

Effectiveness of Cognitive-Behavior Training on Modifying Self and Other-Deception among Females with Irrational Beliefs

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Abstract

Introduction: Self-deception and other-deception can be understood as lying to themselves and others. This research aimed to evaluate the efficacy of cognitive-behavioral intervention on improving self-deception and other-deception in women with irrational beliefs.

Methods: This quasi-experimental study was conducted with two groups of experimental and control and by implementation of pre- and post-test, and using sample of 30 participants (15 in experimental group and 15 in control group). The sampling method was convenient method among volunteer women eligible to inclusion-exclusion criteria of research object. Measuring tools were Self-deception and other-deception and irrational beliefs questionnaires. Data were analyzed using MANOVA test.

Results: Cognitive-behavioral intervention reduced self-deception, other-deception, and irrational beliefs in the experimental group compared with the control group ($P < 0.05$).

Conclusion: According to this results study, cognitive-behavioral therapy can be an efficient intervention for the correction of irrational beliefs, self-deception and other-deception.

Declaration of Interest: None

Key words: Cognitive-behavioral intervention, Irrational beliefs, Self-deception, Other-deception.

Introduction

Self-deception is evaluating the willingness of individuals to document their positive characteristics without considering the truth. Self-deception facilitate the removal of signs is guilty of one's knowledge of self (Such as sweating and change eye movement). In fact, self-deception bias means information expressed its features (1).

Self-deception—largely considered as a paradigmatic example of individuals holding false beliefs as a result of motivational influences. In self-deception, one deceives oneself into believing something they desire to be the case (2). And, the other-deception is the person tends to present itself in a way favorable to others (3). Other-deception, often lead to emotional turmoil in person (4).

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Self-deception is the deception with deception. And, the other-deception is the deception of others by deceit. Contrary to what is stated in the difficult to convey to yourself and others while others are unaware or ignorant and untrue statements and hide the flaws and deceive themselves and others, or your own distant, grooming and facilitate the work for themselves and others, to convince themselves and others mistakenly believe that their jockey and others are hidden (5).

Deweese (6) in his paper, self-deception - and other deception paradoxical belief as to a matter, he paradoxically the acceptance of subject self-deception and other-deception, tried to describe the right and away from the contradiction of the phenomenon of self-deception and other-deception. He is described on the assumption that self-deception and other-deception can be understood as lying to themselves and others. Deception's purpose is to maintain a belief in other individuals that the deceiver knows or thinks to be false. However, the information presented does not have to be false information, rather the sender of the information must believe the information to be false. Not all deception is intentional, but all deception alters the perception of the receiver. Lies also alter the perception of the reader with intention. For this manuscript, lying will be considered a sub-category of deception (7).

Self-deception and other-deception may keep the mind alert and facilitate the continued threat of action and motivation and optimism is in adverse conditions (8). Hence, self-deception and deceiving others-created state of mind in which a person blindly believe that

is totally irrational and wrong to maintain clarity. Therefore, self-deception and other-deception are part of irrational beliefs and are considered a defense mechanism that creates psychological stress (9) and their individual emotional turmoil (4).

Irrational beliefs, prejudices and biased expectations that people are learned in childhood, usually express with the words "should" and "would" (10). Irrational Beliefs are thoughts that the person's mental domination and the determining factor of how they interpret and give meaning to events and regulate the quantity and quality of their behaviors and emotions (11,12, 13).

Irrational beliefs (such as self-deception and other-deception) as an important feature of the psychological causes are vulnerable to negative life events (13, 14). They seem to be one of the strategic guidelines on the use of cognitive-behavioral intervention.

The purpose of cognitive-behavioral therapy is cognitive restructuring and help people change thinking patterns that are wrong regarding to thought processes and irrational beliefs. Cognitive-behavioral intervention is concerned and emphasized that verbal behavior and their imagery with the world around and the future must be changed due to its techniques (15). Cognitive-behavioral intervention is an organized intervention based on cognitive-behavioral approaches contains cognitive restructuring of irrational beliefs, and errors and bias, cognitive and behavioral skills and coping with problems by a person (16). Cognitive-behavioral therapy is one of the non-pharmacological therapies that has been applied in clinical practice in recent years (17). Cognitive-behavioral therapy (CBT) is the psychological approach with the best evidence of efficacy. CBT showing an increase in cognitive and behavioral coping strategies (17). Cognitive-behavioral intervention on the belief persists that irrational beliefs and unrealistic assessments of everyday events can have a negative impact on the emotions and behavior (18).

Clore and Gaynor (19) investigated the effectiveness of structured cognitive and show that this training makes many changes in the interior of distress and positive thinking. In fact, the logic of ideas to improve the cognitive status of the people. The role of the therapist, then, is to help the patient identify their thinking style and change its properties using evidence and logic. The aim of this type of treatment is to help clients identify their dysfunctional behavior and distorted patterns of thought through regular discussion and organized behavior (20).

Since many of the cognitive problems are related to the way people think (21) can be modified, irrational thoughts and replace them with rational thoughts of emotional disorders, psychological and behavioral prevented (22) Therefore, the expected cognitive-behavioral intervention to correct irrational beliefs in women can reduce self-deception and other-deception. So this research suggests that cognitive-behavioral intervention to modify the effects of self-deception and other-deception in women with irrational beliefs.

Methodology

A quasi-experimental design with pre-test, post-test, experimental and control groups were utilized in this study. Statistical populations of this research comprised all the women in Tehran all women in Tehran? , the age range of 40-20 years was extended. Sampling method of this study was convenient method, in which sampling of volunteers who responded to the call record, after an initial telephone interview, the interview referred to health counseling center dawn and they score on a scale of irrational beliefs Jones (23) score of 311 and above (one standard deviation above the mean) 30 people who were eligible for this study, were selected to participate in the study signed a consent ethic. Inclusion criteria were individuals with the score of 311 or higher on a scale of irrational beliefs (23), the age range of 20-40, being female, residence in Tehran, minimum education with high school

diploma. Exclusion criteria were having significant psychological illness (such as personality disorder, major depression, obsessive-compulsive, bipolar, etc. based on clinical interview and criteria for DSM-5), employment has a degree in psychology or counseling, and receiving a psychological intervention. Other significant physical or chronic illnesses such as cardiovascular diseases, endocrine diseases, diabetes, etc., informed signed consent was obtained from eligible participants.

Then the people in the control and experimental groups (group list pending) includes a group of 15 participants were assigned randomly. All subjects in both groups before and after the introduction of 25 weekly sessions of cognitive-behavioral group therapy groups, in a session on all the items of the responded questionnaire irrational beliefs Jones (23), self-deception Questionnaire (SDQ), other- deception questionnaire (ODQ).

Jones Irrational Beliefs Questionnaire:

This tool measures the intensity and type of irrational beliefs, test Jones, Jones Irrational Beliefs Test in 1968 and was developed by Jones created. This questionnaire is the most widely used measurement tool irrational beliefs in the world.

Investigate reliability and validity of Jones

(23) test to retest reliability 0.92 and each of the subscales from 0.66 to 0.80 to 10 persons, it reported. In Iran, the Cronbach alpha reliability of this scale in research Taghipoor (24) using a sample of 106 students with an average age of 25/24 years of Allameh Tabatabai University was 0.71. To determine the convergent validity, the correlation coefficient Jones Beck Depression Inventory was obtained was 0.82. Face validity test has been approved by experts in counseling psychology.

Self-deception Questionnaire (SDQ): to assess the willingness of the individual to

ascribe positive attributes to their individual design that is self-deception is involved (25). This questionnaire consists of 20 items in a LIKERT scale of 1 to 7 in order to evaluate the behavior will be assessed if you choose options 1 or 2 are considered to be self-deception.

Test-retest reliability of this questionnaire, 81% within 4 to 10 weeks of performance have been reported. SDQ questionnaire with Beck Depression Inventory BDI), (26) with the neuroticism scale Eysenck (27) was negatively correlated with the scale of the Eysenck Personality Questionnaire polygraph positive correlation (25). Globally SDQ statements are true but are psychologically threatening. High scores on this research subject honesty and self-deception is a sign of lower grades. In research Agah Haris and Ezzati (press) statements of Self-deception consistency coefficient (25) 400 students of the University of Semnan province 0.85 reported, with an average score of 73.76 with standard deviation 19.58, which indicates the validity of the questionnaire.

Other-deception questionnaire (ODQ): to assess the willingness of people to introduce themselves in a manner favorable to the people concerned (25) of this questionnaire was composed of 20 items, the LIKERT scale of 1 to 7 each item is classified. The questionnaire 6 and 7 represent other options with sub-scale deception ODQ neuroticism and negative correlation with the scale of the

Eysenck Personality Questionnaire false positive correlation with the SDQ of this questionnaire also a strong positive correlation (25). ODQ statements are socially desirable, but they are statistically rare behavior.

High scores on this research subject honesty and lower symptom scores other- is deception. In research Agah Haris and Ezzati (press) the questionnaire consistency coefficient other- deception (25) 0.85 to 400 students of the University of Semnan province were reported that average was 55.94 with 19.1 standard deviation, which represents the validity of the questionnaire.

Process of implementation of the research: for the study, 30 participants were eligible for entry-exit were selected. Then these people in the two groups (control group waiting list) includes a group of 15 participants were assigned randomly.

Then training group cognitive- behavioral therapy (28) that the program is meeting a period of 25 weekly sessions, each session lasting 90 minutes at the dawn of the health counseling center was run by the researcher. Upon completion of the training sessions of cognitive-behavioral group therapy, the questionnaire was administered to experimental and control groups. (Post-test) The content of the meetings is provided in Table 1.

Table 1: Cognitive-behavioral group therapy training sessions

| Meeting | Explanation |
|-----------|---|
| Meeting 1 | Interviews and pre-test, the questionnaires were self-blame attributions, irrational beliefs Jones, signed a consent form to participate in the program of cognitive-behavioral, behavioral contract |
| Meeting 2 | Welcome, Referrals members of Cognitive-behavioral and structure and rules of group sessions, individual work arrangements |
| Meeting 3 | Review Individual work session to introduce the basic concepts, logical errors, automatic thoughts, beliefs, mental corms, capture automatic thoughts: Learn ABC and recorded comets in three separate columns, individual tasks: collecting existing ABC everyday life |
| Meeting 4 | An overview of individual work session before the speech: logical errors, Practice: recognition and classification of logical errors, setting Individual work |

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|------------|---|
| Meeting 5 | An overview of the individual work of the third session, speech (discussed class) using the appropriate logic, practice: the use of appropriate logic for the production of alternative rational thoughts, setting Individual work |
| Meeting 6 | An overview of individual work session before the lecture (discussed class) against manipulation, exercise: Develop your personal objections, speech (discussed class): strengthening against manipulation by changing perception, setting individual work next session |
| Meeting 7 | Review individual tasks fifth meeting, speech (discussed class): Basic model (generic), set individual tasks: patterns and events in the history of private life |
| Meeting 8 | Review individual tasks related to the previous session, lecture explaining the rudiments of vertical arrow method, practice: the vertical arrow, set individual tasks |
| Meeting 9 | Review individual work session before the lecture (subject) (content) advanced vertical arrows, Practice: more vertical arrows, speech: degree of mental distress SUDs, lectures: Grading beliefs of SUDs, set individual tasks |
| Meeting 10 | Review individual work session of the eighth, Lecture: The concept of negative thoughts you exercise: classification set of beliefs and cognitive maps, exercises: Set the original list of negative beliefs, adjust individual tasks |
| Meeting 11 | Review Individual work session before the speech: cognitive formulation, practice: fill in the worksheet cognitive formulation, setting Individual tasks |
| Meeting 12 | Review Individual work session prior to the introduction of third-speech beliefs can change, lecture: introduction of rivalry (adversarial), Practice Analysis challenge (adversarial), adjusted for individual tasks |
| Meeting 13 | Review individual tasks, speech analysis, investigative, Practice: exploratory analysis |
| Meeting 14 | Individual tasks review meeting before the speech: scientific analysis, practice: scientific analysis, individual tasks set next meeting |
| Meeting 15 | Review individual work session before the speech: consolidation of information: the number of false beliefs and how many of them are true, mental maps, luggage, practice: making mental maps mastic, setting individual tasks |
| Meeting 16 | Review individual tasks session to speech (dialogue coach) opposed making, practice: opposition to all the assumptions used in practice: debate challenge, set individual tasks for next meeting |
| Meeting 17 | Review individual tasks, presentations: Change the perception, practice: conceptual change, adjust solo activities next session |
| Meeting 18 | Review individual tasks, presentations: Change excitement, exercise: Change emotional, speech, change in mental content mastic, Practice: Changing the mastic mental content |
| Meeting 19 | Review individual tasks, presentations: Opening balance mastic seeking mental content, practice balance mental retrieving luggage, specifying the individual tasks, practice: Illustration safe place |
| Meeting 20 | Reload individual assignments, presentations and training: mental issues mastic and what needs to change, adjust individual assignments |
| Meeting 21 | Reload individual assignments, lecture: self-mental empowerment, practice self-empowerment, mental, speech opening parenting, practice: open parenting, practice: writing letters, individual task: setting goals for behavior change |
| Meeting 22 | Review individual tasks related to the twentieth session, lecture: Breaking meme: identify and prioritize dysfunctional behaviors, calculating behavior chain analysis, |

| | |
|---------------|---|
| | alternative behavior, individual tasks: identification and prioritization of dysfunctional behaviors, calculated dysfunctional behaviors, chain analysis |
| Meeting 23 | Individual tasks over twenty-first session, lecture practices and behavior change: the development of fluid behavior, change chain, antecedent control, control amplifier and techniques step by step, your plan to change the kind of behavior |
| Meeting 24 | Review individual tasks, lectures, problem solving, practice problem solving using the worksheet solving individual tasks set for the next meeting |
| Meeting 25 | Review homework, lecture: cognitive-behavioral mental practice, practice: Complete the worksheet to practice CBT: cognitive-behavioral rehearsal exercises, party planning, individual tasks |
| Meeting 26 | Lecture: the continuity of change: cognitive techniques, experimental techniques and behavioral techniques, practice: provision plan (plan) depth review of the program, the necessary adjustments for the next assessment of treatment and follow-up action to end the session |
| Final meeting | Implementation questionnaires , self-blame attributions, irrational beliefs Jones Implementation questionnaires |

Ethical considerations: for implementing the independent variable of group therapy training and ethics awareness to all the women in the study, the research goals and complete a written consent to participate in research by women, It was explained to them that the results will remain confidential and used the results of an anonymous individual.

Data analysis: Data collected by the software SPSS-20 in both descriptive and inferential analysis was performed. At the level description: the indices were responders. Inferential statistics to analyze the variables of one-way analysis of variance (ANOVA) and also to evaluate the effect of correlated variables of multivariate analysis of variance (MANOVA) was used.

Results

Demographic characteristics of the sample: a total of 30 undergraduate students studying in the fields of Humanities, Science, Engineering and Technology and the Arts participated in the study, the mean age was 27 years and 2 months with a standard deviation of 7.13 years and age range was extended from 18 to 53 years.

In Table 2. results of the analysis descriptive and inferential After studying the basic assumptions such as normal distribution of scores, homogeneity of variances, etc., to use

test, ANOVA (ANOVA) Results of this test for each of the subscales and total score of self-deception and other-deception, and irrational beliefs is provided for each group.

According to Table 2. Pre-test and post-test scores of self-deception of both control and experimental groups are significantly different. ($P < 0.05$) Thus intervention improved cognitive-behavioral self-deception experimental group than the control group.

Also, other-deception pre-test and post-test subjects in both experimental and control groups are significantly different. ($P < 0.05$)

Thus, intervention have improved the cognitive-behavioral of other-deception in experimental group compared to the control group. Also, pre-test and post-test Irrational Beliefs in both control and experimental groups are significantly different. ($P < 0.05$)

Thus cognitive-behavioral intervention improved irrational beliefs experimental group compared to the control group.

Table 2: ANOVA test to compare self-deception and other-deception in two groups

| Indicator | Situation | M | SD | F | df ₁ | df ₂ | Significant level | Size of effect |
|--------------------|-----------|-------|-------|------|-----------------|-----------------|-------------------|----------------|
| self-deception | Pre-test | 98.26 | 10.95 | 5.76 | 1 | 28 | 0.02 | 0.17 |
| | Post-test | 102.4 | 12.07 | | | | | |
| other-deception | Pre-test | 68.6 | 16.59 | 9.5 | 1 | 28 | 0.005 | 0.25 |
| | Post-test | 66.43 | 21.51 | | | | | |
| Irrational beliefs | Pre-test | 319.3 | 25.66 | 7.63 | 1 | 28 | 0.01 | 0.21 |
| | Post-test | 303.1 | 36.92 | | | | | |

Discussion and conclusion:

According to the results presented in Table 2, self-deception and other-deception experimental group and control group, the intervention by cognitive - behavioral dropped. In self-deception and deception, interest and orientation of the individual to a particular faith, makes him accept the fact that the opposite view expressed in the form, the inhibition. In this mode, the person is not able to accept and attempt to resort to self or other-deception, self as good and desirable in the presence of others or to justify their presence (5).

In this regard, self-deception and other-deception have contradictory opinions about the same thing as saying, the sense that and other-deception can be understood as lying to yourself and others (6). He believes the lie to yourself and others, that person intentionally and others to believe what is not true to force or persuade.

In other words, self-deception and anything else that person, and get others to see the world as he wants, not the way it is. When you lie to yourself, all your hopes, dreams, memories and even his passion for the world around use. Self-deception makes the information that his attitude towards the world in support of the application and any information that is contrary to reject it (6).

In fact, self and other - deception is the mental state in which a person blindly believe that is

totally illogical and wrong to maintain clarity. Therefore, self-deception and other-deception component malfunction behaviors are considered a kind of defense mechanism that creates psychological stress (7) and emotional disturbances are individual (4).

Since defense mechanisms have the same functionality with irrational beliefs. (I.e. distortion in judgment) (12) According to Ellis (13) are prevented from reaching personal goals, make the person willing to adopt one thought is absolute nonsense. Hence, according to the association thought - feeling - behavior (26).

So in order to explain the findings of this study can be modified and behavioral emotional responses to life events efficiently through the distorted interpretations or inappropriate (29) could modify behaviors like self-deception and other-deception.

In fact self-deception and other-deception meant to express bias in their properties or others (1) and people on their way, others and the environment to understand and interpret and evaluate their future, Beck (30) communicate with others and respond to them, a logic error or malfunction are behavior and cognitive-behavioral intervention by targeting problematic behaviors with mechanisms such as problem solving, cognitive restructuring and coping with cognitive biases through techniques such as reductio ad absurdum, challenge analysis, exploratory analysis, scientific analysis against manipulation of

these elements malfunction and lead to a decrease in self-deception.

It can also be said that a combination of cognitive and emotional subjective experience that is clearly not distinguishable (29), the purpose of cognitive behavioral and functional aspects of merger of thought - emotion - action by changing dysfunctional behaviors, emotional regulation and cognitive restructuring (30).

So we can expect that the application of behavior modification techniques and skills exchange guided treatment (31) Correcting cognitive distortions and selective attention on five areas, attributes, expectations, assumptions and criteria that are interpersonal situations dysfunction (32) And decrease frustration and increase tolerance (33), can be negative behaviors when experiencing conflict affected people and thus believe (34) dysfunction, including stress and disturbance behavior by modifying cognition corrected.

Therefore, by modifying the vicious cycle of thought-feeling - behavior can be expected to improve the quality of the connection, (29) and also use of techniques such as Socratic questioning, behavior guidance, teaching specific behavioral skills such as conducting dialogue focused on the exchange of feelings and thoughts and the conversation that focused on problem solving or decision-making, (32) to modify the communication functions and thereby also reduce fraud else.

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