Effectiveness of Short-Term Solution-Focused Group Training on Sense of Psychological Coherence among Female Adolescents

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Abstract

Background and aim: This study aims to investigate the effectiveness of short-term solution-focused group counseling on sense of psychological coherence.

Method: This research is a pretest-posttest quasi-experimental study design with a nonequivalent control group and two-month follow-up.

The research statistical population comprises all female adolescents in the first grade of secondary school who referred (were referred) to counseling offices in Mashhad Education District in 2015 due to behavioral and academic problems. The research sample consisted of 30 adolescents’ 15 years old girl using available sampling method and was randomly assigned into two experimental (15 individuals) and control (15 individuals) groups. For data collection, the revised form of Flensborg Sense of Coherence Scale (2006) was applied. Both groups took a pretest. Then, the therapeutic model (short-term solution-focused method) was implemented during 8 weekly sessions of 1.5 hours for the experimental group, but the control group received no training. At the end of 8 weeks, a posttest was taken from both groups and a two-month follow-up was conducted. To analyze the data, analysis of variance with repeated measures was used.

Findings: The obtained results demonstrated that short-term solution-focused training could significantly increase the sense of coherence (P<0.05) among adolescents’ girl in both posttest and two-month follow-up.

Conclusion: Short-term solution-focused training may promote sense of psychological coherence among female adolescent students.

Keywords: adolescence, short-term solution-focused approach, sense of coherence

1. Introduction

Adolescence is a critical stage of life that causes the adolescents to experience higher levels of negative emotions in relation to what is under their control due to negative cognitive beliefs and this, in turn, sets the stage for the incidence of problematic and risky behaviors among this age group (Wan, 2012). Riediger and Klipker (cited in Riediger & Huong, 2015, p. 14) have reported that adolescents usually experience more diverse and more negative emotions compared to other age groups. Adolescence is a time of significant growth changes which cause the adolescents to deal with numerous growth challenges. Correspondingly, they further refer to risky behaviors and this prepares the ground for long-term consequences and emotional and behavioral problems such as depression, anxiety, conduct disorder, substance abuse, suicidal thoughts and so on (Schmied & Tully, 2009). The prevalence of risky behaviors in adolescence is regarded as the most important factor in the failure of this age group in everyday life (Bradly et al., 2009). Extensive research has enumerated different risk factors in this age group’s risky behaviors (Wan, 2012). With the prevalence of risky behaviors among adolescents, learning the self-regulation skill takes on special importance since adolescents and young people who still have not been equipped with this skill are more likely to commit risky and unhealthy behaviors (Bandy & Moor, 2010). In the last 10 years, working with students through short-term solution-focused approach has increased and has
attracted the attention of researchers and school experts such as counselors, psychologists and social workers and since it is short term, it is a great help to the school staff. Short-term solution-focused counseling in the school environment is applied for a variety of services including the problems that are rooted in emotional behaviors (Kim & Franklin, 2009). In the meantime, a sense of psychological coherence is defined as a source of general coping in different situations of life, which promotes the health status of individuals and protects them against life critical incidents, tensions and stresses (Grevenstein, Blumake, Negy, Wipperman, & Kroeniger-Jungaberle, 2014). In fact, one of the factors that has been raised as a protective factor and success factor in today’s stressful life is the sense of psychological coherence (Haukkala, Konttinen, Lehto, Uatela, Kawachi, & Ia tikainen, 2013). People with a high sense of coherence try to accept their life conditions with greater comprehensibility, more efficient management and deeper meaningfulness (Rohani, Aliabadi, Omranipour, & Langiis-Ekloe, 2015) and more quickly recover from tensions (Wang, Hay, Clarke, & Menahen, 2014). This feeling as a source of general coping leads to flexibility and health promotion of individuals (Grevenstein & Blumake, 2015). Further, people with a high sense of coherence are better able to find a solution for their problems (Wang et al., 2014). This sense is a construct that assists the individuals in the thick of the stressful life and is the main core of Salutogenic (origin of health) theory and focuses more on health than disease (Supper et al., 2014). This sense shows why some people remain healthy under the pressure of different stresses while others become injured and sick (Li et al., 2015). A sense of coherence is defined as a general and flexible orientation towards life (Grevenstein et al., 2014). This sense is the source of health promotion and indicates the individual’s coping ability to overcome difficulties and stressful situations (Supper et al., 2014). Antonovsky sense of coherence theory suggests that this sense is composed of three components including comprehensibility, manageability and meaningfulness, which is associated with both physical and mental health so that it leads to health promotion through making an impact on our immune system and endocrine glands (Flensborg-Madsen, Vetegedt, & Merrick, 2014).

Experts believe that individuals with low sense of coherence have psychological distress; that is, they lack the ability to cope with the situations that are disappointing or are the result of loss or threat (Arvidsdotter et al., 2015). Studies have confirmed the negative relationship of this sense with dysfunction in everyday life (Li et al., 2015) and stress (Damgard et al., 2015) and also the positive relationship of this sense with facilitation of adaptive coping in the face of inherent stressors (Supper et al., 2014). Additionally, it has been revealed that it is a strong predictor of depression (Haukalla et al., 2013) and anxiety (Moksnes et al., 2013). According to the studies conducted, enjoying a strong sense of coherence leads to the facilitation of adaptive coping in the face of inherent stressors in daily life (Supper et al., 2014) and higher efficiency and greater coping ability of nurses (Matsushita, 2014) and takes care of people with dementia through improving life quality (Wang et al., 2014) and is helpful in stress management and life health promotion (Fossion, Leys, Vandelear, Kempenaned, Braun, Verbanck, & Linkowski, 2014).

There are effective training approaches, among which “solution-focused” training approach can be a good potential for preventive therapeutic goals because of its shortness and practicality and also the belief in the ability of individuals to achieve desired changes with minimal assistance (Pakrosnis & Cepukiene, 2015). Short-term counseling is considered as a respond to the request for effective, efficient, practical and temporally limited aid services, which emphasizes the achievement of optimal solutions by clients (Taathadi, 2014). Solution-focused approach is a short-term method whose cornerstone is the establishment of solutions (Bayard, Rambo, & Richartz, 2015). This treatment method is a non-pathological approach that helps individuals by applying the client’s resources and valuing his motivation and using the methods of motivational considerations (Yokotani & Tanura, 2014).

Further, Bayard et al. (2015) regard this kind of counseling as helpful in school counseling in that it focuses on the resources of individuals. Solution-focused training (SFT) helps the clients achieve their goals faster through the unique features of focusing on solutions rather than problems (Dorotti, 2014). The purpose of short-time solution-focused approach is the mutual cooperation between the client and therapist in creating solutions (Yokotani & Tanura, 2014). Focusing on the client’s objectives, clarifying the exceptions, miracle questions, coping questions, scale questions and detection of the client’s capabilities and resources are among the main elements of this approach (Bond, Woods, Humphery, Symes, & Green, 2013). Indeed, solution-focused therapy is a direct and short treatment method which focuses on the client’s ability to create coping skills and apply them for the present and future purposes revolving around the current problem or issue (Stermensky & Brown, 2014). On the other hand, the effectiveness of short-term solution-focused approach in helping people on a range of issues and problems has been approved (Archuleta, Grable, & Burr, 2015). Researchers have performed multiple studies regarding the effectiveness of this approach in different fields and have reported its effect on the improvement of behavioral performance (Pakrosnis & Cepukiene, 2015), improvement of family functioning
and addiction treatment (Nameni, Shafi’abadi, Delavar, & Ahmadi, 2014), reduced depressive and anxiety disorders (Maljanen et al., 2014), recovery from trauma (Zhang, Yan, & Liu, 2014), increased health recovery (obtaining power and social optimism) (Roden et al., 2014), resolving problems and conflicts (Stermensky & Brown, 2014), interventional treatment of individuals’ problems (Bayard, Rambo, & Richartz, 2015), possibility of building solutions (Bayard et al., 2015) and more positive and constructive interactions of students with their teachers and classmates (Willford et al., 2013). According to what was mentioned above, the present study intends to examine the effectiveness of short-term solution-focused approach training in the sense of psychological coherence among female adolescents.

2. Methodology

The present research is a pretest-posttest quasi-experimental study design with a nonequivalent control group and two-month follow-up. The research statistical population included all female adolescent students in the first grade of secondary school who referred (were referred) to counseling offices in Education District 2 of Mashhad in 2015 due to behavioral and academic problems. The research sample consisted of 30 female adolescents who were selected voluntarily and through available sampling method and was randomly assigned into two experimental (solution-focused training) and control groups, each containing 15 individuals.

3. Research Tool

Flensborg Sense of Coherence Scale (2006): This questionnaire is a 35-item test with 3- to 5-option questions and options are scored on a Likert scale so that the subject responds to each of the first two options and receives score 3 which is the highest score and if he answers each of the last two options, he receives 1 which is the lowest score. Sub-components of this scale are comprehensibility, manageability and meaningfulness and the scores of these subscales can be calculated separately. 29-question and 13-question versions of this questionnaire have been developed by Antonovsky and this questionnaire has been revised by Flensborg and his colleagues. In this study, new and revised version of sense of coherence scale has been used. This questionnaire was initially translated from English to Persian and then from Persian to English and was used after the experts’ approval. According to Flensborg (2006), the questionnaire reliability was estimated to be 0.78 through Cronbach’s alpha and in another study; it was obtained to be 0.86.

3.1 Steps of Research Implementation

After the selection of 30 female adolescents in the first grade of secondary school and their random assignment into two experimental and control groups (each including 15 individuals), a full explanation about the researcher’s objective, process of research implementation and manner of completing the questionnaires was given to the participants and they were asked to answer the questions carefully and according to the instructions. After taking a pretest from all the subjects, timing of sessions was determined. The sessions were held on a weekly basis from February 2015 to mid-April 2016 in one of the high schools in Mashhad (Maryam High School). In these one-and-a-half hour sessions, the experimental group underwent 8 sessions of solution-focused training while the control group did not receive any training. The control group was told that they would also be trained after completing the research project. Training protocol of the solution-focused approach has been provided below.

3.2 Training Protocol of the Solution-Focused Approach

First session: Introduction, establishment of communication, determining the framework and rules of sessions, motivating and encouraging the members to focus on solutions instead of problems.

Second session: Clarifying the construct of “sense of coherence”, defining the objectives, stating the issues discussed in the sessions, training how to review and remold problems.

Third session: Explaining the components of sense of coherence, using a scale of 0 to 10 for prioritizing problems, making contracts and stating possible solutions to problems and highlighting the potential and actual capabilities of students.

Fourth session: Raising the students’ awareness of the benefits of promoting the level of sense of coherence and disadvantages of the failure to do so, finding the exceptions (to challenge the full-of-problem image of the student).

Fifth session: Talking about the relationship between the sense of coherence and type of performance in connection with the problems raised by the students, using miracle questions.

Sixth session: Discussion with students about the relationship between the components of sense of coherence with their feeling of peace and health in the face of crises and stressors of their life, stabilizing and consolidating
the solutions to problems or reducing them.

Seventh session: Using a scale of 0 to 10 to achieve the goal, helping the members find the methods to think and feel differently.

Eighth session: Summing up the previous matters, conclusion, praising and admiring the students for their success.

4. Findings

In this section, the findings of the study are presented in two descriptive and inferential parts. Initially, descriptive findings of the research and then inferential data will be provided.

Table 1. The mean and standard deviation scores of sense of coherence in female adolescents of the experimental and control groups

<table>
<thead>
<tr>
<th>Sense of Coherence</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>65.9</td>
<td>12.1</td>
<td>42</td>
<td>85</td>
</tr>
<tr>
<td>Posttest</td>
<td>79.6</td>
<td>10.4</td>
<td>60</td>
<td>98</td>
</tr>
<tr>
<td>Follow-up</td>
<td>79.1</td>
<td>10.8</td>
<td>59</td>
<td>99</td>
</tr>
<tr>
<td><strong>Control group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>80.1</td>
<td>6.6</td>
<td>66</td>
<td>91</td>
</tr>
<tr>
<td>Posttest</td>
<td>78.1</td>
<td>7.7</td>
<td>64</td>
<td>88</td>
</tr>
<tr>
<td>Follow-up</td>
<td>77.5</td>
<td>7.3</td>
<td>64</td>
<td>88</td>
</tr>
</tbody>
</table>

As shown in Table 1, there is a significant difference between the sense of coherence scores in the posttest and two-month follow-up of the experimental group compared to the control group. But no significant difference exists between the scores of the control group.

4.1 Testing the Homogeneity of Variances Assumption

Before providing the results of testing ANOVA with repeated measures, assumptions of this test were examined. One of the assumptions of this test is the normal distribution of dependent variables. Levene’s test results indicated that for the whole scale in both experimental and control groups, it is insignificant (P>0.05). The results of Levene’s test have been presented in the table below.

Table 2. Levene’s test results to examine the homogeneity of variances

<table>
<thead>
<tr>
<th>Levene statistic</th>
<th>Degrees of freedom 1</th>
<th>Degrees of freedom 2</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>5.1</td>
<td>28</td>
<td>0.06</td>
</tr>
<tr>
<td>Posttest</td>
<td>1.1</td>
<td>28</td>
<td>0.31</td>
</tr>
<tr>
<td>Follow-up test</td>
<td>1.6</td>
<td>28</td>
<td>0.21</td>
</tr>
</tbody>
</table>

As shown in Table 2, the output of this test demonstrates that the significance level of the test is higher than 0.05 (P>0.05). The null hypothesis in Levene’s test is that the variance of groups is homogeneous. Thus, given that the significance level is higher than 0.05, the null hypothesis stating that the variances are homogeneous is confirmed.

Table 3. Results of analysis of variance with repeated measures for the variable of the sense of psychological coherence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>421.3</td>
<td>1</td>
<td>421.3</td>
<td>37.2</td>
<td>0.000</td>
</tr>
<tr>
<td>Training*group</td>
<td>936.1</td>
<td>1</td>
<td>936.1</td>
<td>82.7</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>317.1</td>
<td>28</td>
<td>11.3</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
As provided in Table 3, the effect of the variable of training between sessions and the interaction between the two factors of training and group in increasing the sense of psychological coherence scores is statistically significant. In both cases, the significance level is 0.000 which is less than 0.05. Therefore, the research hypothesis indicating that short-term solution-focused approach training is effective in the sense of psychological coherence among girl adolescents is confirmed.

Table 4. Results of Bonferroni test to compare the means in the pretest, posttest and follow-up test in the variable of the sense of psychological coherence

<table>
<thead>
<tr>
<th>Comparison of groups</th>
<th>Difference between the means</th>
<th>Standard error of means</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>-5.8</td>
<td>0.91</td>
<td>0.000</td>
</tr>
<tr>
<td>Follow-up</td>
<td>-5.3</td>
<td>0.87</td>
<td>0.000</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>5.8</td>
<td>0.91</td>
<td>0.000</td>
</tr>
<tr>
<td>Pretest</td>
<td>0.53</td>
<td>0.29</td>
<td>0.08</td>
</tr>
<tr>
<td>Follow-up test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>5.3</td>
<td>0.87</td>
<td>0.000</td>
</tr>
<tr>
<td>Posttest</td>
<td>-0.53</td>
<td>0.29</td>
<td>0.08</td>
</tr>
</tbody>
</table>

As shown in Table 4, the comparisons made suggest the existence of a difference in the scores of the pretest, posttest and follow-up test, which indicates the effectiveness of short-term solution-focused approach training in the sense of psychological coherence among female adolescents.

5. Discussion and Conclusion

The present study was conducted with the aim of investigating the effectiveness of short-term solution-focused approach training in the sense of psychological coherence of female adolescents. To this end, an intervention group (under solution-focused training) and a control group (on a waiting list for treatment) were used. The two groups were matched in terms of demographic variables. The posttest results show that the mean scores in the posttest and follow-up in the variable of the sense of psychological coherence have significantly increased compared to the control group. As has been demonstrated, short-term solution-focused approach could enhance the sense of psychological coherence among female adolescents. Several studies have been conducted in this respect, which are consistent with the present research. Among them are the studies by Yokotani et al. (2015), Pakrosnis and Cepukiene (2015), Shakarami et al. (2014), Maljanen et al. (2014), Roden et al. (2014), Bond et al. (2013), Arvand et al. (2012), Shafi’abadi et al. (2012), Safarpour et al. (2011) and Shahi and Ojinezhad (2014).

The studies performed by Yokotani et al. (2015) are included here in that through short-term solution-focused therapy, they caused the individuals to think more about the solutions by controlling their talks about problems. In fact, this treatment could save them from drowning in problems. On the other hand, Wang et al. (2014) believe that empowerment of people in finding solutions and not drowning in the difficulties ahead indicate the promotion of their sense of psychological coherence. Besides, Pakrosnis and Cepukiene (2015) state that by applying this approach, they could improve the academic performance of students. According to the studies by Tartas et al. (2014), promotion of individuals’ academic performance depends on the level of their sense of psychological coherence. A review of the research by Shakarami et al. (2014) shows that solution-focused therapy moderates the problems of couples by reducing their stress level. Additionally, Supper et al. (2014) have found that strong presence of the sense of psychological coherence facilitates adaptive coping in the face of inherent stressors. Kimhi (2015) in a study indicated that those with higher sense of psychological coherence obtain better scores for their response in the face of sustained stresses. Li et al. (2015) observed that the sense of psychological coherence has a significant negative relationship with dysfunction of individuals in everyday life. Bond et al. (2013) emphasize that short-term solution-focused therapy causes to reduce behavioral problems in children. In this regard, there is a report from Benke, O’callaghan and Morrissey (2015) indicating the impact of the sense of psychological coherence on self-care behaviors in children. Arvand et al. (2012) consider solution-focused therapy as effective in reducing depression. Li et al. (2015) argued that there is a significant negative relationship between depression and sense of psychological coherence.

In this study, the component affecting the mental health of individuals and subsequently public health, i.e. sense of psychological coherence, was investigated and to influence this component, the solution-focused postmodern approach was used. The sustainability of the treatment effect in this research was approved through a two-month
The present study suggested that this approach can be applied for working with adolescents since this method gives the individuals complete freedom to choose for their future and fate. Adolescents need to find themselves and their capabilities and identify their abilities. Solution-focused approach gives them this right and reveals their potential capabilities and capacities in dealing with life’s challenges such that each individual becomes able to competently manage his own affairs. In the present study, the participants in solution-focused training sessions significantly showed positive changes in the sense of psychological coherence. Indeed, this training helped them change their direction towards less use of maladaptive strategies and greater use of adaptive strategies through the application of techniques and enjoy higher sense of psychological coherence. A review of the literature on solution-focused therapy indicates that this type of treatment has been applied in various situations and beneficial results have been achieved. It seems that the acquisition of such beneficial findings is the result of a non-judgmental, non-confrontational, sympathetic and cooperative stance of the therapist towards the client and also the emphasis on here and now, exceptions of the problem, positive cases, capabilities, respect for the client’s objectives and use of their internal resources. Despite extensive research efforts to help the adolescents benefit from a healthier and more productive life, the related studies suggest the unsatisfactory conditions of this age group, which indicates the inadequacy of current treatments and the need for the development of other treatment options and introduction of short-term and more effective treatments. Among the limitations of the present study are the impossibility of controlling all the confounding variables, familiarity of some students with each other and thus their resistance to state their problems, possible inaccuracies of students to respond to the questionnaire because of repeating this job and limited sample size. Considering these limitations, it is recommended that in future research, this approach be used in working with male adolescents and students in other educational levels and with different ages on a group basis and its effectiveness in each of the components of the sense of psychological coherence be investigated. Also, this approach should be compared with other approaches in terms of their effectiveness in mental health and more optimal performance of individuals in daily life and in the face of its stressors.

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References


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