The Efficacy of Optimism Group Therapy on Symptoms of Depression, Anxiety, And Stress of Adolescent Girls of Divorced Families

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Abstract

Recent estimates have shown that approximately one million children annually experience the divorce of their parents and many of the studies on divorce likewise signify that children of divorced parents are at a greater risk of psychological, behavioral, and educational problems. Objectives: Therefore, the present investigation was carried out to study the effectiveness of optimism group intervention on psychological symptoms (depression, anxiety, and stress) of adolescent girls of divorced families in line with the concept of attribution style. Method: The participants were 30 middle school students of Isfahan city. In order to select the sample, cluster random sampling was used initially and one district (cluster) was selected among 5 educational districts of Isfahan and one school was chosen out of this district. Subsequently, available sampling method was utilized for selecting the participants. 15 participants were placed in experimental group which were alike the control group in respect of gender, age, and school and they filled out the scale of depression, anxiety, and stress (DASS-42) prior to and following the intervention. Data were analyzed by making use of Covariance analysis (MANCOVA) of SPSS 16. Results: The results of Covariance analysis demonstrated that totally teaching optimism has a meaningful effect on the degree of depression, anxiety, and stress symptoms of adolescent girls in post-test and follow up stage (P<0.05). Conclusion: Teaching optimism incurs the decrease of depression, anxiety, and stress symptoms of adolescent girls.

Introduction

It is evident that family has widespread effect in terms of personality formation and its development in children as well as individual adaptation to society. The dynamics of the main family contribute to the formation of opinions about ourselves, others, and our communications. To verify this claim, previous pieces of research showed that emotional atmosphere of family is significantly associated with self-esteem [1], adolescent’s externalizing behavior problems [2], students’ assertiveness and problem solving [3]. Further, it is negatively associated with anxiety, stress, depression, and physical symptoms of children [1] and affects the emergence of adolescents’ emotional and behavioral problems remarkably.

Moreover, during the last thirty years the world has witnessed a higher increase of divorce besides the decrease of condemning it; thereby most countries have moved toward facilitating divorce. The decision to divorce for whatever reason is always devastating for an unharmed family and is experienced as death: a family’s death [4].

Diagnostic and statistical guide of psychological disorders of American Psychology Association, reports decease and divorce as the two most distressful psychosocial problems in life [4]. Though, divorce results in the family disintegration and this disintegration has countless detrimental effects for both parents and children, this phenomenon is rising in the majority of countries. High prevalence of stress symptoms in orphan children and adolescents is greatly related to physical and social ignorance of children [5]. Conducting a few studies on divorce fields, Marquardt [6] found that the children of divorced families compared to their peers are more on the verge of psychological problems and besides behavioral problems and high depression, they have low
academic performance [7]. In fact, most of the studies on divorce have shown that the children of divorced families are at higher risk of psychological, behavioral, and academic problems [8].

Optimism is a positive-thinking psychological subject. Most people take optimism as considering the glass as half full, seeing a shiny layer in every phenomenon, or the expectation of a happy ending for all real troubles. The viewpoint of positive thinking signifies that optimism entails repeating reinforcing expressions with one. From others’ perspectives teaching optimism means shirking responsibilities or merely empty optimism is taught. However, optimism is beyond this. The learned optimism takes into account the appropriateness and inappropriateness of judgments which becomes effective not as a result of absurd optimism but because of thinking power without any negativism. Optimism is rooted in how individuals think of the causes, explanatory style of each individual which has three dimensions: permanence, personalization, and pervasiveness [9]. Optimistic people interpret pleasant events permanent, pervasive and, internal. The opposite point is pessimism; the investigations have shown that people who think pessimistically exaggerate things which are not much serious. But an interesting psychological finding is that individuals can choose the way they think [10]. Optimism includes several advantages: this trait can help people to resist depression and achieve more success in life, work, and so forth and the individual suffers less from infective illnesses. Likewise, pessimism is associated with depression, greater anxiety, decrease of progression anticipation and not suitable physical condition [9]. The purpose of teaching optimism is that people have more dominance over their thoughts encountering with life’s adversities and bad luck [10].

What Seligman called “explanatory style” is formed in childhood and lasts until forever without external interference. As stated this style includes three dimensions:

1. Sometimes versus always: children who believe pleasant events have permanent causes (contrary to unpleasant events), are happier and more optimistic than children who think the causes are temporary.
2. Pervasiveness: local versus global; an optimistic child believes that all his actions lead to such outcomes whereas a pessimist child thinks events do not stem from a particular cause.
3. Personalization: internal versus external; children who are accustomed to blame themselves when faced with failure have low self-esteem and feel guilty and embarrassed. Children who blame other people and circumstances when bad events strike, have better opinions about themselves. On the whole, those who blame others are involved with lower feeling of guilt and embarrassment and like themselves a lot better [9].

Seligman’s method for contributing the individuals in their attributional styles from pessimism to optimism is famous as ABCDE (recognizing adversities, beliefs, and consequences), DI (disputation of attention and conflict), and E (energization) [9].

Numerous studies on the effectiveness of this teaching have been conducted including Seligman et al. [9] that performed acquired optimism program on 5-12 years old students and the outcomes revealed that children who took part in this program exhibited symptoms of average and extreme depression half the control group [9]. In the study of Quayle et al. [11], teaching this program to 11 and 12 years old girls in Western Australia has led to a reduction of depression symptoms and elevation of self-value in the experimental group in comparison to the control group.

The focal point is that child abuse and ignoring them put the children at the risk of vulnerability to pessimistic attributional style [9]. Ignoring children is likely to occur more in divorced families rather than ordinary ones; hence, this study seeks to examine the intervention effect of teaching optimism on adolescents’ psychological symptoms of divorced families who are regarded to be at risk in some way.

Voelz et al. [12] maintained that depressed individuals who exhibit an optimistic attributional style for positive events will be more likely to regain hopefulness faster and demonstrate higher reduction of disappointment. As a result, it can be claimed that this trait is of significance in clinical psychology field and useful procedures can be done to enhance it.

Optimism growth:

Growth of optimism is determined by parents’ psychological health and the type of modeling they present for their children’s optimism. The parents of optimistic individuals encourage their children to deal with their failures optimistically and thus reinforce optimism and hard working in various ways. There is every likelihood that pessimists are from families with depressed parents and they teach their children pessimistic attributional style and reinforce pessimistic attributional style in a differential manner. When parents blame children and attribute their failure to internal, global and stable factors, they are probably raised pessimist. Child abuse and ignorance likewise make the children vulnerable to pessimistic attributional style [9].

Regarding the children of divorced families it can be said that if we accept this reality that neither a father is able to create a relationship such as the one between mother and child nor a mother is able to replace father and social worker or any other non-parent caretaker is not able to make parent–child relationships; thus, divorce exerts an irreversible harm on children. Given that the children of divorced families and particularly adolescent girls in these families are more vulnerable, for enhancing psychological health in society and families, a proper action can be done to prevent subsequent psychological problems for this age range by benefiting prevention and therapy programs such as teaching optimistic attributional style in a propitious time.
concept of optimistic attributional style that Seligman dealt with it in the book “The Optimistic Child” and upon gaining necessary permissions and participants’ satisfaction, the teaching program was set in twelve sessions of 45 minutes and the 15 participants of experimental group underwent an optimistic attributional style 3 sessions a week for 4 weeks and the 15 participants of control group were on the waiting list. All the participants were again evaluated in post-test and follow up stage (40-day) by DASS-42 test. Finally, the intervention sessions of teaching optimistic attributional style were held for the participants of control group.

The principal concepts of teaching optimistic attributional style are as follows:
- Familiarity with the connection of thinking, feeling and the way of self-talk
- Familiarity with the definitions of optimism and pessimism concepts; explaining optimistic attributional style
- Familiarity with permanence dimension in explanatory style by using pictures, stories and authentic explanations
- Familiarity with pervasiveness dimension in explanatory style by use of pictures, stories and authentic explanations
- Familiarity with personalization dimension in explanatory style by use of pictures, stories and authentic explanations
- Teaching to resist wrong and catastrophic beliefs
- Teaching social skills
- Teaching problem-solving skills [9].

Participants:
Data was gathered from 30 girl students ranged in age from 12-15 whose parents were divorced. To select a school, cluster sampling method was used and then the research sample was divided into two experimental (15 persons) and control (15 persons) groups. The participants filled DASS-42 questionnaire in follow-up stage (40-day), prior to and after the intervention. The experimental group was similar to the control group with regard to age, sex, and school.

Instruments:
Two questionnaires as follows were deployed in this research:
1) Demographic information questionnaire:
   a researcher-made questionnaire that includes demographic information of age, parents’ occupation, parents’ illnesses, the number of families’ children, economic and academic status of participants.
2) Depression, anxiety, and stress scale (DASS-42):
   DASS-42 scale [13] is a self-report instrument that its psychometric characteristics have been well verified in normal and clinical populations and differentiates between three states of depression, anxiety, and stress. This scale consists of 42 questions and 3 subscales that each is measured by 14 questions and can screen the symptoms of depression, anxiety, and stress during the last week. The questions are 4 multiple-choice; the range of answers varies from “never” to “always” in a way that individuals can mark their answers with a cross in front of the related question. Scoring is from 0 to 3 and score 0,1,2,3 have been considered respectively for “never”, “a little”, “sometimes”, and “always”. Then, the sum of the scores of each subscale is calculated and interpreted [14].

   Lavibond and Lovibond [13] determined the retest reliability for subscales of stress, anxiety, and depression to be 0.81, 0.79, 0.71, respectively, and its correlation with Beck’s depression and anxiety inventory were respectively 0.81 and 0.74. Afzali et al. [15] applied psychometric properties of the test in a sample of 400 girl students of Kermanshah; the results showed that the correlation of depression scale of this test with Beck’s depression inventory was 0.849, the correlation of anxiety scale with Zungscale was 0.831 and the correlation of stress scale and students’ stress inventory was also 0.757. Alpha Cronbach was calculated to be 0.94 for depression scale, 0.85 for anxiety scale, and 0.87 for stress scale. In addition, Sahebi, Asghari and Salari (2005) [16] calculated, with the application of 21-question form of this scale for calculating convergent validity, the correlation of depression, anxiety, and stress subscales with Beck’s depression inventory to be 0.7, Zung anxiety scale to be 0.67 and perceived stress scale (0.49). In the current research, by selecting a sample of 50 middle school students, the reliability was calculated through Alpha and its degree for depression, anxiety, and stress was respectively 0.8, 0.67, and 0.79.

Results:
Firstly, normal distribution hypothesis of the scores of pre-test of depression, anxiety, and stress variables was affirmed (P<0.05). The calculated amount of F for Levene’s test was not meaningful and it can be concluded that the variances are homogenous and MANCOVA analysis test is possible (P<0.05). Thus, the results of Covariance Analysis showed that the difference between the variables of age, academic grade, academic status, economic status, parents’ occupation and parents’ illnesses in the two groups of experimental and control was
not meaningful. In table 1, the average and standard deviation of research variables in experimental and control group at pre-test, post-test and follow-up stage are presented.

Table 1: number, average and SD of research variables in experimental and control group in pre-test, post-test-test and follow-up stage

<table>
<thead>
<tr>
<th>Standard deviation</th>
<th>Average</th>
<th>Number</th>
<th>Sig</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Post-test</td>
<td></td>
<td></td>
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<tr>
<td>Pre-test</td>
<td></td>
<td></td>
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<tr>
<td>Follow-up</td>
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<tr>
<td>Post-test</td>
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<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

| 3.9                | 3.8     | 5.6  | 12.53| 9.26     | 20.1 | 15  | Experimental | Depression |
| 9.52               | 9.4     | 9.5  | 24.13| 24.8     | 24.6 | 15  | Control      |            |
| 3.3                | 3.8     | 4.4  | 10.46| 7.8      | 12.46| 15  | Experimental | Anxiety     |
| 8.1                | 8       | 8.3  | 16.53| 15.93    | 15.93| 15  | Control      |            |
| 4.8                | 4.9     | 6.7  | 17.2 | 11.46    | 24.26| 15  | Experimental | Stress      |
| 7.7                | 6.7     | 7.6  | 25.3 | 23.4     | 25.6 | 15  | Control      |            |

As it is observed in table 1 the depression average of the experimental group in pre-test stage is 20.1 and this average is 24.6 in the control group; in post-test and follow-up the average of depression in the experimental group are respectively 9.26 and 12.53 and in the control group are 24.8 and 24.13.

The average of anxiety at pre-test stage in the experimental and control groups are 12.46 and 15.9, respectively; in post-test and follow-up the average of anxiety in experimental were respectively 7.8 and 10.46 and in control group were 15.93 and 16.53.

The average of stress in the experimental group in pre-test stage is 24.26 and this average in the control group is 25.6; in post-test and follow-up the average of stress in the experimental group are respectively 11.46 and 17.2 and in the control group are 25.4 and 25.3. In table 2 the results of Covariance Analysis based on the variables under study are presented.

Table 2: the results of Covariance analysis in the two groups of experimental and control after controlling the intervening variable

<table>
<thead>
<tr>
<th>Statistical power</th>
<th>Ela square</th>
<th>Sig</th>
<th>F</th>
<th>Average of squares</th>
<th>df</th>
<th>Sum of squares</th>
<th>Dependent variable</th>
<th>source of effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.79</td>
<td>0.000</td>
<td>62.59</td>
<td>894.95</td>
<td>1</td>
<td>894.95</td>
<td>Post-test depression</td>
<td>group</td>
</tr>
<tr>
<td>0.997</td>
<td>0.58</td>
<td>0.000</td>
<td>24.91</td>
<td>393.33</td>
<td>1</td>
<td>393.33</td>
<td>Follow-up depression</td>
<td></td>
</tr>
<tr>
<td>83.9</td>
<td>0.58</td>
<td>0.002</td>
<td>19.3</td>
<td>113.45</td>
<td>1</td>
<td>113.45</td>
<td>Post-test anxiety</td>
<td></td>
</tr>
<tr>
<td>74.6</td>
<td>0.32</td>
<td>0.022</td>
<td>6.71</td>
<td>33.12</td>
<td>1</td>
<td>33.12</td>
<td>Follow-up anxiety</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.79</td>
<td>0.000</td>
<td>54.3</td>
<td>533.17</td>
<td>1</td>
<td>533.17</td>
<td>Post-test stress</td>
<td></td>
</tr>
<tr>
<td>0.98</td>
<td>0.59</td>
<td>0.000</td>
<td>20.67</td>
<td>110.4</td>
<td>1</td>
<td>110.4</td>
<td>Follow-up stress</td>
<td></td>
</tr>
</tbody>
</table>

To interpret the data, the effectiveness amount of pre-test scores in the two groups of experimental and controlon the scores of post-test was controlled, by using Covariance Analysis statistical method. In fact, that part of the variance of post-test scores which spring from the variance of pre-test scores was subtracted from total variance of post-test scores of depression, anxiety, and stress test. As it is observed in table 2, the post-test scores of depression, anxiety, and stress are meaningful according to the group (arerespectivelyp<0.000, p=0.002, p<0.000). Consequently, optimism teaching had effect on depression and the scores of experimental group on the post-test have been meaningfully decreased (p<0.000). The effect of teaching optimism on anxiety and stress has been significant likewise (respectively p<0.002, p<0.000). In other words, post-test depression, anxiety, and stress of experimental group have decreased. Eventually the follow-up scores of depression, anxiety, and stress are significant according to the group (respectively are p<0.000, p<0.022, p<0.000).

Discussion and conclusion:

In this study teaching optimistic attributional style has been effective in reducing the adolescent girls’ depression. This finding is consistent with the investigation of Jafari [17] who declares that revising cognitive styles and processes prevent the emergence of depression, academic failure, occupational failure, lack of assertiveness and self-esteem as well as illnesses; and research of Zarei [18] who asserts that teaching optimistic attributional style is effective in girls’ depression who are in the age range of 10-13.

Seligman [9] and Quayle et al. [11] have suggested that teaching optimistic attributional style which is designed on the basis of Pennsylvania Prevention Program has been effective on curing depression symptoms.
The positive results of this study can be explained in this way that as Seligman raises, the nature of depression and frustrations acquired, thus, it can be reduced through cognitive-behavioral psychotherapy, particularly renewing attributional style and teaching optimistic attributional style and prevent its emergence in adulthood. Abramson and Seligman [19] have claimed that people’s inappropriate styles results in depression. Therefore, inappropriate styles and mental suppositions have to be corrected so as to lessen and eradicate this disorder. In this research the fundamental hypothesis was that the chief anticipating factors of depression are inefficient and improper understandings that individuals apply when they confront with pleasant and unpleasant events: hence, correcting and restructuring these styles on account of realism is the key to diminish depression symptoms. As it was mentioned pessimistic attributional style means considering stable, pervasive and personal styles for unpleasant and negative events and temporary styles are special and impersonal for pleasant events which play a key role in children and adolescents’ depression. The prime and main focus of retraining attributional style is often on the individuals’ cognitive and interpretative components about the events. The effectiveness of teaching methods of attributional styles is an evidence of cognitive factors’ intervention on psychological disorders. Unless cognitive factors have role in such disorders, the discussion on the efficacy of these teaching and therapy methods in curing psychological disorders and interpersonal problems remain pointless and not sensible.

Moreover, this study elucidated that teaching optimistic attributional style is effectual in reducing anxiety symptoms, for the foundation of teaching optimistic attributional style consists of Beck’s Cognitive Behavioral Therapy (CBT) and Rational Emotive Behavior Therapy (REBT) of Ellis (similar to cognitive restructuring which originates from REBT of Ellis and aids people to have a more sensible assessment of themselves and others and is also helpful in curing anxiety disorders) as well as common skills in teaching optimism and cognitive-behavioral therapy such as catching thoughts, evaluating thoughts, generating more accurate explanations and decatastrophizing. From the perspective of cognitive treatments, anxiety is the improper result of illogical interpretations and when we examine countless events for which individuals make themselves worried we understand that these illogical understandings are how prevalent. The other point is that depression is not often in a pure form and anxiety disorder exists in 50 per cent of depressed [20]. Considering this issue, this study attempted to show that teaching optimistic attributional style in line with the framework on the basis of which it became to exist can be also effective, the thing which is ignored in different studies concerned with measuring the efficacy of optimism attributional style on depression.

Ultimately, teaching optimistic attributional style has been effective on reducing adolescent girls’ stress. Consistent with the studies of Jackson et al. [21] and Sarin and Abala [22], those who have pessimistic attributional style tolerate higher levels of stress compared to other people. As the purpose of optimism teaching is that individuals have greater control over their thoughts when encountered with adversities and difficulties of life (the concept which is discussed in cognitive therapies) and also this point that high level of encounter with events full of stress and restriction of supporting resources to confront them are among critical factors which incur applying inappropriate methods such as emotional methods in a stressful situation (like the one which happens to divorced families) accounts for the result of this hypothesis about the effectiveness of teaching optimistic attributional style on the adolescents’ stress of divorced families. Every one’s vulnerability to stress is influenced by his/her coping skills and available social support; teaching optimistic attributional style also includes instructing problem-solving skills, a skill which is covered within immunization programs against stress, and social skills. Eventually, with scrutinizing all skills which are taught in optimistic attributional style, this instruction can be introduced with a greater effective potential beyond the ones that have dealt with it so far.

REFERENCES