

# Effectiveness of Life Skills Training on the Reduction of Social Phobia in Hearing Impaired Students

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## ABSTRACT

**Objective:** The purpose of this study was to determine the effectiveness of life skills training on decreasing social phobia (SP) disorder in students with hearing impairment.

**Methods:** The sample included 30 male students, age range from 8 to 18 years with hearing impairment recruited from exceptional schools. Their age and IQ were matched. They were randomly assigned into experimental and control groups (15 students in each group). The participants were assessed by social phobia inventory scale (SPIN). Independent t-test and analysis of covariance were applied for analyzing the data.

**Results:** The experimental group had better results in decreasing their social phobia than the control group ( $P < 0.001$ ). The results showed that training life skills to students with hearing impairment can decrease the severity of social phobia.

**Conclusion:** The life skill training is effective in decreasing the intensity of SP in students with hearing impairment.

## 1. Introduction

**S**ocial phobia is a common and disabling condition, which typically follows a chronic course in the absence of treatment (Bruce et al., 2005). It is associated with marked impairment in social and occupational functioning (Herbert et al., 2005). The text revision of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, 2000) describes SP as a persistent fear of certain social or performance situations, in which the person fears that he or she will act in a way (or show anxiety symptoms) that will be embarrassing or humiliating.

A key suggestion in the Clark and Wells (Clark et al., 2006) cognitive model of SP is that when feeling threatened in social situations, patients switch to process themselves as social objects, and turning their attention to

internal rather than external stimuli. Consistent with this view, a number of studies have found that when patients with SP enter social situations, they experience visual and/or somatic images of themselves as objects of the scrutiny of others. They report seeing themselves from an observer's perspective and appearing the way they imagine themselves coming across to other people (Coles, Turk, & Heimberg, 2002). They appraise this mental representation as mirroring a true reflection of self, yet the image or impression is typically distorted in a negative way.

Many studies (Rapee & Abbott, 2006) have shown that patients hold excessively negative self-perceptions relative to observers; they underestimate their social performance, overestimate how visible their anxiety symptoms appear, and underestimate their general attractiveness. SP is reported in most of the cultures, also epidemiological studies report the prevalence of this problem in general population as 3% to 13% (Olivares, Vera-Villarreal, &

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Lopez-Pina, 2010). This prevalence rate makes it the most frequent anxiety disorder in the clinical and community population and the third most diagnosed psychological disorder, after major depression and alcohol dependence (Zubeidat, Fernández-Parra, & Sierra, 2007). The treatment of SP occupies and preoccupies researchers regarding both adults and children and adolescents (Butler et al., 2006). Many studies have shown that patients with SP when feeling overwhelming anxiety and threatened in social situations, switch to avoid participating in these situations (Olivares, Garcia-Lopez, & Hidalgo, 2002). Among those who avoid participating are individuals with hearing impairment.

Hearing impairment is one of the most common congenital and acquired diseases in children. About 1-3 children in 1000 are affected (Seifert et al., 2005). Hearing damage can cause secondary problems (i.e. perceptual, communicational, emotional, social problem, and so on) which based on the degree of hearing impairment, the age of child at the onset and child's intellectual potential, the magnitude of problems may vary (Patton, 2004). The hearing-impaired child is at risk of loneliness living and loss of social discussion and coequal's partnership. Consequently, it causes interpersonal relationship crisis in hearing impaired people (Van Eldik et al., 2004). The long-term social avoidance in the individuals with hearing impairment will lead to SP in most of them (Huberty, 2004).

Reviewing studies on people with hearing impairment shows that the amount of problems caused by SP in children and adults with hearing impairment is more than their normal peers. Different studies in this area have reported the prevalence of anxiety disorders in people with hearing impairment as 15% to 25% (Kvam, Loeb, & Tambs, 2007). Research in psychological and social developmental domain of hearing impairment children shows that they have different developmental characteristics compared to their hearing peers (Asher & Taylor, 1983). They are more vulnerable to mental health problems than their normal peers (Hindley & McGuigan, 1994). There is no doubt

that hearing damage causes limitations in intellectual abilities, social interactions, and ultimately limitations in the growth of life skills (Hyatt & Filler, 2007). It seems that the main causes of SP in this group of individuals are social avoidance, poor life skills and lack of others' attention. Connor, Davidson, and Churchill et al. (2000) believed that people with SP act poorly in the field of life skills. Therefore, life skills training for people with SP can be very helpful. This study aimed to examine the effect of life skills training on the improvement of SP in students with hearing impairment.

## 2. Methods

This study used a semi-experimental design with pretest, posttest, and a control group. The participants were 8 to 18 years old students with hearing impairment. They were studying at exceptional schools of Arak City during the 2011-2012 academic year. Thirty students who received high scores on SPIN were selected. All participants were provided written informed consent for entering the study. To determine their IQ, Leiter international performance scale was used. The participants were matched based on the age and intelligence and randomly assigned to experimental (15 students) and control (15 students) groups. All students completed the SPIN at pretest. The experimental group received life skills training twice a week and each session took 2 hours. Life skills training lasted for 14 weeks. All training sessions were conducted by the researcher at the school. The posttest for SPIN was administered immediately after intervention. To evaluate participants' performance, a month after the intervention, both groups were reassessed. Independent t-test and ANCOVA were applied for analyzing the data.

## Measures

### Social phobia inventory (SPIN)

SPIN was developed by Connor et al. (2000) to assess symptoms of this disorder. It is a screening instrument that can be easily administered to students with hearing impairment. This 17-item self-report questionnaire

**Table 1.** The comparison of experimental and control groups of homogeneous age and intelligence.

	Group	n	M±SD	df	T	Sig.	d
Age	Experimental	15	12.21±1.92	28	0.371	0.95	0.12
	Control	15	13.98±1.95				
IQ	Experimental	15	90.91±6.09	28	0.497	0.31	1.3
	Control	15	91.28±5.80				

**Table 2.** Mean and SD of the experimental and control groups in different positions.

	Group	Pre-test M±SD	Post-test M±SD	Follow-up M±SD
Social phobia	Experimental	52.78±4.05	24.11±3.52	21.82±3.94
	Control	51.66±3.99	49.98±3.29	50.35±4.36
	Total	52.02±4.45	37.04±3.39	36.11±4.09

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is available in the public domain and its items evaluate fear, avoidance, and physiological distress components of social anxiety with severity of each symptom rated on a scale from 0 to 4 such that the total score ranges from 0 to 68. This questionnaire was confirmed first by Abdi in 2005 and then by Momeni that reported its Cronbach  $\alpha$  of 0.88. SPIN has demonstrated good reliability in screening for SP; a score of  $\geq 19$  has been found to distinguish between those with and without social anxiety disorder (Antony et al., 2006).

### Leiter international performance scale

The scale was introduced by Leiter (Stoelting Co, 2011) as an evaluation tool for a number of speech and language deficient groups because of its unique response format which is nonverbal. The Leiter international performance scale has been very useful in the intellectual assessment of a number of populations, including deaf, mentally handicapped, autistic, speech and language impaired, non-English speaking, motor-involved, brain injured people, and intellectually superior persons. It is considered highly correlated with traditional intelligence tests like WISC-III full scale IQ test (Elliott, Gresham, & McCloskey, 1988). This scale has been normalized and used by Valujerdi in the Special Education Organization of Iran.

### Life skills training

Based on the past research and review of existing programs, a life skill training program was developed by the authors. The program is a comprehensive behavior change approach that concentrates on the development

of the skills needed for life such as self-awareness, communication, decision-making, thinking, managing emotions, relationship skills, daily living skills, survival skills, choices and consequences, interpersonal/social skills, eye contact, tone and volume of speech, conversational skills, and assertiveness.

This intervention program worked on promoting child's coping resources, enhancing the social competency and consequently imposing a positive effect on mental health. Training sessions also focused on teaching skill modules using brief didactic instruction, behavioral modeling, and role-playing in therapy, obtaining direct feedback from therapists, behavioral rehearsal, and assertiveness, accepting compliments and implementing the skills.

These methods have been used with success in previous life skills training groups (Stravynski, Arbel, Lachance, & Todorov, 2000). Research generally suggests that life skills training is helpful for SP, although it is unclear whether life skills training is more helpful than placebo conditions. Life skills training may work by encouraging the use of underused life skills or by facilitating exposure to social situations through role-plays and real-life practices. Consistent with a deviation from a deficit model, Stravynski and colleagues found preliminary support for a type of life skills training that focused on improving social conduct rather than "fixing" life skills deficits (DSM, 2000). Their case series of 5 SP patients yielded meaningful improvements in symptoms for 4 of 5 patients that were maintained at 2-year follow-up.

**Table 3.** Results of covariance analysis of the posttest scores of SP.

Source	Ss	df	Ms	f	P
Pretest	2952.409	1	2952.409	138.210	0.001
Group (posttest)	237.059	1	237.059	11.371	0.001
Error	364.481	28	21.678		
Total	3575.975	30			

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**Table 4.** Results of covariance analysis of the follow-up scores of SP.

Source	Ss	df	Ms	f	P
Pretest	1445.34	1	1445.34	420.870	0.001
Group (follow up)	423.29	1	423.29	123.261	0.001
Error	61.80	28	3.88		
Total	1930.375	30			

### 3. Results

The results were analyzed by independent t test and ANCOVA. Homogeneity of variance studied groups according to age and intelligence were compared using t-test. According to Table 1, using an independent t-test, there was no significant difference between the mean age ( $P=0.95$ ) and IQ ( $P=0.31$ ) in experimental and control groups.

As it is demonstrated in Table 2, there is no difference between the average grades of experimental and control groups in pretest situation but the average grades of experimental group reduced in posttest and follow-up situations compared to the control group.

To investigate the hypothesis of whether using life skills training is effective on reduction of SP in hearing impaired students, ANCOVA was used. As it is seen in Table 3, the effect of pretest is significant ( $F=138.210$ ,  $P<0.001$ ). For examining the effects of group or intervention (life skills training) on dependant variable (SP), pretest effect as the covariate factor was removed. Results indicated that after removing covariate factor, group or intervention effect is statistically significant ( $F=11.371$ ,  $P<0.001$ ). Comparison of both group means showed a meaningful decline in posttest scores of experimental in comparison with the scores of the control group.

To evaluate participants' performance one month after the end of the intervention, both groups were reassessed using analysis of covariance. Based on the result (Table 4), after removing the effect of pretest, there were statistically significant differences ( $F=11.371$ ,  $P<0.001$ ) between the scores of both groups in follow-up period. Thus, life skill training had a positive impact on reduction of SP in hearing impaired students.

### 4. Discussion

In recent years, there have been several advances in the psychological treatment of SP. Social anxiety disorder is characterized by an intense fear of embarrassment, humiliation, or scrutiny by others in social or performance situa-

tions. Some situations that persons with SP often fear include attending parties, meeting strangers, speaking at meetings, or interacting with authority figures. The number of situations feared by people with SP varies among individuals.

For everyone to reach their full potential, a number of critical life skills must be learned. Specific learning opportunities are important for children with special needs. Inclusive education facilitates environment and opportunities for learning social and academic skills. Schools and teachers could integrate life skills lessons, which cover social skills training in their curriculum (Quigley, 2007).

This study aimed to investigate the effectiveness of life skills training on reduction of SP in hearing impaired students. The result of this study at posttest and follow up shows that the life skill training is effective in reduction of SP among hearing impaired students. This result is consistent with the results of some other research in this area. Ahmadian and Fata (2009) on their study examined the effect of life skills education on children with mild intellectual disability and indicated that the life skills education program had positive effects on self-knowledge, interpersonal relationship, and anger-management. In another research done by Hayward, Varady, and Schatzberg (2000), the partial effect of life skills training has been surveyed on the adult women with social anxiety. The results showed that experimental group had 50% reduction in social anxiety scale whereas this number has been 5% in the control group.

Given the role of life skills, this technique has been considered as the treatment of choice in the reduction of SP. Effectiveness of this approach has been demonstrated in individual and group formats in several populations of socially phobic adults (Corrigan, 1991). Recently, Beidel, Turner, and Alfano (2010) stated that persons with SP most likely develop life skills deficits because of missing socialization experiences. The positive results of several intervention strategies designed to address these skill deficits support their view. The effectiveness of the life skills training program had already been revealed in controlled



studies with heterogeneous samples of patients with SP (Van Dam-Baggen & Kraaiaam, 2004).

The results of the present study are consistent with other research in the field of improving the mental health, confirming the effectiveness of such interventions in reducing SP in individual with hearing impairment. These findings can be helpful for mental health practitioners, therapists, and parents. In particular, this training is very promising for many parents that fear the drug treatments reduce problems in children. Finally, we can understand that the life skills training will have good impact in reduction of SP in individuals with hearing impairment.

The sample size could be viewed as a potential limitation. Since there were only 30 female students participating in the study (in which only 15 students in experimental group), the findings could be difficult to generalize to the population of hearing impaired student. Accessibility to one scale for rating the social skills could be another limitation of this study. The time constraints of the study could also be a factor affecting the outcomes. Fourteen sessions of the intervention occurred over 7 weeks and the degree of improvement could not be the one as expected. This study could be expanded to include a larger population of students. Further studies resulting from this research could revolve around incorporating any portion of this program for a variety of population. Preparation of this program based on the needs of students with disabilities would provide opportunities for their improvements in specific areas.

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