

# The Effectiveness of Cognitive-Behavioral Education on Students' Communication Problems and Perfectionism

Sara Dehghani<sup>1</sup>, Zahra Gholamy Heidarabady<sup>2</sup>, Elaheh Khoshnevis<sup>3</sup>

1-Graduate Student; Counseling and Tutoring. Department of Psychology and consultation. West Tehran Branch. Azad university. Tehran. Iran.

2-Assistant Professor. Department of Psychology and consultation. West Tehran Branch. Azad university. Tehran. Iran

3-Assistant Professor. Department of Psychology and consultation. West Tehran Branch. Azad university. Tehran. Iran

## Abstract

In the present study, the effectiveness of cognitive-behavioral education on the communication difficulties and perfectionism of students was studied. The research design was pre-test and post-test method with control group. The statistical population of this study included all students in district 2 of Tehran in the academic year of 2017-2018. The sample size consisted of 30 members of this community, which were selected by simple random sampling method. The samples divided into two groups of 15 patients. The questionnaire of perfectionism and multidimensional perfectionism were used to measure the communication difficulties of the questionnaire and perfectionism. After selecting the test group, experimental intervention (cognitive-behavioral training) was performed on the experimental group for 8 sessions of 90 minutes and one session per week, and after completing the training program from each of the two post-test groups action, it came to analyze the collected data, in addition to descriptive statistics, one-way covariance analysis was used. Results showed that cognitive-behavioral education improved the subscales of communication difficulties, explicitly and publicly. In terms of others, aggression, support and participation, and perfectionism, and under the subcategory of democratism (concern about mistakes-individual measures-parents expectations-doubts about things), the test group has been compared with the group. But under the scales (openness-dependence) and (parental critique-the tendency to order and organization) was not affected. The conclusion is that cognitive-behavioral learning can improve the interpersonal difficulties and perfectionism of students.

**Keyword:** Cognitive-Behavioral Education, Communication Problems-Perfectionism.

**DOI:** 10.7176/RHSS/9-3-10

## Introduction

Students as the main pillar of education have always been considered by the educators and therefore it is necessary to recognize their personality, cognitive, emotional and motivational characteristics in order to promote mental health and improve the educational quality of students. One of the most desirable areas for student growth is healthy communication and perfectionism.

Perfectionism is one of the most desirable appearances in humans, especially adolescents. Secondary school students always try to create an ideal relationship between their creativity and reaching the goal peaks, and how they can draw an objective perfection in the competition between the lesson and the high school.

This feeling and willingness to achieve "desirable" in the absence of proper support and guidance can lead to increased stress and mental stress that sometimes leads to psychological collapse. Perfectionism, as considering very high standards for evaluating progress, can be a hindrance to creativity, because perfectionists usually have difficulty in starting things (Mahmoudian and Ismaili Shad, 2015).

In general, fear of failure, concern about evaluation and the way of thinking

Others are concerned about themselves, the elaboration of high-level standards and the lack of confidence in their successful achievement, which perfectionists face with them, all contribute to the emergence and anxiety of the anxiety, and because they are afraid of failing to achieve their desired perfection, except for success Perfect ones are not satisfied with anything. Having a perfectionist thinking, on the one hand, leads to academic failure, because full-fledged students are not only satisfied with the achievement of excellent results; they do not succumb to the fact that their performance is better than their peers, but also their satisfaction is only fully secured when they are they do nothing completely without any fault, therefore, they may not be liable for their fear of not being able to pursue their goals or leave it in the half-time and This leads to academic failure, and on the other hand, perfectionism may lead to a decline in education by inducing depression and communication difficulties (Shamizadeh, 2017).

The motivation for perfection and its impact on human behavior throughout history has been discussed immensely by psychologists, and in particular the theorists of the re-evaluationist approach. Although perfectionism has a long history of about a century, little empirical research has been done on this structure.

The perfectionists are known as those who tend to be fully in all aspects of life (Stoebur and Stoebur , 2009). Perfectionism is characterized by a tendency toward perfect performance, determination of high-level goals, and rigorous evaluations of oneself. The perfectionists are very concerned about the evaluation of others, they are concerned about the lack of approval by others, and avoided doing things that cause displeasure and, therefore, disapproval of others (Flat and Identity, 2002).

From the point of view of psychology, perfectionism relates to people who set up high and inaccessible criteria (Yand et al., 2011). These people tend to do things in the best way, and the results are not satisfactory for them. This attribute is sometimes very intensified in people and becomes sickly and obsessive-compulsive, in which case the image of an individual is worse than his actual image (Jorabchi, 2015).

The purpose of this study was to investigate the effectiveness of cognitive-behavioral education on students' communication and perfectionism difficulties.

#### Research Methodology

##### Research design

A quasi-experimental design is a pre-test, post-test with a control group

##### 3.2. Statistical Society

The statistical population of this study was all students in Tehran 2nd district in the academic year of 2017-2018.

##### 3.3. Sample and sampling method

Statistical population: The statistical population of this study will be all students in district 2 of Tehran.

Sampling method: The research method is simple random sampling.

Sample size: According to the research type (quasi-experimental), the sample size will be 30 people.

Simple random sampling was used to select subjects. According to the nature of the research, which is a semi-experimental type, the sample size was suitable for 30 people and randomly assigned to two experimental and control groups of 15.

##### Measurement tool

##### 1.4.3. Multi-dimensional perfectionism questionnaire Frost (1990):

The Frost multidimensional perfectionism scale was designed in 1990 by Frost et al. For measuring perfectionism. This questionnaire integrates perfectionism into six dimensions and includes 35 questions, 9 questions (9,10,13,14,18,21,23,25,34) to the component of worry about errors, 7 questions (4,6 , 12,16,19,24,30) to the component of certain criteria, 5 questions (1,11,15,20,26) to the parental expectations component, 4 questions (3,5,22,35) to the parental critique component , 4 questions (17,28,32,33) were allocated to the component of doubt about the tasks and the remaining 6 questions to the organizing components.

##### 3.4. Reliability and Validity:

In 1990, Frost et al. designed the questionnaire to measure perfectionism. He reported the value of Cronbach's alpha for each of these dimensions as follows.

83%	Individual criteria	88%	Concern over mistakes
84%	Parental critique	84%	Parents' expectations
93%	Desire to organize	77%	Doubts about things
		90%	General perfectionism

These six dimensions have high correlation, but "organization" has the least correlation with other dimensions and the overall score of perfectionism. For this reason, this dimension is not considered in the calculation of perfectionism.

The reliability of perfectionism components in Ahmadi's research using Cronbach's alpha method is as follows

72%	Individual metrics	83%	Concern over mistakes
63%	Parental critique	77%	Parents' expectations
81%	Desire to organize and organize	77%	Doubts about things
		86%	General perfectionism

This scale has a high correlation with other perfectionism scales, especially Burns perfectionism (1980), self-centered perfectionism and community-based on the multidimensional perfectionism scale of Hubble and Flat (1991).

Grading method:

The scale has 35 questions. Each question, based on the Likert model, ranges from 1 to 5 (1 = completely disagree, 2 = I disagree, 3 = Neither I disagree, Nor I agree, 4 = I agree, 5 = I totally agree). For each dimension, a score is obtained and a total score is obtained for the entire questionnaire material. It should be noted that the total score of perfectionism from the sum of kidney scores is later calculated, except for the organization dimension.

#### 3.4.2. Interpersonal communication difficulties questionnaire

The 32-item question of the interpersonal communication difficulty scale is a self-reporting tool that addresses issues that individuals typically experience in interpersonal relationships. This form was designed by Barham and colleagues as a short version of the original form (form 127 questions) in order to use this tool in clinical services.

This form was obtained based on exploratory factor analysis from the form 127 of the question, taking into account the four items that have the highest factor load in each scale. This scale has 6 sub-scales. Frankness, openness, consideration of others, aggression, protection and participation, dependence on others.

Reliability and Validity.

Fath et al. (2013) examined the validity of the interpersonal problems questionnaire from the two methods of internal consistency. Cronbach's alpha coefficient was used to measure the internal consistency. Cronbach's Alpha coefficient for openness and publicity factors, openness, consideration of others, aggression, support, participation and affiliation are respectively 0.83, 0.63, 0.60, 0.83, 0.71, 0.63 and for a total score of 82 /. Has been achieved. The ballot coefficient is also used for explicit and public factors, openness, consideration of others, aggression, support, participation, and affiliation in the order of 0.80, 0.70, 0.61, 0.88, 0.77, 0.61 and for the whole scale of 83 /. They reported that the ideal credibility of the scale of interpersonal communication problems was.

#### 3.4.4. Procedure

After selecting the subjects, perfectionism questionnaire and interpersonal communication difficulties were provided to the subjects. By doing this, the whole questionnaire was completed by the subjects completely and without fail. Then, 30 people who had higher scores than the rest of the subjects were selected and were replaced in two experimental and control groups of 15.

The control group remained intact and cognitive-behavioral techniques were administered to the experimental group in 8 sessions. The sessions were administered to the subjects once a week for 90 minutes and then two weeks after the completion of the training, again the subjects of the two experimental and control groups were evaluated by the questionnaires.

#### 3.5. How to conduct training sessions

After selecting people who had high scores in perfectionism and interpersonal communication difficulties, these subjects were replaced in two experimental and control groups. The experimental group participated in a workshop with a cognitive-behavioral approach for eight 90-minute sessions. Each session consisted of several sections, in which all members of the group spoke at a brief moment about their feelings, then the assignments of the previous meeting were reviewed and the members of the group responded to their wishes and wishes.

After reviewing assignments and providing feedback, new skills were taught and members were encouraged to present their issues objectively and explicitly and to solve them using the cognitive-behavioral approach and skills learned at that meeting. At all meetings, efforts were made to focus on topics related to the cognitive-behavioral approach and to be formatted within the framework of the intended process.

In the end, the future session assignments were presented. These assignments were provided to assist in the use of training provided in daily life, as well as to remedy potential mistakes in learned skills. The control group did not receive any intervention during this period. After the end of training sessions, both groups were re-tested.

Session	Content
1	Referral, initial communication, pre-test run, familiarity with the principles and objectives of the meeting, training Basics of Cognitive-Behavioral Theory, Understanding the C-B-A Pattern With Examples, Submission and Receiving
2	Review the assignment of the previous session, continue teaching C-B-A with examples of everyday life, design Challenging questions and helping members identify misconceptions and provide answers Substitute, Submission, and Receive Feedback.
3	Reviewing the previous meeting assignment, negative self-concept thinking, familiarizing and identifying common cognitive errors, Provide dormant ballot papers, provide assignments and receive feedback.
4	Reviewing the assignment of the previous session, rating negative beliefs on a scale of 100 to 0, mentioning the evidence for Realistic and rational thinking, replacing negative beliefs with real and logical thoughts by members of the group, giving a homework and receiving feedback.
5	Review the previous session, Teach technique, Jacobson (muscle), exercise Attendance in a group counseling session with the participation of members (to ensure the correct understanding of the technique), presentation Homework and feedback.
6	Reviewing the task of the previous session, teaching the problem-solving technique, explaining the technique by providing concrete examples of The life of group members, providing a hypothetical problem and solving it by way of problem solving, assignment
7	Reviewing the session beforehand, teaching the role technique, participating in each game The role, the hypothetical or real problems, and solving it using role play, identification training Cognition, identifying irrational cognitions, challenging them and replacing them with Logical beliefs, rehearsal of scenes by self-reflection and positive thoughts, assignment and reception Feedback.
8	Review the assignment of the previous session, continue to play its role and practice by all members of the group, summarize and discuss the general discussion of past sessions, prepare to apply the methods learned in real life situations, at the end of the post-test run.

Session 1: Initial communication, pre-test, familiarization with the principles and objectives of the meeting, teaching the basics of cognitive-behavioral theory, familiarity with the C-B-A model with examples, assignment and feedback.

Session 2: Reviewing the assignment of the previous session, Continue teaching C-B-A by giving examples of everyday life, challenging questions, and helping members identify mistakes of thought and providing alternative responses, providing assignments, and receiving feedback.

Session 3: Reviewing the previous meeting assignment, negative self-concept ideas, identify and identify common cognitive errors, provide inadequate dossiers, provide assignments, and receive feedback.

Session Four: Reviewing the assignment of the previous session, rating negative beliefs on a scale of 100 to 0, citing evidence for real and rational thinking, replacing negative beliefs with genuine and rational thoughts by members of the group, providing assignments and receiving feedback.

Session Five: Reviewing the session of the previous session, teaching Jacobson technique (muscle), practicing at a group counseling session with the participation of members (to ensure proper understanding of the technique), providing assignments and receiving feedback.

Session Six: Reviewing the assignment of the previous session, teaching the problem-solving technique, explaining the technique by providing concrete examples of the members of the group's life, providing a hypothetical problem, and solving it by solving the problem, providing a homework, and receiving feedback.

Session Seven: Reviewing the assignment of the previous session, teaching the role technique, the participation of each member of the group in the role play, raising hypothetical or real problems and solving it by using role play, identifying cognitive training, identifying irrational cognitions, Challenging them and replacing them with logical beliefs, rehearsing scenes with selfishness and positive thoughts, providing assignments and receiving feedback.

Session eight: Reviewing the assignment of the previous session, continue playing the role and practice by all members of the group, summing up and reviewing the discussions of the past sessions, preparing to use the methods learned in real life situations.

### 3.6. Data analysis methods

In the descriptive statistics section, the characteristics of the statistical group are described in terms of central orientation and dispersion indicators such as mean, mean, standard deviation, frequency distribution tables. In the inferential statistics section, according to the type

of research that was quasi-experimental, with pre-test design, post-test with control group, if data were normalized through Kolmogorov-Smirnov, then covariance analysis was used.

Results

Descriptive Characteristics:

Table 1. Number of subjects

Group	Quantity
Experiment	15
Control	15
Total	15

Table 2. describes the variables of interpersonal communication problems in the experimental and control group (pre-test)

Group		Affiliation	Support for participation	aggression	Concern over others	Openness	Frankness
<b>Experiment</b>	Median	10.0000	25.0000	16.0000	16.0000	13.0000	27.0000
	Mean	9.8000	25.2000	15.4000	15.4000	12.5333	26.6667
	Standard deviation	1.85934	3.16679	2.02837	2.02837	2.64215	3.37357
	Elongation	-1.446	-1.320	.430	-.879	-1.000	2.120
	Skidding	-.203	-.305	-.337	.019	-.298	-1.239
	The maximum amount	12.00	29.00	19.00	19.00	16.00	31.00
	The lowest amount	7.00	20.00	11.00	12.00	8.00	18.00
<b>Evidence</b>	Median	9.0000	27.0000	15.0000	16.0000	14.0000	25.0000
	Mean	9.2667	27.1333	14.7333	16.1333	13.6667	25.9333
	Standard deviation	1.43759	2.38647	2.01660	2.06559	2.02367	4.31719
	Elongation	-1.590	.663	-.767	-.391	-.630	-1.316
	Skidding	.127	-.691	-.243	.805	-.250	.095
	The maximum amount	11.00	31.00	18.00	20.00	17.00	32.00
	The lowest amount	7.00	22.00	11.00	14.00	10.00	19.00

As shown in the table above, the following scales of interpersonal communication problems at the test node, the openness and the public are the lowest with an average of 26.66, and the highest is the affiliation with the mean score of 9.80. Also, the mean of subscales of interpersonal communication problems in the control group, support and participation with the mean of 27.13 is the highest and the lowest of 9.26. Comparison of mean scores of pre-test in both experimental and control groups indicates that the mean scores of subscales of interpersonal communication problems in the pre-test in the experimental and control groups are not significantly different.

Table 3. Descriptive indexes of perfectionism variables in the test and control group (pre-test)

Group		Desire to organize	Doubts about things	Parents criticism	Parents' expectations	Personal Criteria	Openness	Frankness
<b>Experiment</b>	Median	22.0000	12.0000	14.0000	15.0000	29.0000	32.0000	123.0000
	Mean	21.2000	12.7333	14.1333	14.8000	28.4667	31.2667	122.6000
	Standard deviation	3.54965	2.98727	2.09989	2.27408	2.85023	2.49189	9.09317
	elongation	-1.091	.371	-.467	.064	2.696	4.750	-.335
	Skidding	-.256	.798	-.416	-.725	-1.081	-1.789	-.758
	The maximum amount	27.00	19.00	17.00	18.00	33.00	34.00	135.00
	The lowest amount	16.00	8.00	10.00	10.00	21.00	24.00	105.00
<b>Evidence</b>	Median	21.0000	14.0000	15.0000	15.0000	28.0000	33.0000	124.0000
	Mean	20.6667	13.3333	13.7333	13.9333	28.1333	32.4000	122.2000
	Standard deviation	3.35233	2.25726	2.57645	2.21897	3.48193	4.93964	9.08845
	Elongation	-1.102	-.288	-1.269	-1.611	-.553	1.233	.893
	Skidding	.019	-.092	-.325	-.311	-.562	-.129	-.714
	The maximum amount	26.00	17.00	17.00	17.00	33.00	43.00	136.00
	The lowest amount	16.00	9.00	9.00	11.00	21.00	22.00	101.00

As can be seen from the table above, experimentalism is in the experimental group with an average of 122.60. Under the perfectionism scales in the test node, the subscale of worries about errors with the mean of 31.26 is the highest and the lowest under the doubts scale for the tasks with the mean score of 12.73. The amount is. Also, the traditionalism in the control group is 122.20. The mean in the subscales is perfectionism in the control group, concern about errors with an average of 32.40, and the highest and lowest subscales of doubt in the case with the mean of 13.33 are the lowest. The comparison of the mean of pre-test scores in both the experimental and control groups indicates that the mean scores of perfectionism and its subsamples in the pre-test in the experimental and control groups are not significantly different.

Table 4. Descriptive variables of interpersonal communication problems in the experimental group (post test)

Group		Dependency	Support for participation	aggression	Concern over others	Openness	Frankness
<b>Experiment</b>	Median	8.0000	29.0000	12.0000	19.0000	14.0000	28.0000
	Mean	7.8667	29.5333	11.8667	18.1333	14.4000	27.4667
	Standard deviation	1.55226	4.96943	2.35635	2.66905	2.69391	3.79599
	Elongation	-.019	-.235	2.144	-1.250	-.322	1.526
	Skidding	-.010	-.698	1.053	-.242	-.290	-1.014
	The maximum amount	11.00	36.00	18.00	22.00	19.00	33.00
	The lowest amount	5.00	20.00	9.00	14.00	9.00	18.00
<b>Evidence</b>	Median	9.0000	27.0000	14.0000	15.0000	14.0000	23.0000
	Mean	8.7333	25.7333	14.2667	15.1333	13.8000	24.5333
	Standard deviation	1.43759	3.17280	1.94447	2.03072	2.11119	3.46135
	Elongation	-.355	-1.092	-.383	1.229	-.616	-.898
	Skidding	-.127	-.555	.240	.855	.198	.289
	The maximum amount	11.00	30.00	18.00	20.00	18.00	31.00
	The lowest amount	6.00	20.00	11.00	12.00	11.00	19.00

As shown in the table above, the subscales of interpersonal communication problems in the testing node, support and participation with the mean of 29.53, the highest and the lowest, are the lowest with the mean score of 7.86. Also, the mean of subscales of interpersonal communication problems in the control group, support and participation with the mean of 25.73 is the highest and the mean of 8.73 is the lowest.

Table 5. descriptive characteristics of perfectionism variable in control group (post-test)

Group		Desire to organize	Doubt about actions	Parents radical criticism	Parents' expectations	Individual metrics	Concern over others	Perfectionism
<b>Experiment Group</b>	Median	19.0000	11.0000	12.0000	11.0000	24.0000	26.0000	104.0000
	Mean	18.4667	10.6000	12.1333	10.6667	24.0667	26.4667	102.4000
	Standard deviation	1.64172	1.72378	1.84649	1.58865	3.57505	3.94365	8.30490
	Elongation	-.681	-.291	-.237	-1.174	1.570	.771	-.324
	Skidding	-.211	.239	.718	-.105	1.063	.033	-.648
	The maximum amount	21.00	14.00	16.00	13.00	33.00	34.00	113.00
	The lowest amount	16.00	8.00	10.00	8.00	19.00	18.00	85.00
<b>Group Evidence</b>	Median	20.0000	12.0000	13.0000	13.0000	28.0000	32.0000	117.0000
	Mean	19.8000	12.5333	13.2667	13.2000	27.7333	31.8667	118.4000
	Standard deviation	2.67795	2.03072	2.25093	2.30527	5.14735	4.86778	9.04591
	Elongation	-.384	.319	-.763	-1.185	-1.252	1.548	-.368
	Skidding	.169	.505	-.166	-.160	-.040	.226	.027
	The maximum amount	25.00	17.00	17.00	16.00	36.00	43.00	133.00
	The lowest amount	16.00	9.00	9.00	9.00	20.00	22.00	101.00

As can be seen from the table above, experimentalism is in the experimental group with an average of 102.40. Under the perfectionism scales in the test node, the subscale of worries about errors with the mean of 26.46 is the highest and the lowest under the scale of doubt in the case with the average score of 10.60. The amount is. Also, the traditionalism was in the control group with an average of 118.40. Mean in the sub-scales, the perfectionism in the control group, the worries about the errors with the mean of 31.86, the highest and the lowest subscale of doubt in the case with the mean of 12.53 are the lowest.

#### 4.2. Inferential analysis

In this section, research hypotheses are investigated. To investigate the research, considering the nature of the tool used and the objectives and hypotheses, one-way covariance analysis was used to examine the hypotheses.



Table 6. Shapiro Wilk test results to verify the data's normality

Variable	Shapiro Wilk Test	
	sig	F
Frankness	.713	.961
Openness	.299	.933
Concern over Others	.143	.912
Aggression	.161	.915
Collaboration	.142	.876
Dependency	.132	.868
Perfectionism	.164	.889
Concern over mistakes	.148	.880
Individual criteria	.875	.971
Parents' expectations	.911	.974
Parents radical criticism	.395	.941
Doubt about actions	.903	.973
Desire to organize	.805	.901

Based on the results of the above table, since the F value at 05 / . Therefore, the data is normal and the use of parametric probes is not possible. The main hypothesis: cognitive-behavioral education has an impact on the communication difficulties and perfectionism of students. Levin's Assumption Test to examine the variance of the dependent variable in different groups (test, control).

The variable of the agent indicates that the variance of the dependent variable is equal among these groups, so a covariance test can be used.

Table 7. Levin test results for homogeneity analysis of variance

F		SIG Level	Degree of Freedom 2	Degree of Freedom 1
3.521	Communication difficulties	.124	28	1
.073	Perfectionism	.788	28	1

Table 8. Results of the meaningful test of multivariate covariance analysis in the two groups

Name of Test	Squared ETA	SIG Level	DF Error	DF Hypothesis	f	Amount
The effect of the pillow	.850	.000	22.000	7.000	17.867	.850
Lambda Wilkes	.850	.000	22.000	7.000	17.867	.150
Hoteling effect	.850	.000	22.000	7.000	17.867	5.685
The biggest root of the error	.850	.000	22.000	7.000	17.867	5.685

In this study, the mean values of the scores of the two groups of test and evidence were used in this study. The small values of this statistic indicate that the mean of the groups is different, but if this index is very close to the number 1 shows that there is a significant difference between the two groups' meanings. Therefore, as the table data shows, cognitive-behavioral education has caused a significant difference in students' communication and perfectionism, indicating that this training significantly reduced the components of communication difficulties and perfectionism of students. It has improved the effectiveness of cognitive-behavioral education.

Part One: Cognitive-Behavioral Education has an impact on the components of interpersonal communication difficulties (openness and publicity, openness, consideration of others, aggression, support, and participation and affiliation).

The Levin assumption test for measuring the variance of dependent variables among different groups (testing, control) shows that the dependent variance among these groups is equal, so covariance test can be used.

Table 9. Levin test results for homogeneity analysis of variance

	Significance level	Degree of freedom	Degree of freedom	F
Frankness	.124	28	1	2.521
Openness	.245	28	1	1.411
Concern over Others	.877	28	1	.025
Aggression	.849	28	1	.037
Collaboration	.148	28	1	2.208
Dependency	.265	28	1	1.292

Table 10. The results of covariance analysis for the first partial hypothesis

Dependent variable post-test subscales of interpersonal communication problems						
Variable	ETA coefficients	Significance level	F	Average squares	Degree of Freedom	Sum of squares
Frankness	.149	.035	4.891	64.533	1	64.533
Openness	.016	.503	.461	2.700	1	2.700
Concern over Others	.300	.002	12.003	67.500	1	67.500
Aggression	.248	.005	9.257	43.200	1	43.200
Collaboration	.182	.019	6.231		1	108.300
Dependency	.082	.124	2.517	5.633	1	5.633

According to the data in the above table, since the value of F is significant at the significance level of  $\alpha = 0.05$  in sub-scales (openness and popularization, consideration of others, aggression, support, and participation), therefore, below Scales (explicitly and publicly, taking into account others, aggression, support, and participation) are assumed to be zero and the assumption of research is confirmed with 95% confidence. But in the subscale (openness-dependence), the significance level is higher than  $\alpha = 0.05$ , which indicates that in this subscale of the zero assumption, the assumption of the research is rejected with 95% confidence. In other words, cognitive training based on the components of communication difficulties affects the subscales of interpersonal problems, other than the subscales (openness-dependence) of students.

1. Cognitive-behavioral education has an impact on the components of perfectionism (worry about mistakes, individual standards, parental expectations, parental critique, doubts about things, tendency to order and organization).

The Levin assumption test for measuring the variance of dependent variables among different groups (testing, control) shows that the dependent variance among these groups is equal, so covariance test can be used.

Table 11. Levin test results for homogeneity analysis of variance

	Significance level	Degree of freedom 2	Degree of freedom 1	F
Concern over mistakes	.064	28	1	4.036
Individual criteria	.222	28	1	1.557
Parents' expectations	.747	28	1	.106
Parental critique	.127	28	1	2.476
Doubts about things	.359	28	1	.869
Desire to organize	.721	28	1	.130

Table 12. The results of covariance analysis for the second partial hypothesis

Sub-dependent variable Post-test perfection sub-criteria						
Variable	ETA coefficients	Significance level	F	Average squares	Degree of freedom	Sum of squares
Concern over mistakes	.285	.002	11.145	218.700	1	218.700
Individual criteria	.155	.031	5.135	100.833	1	100.833
Parents' expectations	.305	.002	12.282	48.133	1	48.133
Parental critique	.075	.143	2.273	9.633	1	9.633
Doubts about things	.220	.009	7.902	28.033	1	28.033
Desire to organize	.088	.111	2.703	13.333	1	13.333

According to the data given in the above table, the value of F is significant at the significance level of  $\alpha = 0.05$  in the sub-scales of perfectionism (worries about errors-individual measures-parents expectations-doubts about things), therefore, below Scales (Concerned about Mistakes-Individual Benchmarks-Parents' Expectations - Doubts about Things) The zero assumption is rejected and the assumption of the research is confirmed with 95% confidence.

But in the sub-scale (parental critique-tendency to order and organization), the level of significance is higher than  $\alpha = 0.05$ , which indicates that in this sub-assumption, the assumption of zero assertion assumes a research assumption with 95% confidence. In other words, cognitive-behavioral education is based on the components of perfectionism, except for the subscales (parental critique-tendency to order and organization) of students.

## Discussion

Main hypothesis: Cognitive-behavioral education has an impact on the communication difficulties and perfectionism of students.

The research has been used to compare and judge the equality of the scores in the two groups of the test and the control group. The small values of this statistic indicate that the mean of the groups is different, in other words, cognitive-behavioral education on communication difficulties and students' perfectionism is influential.

The findings of this study were compared with the researches of Rome and Allison (2017), Johnson & Dahl (2016), Sylle & Nilggs (2014), Kernes et al. (2007), Larifan and Zaerian (2010) Zargar et al. (2012) Colleagues (2017), Elham Rafee (2014), Farahzadi (2017), Fathi (2017), Asgharpour (2017) Shamizadeh (2017).

Findings about the effectiveness of this method on sample individuals showed that cognitive-behavioral methods were in fact improved with the cognitive awareness that students learned about how to behave and think badly. They also have a more positive social function by reducing the level of their cognitive errors and behave more comfortably and better in relation to others, reducing the negative thoughts caused by their own lives and trying to provide better comfort for themselves and for other members.

In the next study, the researcher concluded that if a suitable educational method could be effective in preventing cognitive and emotional errors and auto negative attitudes, a great step would be taken to protect the health of individuals.

The first hypothesis: cognitive-behavioral education has an impact on the components of interpersonal communication difficulties (openness and publicity, openness, consideration of others, aggression, support, participation and affiliation).

Covariance analysis on the mean of pre-test and post-test difference components of communication difficulties (explicitly and publicly, considering others, aggression, support and participation) indicates that among students of the experimental and control group There is a significant difference.

Therefore, it can be said that cognitive behavioral training techniques have been able to significantly improve the mean of subscales of openness and popularity, consideration of others, aggression, support and participation of individuals in the test group. But there was no significant difference between the scales (openness-dependence).

The findings of this study are consistent with Johnson & Dahl (2016), Asgharpur (2017) and Shamizadeh (2017).

In explaining this hypothesis, it can be said that the purpose of teaching cognitive-behavioral techniques is to teach how to think about issues. This is a way to reinforce reasoning and use personal abilities to decide on problems that ultimately make an individual They have problem-solving skills and, unlike those who do not have this skill, they do not show aggression.

Since aggression in adolescents is high, this can be either a sense of independence or a peer or a feeling of strength. (Pegani et al., 2004). Previous research demonstrates the usefulness of treatment and the effectiveness of interventions in controlling aggression and that aggression is a controllable phenomenon and can be controlled or moderated by training appropriate methods that can improve effective interpersonal relationships.

Also, the most important reasons for the emergence of interpersonal difficulty are poverty, problem-solving skills, lack of basic skills for engaging with others and lack of knowledge of communication skills, and even most people, when faced with an interpersonal relationship, lack the necessary skills they are dominated by their emotions, and the reason for the effect of cognitive group therapy is that it compensates for some of the deficiencies and skills deficiencies and informs the individual of the special skills of mastering the emotions (Nemati, 2009).

The basis of reduction of interpersonal communication difficulties is based on cognitive reconstruction and its control. In addition, this program is based on cognitive changes and changes in people's cognition that after cognitive reconstruction of subjects who have negative knowledge, pessimism to others, unreasonable thoughts and prejudices have been forged, the context for changing their thoughts and behaviors has been provided. Our task is to guide the father of socially acceptable behaviors by having the resources and skills that can be achieved by using them with compromise issues. The hypothesis in such interventions refers to the lack of skills that are needed for proper interaction in people's lives, so that some negative behaviors, such as aggression, are due to a lack of these skills.

The second hypothesis is cognitive-behavioral on the components of perfectionism (worry about mistakes, individual standards, parental expectations, parental critique, doubts about things, tendency to order and organization).

Covariance analysis on the mean of pre-test and post-test scores of perfectionism components (worries about mistakes-individual criteria-parents expectations-doubts about tasks) indicate that there is a significant difference between students in the experimental and control group. Therefore, it can be said that cognitive-behavioral training techniques have been able to significantly improve the mean of subscales (worries about mistakes-individual measures-parents expectations-doubts about things). Individuals are tested. But under the scales (parental critique-tendency to order and organization), no significant difference was observed.

The findings of this study were compared with the researches of Rome and Allison (2017), Johnson and Dahl (2016), Syl and Nilggs (2014), Kernes et al. (2007), Larifan and Zaerian (2010) Zargar et al. (2012) behind Mashhadi And colleagues (1396), Elham Rafee (2014), Farahzadi (2017), Fathi (2017), Shamizadeh (2017).

Usually, the lives of perfectionists are summed up in a series of proclivities, dowries, and descriptions. They must attain to the fullest extent possible in everything and do it in the best way, and they will not be satisfied and will not be satisfied with their fullness, anxiety, depression and feelings of severe sin. On the other hand, these ambitious expectations impose on them the heavy and irrational responsibilities of the realm of life.

## Conclusion

The results of this study showed that cognitive-behavioral education improves the subscales of communication difficulties (explicitly and publicly, consideration of others, aggression, support and participation) and perfectionism, and under the substage of extremism (concern In the case of mistakes - Individual standards - parental expectations - doubtful about the work (test group compared to the control group). But under the scales (openness-dependence) and (parental critique-the tendency to order and organization) -was not affected. The conclusion is that cognitive-behavioral learning can improve the interpersonal difficulties and perfectionism of students.

## References

- Flett, G.L; Hewitt, P.L (2002). *Perfectionism: Theory, research and treatment*. Washington, DC.
- Hewitt, P.L; Flett, G.L (1991b). Perfectionism in self and social context: conceptualization, assessment and association with psychopathology. *Personality and social psychology*, 60, 456- 470.
- Johanson,C.,Dahl,J.A.(1996). The Effectiveness of Family Therapy in a Cognitive-Behavioral Approach on Reducing Communication Problems and Perfectionism. *Behavior Research and Therapy*, 36, 915-931.
- Kearns, H., Forbes, A., & Gardiner, M. (2007). A cognitive- behavioural coaching intervention for the treatment of perfectionism and self handicapping in a non clinical population. *Behavior Change*, 24, 157-172.
- Ram, D. Alison, R. (2017).The Effectiveness of Cognitive-Behavioral Training on the Perfectionism of Mothers of Children with Autism. *Personality and individual differences*, 18, (5)668-663 .
- Saile, H., & Nilges, P. (2014). The Effectiveness of Cognitive-Behavioral training on Mental Health and Perfectionism of Special Nurses. *International Journal of Group Psychotherapy*, 48, 215-243.
- Stoeber, J., & Stoeber, F. S. (2009). Domain of perfectionism: Prevalence and relationships with perfectionism, gender, age and satisfaction with life. *Personality and Individual Differences (in press)*.
- Yiend J, Savulich G, Coughtrey A & Shafran R. (2011). Biased interpretation in perfectionism and its modification. *Behav Res Ther*; 49(12): 892-900.
- Asgharpur, Saleh. (2017). *Cognitive-Behavioral Family Therapy Education on Communication Problems of Couples Applicant for Divorce Reciprocal Referral from Family Court to Ahwaz Psychological Counseling Centers*. Master thesis of Chamran University of Ahvaz.
- Mashhadi, Coral; Yazdandust, Facies; Asgharnejad Farid, Ali Asghar, Maridpour, Dara. (2017). *The Effect of Cognitive Behavioral Therapy on Perfectionism, Confirmation and Emotional, Cognitive and Physical Depression Symptoms in Patients with Pain Disorder*.
- Jorabchi, Masoomeh (2015). *The Effectiveness of Reality Therapy Training on Perfectionism and Self Confidence of Girls Submitted to Tehran's Beauty Surgery*. Master thesis of Roodehen Azad University.
- Rafei, Inspirational. (2014). *The Effectiveness of Cognitive Behavioral Group Counseling on the Perfectionism of Gifted Students*. Master's thesis at Allameh Tabataba'i University.
- Goldman, Yadollah; Men, Maryam; Mehrabizadeh Arminand, Mahnaz. (2012). Effectiveness of cognitive-behavioral intervention on perfectionism and guilty feelings of students. *Applied Psychology Quarterly*, Year 6, Issue 4, pp. 71-85.
- Shamizadeh, Hadi (2017). *The Effectiveness of Cognitive-Behavioral Education Based on Perfectionism on the Difficulties of Exercise and Depression in Ahar County Students*. Master thesis, Tabriz University.
- Lavifakan Ali; Zaerian Sakineh. (2010). Comparison of the effectiveness of two methods of cognitive-behavioral education and training of time management skills on decreasing negligence and perfectionism of students. *Counseling and Psychotherapy (Consultative Culture)*, Volume 1, Issue 2, Pages 99-126.
- Fatah, Najme; Azad Fallah, Parviz, Rasoulzadeh Tabatabaee, Sayed Kazem; Rahimi, Changiz. (2013). Validity and Reliability of the Interpersonal Problems Questionnaire (IIP-32). *Journal of Clinical Psychology*, Vol. 5, No. 3: 34-23.
- Fathi, Ali. (2017). *Effectiveness of cognitive-behavioral intervention on perfectionism and loneliness in non-indigenous students residing in Shahid Beheshti dormitories*. Master's thesis of Shahid Beheshti University.
- Farahzadi, Maryam (2017). *Comparison of the effectiveness of group therapy based on admission and commitment and cognitive-behavioral group therapy on perfectionism and self-esteem of women with physical dissatisfaction*. Master thesis of Azad University of Tonekabon.
- Mahmudian, Shahlaq Esmaeili Shad, Behrang. (2015). *The Relationship between Perfectionism and Creativity Dimensions Among High School Students in Jajarm County*. *Quarterly Journal of Educational Research*, Vol. 10, No. 44, pp. 79-96.