Original Article

The Effect of Social Skills Training Program on the Emotional and Behavioral Problems of Adolescent Girls in a High School

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Objective: School-based interventions (such as life skills training) have become the mainstay for prevention of some behavioral problems. This study was conducted to evaluate the efficacy of a social skills training program on a group of students who were in the first grade of high school in an urban area of Tehran, Iran

Method: In a before-after study, a kind of social skill education program named "Right Choices" was used for high school female students. The entire students of a class in a high school participated in the study. The students' age ranged from 14-16 years. All of the participants lived in an urban area. Demographic characteristics were recorded in a designed questionnaire and included the name, age, educational level of the students and their parents, and prior history of psychiatric and medical condition. The total problem score and each of the subscale scores of the students before and after the study were calculated and compared.

Results: The mean age of the 33 participants in the study whose SDQ answer sheets were completed was equal to 15.15±6.2 years (14 to 17 years). The mean total problem score of the participants in the beginning of the program was equal to 14.3±5. After the program, the students' total problem score and all of the subscale scores improved, however, the differences between pre- and post intervention scores were not statistically significant.

Conclusion: Social skills training program may impact the problem behaviors of the adolescent girls.

Key Words:

Adolescents, Behavioral symptoms, School, Prevention and control, Psychological adaptation

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Approximately one-third of children and adolescents will experience a diagnosable mental health disorder in their life time (1); however, 75-80% of these children do not receive appropriate interventions. disorders lead to impairment in social, academic, and family functioning causing some students to drop out the school, become engaged in juvenile justice system, abuse drugs or alcohol, or participate in risky behaviors with serious long-term consequences (1). makers, researchers, and clinicians have long been concerned about the large number of children with serious emotional disturbances who do not receive treatment for their disorders. Many children and adolescents have home or neighborhood environments that place them at high risk for psychiatric disorders (2). On the other hand, factors such as type of disorder and impairment, some family characteristics, parents, youth as well as factors such as child's age, gender, Ethnicity, family's socioeconomic status, child's physical illness, parental use of mental health services, and parental perceived burden have been found to affect child service utilization patterns(3). Accordingly consultation in the school will facilitate primary

diagnosis and referral of the students who have problem (4).

Professionals have recognized that both mental health promotion and intervention are imperative for children in elementary schools (5). On the other hand, mental health clinicians can assist children with chronic medical conditions with school absences, compliance with medical regimens, case management, teacher training, counseling parents, and improving social acceptance of these children (6).

Universal interventions are directed towards the entire student body and usually have mental health promotion and screening as coexisting priorities; some of these programs focused on disruptive behaviors and task completion in elementary and secondary schools. These programs tend to involve extensive teacher training and supervision and rely on widespread consistent behavior strategies to improve behavior and achievement of students. Schools using these programs have experience in disciplinary behaviors and high rates of teacher and parent satisfaction (1). Children entering school with poor social behavior

Children entering school with poor social behavior often have a plethora of problems including peer rejection, behavioral problems, and low levels of academic achievements. In addition, teacher reports suggest that children come into school with differing levels of social skills and that these skills are critical for early school success (7). It is showed that leaning and work-related social skills will contribute to later academic success and improve achievements (8).

School-based interventions (such as life skills training) have become the mainstay for prevention of some behavioral problems (e.g. smoking); concerns have been raised whether the effects of this reported positive program are measure dependent (9). On the other hand, some cultural and geographical factors may affect intervention outcomes because children from different cultural or geographical backgrounds may have different emotional/behavioral problems , different skills or social relationships or may encounter different stressors(10) .

Considering the above-mentioned factors, and the fact that most of the studies have evaluated the effect of social skill training programs in children especially those with psychiatric problems it was decided to evaluate the efficacy of a social skills training program on a group of students who were in the first grade of high school in an urban area of Tehran, Iran

Materials and Method

In a before after study, a kind of social skill education program named "Right Choices" was used for the female students of a high school. In this program the students attended 34 weekly sessions. duration of each session was 20-30 minutes. The Persian version of the program was used for this study (Shahriver 2005, not published until now). Due to practical limitations, we modified this program to 18 weekly sessions with the duration of 90 minutes in the classroom with the participation of all students (about 30 people) and a child and adolescent psychiatrist. The face validity of this modification was approved by two expert child and adolescent psychiatrists. The participants of this study were the entire class of girls who were in the first year of high school. The students' age ranged from 14-16 years. All of the participants lived in an urban area.

Program content

The content of adolescents' sessions aims to enhance their social skills at home and school and to decrease their problematic behaviors. We used cognitive behavioral skills such as self reinforcement, modeling of skills, role play, behavioral rehearsal and positive reinforcement. In addition, group work was used to practice the skills in the classroom and home to extend the learned skills in social circumstances. All the students had the chance to role play and practice the skills in the classroom under the supervision of a child The content of the sessions in this psychiatrist. program are as follows: Problem solving, Negotiating, Apologizing, Using self control, Standing up for your rights, Keeping out of fights, Responding to teasing.

Measures

Demographic characteristics were recorded in a designed questionnaire which included the name, age, educational level of the students and their parents, and prior history of psychiatric and medical condition.

Because we wanted to evaluate the effect of a social skill training program on emotional and behavioral difficulties, the Farsi version of Strength and Difficulties Questionnaire (SDQ) self-report form was used to evaluate the efficacy of the program's interventions. The Strength and Difficulties Questionnaire is a structured questionnaire that is used to screen the child and adolescent psychiatric problems and contains 25 questions with 5 subscales including emotional, hyperactivity, relationship, and conduct problems and pro-social behaviors with 5 items in each. The sum of the first four subscales consists the total difficulty score (11). Goodman's cut of points were used in this study (11). The questionnaire has 3 forms; parent-report, teacher-report and self-report. The self-report form is applied for the cases that were older than 11 years. Thehranidoost et al., have evaluated the validity and reliability of the questionnaire in the Iranian population (12). Students administered the questionnaires before and after interventions. Oral consent was obtained from the students.

Statistical analysis

The total problem score and each of the subscale scores of the students before and after the study were calculated and compared using t-student. Chi square test was used to compare the probability of having scores above the cutoff score for Iranian adolescents in the self-report form of the SDQ. The statistical analyses were done using SPSS Win 15.0 (release 15.0). Significance levels determined to be equal to 0.05.multivariate logistic regression.

Results

All of the participants were female students in the first grade of high school. The mean age of the 33 participants in the study whose SDQ answer sheets were completed was equal to 15.15 ± 6.2 years (14 to 17 years).

The mean total problem score of the participants in the beginning of the program was equal to 14.3 ± 5 . There were not any statistically significant differences between the participants' total problem score and parents' occupation and education (P > 0.05).

The mean subscale scores of the participants in the study before and after the administration of the program are shown in Table 1. The mean scores in different subscales were not different regarding parents' education and occupation (P > 0.05).

Prior to the start of the program, 4 students (12.1 percent) had total problem scores higher than the cutoff point determined for adolescent population of Iran (13).

Table 1. Total and sub-scale scores for the Farsi version of the Strengths and Difficulties

Questionnaire self-report form before and after the program.

Subscale	Before mean (SD)	After mean (SD)	Program effect P
Total difficulties score	14.3 (5.0)	13.4 (5.2)	0.233
Emotional problems	3.9 (2.6)	3.5 (2.3)	0.227
Conduct problems	3.5 (1.8)	3.5 (1.7)	0.992
Hyperactivity/inattention problems	4.5 (1.2)	3.9 (1.9)	0.062
Peer problems	2.4 (1.4)	2.4 (1.5)	0.891
Prosocial behavior	6.8 (2.2)	7.3 (1.9)	0.122

Table 2. Frequency of the students who had scores higher than cutoff scores before and after the administration of the program.

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Subscale	Before	After	Program effect	
	Number (%)	Number(%)	Р	
Total Problem	4 (12.1)	3 (9.1)	0.330	
Emotional Problem	10 (30.3)6	6 (18.2)	0.053	
Conduct Problem	4 (12.1)	4 (12.1)	0.400	
Hyperactivity Problem	0 (0)	3 (9.1)	-	
Peer Problem	2 (6.1)	3 (9.1)	0.119	
Prosocial Behavior	9 (27.3)	6 (18.2)	0.003	

Frequencies of the students with scores higher than the cutoff points in the different subscales before and after the administration of the program are shown in Table 2. The ratio of the students with high emotional problem scores was greater than the other subscales in the beginning of the study. There were not any statistically significant differences between having scores higher than the cutoff points and parental education and occupation (P > 0.05).

After the program, the students total problem scores and all of the subscales improved (Table 1),however, the differences between pre- and post intervention scores were not statistically significant (P > 0.05). The frequency of the students with scores higher than the cutoff points decreased in the total problem scale and emotional problem and prosocial behaviors subscales, but it increased in the hyperactivity subscale. Nonetheless, these differences were not statistically significant except for the pro-social behavior subscale in which the frequency of students with low pro-social behavior decreased from 9 to 6 after the program (P = 0.003). Neither parental education nor occupation was significantly associated with the observed changes in the subscale scores (P > 0.05).

Discussion

In the present study which is a quasi-experimental one, the efficacy of a social skill training program on female first grade high school students was evaluated. Although the present study was performed on a population of the students of a single class and this small group number limited the ability to detect the quantitative differences in the outcome, some encouraging trends in the data were observed.

The numbers of the students with score higher than cutoff points in emotional problem and lower than the cutoff point in pro-social behavior subscales was higher than expected. Because the cutoff points were

determined to differentiate the adolescents in 10 highest percentile of problem behaviors, it was expected that about 10 percent have scores higher than the cutoff points. This may be due to higher frequency of emotional problems and lower frequency of socially approved behaviors in this group of female adolescents who experienced adolescent turmoil .

Although the mean score in the hyperactivity subscale decreased after the program, 3 participants had scores more than the cutoff point of this subscale after the program. This finding is an interesting one because it was supposed that the program cause a reduction in the frequency of adolescents with problems in any area. However, hyperactivity is mainly a biological problem that requires pharmacological intervention and its core symptoms do not change with a social skill training program .

On the other hand, the number of adolescents with high peer problem scores was increased. Among the participants, 2 had high peer problem scores before the study who continued to have high problem score. Another adolescent was added after the program that had borderline score in this subscale before the program. Therefore, it can be concluded that although the program could help the participants as a group, it cannot help the adolescents with special problems in this regard.

Some studies have evaluated the effect of social skill training in children and adolescents. Most of them have investigated the effect of social skill training on difficult situations including high risk students, substance use disorders and also in ADHD children, but a few studies have evaluated the promotion effect of this intervention on normal population in community samples. Arabgol et al., in a study using SDQ questionnaire evaluated the effect of social skill training in a group of primary school girls which had positive results (13). In another study O'Hearn et al.,

evaluated a school based intervention designed to teach these skills to at risk urban adolescents. A 10- week program was administrated to 499 middle school students. Results demonstrated gains in problem solving skills (14). Irvine et al., in another study investigated the effectiveness of a parenting skills program for the parents of middle school students. The results showed reduction in antisocial behaviors in the students (15). A study conducted on the Iranian first grade high school students demonstrated that adolescents' group assertive training program was effective in improvement of anxiety symptoms in participants (16). In a study, Derakhshani et al., investigated the effect of social skill training on the reduction of shyness in a group of female adolescents which had positive results (17).

Limitations

The present study was performed only on a single class of high school first graders. The total problem and subscale scores in this group were higher than the mean of Tehran adolescents. This makes the generalization of the results unjustified .

The small sample size and having no control group for comparison may have considerable impact on the overall results of the study.

It must be remembered that the studied group were only female students. Response of the male students to such program may be different.

Conclusion

Social skills training program may impact the problem behaviors of the adolescent girls. Considering the limited sample size, repetitions of this study with larger sample sizes with both sexes seems to be necessary .

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References

- Evans SW, Mullett E, Weist MD, Franz K. Feasibility of the MindMatters School Mental Health Promotion Program in American Schools J Youth Adolesc 2005; 34: 51-58.
- Leaf PJ, Alegria M, Cohen P, Goodman SH, Horwitz SM, Hoven CW, et al. Mental health service use in the community and schools: results from the four-community MECA Study. Methods for the Epidemiology of Child and Adolescent Mental Disorders Study. J Am Acad Child Adolesc Psychiatry 1996; 35: 889-897.
- 3. Wu P, Hoven CW, Bird HR, Moor RE, Cohen P, Alegria M, et al. Depressive and Disruptive Disorders and Mental Health Service Utilization in Children and

- Adolescents. J Am Acad Child Adolesc Psychiatry 1999; 38: 1081-1090.
- Walter HJ, Berkovitz IH. Practice parameter for psychiatric consultation to schools. J Am Acad Child Adolesc Psychiatry 2005; 44: 1068-1083.
- Charron SA,Parns M. Promoting emotional wellness: undergraduate clinical experiences in elementary schools. Nurse Educ 2004; 29: 208-211.
- Nabors LA,Lahmkuhl HD. Children with Chronic Medical Conditions: Recommendations for School Mental Health Clinicians J Dev Phys Disabil 2004; 16: 1-15.
- McClelland MM,Morrison FJ. The emergence of learning-related social skills in preschool children. Early Child Res Q 2003; 18: 206-224.
- McClelland MM, Morrison FJ,Holmes DL. Children at risk for early academic problems: the role of learning-related social skills. Early Child Res Q 2000: 15: 307-329.
- Gorman DM. Does measurement dependence explain the effects of the Life Skills Training program on smoking outcomes? Prev Med 2005; 40: 479-487.
- Weist MD, Myers CP, Danforth J, McNeil DW, Ollendick TH, Hawkins R. Expanded school mental health services: assessing needs related to school level and geography. Community Ment Health J 2000; 36: 259-273.
- Goodman R. The Strengths and Difficulties Questionnaire: A research note. J Child Psychol Psychiatry 1997; 38: 581-586.
- Tehrani Doost M, Shahrivar Z, Pak Baz B, Rezaei A,Ahmadi F. [Validity of farsi version of strengths and difficulties questionnaire (SDQ)]. Advances in cognitive science 2007; 8: 33-39.
- 13. Arabgol F, Mahmoudi Gharaei J,Hakim Shoushtari M. [The effect of social skills education on the function of grade four elemantary students]. Advances in cognitive science 2005; 7: 51-57.
- O'Hearn TC,Gatz M. Going for the Goal: Improving youths' problem-solving skills through a school-based intervention. J Community Psychol 2002; 30: 281-303.
- Irvine AB, Biglan A, Smolkowski K, Metzler CW,Ary DV. The effectiveness of a parenting skills program for parents of middle school students in small communities. J Consult Clin Psychol 1999; 67: 811-825.
- Rahimi J, Haghighi J, Mehrabi zadeh Honarmand M,Beshlideh K. [The effect of group assertive training on social anxiety, social skills and assertiveness of male first grade high school students in Shiraz]. J Educ Psychol 2006; 3: 111-124.
- Derakhshani S, Hosseinian S, Yazdi SM. [The effects of group social skills training on reduction of shyness of high school female students]. Counseling research and development 2006; 5: 23-34.