The effectiveness of behavioral couple’s therapy to promote marital adjustment in women with addicted spouse

Mostafa Dehghani¹, Khaled Aslani¹, Reza Khojastemehr¹

Abstract
Drug abuse as social problem is phenomenon which degrades ability of society. The aim of this study was to investigate effectiveness of behavioral couple’s therapy to promote marital adjustment in women with addicted spouse. The design of this study was experimental with pre-test, post-test and follow up with control group. The study included all couples that had referred to clinics of addiction treatment in Ahvaz, Iran, that among them 20 couples were selected and randomly divided into two groups as experimental and control group. Research instruments include revised dyadic adjustment scale and structured diagnostic interview by clinical centers’ psychiatrist. The results showed that there was significant difference in marital adjustment between two groups. These results remained significantly stable during follow-up. Behavioral therapy is one of the most effective in improving marital adjustment.

Keywords: Couples Therapy, Marriage, Substance Abuse

Introduction
Drug abuse as social problem is phenomenon which degrades ability of society in organizing and preserving the existing order and it makes structural transformations in the economic, social, political and cultural systems [1]. Drug abuse has been studied in various aspects up to now. Drug abuse is the institutions and networks of mutual relationships among concepts which should be paid attention for analyzing the. “Family” is the most important institution which analyzes this phenomenon [2]. Family structure is damaged irreparably and its functions get damaged in case of entering drugs into the family path and affliction of family members to it [3].

There is direct relationship between the drug abuse, family and marital problems in such way that each can precede the other one preferably and creates some defective cycles between the couples and then it is too difficult to escape from and get rid of this ominous one [4].

Families afflicted with drug abuse usually encounter to various functions and numerous challenges [5,6-9]. Life of couples afflicted with drug abuse leads to divorce and separation more than those couples without drug abuse. Also, life quality and marital satisfaction of couples afflicted with drug abuse faces numerous negative changes [10].

Couples afflicted with drug abuse report lower marital satisfaction and their coupling adjustment gets damaged [11,12].

Drug abuse creates disorders in mutual marital relationships in long term and marital life gets damaged. Job pressures and negative marital consequences such as marital dissatisfaction
and marital maladjustment were created by disrupting the marital relationships [13]. Longitudinal studies have shown that couples who were afflicted with drug abuse report lower marital adjustment [12]. Marital adjustment and satisfaction among couples afflicted with drug abuse are much less than healthy ones [10-12]. Research findings have revealed that couples who were afflicted with the drug abuse have less marital adjustment and they were dissatisfied with their communications, complain about the inefficient methods of problem-solving by their wives and take steps toward divorce. As research’s findings; the drug abuse of men discourages the women in life and makes them less impressment, minimize their emotional relations with husbands, use limited communication skills in their relationships and as a result decreases couples’ adjustment [14]. Drug abuse makes addicted families less initiative in solving their problems and lack of initiative in problem solving causes which the most differences are created due to least problems and the marital adjustment is assimilated [10].

Also, the drug abuse creates inefficient patterns and as a result marital maladjustment is created and the negative relationship and low levels of marital adjustment are developed [10].

Behavior Coupling Treatment (BCT) is special treatment for drug abuse which has been supported empirically [15]. Findings have shown that among several interventions carried out during the last three decades among participation of couples afflicted with drug abuse in BCT program has created positive outcomes for them and led to reduced drug abuse as well as improved their family problems [4].

In general, BCT has improved marital adjustment in many researches and this improvement has had better results than other personal treatments as well as other group treatment [16]. Various studies have indicated BCT reduces the drug abuse and improves the coupling adjustment and also enhances the outcomes of marital life of those afflicted with drug abuse [4].

In regard to the aforementioned, the main issue of this research for following is the effectiveness of BCT on improving the marital adjustment of women with addicted spouse in Ahvaz city and whether BCT can improve the marital adjustment of women with addicted spouse in Ahvaz city.

Method
Statistical population of this research includes all couples who referred to clinics of addiction treatment in Ahvaz city, the southwest of Iran, among them four clinics were selected and were taken as the basis of research. In this population, men had background on drug abuse (type of drug: opium) and domestic violence who were detoxified and they were treated by methadone method during the treatment process. Families’ women were in healthy condition.

Sampling in the present research is purposeful sampling and was carried out randomly in order to research issue and aims. Four clinics were selected from among all addiction treatment clinics in Ahvaz city, the southwest of Iran, in order to carry out the present research. By referring to these clinics, participant couples were invited to attend in specified clinics on due time in order to take test and undergoing interview by the researcher and colleagues for performing the research. In the first step, the marital adjustment questionnaire was completed by women. In the next step, those women who had one standard deviation (SD) lower than the mean in adjustment variable were chosen with their husbands among who 20 eligible couples were selected for participating in present research and they were divided into two groups (experiment group and control group).

Intervention program of behavior coupling treatment was carried out on the experiment group in pair form and the couples of control group were put into the waiting list (after finishing the sessions of behavior coupling treatment on the experiment group,
control group and couples who were not in no groups by random sampling, were treated in an appropriate time by behavior coupling treatment). At the end, after intervention on the experiment group, women from both groups completed questionnaire for posttest in the variables of marital adjustment. Finally, after two months from the treatment period, women from both groups took the exams of domestic violence and marital adjustment as the follow-up.

Revised Dyadic Adjustment Scale (RDAS) had been constructed by Busby, Larsen and Christiansen [17]. The original form of this scale includes 32 questions which had been constructed by Spinner and based on the theory of Livise & Spinner about the marital quality [17]. This scale is pencil-paper self-report report which has 14 items and in scored on the 6-degree spectrum from 0 to 6, in such a way that score 5 is allocated to "completely agree" and 0 to "completely disagree". This scale consists of three subscales of agreement, satisfaction and coherence which show total score of marital quality. High scores indicate high marital quality. The subscales of agreement include the expressions 1 to 6 which is scored as follows: 5= completely agree; 4= approximately agree; 3= sometimes agree; 2= mostly disagree; 1= approximately agree; 0= completely disagree. The subscale of satisfaction which includes expressions 7 to 10 is scored as below. 1= always; 2= most often; 3= sometimes; 5= rarely; 6= never. The subscales of coherence include the expressions 11 to 14 which are scored as follows. 1= everyday; 2= approximately every day; 3= sometimes; 4= rarely; 5= never and the expressions 12 to 14 are scored as 0= never; 2= less than once a month; 3= once or twice a month; 4= once to twice a week; 5= once a day; 6= most often [18]. In a study, the reliability of this scale was obtained by using Cronbach’s alpha for three subscales agreement, satisfaction and correlation as 0.79, 0.80 and 0.90, respectively [17]. In the present study, reliability coefficient 0.83 was obtained by using Cronbach’s alpha in order to determine the current scale’s reliability. Reliability of subscales of this questionnaire was obtained from subscales of agreement, satisfaction and correlation by using Cronbach’s alpha as 0.90, 0.88 and 0.68, respectively.

Behavior coupling treatment includes 6 treatment sessions (two sessions a week and 45 min for each session) which was used on the experiment group. Contents of treatment sessions were designed in 6 sessions on the basis of behavior treatment family specialized for those families who involved in drug abuse and within the framework of drug abuse treatment book with behavior treatment family approach written by Donohue. This treatment includes programs such as couples’ interactions, creating supportive atmosphere to prevent drug abuse, reflecting the feelings and behaviors explicitly and frankly, increasing the positive behaviors, decreasing the negative behaviors, teaching the life skills and improving the relations [19].

**Results**

Table 1 shows mean and SD of marital adjustment scores in experiment and control group separately in stages of pre-test, post-test and follow-up.

<table>
<thead>
<tr>
<th>Statistical indices</th>
<th>Experiment group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Marital adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>30.30</td>
<td>48.60</td>
</tr>
<tr>
<td>SD</td>
<td>7.88</td>
<td>6.23</td>
</tr>
<tr>
<td>Minimum</td>
<td>20</td>
<td>42</td>
</tr>
<tr>
<td>Maximum</td>
<td>44</td>
<td>61</td>
</tr>
</tbody>
</table>
As seen in the Table 1, the mean of pre-test, post-test and follow-up scores of marital adjustment in experiment group were 30.30, 48.60 and 53.00 respectively and in the control group were 29.30, 30.10 and 30.70, respectively. Standard deviation of pretest, posttest and follow-up scores of marital adjustment in the experiment group were 7.88, 6.23 and 5.53, respectively and in the control group were 5.63, 4.86 and 4.83, respectively.

Table 2 shows the one-way analysis of covariance on the post-test score with controlling the pre-test of dependent variable of research (marital adjustment).

<table>
<thead>
<tr>
<th>Effect</th>
<th>Dependent variable</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Significance level</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Marital adjustment</td>
<td>1640.69</td>
<td>1</td>
<td>1640.69</td>
<td>53.33</td>
<td>0.000</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Results in Table 2 show that the one-way analysis of covariance in the variable of marital adjustment (F= 59.3, p= 0.000) is significant. In order to understand this difference, it is sufficient to compare the mean of posttest in both control and experiment groups in terms of the aforementioned dependent variables. In regard to the results given in Table 1, the mean of posttest on the total score of marital adjustment in experiment group and control group is 48.60 and 30.10, respectively indicating that marital adjustment in experiment group has increased. The obtained results emphasize on the effectiveness of behavior coupling treatment on increasing the marital adjustment. Table 3 shows the summary of results of one-war analysis of covariance on the scores of posttest with controlling the pretests on the subscales of marital adjustment in both control and experiment groups. Results in Table 2 show that the one-way analysis of covariance in the variable of marital adjustment (F= 59.3, p= 0.000) is significant. In order to understand this difference, it is sufficient to compare the mean of posttest in both control and experiment groups in terms of the aforementioned dependent variables. In regard to the results given in Table 1, the mean of posttest on the total score of marital adjustment in experiment group and control group is 48.60 and 30.10, respectively indicating that marital adjustment in experiment group has increased. The obtained results emphasize on the effectiveness of behavior coupling treatment on increasing the marital adjustment. Table 3 shows the summary of results of one-war analysis of covariance on the scores of posttest with controlling the pretests on the subscales of marital adjustment in both control and experiment groups.

Table 3 Summary of results of one-war analysis of covariance on the scores of posttest with controlling the pretests on the subscales of marital adjustment in both control and experiment groups

<table>
<thead>
<tr>
<th>Effect</th>
<th>Test</th>
<th>Value</th>
<th>F</th>
<th>Df hypothesis</th>
<th>Df error</th>
<th>Significance level</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Pillai trace</td>
<td>0.87</td>
<td>29.65</td>
<td>3</td>
<td>13</td>
<td>0.000</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Wilks’s lambda</td>
<td>0.12</td>
<td>29.65</td>
<td>3</td>
<td>13</td>
<td>0.000</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Hotelling trace</td>
<td>6.84</td>
<td>29.65</td>
<td>3</td>
<td>13</td>
<td>0.000</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Roy’s largest root</td>
<td>6.84</td>
<td>29.65</td>
<td>3</td>
<td>13</td>
<td>0.000</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Contents of Table 3 show that there is a significant difference between posttest scores of experiment and control groups in terms of at least one of the subscales of marital adjustment. Since there a difference between the control and experiment groups in terms of at least one dependent factor, one-way analysis of covariance in Multivariate Analysis of Covariance (MANCOVA) was performed on each of subscales of marital adjustment in order to specify the difference point. Table 4 shows the results of one-way analysis of covariance in MANCOVA for comparing the posttest scores through controlling the pretest on the subscales of marital adjustment in both control and experiment groups.
Table 4 Results of one-way analysis of covariance in MANCOVA on the posttest scores through controlling the pretest on the subscales of marital adjustment in both control and experiment groups

<table>
<thead>
<tr>
<th>Effect</th>
<th>Dependent variable</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Level of significance</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Agreement</td>
<td>402.526</td>
<td>1</td>
<td>402.526</td>
<td>62.70</td>
<td>0.000</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
<td>156.374</td>
<td>1</td>
<td>156.374</td>
<td>28.31</td>
<td>0.000</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>Solidarity</td>
<td>51.349</td>
<td>1</td>
<td>51.349</td>
<td>7.40</td>
<td>0.016</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Results in Table 4 show that the one-way analysis of covariance in agreement (F= 62.70 and p= 0.000), Satisfaction (F= 28.31 and p= 0.000), Solidarity (F= 7.40, p= 0.016) are significant. Obtained results emphasize on the effectiveness of behavior coupling treatment on Increasing agreement, Satisfaction and Solidarity.

In order to clarify the fact that intervention effect is stable during time (after posttest to follow-up), multivariate covariance analysis with repeated measures was carried out on the scores of posttest and follow-up while controlling the pretest of dependent variable of marital adjustment.

Discussion

The obtained results showed that there is a significant relationship between the subjects of experiment and control groups in terms of marital adjustment in pretest as well as the follow-up. This finding indicates that experiment and control groups are different from each other in terms of rate of marital adjustment in BCT. BCT leads to improve marital adjustment among participants of experiment group in comparison of control group in posttest stage and it continued in two-month follow-up step.

Results are consistent with several researches [3,19,20,21]. In elaborating this finding, it can be said that as result behavior coupling treatment, enhances communication and increases satisfaction among the couples. In a research, this achieved result indicates that behavior coupling treatment teaches the skills to the couples which affect their quality of their marital relationship [19]. For example, problem-solving skill teaches the couples how to manage issues among themselves. Communication skill teaches them how to communicate properly and effectively with their spouses and conflict-solving skill deals with solving the conflicts. All of these skills lead to better adjustment of couples engaged in drug abuse.

In BCT is focused to train the methods to overcome the conflicts and solve the couples’ problems, to take measures against problems before their expansion, equip the couples for encountering the future issues and train the couples on how to solve their problems before they are included. These issues lead to continuity and improvement of spouses’ relationships without facing any negative consequences [22]. Those couples who participate in the BCT program learn skills which increase spouse support and emphasize on the interpersonal problems [22]. In addition to these, positive communication skills, duties division and agreement which are resulting from these skills are related positively to the marital adjustment of participant couples in the treatment program. Assertiveness is one of those skills which are trained in the behavior coupling treatment program to the couples. Assertiveness is one of the important factors in interpersonal communications which enhances social support in stressing conditions. Increasing the assertiveness ability among the patients can enhance the self-esteem and social support. The result of this is an increase in consistency and adaptation with conditions and acceptance of life conditions among the couples. Weak communications can lead to unhealthy relations and increase the mental pressure. During the stressing conditions, those people with higher level of assertiveness experience less mental pressure [24].

Moreover, specialist teaches the couples through use the technique of attractive family activities in the environment control treatment program which is a part of behavior coupling treatment program, so they use for each other what they like, go to places where they like and
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plan conversations which they like to have and use them. This duty results in marital satisfaction and more agreement of couples [24]. Additionally, through training and intervention as “I have a big family” in BCT, the communications among the family members enhance, the relationships were expanded and family members learn how to appreciate each other. These issues increase the positive exchanges and interactions as a result of which satisfaction and adjustment are improved. Also couples explain what they like and admire and should do for respecting the others in the program of exchanging the positive expressions [24]. This program makes positive exchanges between couples and then their adjustment. In this program, couples discuss and exchange ideas about religious subjects and issues, aims and goals, sexual relationship and life decisions. This program can increase the agreement between the couples.

Conclusion
The results showed that there was a significant difference in marital adjustment between two groups. In addition, these results have been consistent in follow up period. The acquired results revealed that behavioral couple’s therapy was effect in promote marital adjustment. The present research has been implemented on the couples who are involved in drug abuse; therefore, it is not generalizable to the normal couples. This research was carried out among the couples in Ahvaz City; hence, it is not generalizable to the couples of other cities. At the end, all families participating in this research are appreciated.

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Contribution
Study design: MD, KhA, RKhm
Data collection and analysis: MD, KhA
Manuscript preparation: MD, KhA, RKhm

Conflict of Interest
"The authors declare that they have no competing interests"

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