



Effect of cognitive-behavioral group therapy on the hopelessness and loneliness among divorced women

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Abstract

Divorce based on legal separation from life partner can have serious effects on mental health. The effects of this separation are more severe in women than men. The aim of this research was to determine the effectiveness of cognitive-behavioral group therapy on the hopelessness and Loneliness in divorced women. The participants of this study consist of 20 divorced women supported by welfare office who had hopelessness and loneliness symptoms. Inclusion criteria in this study were mother deprivation of child guardianship, not receiving psychological treatment, the lack of physical disease, minimum diploma in education and maximum bachelor of education, the separation time (1 to 2 years). But exclusion criteria were temporary marriage, marriage during performance, the risk of physical illness, having psychotic disorders, drug addiction. They were selected with available sampling method and were randomly assigned into two experimental (N=10) and control (N=10) group and tested by Miller's Hopeless questionnaire and Russell's Loneliness questionnaire. Then, experimental group receive 12 session of cognitive-behavioral therapy techniques and control group not received any treatment. In the end, information from both groups recollected and Follow-up tests were performed one month after the intervention. The results of multivariate Analysis of Covariance showed that the rate of hopefulness in experimental group in compare with control increased and the rate of loneliness decreased. Results indicate that cognitive-behavioral group therapy has a significant effect on hopelessness and loneliness in divorced women.

Keywords: Cognitive, Divorce, Hopeless, Loneliness

Introduction

Family is the most global and comprehensive social institution. No society can claim health without healthy family. Therefore it is favorable to be studied factors that threat family fundamental [1], In family environment influenced by not only biological aspects but also emotional aspects of persons. Although marriage is the beginning of

family formation, it often is not able to keep mutual action between partners. Consequently, differences and conflicts in family are increased that are led to divorce [2].

Wedding conflicts are defined as a reciprocal process when either one or both spouses are not satisfied [3]. Wiseman thinks that divorce is a

process that begins with couples experiencing emotional crisis and ends up with an effort to settle the conflicts through splitting up and entering in to a new situation with different roles and life style [4]. Though divorce is a common experience, it is considered a great happening in life which accompanies social, psychological, and physical negative consequences [5].

Divorce makes serious consequences for the people who are involved in. Some of its consequences are low levels of psychological well-being such as disappointment, rise in psychological stress, low self-esteem, feeling of loneliness, and increase in problem of physical health. In addition, it affects children negatively such as increasing aggressiveness, agitation, anxiety, emotional problems, psychological conflicts and low levels of social competence [6-8]. Besides making a variety of stressful differences in people life, divorce is also accompanied by the negative emotional burden based on separating from a longtime partner and there is no wonder why this separation reduces mental and physical health [9]. Regarding gender differentiations of women and men in confronting behaviors, showing different confrontations after divorce is highly probable in women. In general, women are less controllable than men in ranking of the negative stressful events [5].

The results of the studies demonstrate that in comparison with the preceding period of divorce, women experience less happiness and they feel disappoint and remorseful more. Overall, divorce period is full of stress, instability, feeling of loneliness, negative sentiments often with hostility [10].

Hope is a necessary and vivid part of life which provides the needed energy to fulfill the aims and wishes [11]. It includes the people's understanding and capability for achieving the goals and maintaining the motives until attaining the ends [12]. It seems that with hope one can endure the difficulties in different stages of life and build a meaningful life through challenging the problems [13]. Divorce diminishes the behaviors ascending health and hope [5].

Another component which needs to be addressed is the feeling of loneliness that is usually defined

as a difference between one's own liking and real social relations. Even though feeling of loneliness is considered synonymous with the concept of social isolation, these two are distinct concepts. In fact, social isolation reveals an objective criterion for social interactions and intrapersonal relations. In social isolation, the amount of relations is more significant than the quality of relations [14], whereas the feeling of loneliness is a kind of unpleasant mental experience that is caused by losing the pleasing relations or lack of intimate bond with a person (spouse, child, friend) [15].

On the other hand, feeling of loneliness leads to mental-social problems like low self-esteem and competence, weak social interactions and problems relating to physical health such as malfunction in body immunity and sleeping problems. Because of decreasing tolerance, these people select an inactive life style that leads to their disappointment [16,17].

Although there are different reasons which contribute to divorce, yet Ellis emphasizes the role of cognitive and behavioral causes in creating the matrimonial problems [3]. Therefore, one of the effective cures is the cognitive-behavioral treatment, because it makes a rich relationship network by making the relationship feeling strong, so a person gains hope in it [18].

Cognitive behavioral treatment is a type of psychotherapy which helps people to improve and extend their intellectual patterns or efficient cognitions, and decrease their inappropriate behaviors and feelings to resolve the current problem [19]. During treatment that usually lasts weekly 12 sessions in 3 month, during this time participants learned the ways for managing their thoughts, recognize the thoughts which are the reason of their negative feelings and behaviors, and gain the new encountering ways to replace these thoughts [20].

According to previous studies, it was cleared that religious cognitive behavioral treatment is effective method for decreasing divorcees' depression [21]. In another research, the effect of teaching positivism with focusing

the verses of Quran on rising the hopefulness of divorced women was studied [22]. Similarly, Gail et al carried out a study under the heading of cognitive behavioral group treatment effect on divorcees' depression, anxiety and feeling of loneliness. The results showed the reduction in depression, anxiety and feeling of loneliness following the cognitive behavioral treatment [23]. With viewing the role of these two concepts, hopefulness and feeling of loneliness, and also after-divorce skills that have with mental health, and because the emotional relation of a woman with her husband and child is influential in these concepts while divorcees are deprived of this blessing, it is important step to diagnose the harms that divorcees encounter and their attempt to remove them in the society mental health. Due to the lack of simultaneous study of cognitive and behavioral treatment effects on hopeless and loneliness, therefore the purpose of this study was assessment of the impact of cognitive behavioral treatment on the divorced women's hopefulness and feeling of loneliness.

Method

Regarding the purposes and content this study is a semi-experimental research conducted on divorced women who were protection of in form of pretest-posttest with control group and follow up period. The population of the study included all divorcees who were under the protection of welfare office in Bardaskan, northeast of Iran, in 2014. Sampling was performed by convenience method. That way 81 people were selected for diagnosing hopelessness and feeling of loneliness. To respect the ethics, before conducting the research, the explanations were given so they consented of their free will. Based on the data collected through the questionnaire, 20 participants who had been disappointed and felt alone were assigned to two groups of control and experimental. The participants whom their marks were in range of a standard deviation lower than mean were selected as disappointed participants and the participants with mark higher than median 50 chosen as participants who feel lonely. They were pretested with "Russel's questionnaire of loneliness feeling" and

Miller's questionnaire of hopefulness". Each of the participants having inclusion criteria entered the experimental and control groups: mothers deprived of child's guardianship, lack of being psychologically treated, not having any physical illness, and owning at least diploma and at most M A. The criteria for being out of these two groups included temporary marriage, the ongoing permanent marriage, suffering from physical affliction, having psychotic disorders, and drugs addiction. During weekly 12 sessions, experimental group received treatment with cognitive skills while the control group did not receive any treatments. Then both groups participated in posttest. A month later, follow up study was conducted. During follow up, one participant of experimental group was crossed out of the sample because of marriage. In each session, besides cognitive skills, the behavioral techniques (muscles relaxation and mental picturing) were also taught. First session, the group members got familiar with each other and then three systemic model of excitement was explained for them. Next, in second session, the logical errors were shown to them. After their recognition with logical errors. The method of vertical arrow for identifying the main beliefs was trained and then they were asked to categorize their own main beliefs. After wards, the preparation of a cognitive map was taught. Later on, they were trained three methods of objective analysis, gain and loss, and logical analysis to judge whether they keep their belief or change it. Then, to make a change in belief, the method of designing opposite belief, optional superficial restraint, and rewarding self-punishment was taught. To collect data, Miller's questionnaire of hopefulness and Russel's questionnaire of loneliness feeling were used.

Miller's questionnaire of hopefulness:

This study is composed of forty eight aspects of hopelessness and desperation models in which the specified points were selected according to the evident and hidden behavioral manifestations of hopeful and desperate participants.

In front of each option which is representative

of a behavioral symptom, there are the statements that are written as follow:

For detection of depression amount, terms such as strongly disagree, disagree, neutral, agree, and strongly agree were used that their marks were 1, 2, 3, 4, 5 respectively.

Each participant gets a mark by selecting one of the above options. Numerical value of each option is from 1 to 5. Total marks obtained by each person is from 48 to 240 that 15 statements were marked conversely (11,13,16,18,25-38) In a study that was conducted by Ebadi, et al on divorcees, the reliability coefficients of Miller’s hopefulness scale was reported using two methods of Cronbach Alpha and effective size equal to 0.87 and 0.91 and its validity was measured 0.64 demonstrating the questionnaire enjoys the needed validity [22]. In current study, the reliability coefficient of hopefulness scale was weighed with Cronbach Alpha 0.86 which indicates the ideal reliability of the questionnaire.

Russel’s questionnaire of loneliness feeling:

The scale of loneliness feeling was made by Russel, Pila, and Katron [24]. Since in the main UCLA scale there was the probability of orientation, these experts decided to rebuild

a new scale. To measure UCLA reliability, Russel, Pila, and Katron employed the same scale on 237 students (124 male and 113 female). The reliability of this new scale was reported 0.94 with reexamination method and 0.96 with main scale. In a research on divorcees by Bahrami, et al, the reliability coefficient of this questionnaire was measured 0.95 and 0.95 by Cronbach and Guttman Alpha and its validity was obtained 0.65 [24]. The reliability coefficient of loneliness scale in present research was gained 0.89.

For analyzing the data, SPSS-19 was used. The data were analyzed in two levels: descriptive and inferential. In descriptive statistics level, mean and standard deviation were employed and in inferential level, a multivariate covariance analysis was used to remove the effect of pretest from the posttest scores.

Results

Each variable mean and standard deviation in pretest, posttest and follow-up stages have been presented in Table 1 in control and experimental groups separately.

Table 1 Descriptive statistics of hopefulness and feeling of loneliness in the Pretest, posttest and follow up stages separately in two groups

	N	Index	Hopefulness			Loneliness		
			Pretest	Posttest	Follow up	Pretest	Posttest	Follow up
Experimental Group	10	Mean	127	147.30	142.88	59.10	48.60	49.22
		SD	13.96	13.21	9.68	7.59	8.22	8.74
Control Group	10	Mean	123.40	126.30	124.10	60.20	61.40	59.90
		SD	12.64	14.89	13.20	4.61	5.68	4.20

As Table 1 indicates, the hopefulness scores of experimental group in posttest and follow up stages have increased in comparison with pretest, while the scores mean of pretest, posttest, and follow up in control group was little different from others. Experimental group loneliness

scores have also decreased in posttest stage and its impacts were kept in follow up stages. Because of employing multivariate covariance analysis test for analyzing data, the assumption results of equality of variances (Leven’s test) have been shown in Table 2

Table 2 Leven's test results for studying the assumption of variances similarity in two groups for posttest and follow up stages.

	Stage	F	df1*	df2*	Significance
Hopefulness	Posttest	0.51	1	18	0.48
	Follow up	2.60	1	17	0.12
Feeling of loneliness	Posttest	0.46	1	18	0.50
	Follow up	1.83	1	17	0.19

*degree of freedom

As Table 2 shows the assumption of equality of variances is verified in two group for both stages. According to the data in Table 3, all tests significance level ($p < 0.001$) indicates that there is a significant difference between two groups at least in one of the dependent variables (hopefulness and feeling of loneliness) and according to eta square; 61 percent of the observed

difference among the participants has related to the impact of dependent variable, namely the way of intervention. Besides, with regard to the statistical square 0.95 which is higher than 0.80, the sample size is acceptable for doing this research. The results of significant difference of each of the dependent variables are as follow.

Table 3 The results of multivariate covariance analysis on posttest scores by controlling pretest in hopefulness and loneliness variables

Test	Value	F	df	Significance	Eta-square	Square
Pillai's effect	0.61	11.78	2	0.001	0.61	0.95
Wilk's Lambda	0.38	11.78	2	0.001	0.61	0.95
Hotelling's trace	1.57	11.78	2	0.001	0.61	0.95
Roy's largest root	1.57	11.78	2	0.001	0.61	0.95

Table 4 Results of single variable covariance analysis for studying the effectiveness of behavioral-cognitive treatment on the amount of hopefulness and feeling of loneliness in two group for posttest stage

Index	Sum of squares	df	Mean square	F	Significance	Eta square
Hopefulness	1726.49	1	1726.49	12.49	0.003	0.43
Feeling of loneliness	685.63	1	685.63	24.12	0.001	0.60

Result in Table 4 showed significant difference between hopefulness and feeling of loneliness in experimental and control groups. That is, 43 percent of the change in the participants' hopefulness was due to the independent variable. Hence, one can say that the group behavioral–

cognitive treatment increases the divorcees' hopefulness. Also 60 percent of the loneliness change is caused by the dependent variable, therefore we can say that the behavioral–cognitive group treatment makes a reduction in divorcees' feeling of loneliness.

Table 5 Results of single variable covariance analysis to study the effect of behavioral–cognitive treatment on the amount of hopefulness and loneliness in two group for follow-up stage

Index	Sum of squares	df	Mean square	F	Significance	Ea square
Hopefulness	1046.09	1	1046.09	7.30	0.01	0.32
Feeling of loneliness	286.08	1	286.08	7.73	0.01	0.34

As Table 5 shows, the results of covariance analysis with controlling pretest, revealed that the intervening effect in one month follow up has been continued. In other words, the behavioral–cognitive group treatment has raised hopefulness and reduced loneliness in experimental compared with control group in follow up stages

Discussion

The findings indicate that the behavioral–cognitive group treatment has had a significant effect on reducing divorcees' loneliness and raising their hopefulness in posttest and follow up stages.

The first finding of this study showed the effect of behavioral–cognitive group treatment on increasing divorcees' hopefulness. According to the results of covariance analysis, the mean difference of experimental and control groups during posttest and follow up was significant in hopefulness component. Such finding is in parallel with Pedram et al [25], Alavi et al [26], Roohani, et al [27], Kiyani, et al [28], Holser, et al [29], and Handli, et al 's [30]. Because of the interrelated context of this treatment plan, the obtained results cannot be conceived as the consequence of one special component. Divorcees' illogical thinking causes the problem solving thought to decrease and their psychological problems like disappointment to raise [31]. As we know the disappointed people

are not able to think about the appropriate ways for change since they lack the required cognitive resources. Consequently, a cognitive treatment focusing on detecting and making a change in negative and inappropriate thoughts can increase hope [32]. So one of the effectiveness reasons of the current study deals with the cognitive assignments such as revealing the illogical thoughts and beliefs and attempt in changing these beliefs. Based on three systemic models, when a cognitive part (illogical thinking) changes, in consequence, the emotional part (disappointment) also changes.

From the aforementioned, it can be concluded that since the focus in cognitive treatment is on people's responsibility, they themselves are responsible for learning skills and utilizing the outcomes in their own life, and because hope belongs to man himself and person gains hope by deciding to have it, he simply decides not to become broken down with anything out of his own being. In case of undesirability, he will accept the responsibility of changing his own life and despite the relevant dangers he will do it; so this leads to raise in hope [33].

Moreover, the study demonstrated the influence of behavioral–cognitive method on decreasing the divorcees' feeling of loneliness. In other words, the results show that the difference between two groups is significant during pretest, posttest, and follow up and such

findings are in parallel with Haps, et al [34], Mirton&Huran [35], Gaillet al [23], and Bahrami et al [24]. That is, the thoughts people have during social interaction are very important. Feeling of loneliness which people may suffer after divorce is not necessarily because of lacking social relations; rather it is through the people's impression resulting from these deficiencies [36]; therefore, the cognitive treatment, through change in people's understandings and beliefs can be regarded as an effective treatment to reduce feeling of loneliness.

Although understanding is a valuable aim, it does not guarantee the change in behavior. Thus, using behavioral techniques like relaxation and mental picturing next to cognitive methods are one of the significant causes of change [37]. Since muscle relaxation provides mental imagining and it consequently increases people's power of mind and body, they believe that can cope with unpleasant events and this belief itself has a key role in raising people's hopefulness [38].

Another main strategy of this treatment method is its performance among a patients group. Regarding the possibility of exchanging feelings and learning new behaviors in group for subjects, its effectiveness increases compared with personal treatments particularly for problems that relate to the person's relations with others [39]. In other words, the cohesion of group treatments contributes to the reduction of loneliness. In group, people feel they are understood by other members and that they are important. Group relations are outset for close friendships and support that the people receive from the other members and also the comfort and security that they obtain in group are very influential in dropping their symptoms. On the other hand, people in group can manage their own relations better and gain quiet and hope to be able to directly encounter their difficulties because in group they notice that others suffer from the same problem as they do too [40].

Conclusion

From the present research findings it is concluded that the behavioral-cognitive group treatment is an effective way to increase

divorcees' hopefulness and decrease their feeling of loneliness. With consideration of the obtained findings, it is recommended to carry out such study on people being under the protection of other organization like Relief Committee so that probability to generalize the results is made with more certainty. Moreover, to remove the limitation in generalizing we can choose a bigger sample and increase the research accuracy and validity. The current study is only performed on divorced women and its results cannot be assigned to men.

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Contribution

Study design: SA, PR

Data collection And analysis: SA, PR, PS

Manuscript preparation: SS, PS

Conflict of Interest

"The authors declare that they have no competing interests".

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