

## Surveying the Effectiveness of Social Skills Education on Self-Efficacy of Children with Hearing Impairment

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**Abstract:** Self-efficacy is one of the most important factors in development of healthy social communication that makes people's life pleasurable. The present study aims to survey effectiveness of social skills education on self-efficacy of children with hearing impairment in Shahriar (Tehran-Iran) in 2015. The study is a quasi-experimental single-group study in pretest-posttest type which was carried out on 25 students with hearing impairment, who were selected through purposive sampling. A 12-Session social skills training program was carried out for each participants. Each session was one hour (2 Sessions in week). Demographic form and Wheeler and Ladd children's Self-efficacy questionnaire were used to gather information. Data analysis was performed by SPSS version 22 using description statistics tests, paired T-test and ANOVA with repeated measure. A p-value less than 0.05 are considered as a statistically significant level. The findings indicated that social skills education affected on self-efficacy positively. Before the intervention, self-efficacy score was  $38.4 \pm 5.5$ ; this figure immediately, one week and one month after the intervention was  $66.6 \pm 6.7$ ,  $70.1 \pm 6.3$  and  $71.2 \pm 6.1$  respectively. In other words, there was a significant increase in self-efficacy score ( $p = 0.01$ ). In addition, self-efficacy was directly related to education level of fathers ( $p = 0.01$ ,  $\eta = 0.69$ ), mothers ( $p = 0.001$ ,  $\eta = 0.64$ ) and intelligence quotient ( $p = 0.01$ ,  $r = 0.57$ ). Social skills education led to increase of self-efficacy in children with hearing impairment. Therefore, it is recommended training social skills as an effective method to improve self-efficacy in children with hearing impairment.

**Key words:** Social skills, hearing impairment, children, self-efficacy, recommended

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### INTRODUCTION

Normal hearing at birth is required for the development of language, social speech, emotional speech, learning and communication skills. Hearing loss by limiting the ability of intelligence, social interaction and social skills development in children, leading to academic and social problems in their coming life (Movallali *et al.*, 2010). Children with hearing impairment have lower social skills that cause loss of self-esteem and subsequently reduction in social interaction. They will be considered by their normal peers as unsocial, concerned, anxious and nervous individuals that this mentality may be due to various factors such as inability to effective verbal communication, difficulty in application of social skills and lack of emotional control (Morris, 2002).

Generally all children to enter into the society require a set of social skills so they can build constant interactions and become socially independent (Celeste, 2007). Social skills such as cooperation, collaboration with others, helping, being the starter in relationship, asking for help and to appreciate enables one to have effective relationship with others and refrain from irrational social reactions (Elliott and Gresham, 1993). Lack of social skills has led to problems in the individuals' relationship and behavioral and emotional domains, intensifying learning disorders and to hamper child's progress (Seevers and Jones, 2008). It also showed that social skills training is effective for children in creating and enhancing capabilities such as decision-making, motivate themselves, ability to communicate positively with others, creating positive self-esteem, problem solving

and self regulation and has a positive and significant relationship with social competence, critical thinking and mathematical reasoning in students and can reduce inappropriate behaviors such as aggression in the classroom and improve relationships with peers and adults (Heiman and Berger, 2008; Kamps *et al.*, 2000).

One of the areas that social skills training may affect is self-efficacy beliefs. Self-efficacy concept is formed by Alfred Bandura. He has defined Self-efficacy as a belief a person has the ability to perform an action at a specified position. Doing assignments by different people with similar skills in different situations is dependent upon the change in their self-efficacy beliefs; for this reason, self-efficacy, enabling people to use the skills in dealing with obstacles do extraordinary works (Abdillahi, 2006).

Self-efficacy is an important issue for children because it lets them adapt to life changes favorably. This issue is important to the deaf and hearing impaired children because these children have the same cognitive abilities with normal children. So it is important to pay attention to self-efficacy as instruments that the children believe it and employ it for future success (Ogunyemi and Mabekoje, 2007). Due to the lack of similar studies in the literature, this study was conducted aiming to investigate the effectiveness of social skills training on the self-efficacy of hearing-impaired children.

**Procedure:** This quasi-experimental single group study with pre and post-test that investigates the effect of social skills training on self-efficacy of hearing impaired children. The research populations are consisted of hearing-impaired boy students in primary level of special school of Shohada in Shahriar City that is conducted in 1394. Having IQs of 83 or higher, use of hearing aids and primary level education were among the criteria to enter into study and students with blindness problems, behavioral disorders and mental retardation and the participants in the recent period of social skills were excluded from the study. According to the formula  $N = (Z_1 - \alpha/2 + Z_1 - \beta)^2 \sigma^2 / d^2$  and based on the study by Ramezankhani *et al.* (2014) and considering  $\sigma = 2, \alpha = 0.05$  and  $\beta = 0.20$  the sample size was estimated a total of 25 people who were selected purposefully.

To collect data, demographic information and questionnaire of Wheeler and Ladd was used. Wheeler and Ladd self-efficacy Scale in children, has 22 items and each item represents a social status that is written in the form of an incomplete sentence and after that four options is provided that includes a very easy choice (4 points), easy (3 points), hard (2 points) and very hard (1 point). They were asked to complete by filling the empty

items by choosing one of the options. The final score of self-efficacy scores for each subject was obtained by calculating the sum of the scores assigned to each of the options. The total score on this scale can range from 22-88 and higher grades showed greater self-efficacy. In this questionnaire two situations are considered as conflicting and non-conflicting that questions 1-12 are related to the non-conflicting situation and questions 13 and 22 of the conflicting situations. Hosein and Kiani (2007) in addition to the content validity of the questionnaire, which was obtained through a survey of experts, the perceived construct validity of self-efficacy scale were also evaluated. To determine the construct validity of the scale, factor analysis being used by principal components method. The KMO coefficient was 0.90 and numerical value of +2 index in Bartlett's test of sphericity was 2.2421 that was significant to the level of  $p = 0.0001$ . Also, the Cronbach's alpha coefficient of the questionnaire for the total scale was 0.87, in subscale with non-conflicting situation = 0.78 and in subscale with conflicting situation was 0.83 (Hosseini, 2007). Intervention program was conducted in coordination with teachers and school headmaster in 12, 60-minute sessions (2 Sessions per week) in the empty hours of students when they were attended school. In this research, doctor training package to the study (1384) were used that is designed for children with learning disabilities such as hearing-impaired children (Pajooch, 1991).

Data analysis were carried out with SPSS Software version 22 using descriptive statistics (mean, standard deviation, percentage and frequency) and Kolmogorov-Smirnov test (to check the normality of the data), paired t-test and analysis of variance (ANOVA) by repetitive measurements (Table 1).

## RESULTS AND DISCUSSION

The findings showed that most students (40%) are 11 years of age and 80% of them live with their parents. About 48% of fathers' education level are diploma and 48% of samples mothers' education are below the diploma. The occupation of 60% of fathers is free while 64% of mothers of these children were housewives. Other characteristics of samples are given in Table 2.

The normality of data that was the important prerequisite for analysis of variance with repeated measures was confirmed according to Kolmogorov Smirnov test. Levene's test showed that there is equality of variances. According to Musli test the null hypothesis was accepted to establish the condition of sphericity.

As Table 3 indicates the mean and standard deviation of self-efficacy score was  $38.44 \pm 5.56$  that

Table 1: The content of social skills training sessions offered to students with hearing loss

Social skills training sessions	The content of session
First	Introduction and acquaintance with members of the group, the expression of the group regulation, discussion about the importance of social skills, individuals' feedback about the way to introduce, tone of voice, obligations on how to introduce yourself to others.
Second	Providing assignment report of passed session and give feedback, how to introduce yourself and greet others in dealing with others and giving proper assignment
Third	Providing assignment report of passed session and give feedback, practicing how to exchange daily comities, practicing how to start conversation and appropriate continuation and end of conversation, giving assignment about the start of conversation with others
Fourth	Providing assignment report of passed session and give feedback, Talk about the importance of following the instructions and rules at school and at home and giving assignment about discipline
Fifth	Providing assignment report of passed session and give feedback, Practicing how to request from others, providing a model on how to deal with someone who has rejected our demand, and giving assignment about how to request and providing appropriate responses to it
Sixth	Providing assignment report of passed session and give feedback, talk about the importance of getting permission from the elders in doing tasks and listening skills and giving proper assignment.
Seventh	Providing assignment report of passed session and give feedback, Skills training related to control of emotions and emotional expression and the positive and negative feelings and giving proper assignment
Eighth	Providing assignment report of passed session and give feedback, Training on how to express emotions, presenting a model on how to express various emotions, such as happiness, anger, sadness and skills to ask for help and to help others
Ninth	Providing assignment report of passed session and give feedback, Practice on ways to reject unreasonable demands, talk about how to say no to unreasonable demands, giving assignment on how to reject unreasonable demands and refusal skills.
Tenth	Providing assignment report of passed session and give feedback, Talk about why we should criticize, assignment about providing feedback to others and the skill of apologizing others and refusing to accept others apology
Eleventh	Providing assignment report of passed session and give feedback, Practice of critics' acceptance, a model of appropriate and effective approach to criticism, the task of coping and accepting criticism and problem-solving skills and coping with failure.
Twelfth	Providing assignment report of passed session and give feedback, Providing a summary of the proposed content, summary and evaluation of session results and self-assessment

Table 2: Demographic characteristics of the samples under study

Variable	Frequency	Percentage
<b>Age</b>		
9 year old	7	28
10 year old	8	32
11 year old	10	40
<b>Life situation</b>		
Live with parents	20	80
Live with father	1	4
Live with mother	3	12
Live without parents	1	4
<b>The number of family members</b>		
3 people	4	16
4 people	8	32
5 people	10	40
6 people	3	12
<b>Father education</b>		
Illiterate	1	4
Under diploma	4	16
Diploma	12	48
University	8	32
<b>Mother education</b>		
Under diploma	4	16
Diploma	12	48
University	9	36
<b>Education grade</b>		
Third grade	7	28
Fourth grade	8	32
Fifth grade	10	40

immediately after the social skills training was  $66.60 \pm 6.77$  and one week and one month after intervention it is increased to  $70.16 \pm 6.34$  and  $71.24 \pm 6.13$ , respectively.

The results of variance analysis with repeated measures showed that social skills training has an impact on hearing impaired children pre and post, after a week

Table 3: Comparison of mean and standard deviation of self-efficacy score on the pretest-posttest, and follow-up the group under study

Variable	Mean	SD	p-value
Before intervention	38.44	5.56	p = 0.01 F = 6.984
Immediately after intervention	66.60	6.77	
One week after intervention	70.16	6.34	
One month after intervention	71.24	6.13	

and after a month self-efficacy and it is confirmed on the level of ( $p < 0.01$ )<sup>9</sup> in other words social skills training has positive effect on the self-efficacy of hearing impaired students.

Peripheral findings of this study showed that there is direct and significant correlation between IQ ( $p = 0.01$  and  $r = 0.57$ ) and self-efficacy, in other words an increase in IQ, increasing self-efficacy as well. Based on the Chi square test the assumption of independence between parental education and self-efficacy was rejected and there was correlation between fathers educational level ( $p = 0.001$  and  $\eta = 0.69$ ) and mothers educational level ( $p = 0.01$  and  $\eta = 0.64$ ).

The results showed that the amount of self-efficacy after social skills training is ascending so that the highest score of self-efficacy is related to one month after the social skills training. It seems deaf children after acquiring social skills, could raise their self-efficacy and believe in their capabilities.

The results of Shakeri study in line with the results of this study showed that social skills training have led to increase of self-efficacy in children. It is probable the lack

social skills are the main reasons for loss of self-efficacy in hearing impaired children that is curable through training. Beirami believes that social skills training lead to increase of self-efficacy (Bayrami and Movahedi, 2015). The results of Rezayat and Nayeri (2013) have showed that social skills training of life did not have any impact on the self-efficacy of nursing students. This difference in findings may be due to the nature of education and the target population of these studies (Rezayat and Nayeri, 2013). In Banduras' study quoted by Bayrami and Movahedi (2015) social skills training could increase self-efficacy. Bandura showed that people with high self-efficacy compared to people with low self-efficacy in confrontation with negative feedback of performance, increasing their efforts to do assignments.

It is probable deaf and hearing impaired children have lower self-efficacy than healthy children because hearing problems by limiting the ability of individual intelligence, restrictions on social interaction and social skills development leading to disability of effective and satisfactory relationships with other people of the society and disorder of acquiring social skills and social incompetence, caused by cognitive deficits associated with reduced self-efficacy in deaf children (Pajoo, 1991). A group of researchers believe that hearing loss can not have a negative effect on cognitive abilities and they consider the ability in healthy people as the same as deaf people. Rahimi (2011) has reported that cognitive ability of deaf children is as normal and healthy children and the two groups did not differ in terms of understanding the concept of self-efficacy. Due to the differences of opinions and the controversial nature of the subject, wider researches must be done in this field, because it is not possible for differentiation of the content just to suffice the cognitive abilities of these children and ignore the role of social skills training.

Although the self-efficacy of deaf children may have little difference with healthy children but social skills of blind and deaf children is lower than the healthy children; this means that children who are blind and deaf due to problems with vision and hearing can have less effective relationships with others. People with hearing loss because they are low in terms of basic social skills, gradually lose their self-esteem, refusing to face with others and gradually decreases their social interaction.

Kim (2003) believes that social skills training to deaf people by increasing its concept in children leading to increased levels of self-knowledge and self-efficacy .

It is probable by life skills training to increase social skills of deaf children; because social skills training enable

individuals to deal effectively with the needs and challenges of daily life especially in the area of physical, emotional and social health. Peripheral findings of this study showed that there is direct relationship between self-efficacy with IQ and educational level of parents. Some believe Self-efficacy is associated with the ability and IQ (Schunk and Meece, 2006). The findings showed that there is a correlation between parental education and self-efficacy. Zimmerman in support of this finding writes that tendency to continue education in children affected by their parents' educational level. Although, the findings by Mahmud Pour and Chari study contradicts with this study. Variations of these studies is due to the physical condition of the subjects because in studies of Mahmoud Pour and Chari the samples were healthy while samples of this research consisted of hearing impaired students that using their parents education as a source of support for academic achievement and fix inability caused by their hearing loss problems.

## **CONCLUSION**

The social skills training increase the ability of self-efficacy. As education is to change attitudes and beliefs and change in attitude will follow change in behavior. This training program could help hearing impaired people by changing in their self-efficacy to change their behavior. Child with hearing loss due to hearing impairment have low social skills and self-confidence and consequently low self-efficacy. If the families and health groups associated with hearing-impaired children are working on social and communicative skills of these children, it can improve their self-confidence and self-efficacy level by social skills training and consequently raise the presence of this group of children in the community.

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