Research Paper

The Effectiveness of Problem-Solving Therapy (Solution-Focused Therapy) and Emotion-Focused Therapy on the Spiritual Health of Drug Addicts

Elham Bagheriniya1, Maryam Safara1,2*, Abolfazl Karami1, Shahrokh Makvand Hosseini1,3

1. Department of Psychology, Semnan Branch, Islamic Azad University, Semnan, Iran.
2. Department of Psychology, Women Research Center, Alzahra University, Tehran, Iran.
3. Department of Clinical Psychology, Semnan University, Semnan, Iran.

* Corresponding Author:
Maryam Safara, PhD.
Address: Department of Psychology, Women Research Center, Alzahra University, Tehran, Iran.
Phone: +98 (912) 3600187
E-mail: m.safara@alzahra.ac.ir

ABSTRACT

Background and Objectives: Promoting the psychological health of drug addicts in all dimensions, including spirituality, is one of the goals of psychotherapy approaches, so the aim of this study was to determine the effectiveness of problem-oriented and emotion-based treatment on the spiritual health of drug addicts.

Methods: The present study was a quasi-experimental pretest-posttest study, three groups (two experimental groups with a control group). The statistical population included all drug addicts who referred to addiction treatment centers in the third district of Tehran in the first six months of 2021 (420 people). Three experimental groups were tested. Data collection tools included a researcher-made questionnaire on mental health. Problem-oriented and emotion-oriented therapy sessions were held in eight sessions for both experimental groups over two months, but the control group was on the waiting list. Data were analyzed using SPSS software version 24 and univariate analysis of covariance.

Results: The results showed that problem-oriented and emotion-oriented therapies increased the spiritual health of drug addicts compared to the control group (P<0.01); There was no difference between the two treatments (P>0.05).

Conclusion: Problem-based and emotion-oriented therapies can be used as interventions to promote the psychological health of drug addicts.
Introduction

Drug addiction is the second most common mental disorder [1]. Drug addiction leads to significant harm in various areas, including psychological health [2]. Psychological health includes mental comfort, feeling of self-empowerment, autonomy, adequacy, understanding of intergenerational solidarity, and recognizing their ability to realize intellectual and emotional capacities [3] and multidimensional factors (personality, spiritual, identity, cognitive, behavioral, emotional) are rooted in the social, cultural, economic, and even political conditions of the society [4].

The prevalence of drug addiction has led to the development of types of therapy for it. One of these therapies is problem-solving/solution-focused therapy. Problem-solving therapy believes that focusing on the past and analyzing its problems is a long-term and useless process and emphasizes that people’s beliefs and perspectives are essential in maintaining issues [8]. Problem-oriented therapy (POT) is a future-oriented approach, focusing on solutions rather than solving more problems, and is a short-term intervention [9].

Problem-oriented therapy is appropriate and effective for a wide range of client problems in which the client is purposeful or can set a goal during treatment [10]. In this regard, the results of the research indicate the usefulness of solution-focused therapy in preventing relapse of addiction [11], improving the general health of students [12], and the effectiveness of problem-solving process training in improving public health in drug addicts [13], and the effectiveness of problem-oriented systemic couple therapy on reducing marital conflict in the spouses of drug-addicted men [14].

Another practical and effective therapy is emotion-focused therapy (EFT). The EFT approach reinforces positive outcomes, reduces fear and feelings of loss, reduces ambivalence, and is beneficial in combating conflicts in people with addiction [15]. EFT is an empirical and integrated approach based on real value for the client, an empathetic relationship with the client, respect for the client, and sensitivity to respond to the client’s emotional experiences. The principles of communication in this therapeutic approach include facilitating mutual participation in a safe and work-based therapeutic relationship that provides sufficient motivation and reward for clients to express and examine their main problems and emotional pain [16].

EFT can effectively break the addicts’ cycle of denial and resistance to the need for change and resistance to it [17]. Research has shown the effectiveness of the process of teaching emotion regulation strategies on mental health, self-compassion, and temptation in addicts [18], the efficacy of EFT on promoting mental health in women affected by infidelity [19], and increasing life expectancy in divorced women [20].

Drug addiction is considered from several psychological, social, and cultural dimensions. It negatively affects overall health in all its proposed dimensions and sub-components, such as security, social behavior, development, professional performance, and economy [21]. Considering the importance of maintaining the family and mental health of family members, especially women with addicted spouses, it seems that self-treatment approach, which is an up-to-date, relatively simple, and understandable method for the public, can be effective in rehabilitating spouses of drug addicts.

This study was conducted to determine the effectiveness of problem-solving and EFT on the spiritual health of drug addicts and seeks to answer the question of whether problem-solving and EFT are effective on the spiritual health of drug addicts.

Methods

This study was a quasi-experimental pretest-posttest study with three groups (two experimental groups with a control group). The statistical population included all drug addicts referred to addiction treatment centers in the third district of Tehran City, Iran in the first six months of 2021 (420 people). Among the addiction treatment centers in district 3, two addiction treatment centers, such as Negah Roshan and Sadra Psychiatric Clinic were randomly selected.
Therefore, among the eligible individuals who volunteered to participate in the study, 60 people were selected due to the possibility of losing the sample and generalizability of the results using the convenience sampling method and randomly (by removing the even or odd ball in the bag) in three experimental groups, such as POT, experiment, EFT, and control group.

The inclusion criteria included voluntary collaboration in research, drug addiction based on the diagnostic and statistical manual of mental disorders (DSM 5) diagnosed by the center’s psychiatrist, having a minimum cycle education, age range between 18 and 55 years, and no psychotic disorders based on the individual’s medical record. The exclusion criteria included physical speech and hearing problems to the extent that disrupts the patient’s relationship with the therapist, failure to attend more than one treatment session, use of antipsychotic and psychotropic drugs, lack of cooperation during treatment, and distorted research questionnaire. The data collection tools included the following questionnaire.

Researcher-made comprehensive mental health questionnaire

This 117-item questionnaire was prepared by researchers, supervisors, and counselors to assess the overall dimensions of the mental health of addicts. This questionnaire measures six cognitive (13 questions), emotional (15 questions), behavioral (21 questions), personality (27 questions), spiritual (21 questions), and identity (20 questions) components ranging from strongly disagree (zero) to strongly agree (score four) on a five-point Likert scale. Scores range from zero to 468. Higher scores indicate higher health in each dimension and overall higher mental health.

After selecting the concept under study (mental health of addicts), the researcher extracted the relevant propositions and items from reliable sources such as specialized books and experts and designed and compiled them in a 200-question scale. In the preliminary study on face (content) validity based on the opinion of experts and specialists (8 psychologists specialized and active in the field of addiction), appropriate questions remained, and inappropriate questions were removed from the initial scale. The questions at this stage were reduced to 117 questions, and in the experimental implementation and a sample of 30 people, its internal consistency was calculated to be 0.73 via Cronbach’s alpha.

In the actual implementation, the scale was applied to 300 addicts referred to the addiction treatment center in Tehran City. The validity of the questionnaire was confirmed by exploratory factor analysis with six factors. The reliability of the tool for cognitive, behavioral, emotional, personality, spiritual identity and total components were 0.71, 0.75, 0.88, 0.86, 0.72, 0.77, and 0.83, respectively. In this study, the spiritual dimension of health, which included 21 questions, was used. This dimension measures the context of action with awareness, deep faith and belief, perception of purpose, sense of accomplishment of one’s inner connection goal, and constructive relationship with others.

The research process was such that, with the cooperation of the addiction treatment clinic, drug addicts participated in a briefing session based on their medical records. In this meeting, the goals and duration of the training sessions, the confidentiality of personal information, the right to leave the research at any time, and the time and place of the sessions were explained. Then, 60 eligible and willing people were selected to participate in this project.

These individuals were divided into three equal groups (two experimental groups and one control group). As a pre-test, all three groups completed the informed consent form based on voluntary participation in the sessions and the spiritual dimension of the addict’s mental health questionnaire. Treatment sessions were held for the two experimental groups over two months but the control group was on the waiting list. At the end of the treatment sessions, the mentioned questionnaires were administered again as posttest in all three groups. To observe ethical considerations for the control group, four training sessions were held in compliance with all health instructions.

Based on the content of the De Shazer et al.’s POT sessions, the sessions were held by the researcher in 8 sessions of 60 minutes [22]. The summary of the treatment sessions (Table 1).

The emotion therapy sessions in this study were based on Johnson and German’s emotion therapy protocol [23], conducted by the researcher in 8 sessions of 60 minutes. The summary of the treatment sessions (Table 2).

In this study, all relevant ethical principles have been observed, including the confidentiality of the questionnaires, the informed consent of the participants, and the authority to withdraw from the research. And has an eth-
ics code IR.AZAHRA.REC.1400.029 from AlZahra University. Data were analyzed using SPSS software v. 24 and univariate analysis of covariance (ANCOVA).

Results

Table 3 presents the demographic results of the research sample, including gender, marriage, and education.

Table 4 presents the descriptive results of research variables, including Mean±SD of pre-test-post-test scores of spiritual dimensions of the health of POT groups, POT, and control. Also, this table reported the Shapiro-Wilkes test results to check the normality of the distribution of scores in the groups. According to this table, the Shapiro-Wilkes test results are not significant. Therefore, it was concluded that the distribution of scores is normal.

Table 1. The summary of the treatment sessions

<table>
<thead>
<tr>
<th>Session</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introducing the therapist and familiarizing the members with each other and establishing a therapeutic relationship, expressing the rules of the group, determining the frameworks, and expressing the general principles of POT</td>
</tr>
<tr>
<td>2</td>
<td>Examining goals and expectations focused on change, formulating treatment goals in a positive, definite, tangible, and measurable manner</td>
</tr>
<tr>
<td>3</td>
<td>Examining different interpretations and different views about an event, changing the perception of the problems that occurred more effectively, identifying their sources and capabilities</td>
</tr>
<tr>
<td>4</td>
<td>Identifying positive exceptions, reducing the scope of problems by identifying positive exceptions, and creating hope and motivation to reduce problems</td>
</tr>
<tr>
<td>5</td>
<td>Breaking disruptive behavioral patterns using miraculous questions, identifying examples of success, the future that has already happened</td>
</tr>
<tr>
<td></td>
<td>Eliminating destructive behavior patterns using the miraculous question, identifying examples of previous successes and generalizing them to the future</td>
</tr>
<tr>
<td>6</td>
<td>Identifying the strengths of oneself and others, knowing oneself and others, examining the characteristics of a bright and desirable future from the patient’s point of view</td>
</tr>
<tr>
<td>7</td>
<td>Identifying new ways of thinking, feeling, and behaving instead of current methods and experiencing new emotions</td>
</tr>
<tr>
<td>8</td>
<td>Summarizing, pursuing patients’ goals, conclusion, happy ending</td>
</tr>
</tbody>
</table>

Table 2. The summary of the treatment sessions

<table>
<thead>
<tr>
<th>Session</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Familiarity, creating cohesion, examining the motivation for treatment, explaining the concept of emotion, paying attention to pleasant and unpleasant emotional states</td>
</tr>
<tr>
<td>2</td>
<td>Accepting and reflecting on interactive and emotional experiences, discovering problematic interactions, evaluating attachment problems and barriers, creating therapeutic agreement, continuing to evaluate, and identifying the negative interaction cycle</td>
</tr>
<tr>
<td>3</td>
<td>Unlocking outstanding experiences of attachment, discovering fears and insecurities, accepting fundamentally unrecognized feelings</td>
</tr>
<tr>
<td>4</td>
<td>Clarifying key emotional responses, coordinating therapist-patient diagnosis, accepting the interaction cycle by patients</td>
</tr>
<tr>
<td>5</td>
<td>Expressing emotions, increasing the identification of attachment needs, accepting emotions, deepening the experience of emotional conflict</td>
</tr>
<tr>
<td>6</td>
<td>Deepening emotional conflict, improving interaction techniques, focusing on self, not others, redefining attachment</td>
</tr>
<tr>
<td>7</td>
<td>Reconstructing interactions and changing events, symbolizing aspirations, especially repressed aspirations, facilitating new solutions to problems</td>
</tr>
<tr>
<td>8</td>
<td>Reconstructing interactions and changing events, symbolizing aspirations, especially repressed aspirations, facilitating new solutions to problems</td>
</tr>
</tbody>
</table>
ANCOVA was used to evaluate the effectiveness of POT and EFT on the spiritual health of addicts. The test results for homogeneity of pre-test-post-test regression scores in experimental and control groups showed that the regression slope was equal in the groups (P>0.05, \( F(2,54)=1.340 \)). The results of Levin’s test to examine the homogeneity of variance of the dependent variable in the groups showed that the variance of spiritual health psychology (P>0.05, \( F(2,57)=3.288 \)) is equal in the groups. After examining the assumptions of covariance analysis, a univariate ANCOVA had reported in Table 5.

According to Table 5, F statistic is significant for the spiritual health variable (P<0.01, \( F(2,59)=53.994 \)) at

### Table 3. Demographic results of the research sample

<table>
<thead>
<tr>
<th>Groups</th>
<th>Gender</th>
<th>Marital Status</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Woman</td>
<td>Man</td>
<td>Married</td>
</tr>
<tr>
<td>Control</td>
<td>5(25.0)</td>
<td>15(75.0)</td>
<td>10(50.0)</td>
</tr>
<tr>
<td>POT</td>
<td>6(30.0)</td>
<td>14(70.0)</td>
<td>8(40.0)</td>
</tr>
<tr>
<td>EFT</td>
<td>6(30.0)</td>
<td>14(70.0)</td>
<td>11(55.0)</td>
</tr>
</tbody>
</table>

POT: Problem-Oriented Therapy; EFT: Emotion-Focused Therapy.

### Table 4. Descriptive indicators of pretest-posttest spiritual health scores in experimental and control groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stages</th>
<th>Groups</th>
<th>Min</th>
<th>Max</th>
<th>Mean±SD</th>
<th>Standard Error</th>
<th>Shapiro Wilkes Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Health</td>
<td>Pre-test</td>
<td>EFT</td>
<td>23</td>
<td>44</td>
<td>34.35±6.46</td>
<td>1.44</td>
<td>0.918</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POT</td>
<td>27</td>
<td>44</td>
<td>33.20±4.96</td>
<td>1.11</td>
<td>0.952</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>27</td>
<td>51</td>
<td>36.20±6.20</td>
<td>1.39</td>
<td>0.961</td>
<td>0.562</td>
</tr>
<tr>
<td></td>
<td>EFT</td>
<td>43</td>
<td>63</td>
<td>53.30±6.77</td>
<td>1.51</td>
<td>0.940</td>
<td>0.240</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>POT</td>
<td>46</td>
<td>70</td>
<td>54.30±6.48</td>
<td>1.45</td>
<td>0.915</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>22</td>
<td>44</td>
<td>36.10±5.60</td>
<td>1.25</td>
<td>0.910</td>
<td>0.063</td>
</tr>
</tbody>
</table>

POT: Problem-Oriented Therapy; EFT: Emotion-Focused Therapy.

### Table 5. Results of univariate ANCOVA, differences between experimental and control groups in the spiritual health of addicts

<table>
<thead>
<tr>
<th>Source of Changes</th>
<th>Total Squares</th>
<th>df</th>
<th>Average Squares</th>
<th>F</th>
<th>Sig.</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>363.490</td>
<td>1</td>
<td>363.490</td>
<td>9.897</td>
<td>0.003</td>
<td>0.150</td>
</tr>
<tr>
<td>Group</td>
<td>3 966.048</td>
<td>2</td>
<td>1 983.024</td>
<td>53.994</td>
<td>0.001</td>
<td>0.659</td>
</tr>
<tr>
<td>Error</td>
<td>2 056.710</td>
<td>56</td>
<td>36.727</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>6 063.933</td>
<td>59</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Table 6. Ben Foroni’s post hoc test

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Mean Difference</th>
<th>Standard Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Health</td>
<td>Control</td>
<td>EFT</td>
<td>-18.882</td>
<td>1.595</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>EFT</td>
<td>POT</td>
<td>-15.990</td>
<td>1.933</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.891</td>
<td>1.923</td>
<td>0.415</td>
</tr>
</tbody>
</table>

POT: Problem-Oriented Therapy; EFT: Emotion-Focused Therapy.
the alpha level of 0.01. These results indicate a significant difference between the experimental and control groups in the mean posttest of the spiritual health of addicts. Also, the effect size in Table 5 shows that group membership explains 65.9% of the changes in the spiritual health of addicts. To compare the pairs, Ben Foroni’s post hoc test was used. The results were presented below.

According to Ben Foroni’s post hoc test results in Table 6, POT and EFT methods effectively increase the spiritual health of addicts (P<0.01). No significant difference is observed between the effectiveness of POT and EFT methods on the spiritual health of addicts (P>0.05).

Discussion

This study aimed to determine the effectiveness of POT and EFT on the spiritual health of drug addicts. The results showed that POT significantly increased the spiritual health of drug addicts in the participants of the experimental group compared to the control group. Although no direct study has been conducted on the obtained results, the results are consistent with the results of previous similar studies in this field. For example, Ghaderi et al. study showed that short-term treatment is effective in increasing resilience and reducing relapse in drug addicts [11]. Also, Amiri et al.’s study showed that solution-oriented group counseling increased students’ general health [12].

Shokoohi Amirabadi showed that problem-solving training was effective in increasing the general health of drug addicts [13]. In this regard, another study showed that problem-oriented systemic therapy reduced the marital conflict of the spouses of drug-dependent men by controlling external sources of conflict [14]. Explaining the obtained result, in POT, the quiet discovery of exceptions in the client’s life can inspire hope and purpose in the client to see a better future. During each conversation, the therapist intends to alert the client to automatic reminders when the problem, for whatever reason, did not occur or was less problematic. One way to determine whether exceptions are differences that lead to change is to use rating questions (scale questions).

The therapist may say I want to ask you a rating question. This rating is marked on the axis and scored from zero to ten. Zero is when you decide to seek help and ten is when your problem is resolved to your satisfaction. Tell the number that best describes your current situation. Even when the problem is vague, clients can usually provide an objective numerical grading [24]. In a problem-oriented approach, clients are encouraged to find appropriate solutions with their worldview, and treatment focuses on solving rather than reducing problems. The question is: What do you want to do instead [25]?

Another form of inquiry for clients who feel overwhelmed is called a miracle question. In this way, the client can create a picture of the future without any problems with the therapist’s help. A miraculous question was designed in mind. Suppose a miracle happens tonight when you go to sleep. How do you know the problem was solved in the morning [26]? This method allows us to achieve our goal in the shortest possible time, as if it is a quick way to solve problems and achieve appropriate solutions [27].

In general, problem-based treatment techniques in a group caused clients to change their thinking and attitudes about life issues and problems. By creating a good feeling in the clients towards themselves and showing their strengths and successes, they can direct the clients’ focus from the problem and the resulting weaknesses to the existing solutions. In this way, clients helped to evaluate themselves as capable people with a better position mentally and psychologically. In this way, a coordinated and integrated connection between the internal forces has been provided. Features such as stability in life, peace, fit and harmony, action with awareness, deep faith and belief, perception of purpose, sense of accomplishment, closeness to oneself, God, society, and a specific environment to perform valuable activities, increase in clients.

The results of another study showed that EFT had a significant effect on increasing the spiritual health of drug addicts in the participants of the experimental group compared to the control group. The effect of EFT on the spiritual health of drug addicts is not directly researched. However, studies show the effectiveness of the process of teaching emotion regulation strategies on mental health, self-compassion, and temptation in addicts [18]. In this regard, Boroumand Rad’s study showed that EFT is an effective intervention in increasing the mental health and resilience of women affected by infidelity. This study also showed that EFT reduces social anxiety and improves mental health in individuals [19]. Mahmoud Wendy Bahr’s research showed that the EFT group improves divorced women’s hopes and future thoughts [20].
In the obtained result, the EFT allows people to control negative emotions such as anxiety, depression and hopelessness, and past semi-finished situations by increasing emotional awareness and psychological adjustment. EFT encourages clients to question their distressing thoughts during the treatment and to eliminate alternative self-talk to deal with these emotions and ruminations that cause a physical and mental disturbance. Addressing these issues in the EFT group training sessions improves interpersonal forgiveness levels in reconnecting and controlling revenge, tolerating resentment and realistic understanding, and life expectancy in individuals [28].

EFT group tries to identify emotions and turn them into understandable and constructive messages. Emotional skills are defined as the ability to recognize and express feelings and empathize with others, increase intimacy and a sense of security, reduce openness to criticism, and are essential for maintaining a successful relationship [29].

EFT group is a therapy that focuses on sustained negative interaction cycles due to deep emotional vulnerability and tries to reduce confusion and depression and consequently negative self-thoughts via intervention at the emotional level. In general, this therapy helps people explore and expand their emotions and correct them during this new experience [8]. Therefore, a set of factors, including proper control of emotions, leads to action with awareness, deep faith and belief, perception of purpose, a realization of the goals of their inner relationship, and a constructive relationship with others.

The latest results show no difference between the effectiveness of POT and EFT in increasing the spiritual health of drug addicts. Research shows that no study has been conducted to compare the effect of the two treatment groups in the community of drug addicts; however, separately, close and related research has been conducted on the effectiveness of each on addicts. In achieving such a result, both methods were implemented as a group. This implementation method makes people not think of themselves very different from others, return to society and social life and continue their activities. In addition, both methods have solid theoretical support and aim at psychological flexibility; therefore, when the mentioned methods have been used to increase the positive psychological characteristics (action with awareness, deep faith and belief, perception of purpose, feeling the realization of the goals of one’s internal communication, and constructive relationship with others). No significant difference exists between the mentioned methods.

It is suggested that health centers, addiction treatment clinics, and hospitals pay more attention to the role of spiritual factors in improving the psychological status of addicts. And consider psychological therapies, including POT and EFT, as part of treatment plans and strategies alongside drug therapies to treat addicts.

**Conclusion**

The results showed that POT and EFT increased the spiritual health of drug addicts, and no difference was observed between the effectiveness of the two treatments. Therefore, this type of intervention can be used in the counseling and therapy of the psychological status of drug addicts. Lack of study of different age groups, convenience sampling method, lack of follow-up period, lack of research background and failure to consider other problems and life crises of addicts, and lack of control over demographic factors, such as education level, number of children, the socio-economic class were the limitations of this study. Therefore, it is suggested that future researchers research samples by controlling demographic characteristics and follow-up therapeutic results.

**Ethical Considerations**

**Compliance with ethical guidelines**

The Research Ethics Committee of Alzahra University approved this study (Code: IR.ALZAHRA.REC.1400.029).

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**Authors’ contributions**

Conceptualization and Supervision: Maryam Safara, Methodology: Abolfazl Karami; Data collection and Data analysis: Shahrokh Makvand Hosseini; Writing–original draft: Elham Bagheriniya.

**Conflict of interest**

The authors declared no conflict of interest.
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