

Original Article

## The effect of Social skills training on Socialization skills in children with Down syndrome

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**Objectives:** The development of social skills, especially skills in relating to peers, is an important capacity that provides the foundations for lifelong success. Some children with disabilities need to learn social skills more directly. The purpose of this study was to determine the effects of social skills training on socialization skills development in children with Down syndrome.

**Method:** This study was a semi-experimental conducted on thirty-seven student with Down syndrome, 8-12 years old with IQ 55 – 75. Subjects were divided randomly in two groups (n=18) and control group (n=19). Initially, each of the subjects was assessed by the list of social skills, and then social skill training was performed for 60 minutes, two times weekly, for two months in intervention group, and the socialization skills was evaluated after intervention and 2 months later in the two groups.

**Results:** A significant ( $p < 0/05$ ) improvement in socialization skills was occurred. Follow-up study also showed, improvement of socialization skills were maintained 2 months after the end of training in intervention group ( $p < 0/05$ ).

**Conclusion:** It's seems that training of social skills can improve the socialization skills of children with Down's syndrome.

**Key words:** social skills training, down syndrome, socialization skills.

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### Introduction

Social skills are behaviors that help people interact with others. In school, the interaction may be with classmates, teachers, and other school staff. In later life the interaction may be with co-workers, supervisors, friends, and others that a person meets (1). In support of this, several studies have found that from childhood through adulthood, mentally retarded people show poor or inadequate social interactions with others (2). Children and adolescents with disabilities sometimes have behaviors that are awkward or unacceptable in social interactions. The lack of appropriate social behaviors may be a characteristic of their disability. Students may lack a specific social behavior, apply an inappropriate social behavior to a particular situation, or not be aware that a particular situation calls for a specific behavior (1). Social skill deficits and problematic

peer relations can lead to difficulties including externalizing problems, such as maladaptive behavior and antisocial behavior and internalizing problems, such as Lack of confidence, anxiety and depression (3). Deficits in social skills are at the most important of the difficulties experienced by persons with mental retardation. Social skill deficits can lead to isolation from friendships and peer interactions and can limit further opportunities to improve social skills and this is problematic because deficits in social skills often lead to negative experiences and avoidance of social interactions as a whole, thus limiting opportunities for learning positive social skills and behaviors (4). These limitations can create a cyclic pattern of isolation or peer rejection (5). Improving children with down syndrome' social skills can offset the development of more serious maladjustment (3). Therefore, it is

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critically important to persons with disabilities that accurate assessment and treatment of social skills be part of any credible effort to improve quality of life (5). Social skills are a set of abilities that initiate and maintain positive social relationships, develop friendships with peers and to create adjustment in the school (5). The socialization of children is the acquisition of social skills. In the process of socialization, norms, skills, values, attitudes and behavior are shaped, the child to be able to role to play in the society as a desirable way (6). Dykens and colleagues also report increases in maladaptive behavior with age in a sample of 4-19 year old individuals with Down syndrome, evaluated by Achenbach's Child Behavior Checklist. (7). Betlow emphasizes that social skills training is effective in both sexes (8). Barton - Arwood and colleagues (9), and Amanda and colleagues (10), also refer to the impact of social skills training on social adjustment and increasing social skills. Therefore the purpose of this study was to determine the effect of social skills training on children with Down syndrome.

**Method**

This was a semi-experimental study, conducted on thirty-seven student with Down syndrome, 8-12 years old with IQ 55 – 75. Sampling was performed as available and sample size was determined 40 cases (based on previous studies) the samples were randomly assigned to 2 groups: Intervention and control groups (each group: n = 20). The main steps of this project were to involve four steps: pre-test, social skills training (intervention), post-test and follow-up test.

We assessed the socialization skills of children with Down syndrome by subscales of the Vinland scale, including 64 materials. The social field includes three parts: interpersonal relationships, play and leisure, and ability to be adapted. If the skill is done well, score is 2, if the skill is performed sometimes, score is 1 and if the skill is performed never, score is 0. The test-retest reliability coefficient of socialization showed 0/83 (11).

First the intervention and control groups were examined by the socialization skill subscales. The

two groups were compared and no significant difference was found in the variable like IQ and age. Intervention group was received the social skills training at 2 months, in 10 sessions. Training was conducted through a program that included coaching, feedback, modeling, and role playing and making chips.

During training sessions two of the intervention groups and a person of control group were loss. Therefore, the number of subjects in the intervention group was 18 and control group was 19.

It is worth mentioning that during the intervention, children in control group did not receive special training and proceeded to perform daily activities.

The skills that were trained during 10 sessions in the intervention group included:

- Greet and introduce themselves to the others
- To allow others to use their devices
- Follow the instructions and rules
- Attention to others speaking
- To apologize when doing mistake
- To cooperate with friends
- Maintenance of school facilities

At the end of training period, and 2 months later, all subjects were evaluated again by above measure.

The intervention program attempts to increase understanding of social skills in girls with Down syndrome, and attention to improving social functioning. Then was the emphasis on maintaining and generalization social skills.

The SPSS version 16 was used to statistical analysis of data, and T test was used to examine relationships between variables.

**Results**

A total of 37 children were enrolled in this study: intervention group (n=18), control group (n=19). There were only girls. The average age of subjects was 9.5 SD years. Here were no significant differences in age (p=0/759), IQ (p=0/152), jobs of mothers (p=0/999) and fathers (p=0/087), educations of mothers (p= 0/790), and fathers (p=0/287) between 2 groups by fishers' exact test.

Table 1 shows the means and standard deviations of the socialization in two groups.

**Table 1.** The means and standard deviations of the socialization in two groups

Variable	Status	Control group		Intervention group	
		mean	standard deviations	mean	standard deviations
Socialization skills	Pre-test	52/90	94/6	89/50	10/8
	Post-test	57/90	01/7	90/44	01/8
	follow	73/90	12/7	90/11	66/7

As shown in table 2, there was a significant difference between the mean differences scores of socialization in steps before and after intervention in two groups ( $p=0/000$ ), this means that social skills training to increase socialization skills in intervention group.

Also there was significant difference between the mean difference scores of socialization in after and follow-up intervention in two groups ( $p=0/01$ ), this means that the course improved in intervention group, has continued to the follow-up.

**Table 2.** The mean differences between groups in pre-post and post-follow up of Socialization

variable	group	t	Significant level
Pre-post test	intervention	4/652	0/000
	control		
Post-follow up test	intervention	2/723	0/01
	control		

$P<0/05$

## Discussion

The results of this study showed that social skills' training is effective on socialization improvement in Down syndrome children and this improvement was maintained over a 2-month follow-up period. The result of the present study is in accordance with the study of Seevers & Jones-blank (2008), which trained social skills to 8 students with mental retardation and other health impairments that were identified as at-risk for social adjustment problems. The students ranged in age from 9-11 years old. The two groups met for approximately thirty to forty-five minutes weekly for 8 consecutive weeks with a new social skill introduced at every session. Finding showed a significant improvement following the intervention (1). The other study that conducted by the Soresi and Nota (2000), twenty adolescents with Down syndrome participated in this study (10 males and 10 females). Subjects were randomly assigned to either an experimental or control group, matched for age and level of retardation (low to moderate). The experimental group received the social skills training, but control group subjects engaged in social and cooperation games. This study showed social skill training increasing the ability positive relational behavior with teacher and peer in people with Down syndrome (2). Also a research found that social skills training effective to improvement social-behavior adjustment in adolescents. In this study Seventy four adolescents (ages 13–16 years) and

their parents were randomly assigned to either the treatment group ( $n=40$ ) or a wait-list control group ( $n=34$ ). Adolescents in the control and treatment groups were compared on global self-concept, social self-efficacy, internalizing and externalizing problems pre- and post-intervention.

Youth in the treatment group demonstrated enhanced global self-concept, increased social self-efficacy, and decreased internalizing problems as compared to youth in the control group (13). In another study social skill training was effective on with students with, or at risk of Emotional and Behavioral Disorders. External validity analyses showed that SST is effective across a broad range of behavioral difficulties, such as aggression externalizing - internalizing behaviors, and anti social behavior patterns. Overall, SST is an effective and essential part of a comprehensive intervention program for students with EBD (14). Also a research found that social skills training effective to improvement social adjustment in children with Down syndrome (8).

In present study it appears that social skills used in this program have provided a model of social skills and appropriate ways to approach various situations of children with Down syndrome in the intervention groups. These models based on behavior analysis approach can teach new behaviors to children and it also will improve inappropriate behavior (12). Social skills are the basis for interpersonal communications. Students with disability who acquire good social skills, and show more favorable in terms of social behavior, have more positive self-concept and this leads to the understanding of their limitations and capabilities to better ways (7).

This study had some limitations. One limitation was that the small sample size ( $n=18$ ). The small sample size limits the generalizability and power of the results. Thus, caution should be taken when applying these results to different populations of children with mental disability.

## Conclusion

Therefore, it is necessary to considered social skills training to all students, especially students with mental retardation who have difficulty in communicating with peers. Obviously, appropriate social skills training and providing opportunities and experiences will increase their social interactions, and causes the students to apply strategies and social skills in all environments and real life situations.

On the other hand, it seems that social skill training

includes: modeling, role playing, coaching, feedback and reinforcement led to learning skills and improvement social and personal problems and increase socialization.

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