent t-test P value	0.92	0.45	0.33	
<b>Insight</b>				
Experimental	16.68 ± 2.66	17.06 ± 1.98	16.94 ± 1.88	0.57
Control	16.49 ± 2.02	16.47 ± 2.58	16.40 ± 2.59	0.97
Independent t-test P value	0.70	0.21	0.26	
<b>Decisiveness</b>				
Experimental	17.27 ± 2.17	17.32 ± 1.91	17.26 ± 1.93	0.95
Control	17.17 ± 1.96	16.98 ± 2.43	16.74 ± 2.05	0.51
Independent t-test P value	0.96	0.45	0.22	
<b>total mean score of communication skills</b>				
Experimental	116.83 ± 8.58	120.11 ± 6.73	118.98 ± 8.45	0.04
Control	115.32 ± 9.27	114.60 ± 8.68	113.57 ± 7	0.43
Independent t-test P value	0.41	0.001	0.001	

<sup>a</sup>Values are expressed as mean ± SD.

emotionality of the medical team in patients' satisfaction, Rezaian (9) wrote, "the spiritual intelligence could be effective in communicating with patients and consequently raise satisfaction". To introduce model and measure the spiritual intelligence, King (12) argued that it would be effective in communicating with others. In a research study titled "spirituality the borderline of stress and comfort", Fabricatore et al. (24), stated that the spiritual intelligence was correlated with positively communicating with others and satisfaction of such relationships. Among research carried out on communication skills where their independent variables have common aspects with spiritual intelligence training, we can refer to those studies measuring the effect of communication skills training on improving communication skills. Some of these common components include effectively listening, regulating emotions and affec-

tions, decisiveness, emotional involvement, or empathy. Results found by Roter et al. (25), Carson et al. (26), Rain-gruber et al. (27), and Goelz et al. (28), revealed that there was a significant correlation between holding communication skills training courses for nursing care workers and increased correlation skills.

According to what Wilkinson et al. (29), found, there is a significant correlation between training and nurses' communication skills ( $P < 0.001$ ). In this study, after a six-month training course, nurses could more effectively communicate with patients (29). Shimizu et al. (30), also suggested that communication skills training could strengthen communication skills based on feedback and roles. The ability to actively listen is one side of communication skills according which the person, on one hand, has to totally pay attention to what the speaker says, and, on



**Table 3.** Comparison of Mean Changes of the Component of Listening and Regulating Affections Before, Immediately After, and one Month Later for the Control and Intervention Groups<sup>a</sup>

Average Changes	Control/Experimental	P
<b>Before and After</b>		
Listening	1.51 ± 2.87; 0.09 ± .3	0.01
Regulating affection	1.09 ± -3.83; 0.15 ± -3.86	0.12
<b>After and follow-up</b>		
Listening	0.4 ± -2.58; 0.06 ± -2.88	0.5
Regulating affection	0.38 ± -2.42; 0.4 ± -2.60	0.9
<b>Before and follow-up</b>		
Listening	1.11 ± 3.09; 0.15 ± -3.24	0.06
Regulating affection	0.70 ± -3.78; 0.55 ± -3.37	0.09

<sup>a</sup>Values are expressed as mean ± SD.

the other hand, should briefly explain his/her deduction of what they have been told. Another component of spiritual intelligence is the independent opinion (16). People with independent opinion listen to advisory views and think over them. Therefore, they can be an active listener, however, they finally make decisions based on their internal settings. Regulating emotions is also from components of communication skills. Intensifying abstemious behaviors such as forgiveness, thankfulness, and sacrifice, the spiritual intelligence has a strong impact on self-controlling which is the core of reaching virtue and abstinence. Although there is no research on spiritual intelligence and communication skills, the previous studies had similar results with ours. However, some opposite results have also been reported by some research in this regard with an independent variable somehow similar to spiritual intelligence (31), which believed that communication skills training did not relate to strengthened communication skills. Kruijver et al. (32), reviewed 14 research studies and found the limited impact of these trainings on nurses' skills, their true behaviors, and the resulting satisfaction.

According to what was mention on this subject, it can first be said that interventions aiming to affect insights as a part of training bring out positive results. In a research study to find the effect of the nurse-patient relation on consoling cares, Wilkinson et al. (29), revealed that improved insights resulted in highly effective communication. Note, in addition, that spiritual intelligence training courses seek by nature to make some changes in peoples' insights, experiences and meaning of conducts (16). Thus, one reason found in this research of the impact of spiritual intelligence on communication skills was a change and an improvement that were made in nurses' insights on nurs-

ing cares.

Secondly, reports indicate that spirituality has been widely embraced in recent years (33). Spiritual intelligence goes beyond the person's physical and cognitive relations with environment and enters his/her intuitive views on life. This process highly signifies and values personal experiences (34) and helps people employ their spiritual resources to solve their problems and intensify characteristics such as humility, forgiveness, compassion, and remission (35). In their studies on the relations between flexibility, integration, sense of solidarity, life objectives, and physical and mental health, Nygren et al. (36), observed a positive correlation between positive communication with others and life satisfaction. As a major factor in mental health, spiritual intelligence positively correlates with social performance (36). Thus, it can be regarded as a basic resource for improving social performance, mental health, better adapting to others, and human dynamism and freshness. In addition, a positive correlation has been observed between spirituality and self-efficiency (37). As self-efficiency refers to people's belief in their capabilities and skills, higher spiritual intelligence lead them to have a positive view on themselves and better communicate with others at work (38).

On the other side, Wigglesworth (11) refers to spiritual intelligence as an ability to behave based on sympathy, kindness, wisdom, and keeping internal and external tranquility, regardless of conditions. Thus, such measures may be necessary in making an effective communication. Given the nature and the content of spiritual intelligence training in hospital settings, such interventions improve the nurse-patient relations.

Verifying what was mentioned (39) emphasized on the positive effect of spirituality on peoples' qualification and performance (40) regarded the nurses' communication skills as a sign of clinical qualification. Hence, the spiritual intelligence is expected to enhance communication skills as one sign of clinical competence, because effectiveness, communication, interpersonal understanding, controlling over changes, and taking steps toward difficult routes are of important characteristics of spiritual intelligence (41). Nurses that deeply understand the meaning and concept of their works virtually interpret the difficulties of their works as a chance for offering services to people in need. According to (41), the most important functions of spiritual intelligence at work place are to create calmness, mutual understanding, job satisfaction, and to reduce job stress.

Our results disclosed that the mean scores of communication skills among nurses working in general wards

were higher than those working in the emergency or intensive care wards. One probable reason relates to the situation of patients in these wards. As there are patients with acute and instable physical conditions in the emergency and intensive care wards or their life may be at risk, nurses do not think it is necessary to have an effective communication with patients, because of further concentrating on their physical problems. Patients in other wards though have more stable and better physical conditions. Thus, nurses are less worried about their acute conditions and try to have an effective relation with patients.

## 5. Conclusions

Although the total score of communication skills has increased, in dimensions, the spiritual intelligence has only improved listening skill, we expect that effects of SQ in creating communication skill needs more time and practice and improvement of it. Improving nurses' communication skills is now of the most important ways of enhancing the quality of nursing cares. This, in fact, changes their view on the usefulness of these skills, raises their job satisfaction, helps them identify needs, and makes positive changes in patients' clinical conditions and satisfaction (42). Stressing on spirituality may encourage people to figure out the value and meaning of life, solve their problems, and connect with themselves, others, and the world. Regarding the nature of nursing and the close relation between patients and nurses, strengthened spiritual intelligence can be expected to affect nursing care. Baldacchino (43) found out that spiritual aspects should be an integrated part of training to help nurses deliver better services.

Researchers are suggested to conduct studies similar to this for other statistical populations including nurses from private hospitals, health societies, and other groups, and compare the results. A research study on the long-term effects of spiritual intelligence training on communication skills and other capabilities are also recommended.

## Acknowledgments

We would like to deeply express our gratitude to the University Research Vice-Presidency because of their friendly support and to the nurses because of their cooperation and participation in this research.

## Footnotes

**Authors' Contribution:** The authors equally contributed to the writing and revision of this paper.

**Conflict of Interests:** Authors reject any conflict of material and spiritual interests.

**Ethical Approval:** The required permits were received from the Vice-President of the Nursing and Midwifery Department of Birjand Medical Sciences University (code: ir.BUMS.REC.1394.453) and Valiasr Hospital Presidency.

**Funding/Support:** None declared.

**Informed Consent:** All subjects fulfill the informed consent questionnaire.

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