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# **The effect of a social skills training program on behavioral problems among children with conduct disorder**

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**Abstract**--Objectives: To investigate the effectiveness of social skills training program on behavioral problems among children with conduct disorder. Methodology: A quasi-experimental design "pre and post-test design" was utilized. A convenient sample of 30 children diagnosed with conduct disorder was selected. Three tools were used to conduct the current study, Socio-demographic data sheet, Social Skills Questionnaire and Behavioral Problems Questionnaire-Parent Version. Results: The children with conduct disorder exhibited highly improvement in social skills and behavioral problems after participating in social skills training program sessions ( $P=0.005,0.0001$ ) respectively. After training, total mean scores of behavioral problems decreased from 66.9 to 50.3, social skills increased from 83 to 89. Conclusion: The study concluded that, social skills training program is highly effective in improving behavioral problems among children with conduct disorder. Recommendation: This study recommended that, social skills training programs should be conducted in clinical and non-clinical settings with large sample size included for more confident results and more generalization of results to the community.

**Keywords**---Social skills training, behavioral problems, conduct disorder.

## Introduction

Conduct disorder (CD) is a repetitive and persistent pattern of behavior in children and adolescents in which they violate the rights of others or violate major age-appropriate societal norms or rules. They usually exhibit these behavior patterns in a variety of settings at home, at school, and in social situations and they cause significant impairment in his or her social, academic and family functioning (**APA 2013**).

According to **Cook et al. (2008)** social skills are defined as specific behaviors that an individual exhibit to perform competently on a social task. These skills include all individual's behaviors in a social setting such as active listening skills, reciprocal communication, cooperation and playing skills. In addition, **Mathur and Rutherford (2016)** described a socially skilled person as one who is capable of managing his or her social environment by understanding and responding to social situations effectively.

Children with conduct disorder typically have a wide range of significant social skill deficits that may involve problems in interacting appropriately with others in their social environment, inability to regulate their impulses and emotions so that they may be excluded from activities, may become more socially withdrawn, and may even become the target of bullying behavior by others. They also have difficulty communicating their physical or emotional needs appropriately, inadequate knowledge of social rules or manners, inability to correctly appraise social situations, and even behavioral problems such as violence or aggression (**Gatti & Rocca 2018**).

Social skills training (SST) programs are those programs that aim to teach and improve children's appropriate, adaptive social behaviors (**Frey et al. 2015**). These SST programs are generally multifaceted, stacking different training components, such as psycho-education, skills training, and cognitive-behavioral exercises. Consequently, SST programs typically target multiple outcomes. SST programs can be based on multiple theory-based approaches on how children learn social skills. Social learning theory holds that social behavior is learned by observing others (**Bandura 1997**).

Consequently, many SST program components focus on modeling, coaching, and shaping behavior. The reinforcement theory posits that behavior, both positive and negative, is more likely to occur when a reward follows it. Based on this approach, several SST program components focus on improving children's social skills by directly and explicitly rewarding prosocial behavior (**Ladd and Mize., 2013**).

## Methods

This study will be conducted using a quasi-experimental design "pre and post-test design". The purpose of this study was to evaluate the effect of social skills training program on behavioral problems among children with conduct disorder. It was conducted at Beit El-Shams child psychiatric clinics at El-Abbassia Mental Health Hospital in Cairo. From the first of August 2021 till November 2021 on 30 children diagnosed with conduct disorder were selected according to the following

criteria: children diagnosed by DSM5 as a conduct disorder according to the medical records including those who have behavioral, social, or both problems, both sex, and children aged between 6-12 years old. Exclusion criteria include Children with mixed diagnoses who have other developmental disorders as Attention Deficit Hyper-Activity Disorders (ADHD) or autism, Children with Mental Retardation (MR), children with sensory and motor handicapping, and children with learning disabilities. The program sessions were held once a week and the children of the study group were divided into small groups.

The following data gathering procedures were employed in this study including Socio-demographic data sheet that involve items such as age, sex, residence, number of siblings, birth order, Behavioral problems questionnaire that is a parent version of 37 items used to measure children's behavior for the past 12 months by their parents in pre and post intervention. It measures 4 aspects of children's behavior including aggression toward people or animals, destruction to property deceitfulness or theft and serious violation of rules and finally Social Skills Questionnaire which is a self-reported questionnaire used to measure social skills among children and composed of 46- items that assess eight dimensions of social skills which are further broken down into communication skills, following rules and instructions, cooperation and participation, playfulness skill, friendship management skill, leisure time spending skill, taking responsibility skills and endurance skill.

## Results

Table (1): Socio-demographic characteristics among children with conduct disorder (n=30)

Socio-Demographic characteristics	No.	%
Sex		
Male	20	66.7
Female	10	33.3
Age		
6-<8	6	20.0
8-<10	13	43.3
10-12	11	36.7
Mean age = 9.3 ± 2.5		
Residence		
Urban	6	20.0
Rural	24	80.0
Number of siblings		
1-2	9	30.0
3-4	17	56.7
5-6	4	13.3
Birth Order		
1	13	43.3
2	9	30.0
3	7	23.3
4	1	3.3

Table (1) reveals that the children's age ranged between 6 to 12 years with a mean  $9.3 \pm 2.5$  and 43.3% of them were between ages of 8 to 10 years. The table also shows that two third of the studied children were male, , 80% of the studied children lives at rural areas, 56,7% had 3-4 siblings and their birth order was the first.

Table (2): Social Skills among children with conduct disorder at pre & post social skills training program (n=30)

Items	Pre Mean $\pm$ SD	Post Mean $\pm$ SD	Paired t-test	P value
Communication skills	10.03 $\pm$ 2.46	12.50 $\pm$ 1.2	5.027	0.000***
Following rules and instructions	14.20 $\pm$ 2.41	15.97 $\pm$ 1.99	-3.869	0.001***
Cooperation and participation	10.43 $\pm$ 1.98	11.10 $\pm$ 2.44	-1.424	0.165
Playfulness skills	11.87 $\pm$ 1.89	10.10 $\pm$ 1.67	4.730	0.000***
Friendship management	8.47 $\pm$ 1.83	9.93 $\pm$ 1.31	3.229	0.003***
Spending leisure time skills	9.53 $\pm$ 1.74	10.30 $\pm$ 1.53	1.791	0.084
Taking responsibility skills	10.40 $\pm$ 1.50	8.37 $\pm$ 1.61	5.088	0.000***
Endurance skills	8.10 $\pm$ 2.12	10.80 $\pm$ 1.65	5.054	0.000***
Total	83.03 $\pm$ 11.18	89.07 $\pm$ 7.11	-3.072	0.005**

Table (2) reveals that highly statistically significant differences were found between pre and post intervention training program as regards total mean scores of social skills where  $t = -3.072$  at  $p = 0.0005$ .

Table (3) Behavioral problems among conduct disorder children at pre& post social skills training program (n=30)

Items	Pre Mean $\pm$ SD	Post Mean $\pm$ SD	Paired t-test	P value
Aggression toward people or animals	1.77 $\pm$ 0.56	1.36 $\pm$ 0.42	2.95	.000***
Destruction of property	1.57 $\pm$ 0.65	1.25 $\pm$ 0.41	2.38	.000***
Deceitfulness or theft	1.96 $\pm$ 0.84	1.44 $\pm$ 0.55	3.07	.000***
Serious violation of rules	1.98 $\pm$ 0.58	1.43 $\pm$ 0.49	3.77	.000***
Total	66.9 $\pm$ 12.4	50.3 $\pm$ 4.8	7.19	.0001*

Table (3) reveals that highly statistically significant differences were found between pre and post intervention training program as regards total mean scores of behavioral problems where  $t = 7.19$  at  $p = 0.0001$ .

## Discussion

Social skills training program is as an effective, low-cost, and noninvasive intervention to improve communication skills and minimize aggressive behavior among children with conduct disorder. The current study shows that male is predominance than female regarding conduct behaviors among studied children.

In agreement with **(Patel et al., 2018)** who conducted a study included 32,345 children diagnosed with conduct disorder CD under 18 years old and found about 70% of the children with conduct disorder were males, and they were three times more likely to be admitted for conduct disorder than females. Another longitudinal study conducted by **(Moffitt et al., 2016)** that concluded that boys are two to three times more likely to be diagnosed with CD than girls.

The current study results reveal that the age of the studied children ranged between six to twelve years. This result clarifies that conduct problems may occur at early childhood stage of life which indicate early occurrence of inappropriate behaviors that may result from surrounded environment and family factors as parental neglect, inconsistent child-rearing practices, harsh discipline, physical abuse, lack of supervision, frequent changes of caregivers or large family size. These factors may lead to maladaptive behaviors of their children.

Regarding residence, the current study results show that eighty percent live in rural areas that may explain the strong relation between cultural background, housing, socio-economic status, availability of resources, quality of life and health associated services. Similarly, in the study of **(farahat et al., 2017)** in the study of Disruptive behavior disorders among basic learning schoolchildren at Quweisna District, Menoufia Governorate, Egypt on a cross-sectional study was conducted on 348 basic-learning schoolchildren and their parents, as well as their teachers reported that sixty percent of participants of reside in rural areas.

In regard to number of siblings, the current study results reveal that more than half of the sample has three to four siblings that indicate strong relation to conduct disorder. This result is supported by **(Carballo et al., 2013)** who found that living in large families appears to increase the risk of receiving a CD or MR, diagnosis.

The current study shows that forty percent of studied children are ordered as first child then second child was found to have thirty percent whereas the last child has the lower score. These study results is supported b **(Fukuya et al., 2021)** who studied Association of Birth Order With Mental Health Problems, Self-Esteem, Resilience, and Happiness Among Children and reported that last-born children were less likely to have mental health problems and more likely to have prosocial behaviors and resilience while Middle-born children were found to show the lowest level of happiness, and first-born child was associated with conduct problems.

Unlike **(Aslam., 2015; Odgers et al., 2008)** who found that birth order indeed statistically has an influence on the level of conduct disorders amongst last born, middle and first born respectively therefor, the result indicated that, being a last

born renders one to be more susceptible to conduct disorders compared to being the first born or middle born.

In relation to social skills, the current study results reveal that statistical differences were found at post social and problem solving skills training program. These results accept the study hypothesis: Conduct child who receive the social skills training program would have statistical significant differences in social skills at post intervention than pre intervention.

This result may be explained as social skills deficit resulted in inability of children to communicate physical and emotional needs properly, work cooperatively with others, forming friendships, gaining acceptance from peer groups, appraise social situations correctly and inadequate knowledge of social rules and manners. So the child based social skills training program in the current study focused on children's social skills deficits as the main target of remediation. Social skills training programs typically include a comprehensive assortment of skills such as friendship, conversation, following rules and instructions, endurance, working together, playfulness and taking responsibilities and these attributes may contribute to social and behavioral achievement.

In agreement of the current study results, studies conducted by **(Gresham, Van, and Cook., 2014)** assert that social skills training helps children to facilitate initiating and maintaining positive social relationships, contribute to peer acceptance and friendship development, result in satisfactory school adjustment, and allow them to cope with and adapt to the demands of the school environment. Another studies conducted for evaluating social skills programs suggesting that intervening earlier increases the likelihood of a positive outcome and may prevent problem behaviors from forming **(January et al., 2011)**.

In addition, the child component in SST has also been evaluated in showing reduced disruptive behavior, increased social competence and cognition, compared to control and reduced aggressive behavior and CU traits **(Taylor et al. 2017)**. SST has also been evaluated in a pre-post study on children with disruptive behavior disorders showing significant reduction of conduct disorder symptoms **(Aitken et al., 2018)**

Results of the current study reveal that statistical significant differences were found regarding behavioral problems at post intervention. These results may be due to children are learned to appropriately interpret social cues, communicate effectively with others, make appropriate choices, generate more positive reactions, cope successfully , increase self -esteem and empowerment and avoid applying a hostile attribution bias that help them to demonstrate social and problem solving skills and reduce aggressive and antisocial behaviors.

In congruent with the current study results, **(Spence., 2003)** established that child-based cognitive-behavioral group therapy with disruptive elementary school students where they engaged with psycho-education regarding social skills training and behavioral feedback , the results showed clear evidence for the effectiveness of a CBT treatment for students with disruptive behaviors as seen

through statistically significant results when comparing an active treatment group and a delayed treatment group.

A meta-analysis study conducted by **(Gresham, Cook & Crews., 2014)** that reviewed six studies about SST with children who had or were at risk for emotional and behavioral disorders (EBD). Their results showed that SST was an effective intervention for students with EBD, with a 64% improvement rate relative to controls regarding a wide variety of problems, such as aggression, externalizing behaviors, internalizing behaviors, as well as antisocial behaviors.

Unlike **(Bullis, Walker, and Sprague., 2001)** who exerted that SST may not be effective in treating the behavioral problems of extremely at-risk and antisocial children that may be explained as small sample sizes or lack of experienced therapists administering the intervention.

### **Conclusion**

Based on the findings of the current study, children with conduct disorder have been improved for their behavioral problems after conducting a social skills training program.

### **Recommendations**

- Social skills training programs should be integrated within remediation programs and other treatment modalities for children and adolescents with conduct disorder.
- Prevention programs that focus on social and emotional development, positive parenting programs, psycho-education, and teacher training programs should be provided for conduct disorder.
- Using a large sample size to conduct similar studies for more confident results and for more generalization of results to the community.

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