The Efficiency of Solution-Focused Brief Therapy on Adjustment Problems of Female Students in Amol, Iran

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Abstract
Background: Adjustment and coordination with environment is indispensable to all people.
Objectives: The aim of present study was to determine the effectiveness of solution-focused brief therapy in increasing adjustment of high school female students.
Materials and Methods: This study was based on an experimental pretest-posttest design including 30 female students of Amol high school in academic year 2011-2012. The participants were selected by purposive non-convenience sampling methods, randomly assigned to experimental and control groups, who completed the Bell’s adjustment questionnaire in pre-test phase. Thirty subjects with scores close to mean were selected and randomly divided into control and experimental groups. Solution-focused brief therapy intervention for experimental group was carried out in 5 sessions followed by performing posttest on the two groups. The data obtained were then analyzed using MANCOVA.
Results: The results showed that solution-focused brief therapy (SFBT) was effective in increasing adjustment of the students (P < 0.0006), as well as increasing 3 subscales of adjustment questionnaire comprising home adjustment (P < 0.0006); health adjustment (P < 0.0006); and social adjustment (P < 0.0003); but had no effect on affective adjustment (P < 0.081).
Conclusions: Considering the significant effect of SFBT interventions on increasing adjustment in young students, the training of school counselors can be an effective means for youth to achieve their goals and decrease some problems in the community.

Keywords: Adjustment, Solution-Focused Brief Therapy, Female Students

1. Background

Though adjustment is a major concern at all life stages, it becomes especially a critical issue for juveniles who may exhibit risky health behaviors and try to seek health care systems (1). Adolescents experience psychosocial changes which authors link them to physical functions including pubertal influences that challenge the adolescent (2). Along with puberty, some adolescents display inappropriate behaviors in school setting that threaten optimal learning and create other problematic behaviors (3). The phenomenon is affected by different factors such as parental attitudes (4). Changes associated with rapid growth and development in physical, sexual and emotional aspects are accompanied by adjustment problems that frequently challenge adolescents. The difficulties may correlate with poor self-concept which ultimately affects psychosocial well-being (5). Besides, at this critical period, the fate will be determined by individual’s correct and reasonable decision making (6), which has to be guided on a sound psychological and emotional ground. Approximately 50 percent of the country’s teenagers are girls who play significant roles in constructing the future of society and shaping healthy and competent generations. Therefore, the contribution of officials, preceptors, parents, schools’ authorities and mental health professionals is necessary to raise the social and emotional adjustment of adolescents and prevent anti-social behavior (7).

Adjustment is the most important dimension of psychological health. It is related to human’s affective, social, educational, marital, and occupational domains. Rogers (1961) believes that adjustment level and psychological health are the result of association between our ego and our experiences. Adjustment in adolescents can be analyzed from emotional, social and educational standpoints. Social adjustment is the individuals’ adjustment with their social surrounding that can be gained by changing the self or the environment. Emotional adjustment is the realization of one’s emotions and feelings and controlling feelings in making relationships with others. Educational adjustment is defined as the interest in study and school. Educational adjustment inspires activities that increase achievement and efficacy such as
Various methods may be used to overcome adjustment difficulties including counseling and psychotherapy which help juveniles improve their psychosocial status and behaviors and be routinely integrated into academic settings such as high schools (8). Solution-focused treatment is an innovation to psychotherapy that is based on developing solutions instead of solving problems in relation to exploring future hopes (9). Solution-Focused Brief Therapy (SFBT) is an efficient and evidence-based intervention that is rooted in the belief that it is important to build on the resources and motivation of clients who know their problems best and are capable of finding solutions to solve their own problems, a future-focused approach that serves as a brief intervention (10, 11). The intervention mostly focuses on solutions rather than solving problems (12). There was compelling evidence that SFBT was an effective treatment for a wide variety of behavioral and psychological outcomes and could be useful in treating internalizing and externalizing problematic behaviors of children and juveniles (13, 14), which seemed to be shorter, and cheaper than alternative treatments (15). SFBT studies documented that it could serve as an appropriate intervention for psychological disturbances like depression and might produce helpful results even for people with long-term physical problems (16-18) and health behaviors of female adolescents (19). These carefully constructed communication processes are believed to be key components to helping client’s change. Solutions emerge in perceptions and interactions between people and problems are not to be solved solely by the therapist but rather by cooperation with the client(s) (20). Some studies indicate that subjects undergoing this treatment need two to three SFBT sessions to solve their problems (21).

SFBT has been applied to school settings with a number of problems including student behavioral and emotional issues, academic problems, social skills, and dropout prevention. Students also reported that this method is helpful and increases knowledge and skill (10, 22). The systematic review of related literatures found mixed results regarding the outcome measures examined in the individual studies. Positive outcomes suggested that SFBT can be beneficial in helping students reduce the intensity of their negative feelings, manage their conduct problems, improve academic outcomes like credits earned, and positively impact externalizing behavioral problems and substance use (22-24). The Franklin et al. (2008) (23) study showed that SFBT improved the outcomes of children in a school setting regarding classroom and behavioral problems that could not be resolved by teachers, principals, or school counselors. Having applied the SFBT intervention, teachers and students reported significant improvement in the children’s behavior problems according to standardized measures presented in Child Behavior Checklist and Youth Self-report Form. Kim’s study showed that SFBT was effective in coping with internalizing behavior problems such as anxiety, depression, self-concept and self-esteem, but not in externalizing behavior problems such as conduct problems, hyperactivity and aggression, and in coping with family and relationship problems (25). Reddy et al., found decreased depression and significant improvement in academic performance of an adolescent girl with moderate depression undergoing SFBT (16).

2. Objectives
Regarding the importance of adjustment in adolescence and considering the related studies conducted so far, the authors of present research attempted to explore the impact of SFBT on the adjustment rate of high school female students.

3. Materials and Methods
The present study used pre-test and post-test with experimental and control group. The statistical population of the study comprised female students in the second semester of the academic year 2011-2012, where 722 students were officially enrolled and attended classes in the school of Amol city, northern Iran. Sampling for this study was done in two stages. In the first phase, one female high school with 305 students was purposefully selected form secondary school students who filled in Bell’s questionnaire as an entrance criterion, of whom 100 respondents obtained low scores. In the second phase, 30 students with low scores were randomly selected for the study. The subjects were then randomly assigned into experimental and control groups, each consisting of 15 students. Written informed consent was obtained from all subjects and their parents who had been briefed about the objective of the study.

3.1. Measurements
3.1.1. The Used Questionnaire
The questionnaire used in this study was introduced by Bell in 1961, and included 160-items. It consists of five subscales of which four subscales were used in this study based on our objectives which were: 1) Home adjustment in the house (Chronbach’s alpha 0.91), 2) Health adjustment (Chronbach’s alpha 0.81), 3) Social adjustment (Chronbach’s alpha 0.88), 4) Emotional adjustment (Chronbach’s alpha 0.91); and for total adjustment (Chronbach’s alpha 0.94). Each of subscales has a range of scoring instead of cut-off point. Scores of 13 - 17, 10 - 14, 10 - 20, 20 - 24, and 59 - 71 in women points to poor adjustment validity of Bell’s inventory estimated by test-retest method which was between 0.74 - 0.93 in Iranian sample (cited in Fat’hi Ashtiani et al., 2013) (26). In addition, con-
tent and formal validity of the questionnaire substantiated by thesis advisor and thesis consultant.

3.1.2. Protocol of Solutions-Focused Brief Therapy Sessions

The treatment protocol is demonstrated in Table 1 which includes solution-oriented brief implementation method of treatment, a brief solution-focused therapy, held in 85-minutes weekly sessions for 5 consecutive weeks conducted by the authors for the participants of experimental group.

The data were analyzed using descriptive statistics such as frequency, mean of scores, standard deviations, and the inferential statistical, multivariate covariance (MANCOVA) tests using SPSS 16 software.

4. Results

Tables 2 and 3 describe the results of the survey in the pre-test and post-test phase, including the subjects’ scores on the four subscales of housing, health, emotional, and social, adjustment and its total score, mean, standard deviation and the lowest and the highest scores related to each of control and experimental groups.

### Table 1. Protocol of Solutions-Focused Brief Therapy Sessions

| Sessions       | Objects of Sessions                                                                 | Description of Treatments                                                                 |
|----------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| First          | Interactive understanding between the researcher and the participants. Being         | Once the subjects are introduced to each other, the therapist first taught them theoretical basis of factors which affect adjustment. They were then asked to seek and write personal factors affecting their adjustment. Therapist collected the sheets and illustrated SFBT principles, objectives, home works. Finally the subjects were asked to write a summary about their adjustment status and also announce what they have learned from the session. |
|                |  familiar with the concept of adjustment and the factors affecting brief therapy.  |                                                                                          |
|                | Being familiar with solutions-focused brief therapy sessions.                      |                                                                                          |
| Second         | Restating programs and goals of solution-focused brief therapy and starting and     | In this session, the therapeutic programs and objectives were practically determined with the cooperation of subjects. The subjects then wrote down the therapeutic purposes in a separate sheet with assisting the therapist. The therapist guided them to practically implement their objectives in their daily activities. |
|                | targeting therapy along with subjects’ intervention and activity programs.          |                                                                                          |
| Third to fifth | Review and monitor the plan and the objectives of the previous session, gather      | The previous sessions were reviewed in the third to fifth session. In addition, the treatment plans and goals were reviewed and monitored, alongside personal goals of each subjects compared to those of control group. Additional measures were taken to determine the possible causes of the shortcomings of the performances and solving the problems by active participation of the subjects. During the sessions participants received therapist and group support to accomplish and review determined objectives; meanwhile they assigned new possible necessary practical plans. |
|                | feedback regarding treatment, gather feedback regarding taken action, set new        |                                                                                          |
|                | goals or revising them.                                                            |                                                                                          |

### Table 2. The Descriptive Data Relating to Pre-Test and Post-Test of Experimental Group

| Test Phase/Variable  | Number | Values<sup>a</sup> |
|----------------------|--------|---------------------|
| **Pre-test**         |        |                     |
| Home adjustment      | 15     | 10.70 ± 6           |
| Health adjustment    | 15     | 7.53 ± 3.80         |
| Emotional adjustment | 15     | 14.93 ± 7.45        |
| Social adjustment    | 15     | 11.33 ± 6.55        |
| Total adjustment     | 15     | 42 ± 17.90          |
| **Post-test**        |        |                     |
| Home adjustment      | 15     | 8.87 ± 6.58         |
| Health adjustment    | 15     | 8.20 ± 4.63         |
| Emotional adjustment | 15     | 11 ± 5.85           |
| Social adjustment    | 15     | 8.93 ± 5.16         |
| Total adjustment     | 15     | 37 ± 17.16          |

<sup>a</sup>Values are presented as mean ± SD.

### Table 3. Descriptive Data of Pre-Test and Post-Test of Control Group

| Test Phase/Variable  | Number | Values<sup>a</sup> |
|----------------------|--------|---------------------|
| **Pre-test**         |        |                     |
| Home adjustment      | 15     | 14 ± 8.90           |
| Health adjustment    | 15     | 10.20 ± 4           |
| Emotional adjustment | 15     | 17.13 ± 6.70        |
| Social adjustment    | 15     | 12.80 ± 5.80        |
| Total adjustment     | 15     | 53.73 ± 18.34       |
| **Post-test**        |        |                     |
| Home adjustment      | 15     | 15.20 ± 6.94        |
| Health adjustment    | 15     | 12 ± 4.18           |
| Emotional adjustment | 15     | 13.40 ± 5.21        |
| Social adjustment    | 15     | 12.27 ± 5.10        |
| Total adjustment     | 15     | 52.87 ± 18.45       |

<sup>a</sup>Values are presented as mean ± SD.
Table 4. The Results of Interaction Between Experimental and Control Groups Regarding Pretest-Posttest

| Source of Pre-Test/Variable of Post-Test | SS   | DF | MS      | F         | P Value | $\eta^2$ |
|-----------------------------------------|------|----|---------|-----------|---------|----------|
| **Effects of group**                     |      |    |         |           |         |          |
| Home adjustment                         | 145  | 1  | 145     | 4.892     | 0.006   | 0.158    |
| Health adjustment                       | 73   | 1  | 73      | 5.608     | 0.006   | 0.177    |
| Emotional adjustment                    | 25   | 1  | 25      | 4.890     | 0.081   | 0.168    |
| Social adjustment                       | 57   | 1  | 57      | 4.762     | 0.003   | 0.177    |
| Total adjustment                        | 23   | 1  | 23      | 9.5       | 0.006   | 0.226    |
| **Error**                               |      |    |         |           |         |          |
| Home adjustment                         | 769  | 26 | 30      | NA        | NA      | NA       |
| Health adjustment                       | 339  | 26 | 13      | NA        | NA      | NA       |
| Emotional adjustment                    | 345  | 26 | 13      | NA        | NA      | NA       |
| Social adjustment                       | 397  | 26 | 15      | NA        | NA      | NA       |
| Total adjustment                        | 1142 | 26 | 44      | NA        | NA      | NA       |

Abbreviation: NA; not available.

As it was shown in Table 4, the treatment has significantly influenced the scores of experimental group in home adjustment (MS: 145; F: 4.892; $P < 0.006$; $\eta^2$: 0.158), health adjustment (MS: 73; F: 5.608; $P < 0.006$; $\eta^2$: 0.177), Social adjustment (MS: 57; F: 4.762; $P < 0.003$; $\eta^2$: 0.226), total adjustment (MS: 23; F: 9.5; $P < 0.006$; $\eta^2$: 0.520) subscales; the treatment did not affect scores of emotional adjustment subscale (MS: 4.89; F: 4.89; $P < 0.08$; $\eta^2$: 0.168).

5. Discussion

This study aimed to determine the efficacy of a solution-oriented brief therapy on the high school female students’ adjustment. Adjustment problems could lead to different problems such as family violence, high risk behaviors and dating victimization especially in girls (27). Based on the research findings, the afore-mentioned treatment has been successful in relation to enhancing the students’ home, health, social and total adjustments, but not effective on emotional adjustment. The rationales for the results obtained is that participating in training sessions of SFBT, could turn learning to practice, and be beneficial to the students, a finding consistent with the results of other studies (22, 28) and cited researches by increasing communication skills where students’ adjustment in experimental group increased relative to the control group who received no treatment.

Based on the results, adjustment could increase in students participating in SFBT sessions, which is correlated with basic assumptions of solution-focused approach. According to this theory, shifting from talking about the problem to talking about solutions will lead to the reduction of conflicts. After participating in sessions led by a therapist, students will find possible solutions for the problems they have faced relating to their new environment and being away from their families. Efficient solutions are the result of self-redefinition thereby students will create new and empowering incentives about themselves. Students, especially the new ones, panic from entering the new environment and are confounded in solving their problems and establishing social and emotional relationships with others. By transforming the goal into a minor activity, the therapist encourages the client to make changes, which will probably be considered as self-constituted by the student. After clients have achieved a minor objective such as finding a friend, they are encouraged to reach higher goals like participating in the classroom discussion (15).

The approach used in this study covers the methodological aspects which is likely to change some of students’ assumptions and cognitive errors about themselves. The reasons for the efficacy of solution-oriented brief therapy on adjustment subscales, with the lowest effectiveness on social adjustment with no impact on emotional adjustment, are that with respect to age, the pupils are very vulnerable emotionally and socially in accepting social responsibility, doing research and conducting pre-and post-test, where they obtain highest scores on the subscales of emotional adjustment and none in relation to social adjustment scale. Adolescence is a period between childhood and adulthood wherein physical, mental, emotional, cognitive and behavioral changes are quite evident and characterized by very high conflicts and contradictions. However, the person’s fate will be determined by individual’s correct and reasonable judgment during this period (6), which needs to be directed in order to be prepared psychologically and emotionally.

As the assessment of student’s adjustment in this study was made by self-reporting questionnaire, like all self-reporting questionnaires and behavioral science research, it has some shortcomings in the accuracy test, where on one hand, humans tend to express themselves better...
than they are, and on the other hand, they tend not to disclose themselves. The problem of the school authorities' full collaborations to run pre- and post-tests, and establishing therapy sessions, family rejection due to unfamiliarity with the research goals for running therapy sessions encourage the researchers to implement treatment sessions as short as possible without interfering with students' school hours vacation and returning home. The results of present study showed that the experimental group welcomed the solutions-oriented brief therapy and participated in treatment course. Thus this mode of therapy is suggested to be implemented by authorities engaged in Bureau of Education for schools' consultants.

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Footnotes

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