

# The Effectiveness of Life Skills Training on Improving Emotional Intelligence in Undergraduate Students of Isfahan

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## Abstract

**Background:** People with emotional intelligence can better cope with the challenges of life and effectively regulate their emotions. The aim of this study was to investigate the impact of life skills training on emotional intelligence and its components in undergraduates students of Isfahan.

**Methods:** This study is a Nonequivalent control group design type from a quasi-experimental project. The study population consisted of all undergraduate students in the academic year from 2013 to 2014 that were enrolled in Isfahan. Sixty (60) undergraduates were selected by convenience sampling and were divided into two groups of experimental and control. Then, the experimental and control groups undertook the emotional intelligence test. Cronbach's alpha reliability of the test was reported as 93.0, and the validity studies suggested a high validity of this test. After that, the experimental group was conducted through 15 sessions for 90-minutes. The post test was performed after completion of the training program of both groups. For the purpose of data analysis, the statistical package for social sciences (SPSS) version 18 and the multivariate covariance analysis was used.

**Results:** The results showed that life skills education, with an emphasis on communication skills, was effective in the overall score of emotional intelligence. ( $F(5, 19) = 14.76, P = 0.05, \eta^2 = 0.79$ ) eta-squared values indicate a favorable effectiveness of the training.

**Conclusions:** It is suggested that these skills can be taught regularly and continuously during all periods of academic education.

**Keywords:** Emotional Intelligence, Life Skill, Social Skills, Students

## 1. Background

Coping with the pressures of life and the acquisition of personal and social skills in order to improve lives and build individual and collective comfort, has always been a part of the reality of human life in different periods of life, and is manifested in various forms (1). Due to the today's needs of life, including the rapidly changing socio-cultural patterns, changes in family structure, a vast and complex network of human relations and diversity, the scope and the influx of information resources, man is constantly faced with the challenges, stresses and various pressures and needs psycho-social skills to deal with them effectively. Lack of emotional, psychological and social skills and abilities, make people vulnerable when faced with problems, and exposes them to a variety of mental, social and behavioral disorders (2). Therefore, there is the need to learn skills to deal with these issues in their daily lives. These life skills include skills that are taught to increase mental and social abilities, which enables the individual to properly meet the needs and struggles of life and also cope with more information in different fields and learn social life skills in order to properly enjoy their life (3, 4).

On the other hand, social and emotional abilities and competencies is considered as the decisive and affecting factors on the quality of social relations (5, 6). School intervention programs which focus on emotional competency, such as the promotion of strategic thinking, show that life skills training, especially emotional skills is effective on social compromise (7, 8). The social, economic and life skills have been shown to have effects on emotional intelligence and sense of self-efficacy (9). Studies have shown that factors that cause lack of emotional intelligence include fear, negative self-image, unrealistic expectations of life and blaming others; so long as these obstacles are present and emotional intelligence (EI) (emotionally) is not used, the advancement of people towards success will be adversely affected. Therefore, this study aimed to strengthen the EI (emotionally), create more awareness about emotions and train individuals to overcome life's obstacles. The first step to increase one's emotional intelligence (emotionally) is self-awareness, promoting good anger and stress management, problem-solving skills and interpersonal skills (10).

Another research which investigated the effect of communication skills training (intrapersonal and interper-

sonal) on the emotional intelligence of primary school teachers showed that learning these skills helped to improve emotional intelligence (11). The research suggested that intervention programs in schools that focus on emotional competency, life skills training program, especially emotional skills was effective on social compromise (7, 8). Scientific researches showed that the first steps to increasing Emotional intelligence (emotional) include consciousness and then anger and stress management, problem-solving skills and interpersonal skills. Awareness means how one feels and why one experiences such feeling. Although it may initially be difficult for some people but when one begins to understand himself, he could expand other emotional skills and finally, achieve high emotional intelligence (10).

Intervention studies on the impact of training skills, such as problem-solving skills, communication skills, emotional control skills and emotional intelligence indicates that the training would enhance self-control, self-efficacy and self-regard (12, 13). In addition, other studies have shown that there exist a strong relationship between the level of emotional intelligence (self-awareness, self-control, empathy and social responsibility) and an individual's personal development skills and spontaneity (2). Investigation carried out by Bao et al. on 380 young students demonstrated that emotional intelligence was influenced by the virtue of education, and its training led to stress reduction in individuals through the creation of positive mindfulness (14). The researchers believe that giving out trainings on self-control skills and effective communication skills to the teachers, results in more effective communication with their students, proper stress management, and ability to solve conflicts with students and enjoy living in them (15).

Delphine and colleagues who studied the methods of promotion emotional intelligence showed that, teaching communication skills, controlling negative emotions, anger and stress management strategies as a group and at least for 4 sessions of two hours and half, promoted emotional intelligence. Follow-up actions also showed these changes after 6 months; though some were still retained in some individuals (10).

The study by Humphery and colleagues also showed that training on emotional control techniques caused a reduction in violence and increased the self-regard of individuals (16). Another study that examined how personal and social skills workshops promoted emotional intelligence of medical students showed that the seven-month training program which was conducted on thirty-seven medical students promoted the emotional intelligence on all subscales of the questionnaire Bar-on, and also on extraversion, compatibility, dutifulness and emotional sta-

bility. Researchers offered incorporate effective teaching of life skills in medical science curricula (17).

Increasing the use of emotional intelligence in areas such as psychopathology, education, interpersonal relationships, job satisfaction, mental and physical health, and economic and commercial activities showed that giving attention to emotional intelligence together with logical and cognitive intelligence has a daily increase on the development. Considering the importance of emotional intelligence and due to the possibility of teaching effective components of emotional intelligence to people, the aim of this study was to evaluate the effect of training life skills on improving emotional intelligence of undergraduate students.

## 2. Methods

This research is a nonequivalent control group design study and is a kind of semi-experimental design. The most common quasi-experimental design in educational research is nonequivalent control group design. In this scheme, the classification of research participants into experimental and control groups is not random, and both groups have pre- and post test. The only difference between these plans with pilot projects is the lack of random assignment of subjects (18). This pattern is selected due to the limitations of research in random selection of samples of people. This research aims to study the effectiveness of life skills (with an emphasis on communication skills) on the emotional intelligence of undergraduate students in Esfahan, using this design. In this study, the independent variable is life skills training while the dependent variables are emotional intelligence and its components. In order to analyze the collected data, in addition to descriptive statistics, multivariate analysis of covariance was used.

The study population consisted of all Isfahan undergraduate students who were studying in the academic years of 2013 to 2014. Initiation criteria included graduate students and inclination to participate in the study.

To comply with ethical issues, efforts were given to secrecy and freedom of individuals to participate in research or opt out of it, data confidentiality and keeping them in a safe place. Upon application and prior to collecting data, the objectives of the study were explained to the participants.

The control group for the preservation and observance of moral issues remained on the waiting list by the end of the study and after the end of the study they were trained.

In most research projects, financial constraints, endowment and human resources limit the sample size needed to be studied. In the experimental methods, at least 15 participants were recommended in each group (19).

Thus, by taking into account the likely loss of the sample, the sample consisted of 60 students from this community who used accessible sampling method for their choice. Then, they were divided into two groups of experimental and control, with 30 patients in each group and the Bar-On emotional intelligence test were taken from both group. After a 15- sessions' program of life skills, training was conducted in the experimental group and after completion of the training program, both groups were assessed.

The experimental intervention was conducted in 15 sessions for experimental groups. That is, for each week, a meeting was held for 90 minutes. Teaching methods consisted of working in small groups, group problem-solving, role playing, problem solving scenario, questions and answers and homework at the end of each session. After summing up the materials, assignments were given for the next meeting. The meetings description was as follows:

First session: Explanation of the concept of self-consciousness, description of the dimensions of personality (the inside child, the inside parent, the inside adult) and discussion about each of them. Session II: decision making, types of decisions and methods of effective decision making. Third session: problem solving and its methods. Fourth and fifth sessions: recognition of the excitements, psychological cycle of human recognition (thinking, feeling, behavior) and teaching methods of controlling negative emotions. Sixth session: Familiarity and basic introduction, with some points given about the communication styles in society, explanation of the objectives. Seventh session: preparation and completion of an effective communication, effective communication barriers, the model of communication. Eighth session: non-verbal language and its interpretation, physical characteristics and environmental factors in non-verbal communication. Ninth session: A variety of listening, barriers to listening, mastering of listening skills during the relationship. Tenth session: reflection of feelings and meaning, voiced empathy and decisive but flexible response. Eleventh session: types of expression, benefits and its functions, self-esteem and how to achieve it, the method of communication in the community. Twelfth session: the six stages of assertiveness, growing the strength of telling "not." The thirteenth session: conflict and its types, methods of prevention and control of personal and group conflicts. Fourteenth session: collaborative problem solving and its applications, problem solving process. The fifteenth session: honesty, empathy and love, a commitment to design and implementing communication skills.

The measuring device in this study was the Bar-On emotional intelligence (EQ-i) questionnaire. This device contains five scales or aspects (intrapersonal skills, interpersonal skills, stress management, adaptability and gen-

eral mood) and fifteen sub scale. Test answers were set in a Linker scale of 5 degrees (strongly agree, agree, somewhat disagree or strongly disagree). The test's subscales included: emotional self-awareness (ES), assertiveness (AS), self-regard (SR), self-actualization (SA), independence (In), empathy (EM), social-responsibility (RE), interpersonal relationship (IR), reality testing (RT), flexibility (FL), problem solving (PS), stress tolerance (ST), impulse control (IC), optimism (OP), happiness (HA) (20).

The amount of Cranach's alpha was reported as 0.93 for the whole test (19). Nine (9) types of validity studies were conducted on (EQ-i): Face validity, factorial content, convergent and divergent construct, group criteria, diagnostic and predictive; and they all indicated the validity of this test (21). This study investigated the efficacy of life skills training (with emphasis on communication skills) in promoting emotional intelligence in undergraduate students of Isfahan, using the mentioned intervention plans.

In this research, the independent variable was life skills training while the dependent variable was emotional intelligence and its components.

According to the research design, in addition to descriptive statistics, multivariate analysis of covariance was used in order to investigate the significant difference between the average differences between the two groups and also to control the effect of pre-test and post-test. For data analysis, SPSS version 18 was used.

### 3. Results

In this study, 35.3% of participates were male; 76.7% were in within the age range of 20 to 30 years old, and 20% were above 30 years old. 56.7% of the samples reported their father's educational level as diplomas and 43.3% were undergraduates. 76.7% of participants reported their mother's education as diploma and 23% of them were under graduate. 66.7% percent of participates had average economic situation and 23.3% had good economic situation.

To evaluate the effectiveness of life skills training on promotion of emotional intelligence of undergraduates, the multivariate regression analysis (MANCOVA) was used. The mean and standard deviation scores of subjects in the emotional intelligence Bar-On questionnaire (EQ-i) (total score) in the pre-test and post-test are given in Table 1. The scores of subjects in the subscale of Emotional Intelligence Bar-On questionnaire are given in Table 2.

For the purpose of data analysis, Shapiro Wilk and Kolmogorov-Smirnov tests were used to examine the assumption of the normal distribution of scores, the Levin test was used to examine the equality of variances assumption and

**Table 1.** The Mean and Standard Deviation Scores of Subjects in the Emotional Intelligence Bar-On Questionnaire (EQ-i) (Total Score) in the Pre-Test and Post-Test

Steps	Groups	Statistical Indices	
		Mean	Standard deviation
Pre-test	Test	291.87	13.95
	Control	289.27	8.47
	Total	290.57	11.42
Post-test	Test	318.13	15.57
	Control	283.40	10.03
	Total	300.77	21.86

use Box test was used to examine the assumption of homogeneity of covariance. Table 3 shows the results of Wilks lambda test for the evaluation of the effects of multivariate experimental intervention of life skills training, with emphasis on communication skills on the dimension of emotional intelligence Bar-On questionnaire (EQ-i). Due to the significance level, the assumption of normal distribution of scores was affirmed. In terms of interpersonal skills and dealing with the pressure (stress), the level indicative of normal distribution was not significant, given that the equality of sample size in the two groups of non-compliance with this assumption is allowed (22).

Levine's test was used to test the assumption of the equality of variance. As seen in Table 4, the amount of F obtained for Levine's test was not significant and concluded that the variances were homogeneous and analysis of variance was allowed.

To examine the assumption consistency of the covariance, the test box exam was used. The results of this test are shown in Table 5. As shown in Table 5, a significantly high level of 0.05 was obtained which showed that the estimated F for the test box was not significant.

As shown in Table 6, the obtained  $F = 76.14$  at  $P < 0.05$  is significant. The Eta-squared values was obtained as 79.0, and this result shows the effectiveness of life skills education with an emphasis on communication skills in all areas of emotional intelligence questionnaire Bar-On (EQ-i) (total score). By controlling the effect of pre-test and considering a significance level of the F and Chi Eta between control and experimental groups, it can be said that there exist significant differences in emotional intelligence variable. As a result, life skills training with emphasis on communication skills increased the emotional intelligence. The obtained statistical square (1.00) suggests the adequacy of the sample size and desired statistical accuracy and the amount of Chi Eta (0.79) which indicates the desirable effectiveness of the training.

As shown in Table 7, the effect of life skills training with emphasis on communication skills apart from the counter-pressure scale (stress control) was significant in other questionnaire dimensions. By controlling the effect of pre-test and considering a significance level of F, subscales of interpersonal skills, interpersonal skills, adaptability and general mood and Chi Eta groups, it can be said that there exist a significant difference in the increase in amount in interpersonal skills, adaptability and general mood between the experimental and control groups. But this difference in terms of coping with stress (stress management) was not statistically significant. As a result, life skills training with emphasis on communication skills improves interpersonal skills, adaptability and general mood. The obtained statistical power (in a range of 0.91 to 1.00) indicates the adequacy of the sample size and desired statistical accuracy, and Eta square value represent a relatively favorable effectiveness of the intervention.

#### 4. Discussion

The main objective of this study was to evaluate the effect of life skills education program with emphasis on the communication skills on students' emotional intelligence. The findings of this study showed the effect of life skills education with an emphasis on communication skills on all areas of emotional intelligence Bar-On questionnaire (EQ-i) (total score). By controlling the effect of pre-test and considering a significance level of the F and groups Chi Eta, it can be said that there exist a significant different in emotional intelligence between the experimental and control groups. As a result, life skills training with emphasis on communication skills increased the emotional intelligence. The results of this study are consistent with the results of Nellis et al., Mustafa Sharif, Saarni, Kusche and Greenberg, Bao, and Fletcher et al. (2, 7-10, 14, 17).

These findings are consistent with the logic underlying of life skills. According to the logic underlying of life skills training, it is assumed that the training increases the capacity of psychological subjects, and as a result of these training, general and specific competencies and capabilities of individuals to challenge with stress and difficult situations in life will be effectively improved. Humans, in trying to cope with stress, situations and struggles of life, need the ability that can be of great assistance to them. Functions such as an unpleasant emotional control, problem solving and effective communication are such abilities.

Life skills through the creation and strengthening of these skills help people to adapt and ultimately improve the quality of life and emotional intelligence.

**Table 2.** The Mean and Standard Deviation Scores of Subjects in the Dimension of Emotional Intelligence Bar-On Questionnaire (EQ-i) (Total Score) in the Pre-Test and Post-Test<sup>a</sup>

Groups	Steps	Statistical Indices				
		General mood scale	Adjustment scale	Counter-pressure scale (stress management)	Intrapersonal skills scale	Interpersonal skills scale
Test	pre-test	3.19 ± 39.20	2.87 ± 56.87	0.94 ± 39.33	5.25 ± 61.67	5.10 ± 94.80
Control		2.31 ± 39.33	3.38 ± 56.60	2.07 ± 36.00	3.83 ± 64.87	7.61 ± 92.47
Test	post-test	4.50 ± 43.53	3.01 ± 58.07	4.16 ± 40.93	6.58 ± 68.00	6.48 ± 60.107
Control		3.52 ± 37.47	2.82 ± 56.47	2.71 ± 34.73	3.74 ± 62.87	7.60 ± 91.87

<sup>a</sup>Values are expressed as mean ± SD.**Table 3.** Examination of the Assumption of the Normal Distribution of Scores In the Dimension of Emotional Intelligence Bar-On Questionnaire (EQ-i) (Total Score)

Variable	Shapiro-Wilk test variables			Kolmogorov - Smirnov		
	Significance level	DF	Statistic	Significance level	DF	Statistic
Interpersonal skills	0.001	30	0.86	0.01	30	0.18
intrapersonal skills	0.97	30	0.53	0.08	30	0.14
stress management	0.003	30	0.88	< 0.001	30	0.27
adjustment scale	0.36	30	0.96	0.17	30	0.13
general mood	0.11	30	0.94	0.14	30	0.13
Total scale	0.57	30	0.97	0.2	30	0.09

**Table 4.** The Results of Levine's Tests to Evaluate the Equality of Variance

Variable	F	The Degree of Freedom Between the Group	The Degree of Freedom Error	The Significance Level
Interpersonal skills	3.9	1	28	0.05
Intrapersonal skills	0.22	1	28	0.63
Stress management	2.7	1	28	0.11
Adjustment scale	1.21	1	28	0.27
General mood scale	0.01	1	28	0.92

**Table 5.** The Results of Box Tests for Evaluation of the Equality of Covariance in the Dimension of Emotional Intelligence Bar-On Questionnaire

The Significance Level	The Degree of Freedom Error	The degree of Freedom Between the Group	F	M Box
0.56	3156.63	15	0.9	16.81

**Table 6.** The Results of Wilks Lambda Test to Evaluate the Effects of Multivariate Experimental Intervention of Life Skills Training with Emphasis on Communication Skills on the Dimension of Emotional Intelligence Bar-On Questionnaire (EQ-i)

Variable	Wilks' Lambda Value	F	The Degree of Freedom Hypothesis	The Degree of Freedom Error	The Significance Level	Chi Eta	Statistical Power
Membership group (intervention)	0.20	14.76	5	19	< 0.001	0.79	1.00

The result of implementation of this program showed that the successful implementation of such programs and creation of favorable environment with a high degree of

cooperation helps increase the emotional intelligence of students. Such training improves the performance of individuals in terms of the emotional and social skills.

**Table 7.** Univariate Analysis of Covariance Results in the Context of MANCOVA for Evaluation of Life Skills Training with Emphasis on Communication Skills in the Fields of Emotional Intelligence Bar-On Questionnaire (EQ-i)<sup>a</sup>

Dependent Variable	Total Squares	Degrees of Freedom	Mean Squares	F	The level of Significance	Chi Eta	Statistical Power
Interpersonal skills scale	1026.88	1	1026.88	53.74	< 0.001	0.70	1.00
Error value	439.52	23	19.11				
Intrapersonal skills scale	380.00	1	380.0	34.93	< 0.001	0.60	1.00
Error value	250.24	23	10.88				
Scale adjustment	151.81	1	151.81	11.89	0.002	0.34	0.91
Error value	293.55	23	12.76				
counter-pressure Scale (stress management)	8.65	1	8.65	2.10	0.161	0.08	0.28
Error value	94.96	23	4.13				
general mood scale	183.01	1	183.01	13.34	0.001	0.37	0.94
Error value	315.624	23	13.72				

<sup>a</sup> Source of Changes: Group membership.

The effect of life skills training with emphasis on communication skills on the dimensions of emotional intelligence shows that there is a significant difference between the experimental and control groups in the increase rates of interpersonal skills, interpersonal skills, adaptability and general mood, but this difference in terms of coping with stress (stress management) is not statistically significant. As a result, life skills training with emphasis on communication skills increase the interpersonal skills, including the sub-scales of emotional awareness, assertiveness, self-esteem, self-actualization and independence. This conclusion seems to be logical given that in training, the concept of self-awareness, describing the dimensions of personality (the inside child, the inside parent, the inside adult) and talking about each of them, decision-making, types of decision-making and effective methods of decision making, types of expression, its benefits and functions, self-esteem and how to achieve it and creativity and methods of its emergence is important. This finding is consistent with the research results of Saarni, Kusche and Greenberg (7, 8). As mentioned, this training is effective on interpersonal relationships subscale; this result is consistent with the findings of Fletcher et al., Bracket and Salovey (15, 17). Given that in this study life skills training was conducted with an emphasis on communication skills, the promotion of this sub scale which consists of empathy, social responsibility and interpersonal relationships is logical. Also, training has been effective on the compatibility sub-scale. This subscale consists of flexibility, problem solving, and reality testing. According to several sessions devoted to these issues, particularly problem solving and how to deal with the environment and realistic approach to the environment gives more strength to individual management. This result is justified because when the power of individual management is placed at the service of orga-

nizing emotions, in the face of processes which can be confused in the shadow of poor management; this prevents emotional crises and increases the level of compromise. Life Skills Training on the general mood includes happiness, and optimism is also effective. This result can be explained such that Life skills training program by fostering skills such as making the right decisions, susceptibility, self-esteem, problem solving, creative and critical thinking, communication and social skills and dealing with difficult situations, helps promote personal self-efficacy and in this way, causes joy and promotes general mood in people. This result is consistent with the findings of Brackett and Salovey (15).

The average difference of pre-test and post-test results in subscales of coping with stress (stress tolerance, impulse control) is not statistically significant. Consequently, these results are not consistent with Nelis et al. and Humphrey et al. (10, 16). In explaining this paradox, it can be noted that to create profound changes that can lead to a form of behavior in difficult and stressful life situations, just one training course was not sufficient and this needs to be continued for more period. Also, according to Bradbury and Graves, although emotional situations can be very strong, in the end it is the individual, with seriousness of purpose, who can control his/her own behavior (19). Therefore, perhaps such a serious purpose on subjects has not yet been made. In total, according to the results, it is recommended that a systematic program for training life skills as educational workshops should be considered for students. Life skills should be included as a two unit's course (one theory and one practical) in undergraduate courses in all disciplines. It is also recommended that conducting studies with other emotional intelligence measuring tools and with longer periods of life skills training should be conducted for students.

How to teach life skills to students can be mentioned as the strengths of this study, because the spirit of learning, student interest in learning and its maintenance was attended to until the end of the study. Also, class feedback during the meetings showed that skills were taught in a targeted way to the students and such skills will be used in everyday life. The following limitations can also be considered as weaknesses of this study. The study population and type of research suggests some limitations that should be taken in generalizing the results. The sample in this study was a student sample and in generalizing results to other populations caution needs to be taken. Furthermore, given that the cultural and ethnic conditions affected the training and development of emotional intelligence factors, thus generalizing the findings to students with other cultures and other nations is limited and more research should be done with caution.

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### Footnotes

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