Research Article

Effect of Psychodrama on Communication Skills of Adolescents with Hearing Loss

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Abstract

Background and Aim: Adolescents with hearing loss face many communication problems and challenges due to their hearing impairment. This study aimed to investigate the effect of psychodrama on communication skills of adolescents with hearing loss.

Methods: This is a quasi-experimental study with a pretest/posttest design using a control group. The study population consists of all adolescents with hearing loss aged 12–15 years studying at Naghme School for the Deaf in Yazd, Iran. A total of 24 adolescents were selected using a purposive sampling technique and were randomly assigned into groups of control (n=12) and intervention (n=12). The intervention group received psychodrama at nine sessions of 90 minutes, while the control group received no treatment. The Queendom Communication Skills Test (QCST) was used to collect data. Data were analyzed using descriptive and inferential statistics.

Results: Psychodrama can improve communication skills of adolescents with hearing loss, which is verbal communication.

Conclusion: The mean and standard deviation of the pretest QCST score was 78.75±9.4 for the intervention group. After the treatment, the QCST scores was 105.08±6.28 for the intervention group. The results of ANCOVA showed an improvement in Queendom Communication Skills Test scores of adolescents after intervention (p<0.001).

Keywords: Hearing loss; communication skills; psychodrama

Highlights

- Psychodrama have improved the communication skills of hearing-impaired adolescents
- Psychodrama is performed in a group to evaluate interpersonal communication skill
- Psychodrama therapy increased communication skills of adolescents
Introduction

Hearing loss is either congenital or acquired. Studies on hearing loss suggest that it is not necessarily associated with mental health problems, but it may lead to anxiety, mood disorders or behavioral problems in combination with poor physical, communication, and living conditions of life [1]. Hearing loss is a common disorder and can negatively affect the various aspects of children’s life if their communication needs are not addressed or met [2]. A hearing threshold of 25 dB or greater indicates a hearing loss. Its prevalence is about 1-1.7 per 1000 live births worldwide, which increases with aging due to being progressive and late onset [3]. Children with hearing loss often misinterpret important information in noisy environments, such as classroom or school playground [4]. Misunderstanding of social situations can lead to a feeling of rejection, which can lead to emotional and social problems [5]. Hearing loss is an invisible condition with an adverse effect on a child’s quality of life, causing communication, social and behavioral problems [6]. It has been suggested that speaking and singing are mediators of the effect of hearing loss on the behavior of children [7]. Poor expressive language and gesture in children with hearing loss can reduce their ability for communication, social interaction, self-awareness and problem solving [8]. Social skills are learned behaviors that people use to communicate effectively with others and establish successful and socially accepted relationships [9]. Social skills are an integral part of the development of social competency and are associated with better mental health [10]. In a study in Norway, Eide and Roysamb analyzed the interrelation between psychological problems, social activity, and social network on the one hand and self-reported level of disability or activity limitations on the other hand. They concluded that an individual’s activity limitations are predictive of the level of psychological problems they experience later. Therefore, communication limitations in a child with hearing loss worsen his/her psychological state [11]. Children with hearing loss experience more communication and social problems than those with normal hearing. This difference may increase the risk of mental health problems in children with hearing loss such as loneliness, isolation, depression, and anxiety [12].

Psychodrama is a group psychotherapy and uses guided role playing to gain insight and work on personal/interpersonal problems and possible solutions [13]. Psychodrama is a method of exploring psychological and social problems by having participants enact the relevant events in their lives instead of simply talking about them. A psychodrama session consists of three stages. In the warm-up stage, the leader gives the group short activities that anticipate the skills used in role play, for example, movement or improvisation. In the action phase, participants implement situations from their lives. This is usually a situation that is presented to the group by one of the participants, indicating a specific issue or problems that they want to work through. Finally, in the sharing stage, participants reflect on their behavior and develop deeper understanding of the situations and articulate potential solutions [14]. Moreno’s psychodrama theory and practice is associated with five positive factors, spontaneity and creativity for adaptation, positive relationships, mutual responsibility, expansion of roles repertoire and character strengths, and act hunger for deep engagement [15]. Psychodrama has been used on adults for the treatment of anxiety, depression, and post-traumatic stress [16]. The goal of psychodrama is to develop participants’ clarity and insight, and allow them to test their understanding of reality and build their own solutions. Psychodrama is to help participants learn and change their behavior [17]. With the same self-reflective and emancipatory focus as critical action research, by allowing participants to work with problematic situations without the consequences they would face in their normal lives, psychodrama supports creativity in problem-solving and can create emotional release and insight [18]. The feeling of being accepted and belonged to a group shows the group integration. This is especially important in psychodrama where the participants express their ideas and feelings and behave freely; thereby, it reinforces a greater sense of integration in the group [17]. Albal et al. showed that psychodrama improved the communication skills and emotional intelligence of nurses working in psychiatry clinics. In psychodrama, social behavior is understood from the inner experience as well as the observable outer behavior, and took an emancipatory stance in supporting the exploration of the authentic self and liberation from others’ and their own false perception [19]. Khoubani et al. showed that psychodrama training had a significant effect on communication skills of aggressive girls, because they were encouraged to switch roles to experience different viewpoints and have the opportunity for deeper reflection [20].

The mental health of children with hearing loss is very important, because their social/emotional development can be negatively affected by difficulties in communication; the effect of hearing loss on behavior is lower in children with better communication skills [10]. With improvement in social skills, children with hearing loss may experience fewer problems. No study was found...
on the effect of psychodrama on communication skills of adolescents with hearing loss. Therefore, this study aimed to investigate the effectiveness of psychodrama in improving communication skills of adolescents with hearing loss.

**Methods**

**Study design and participants**

This is a quasi-experimental study with a pretest/post-test design using control group. The study population consists of all adolescents with hearing loss aged 12–15 years studying at Naghme School for the Deaf in Yazd, Iran. The inclusion criteria were: Being monolingual (Persian), having low scores (1-100 from 170) in Queen Communication Skills Test (QCST), and use of oral/aural communication skills in school. The exclusion criteria were: Having a severe psychiatric disorder and absence from more than two sessions of psychodrama intervention. We selected 24 eligible adolescents with normal intelligence. They were randomly assigned into two groups of intervention (n=12, mean age=13.9±1.46 years) and control (n=12, mean age=14.3±0.86 years).

**Measure**

Both groups underwent QCST with the help of their parents (due to the difficult concepts in the test). This test consists of 34 questions developed by Queendom in 2001 to evaluate communication skills in adults (Queendom 2004). This test can assess five dimensions of communication skills: listening (items 5, 6, 7, 8, 22, 23, and 27), understanding verbal/non-verbal messages (items 2, 11, 12, 13, 14, 18, 19, 21, and 28), insight (items 16, 24, 25, 29, and 34), emotional regulation (items 4, 9, 15, 17, 20, 26, 30, and 31), and determination (items 1, 3, 10, 32, and 33). The items are rated on a Likert scale as: 1=never, 2=seldom, 3=sometimes, 4=usually, 5=always. The total score is obtained by summing up the scores of subscales. As a result, the total score ranges from 34 to 170. It should be considered that items 2, 4, 6, 9, 10, 12, 13, 17, 19, 24, 25, 28, 32, and 33 have reverse scoring. The construct validity of QCST was evaluated using confirmatory factor analysis (CFA) by hosseichari and Fadakar [21]. Its total validity was reported 0.69, indicating its acceptable internal consistency. This value was 0.71 for university students and 0.66 for high school students. Also, the total coefficient of its split-half reliability was reported 0.71 [22]. This test was carried out in both groups before and after the end of intervention.

**Intervention**

The intervention group received psychodrama intervention at nine sessions of 90 minutes (two sessions per week), while the control group received no treatment. The intervention was conducted by a first author who was expert in clinical child and adolescent psychology. The intervention protocol was based on the psychodrama protocol proposed by Blatner [23] which is shown in Table 1.

<table>
<thead>
<tr>
<th>Session</th>
<th>Psychodrama therapy</th>
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<tbody>
<tr>
<td>Session 1</td>
<td>Interview with parents, explanation about psychodrama, introduction of each member by another person, members asking each other</td>
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<tr>
<td>Session 2</td>
<td>The technique of situational tests, role playing the dream defined by each member</td>
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<tr>
<td>Session 3</td>
<td>Advertising technique, pantomime game of primary and secondary emotions</td>
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<tr>
<td>Session 4</td>
<td>Storytelling technique, assistant chair technique</td>
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<tr>
<td>Session 5</td>
<td>Fortunetly-unfortunately technique, playing the role of buyer and seller in a hypothetical market using the mirror technique</td>
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<tr>
<td>Session 6</td>
<td>The ball technique, the flow of the fights of the people that were defined in the preparation stage, is performed in the form of a show with the help of the members and the mirror and double technique</td>
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<tr>
<td>Session 7</td>
<td>Magic shop technique, playing a show a new student enters class and how to make friends and relate to others</td>
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<tr>
<td>Session 8</td>
<td>The technique of dream travel, playing theater, getting upset and angry is one of the narratives that the children defined about themselves, and performing one by one the methods that the children described to calm themselves down, on this particular occasion.</td>
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<tr>
<td>Session 9</td>
<td>Review previous sessions and prepare the group to get out of treatment and say goodbye to each other</td>
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Data analysis

The collected data were analyzed in SPSS 22. We used the mean and standard deviation to describe the data, and ANCOVA was used to examine the effect of intervention on dependent variable (communication skills) by eliminating the effect of pre-test. Levene’s test and Shapiro-Wilk test were used to evaluate the assumptions of ANCOVA, whose results showed the equality of variances and the normality of data distribution for the study variable.

Results

As shown in Table 2, the mean pretest QCST score was 78.75±9.4 for the intervention group and 76.92±8.29 for the control group. After the treatment, the QCST scores was 105.08±6.28 for the intervention group and 76.67±8.59 for the control group. The results of ANCOVA showed a significant difference between the pretest and posttest scores of the intervention group, F(1,23)=162.3, p<0.001. Therefore, the psychodrama therapy increased communication skills of adolescents. The effect size indicated that 88% of the variances in communication skills was related to the intervention.

Discussion

The purpose of this study was to evaluate the effectiveness of psychodrama on the communication skills of adolescents with hearing loss. The result revealed the effectiveness of psychodrama in improving their communication skills. This is consistent with the results of Albal et al. [19] who showed that psychodrama can improve the communication skills of nurses in psychiatric clinics, and with the results of Khoubani et al. [20], who showed that psychodrama training had a significant effect on communication skills of aggressive girls. Psychodrama can treat one of the biggest challenges in people with hearing loss, which is verbal communication. Psychodrama provides a chance for children with hearing loss to experience relationship with others in a group [17]. In this study, the adolescents expressed their ideas, feelings and behaved freely which improved a greater sense of group integration. Psychodrama is performed in a group where people can evaluate their interpersonal communication skills, and become aware of their needs for developing higher communication skills [18]; therefore, they get more motivated to participate and follow the treatment. Psychodrama can increase the awareness of social and communication skills and develop self-disclosure [24]. In this study, participants were asked to reveal three unusual things about themselves which revealed their poor communication and dating skills. The group support them, shared experiences, and asked questions compassionately. This emotional and supportive response from the group indicates the sharing stage of psychodrama [14].

Psychodrama, which is based on the principles of creativity and spontaneity, combines sociometry, group dynamics and role theory in order to evoke cognitive, emotional, and behavioral responses in people with hearing loss in treatment and help them attain new viewpoints through better understanding of their roles in life and learn how to interact with others and things that may create challenges or restrict their lives. Many communication deficits in adolescents with hearing loss are due to isolation and low self-esteem [25]; therefore, adolescents in our study, by accepting different roles as friend, brother, etc., could learn about their own feelings and those of others and, thus, know how to communicate with them; through psychodrama, people in treatment are often able to develop their use of language and perspective as they use action methods to explore past, present, or future occurrences [26]. Furthermore, psychodrama can help adolescents with hearing loss see themselves and their situations from an outside perspective; the psychodrama sessions are conducted in a secure place to find new solutions to difficulties or challenges, whether they are based on external causes or past events.

This study had some limitations including the use of a test (QCST) that was not been normalized for adolescents with hearing loss and the lack of a follow-up phase. In future studies, the communication skills of adolescents with hearing loss should be assessed using a appropriate questionnaire. It is also recommended to investigate the effectiveness of psychodrama on other

<table>
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<th>Examination group</th>
<th>Control group</th>
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<tr>
<td>Pretest</td>
<td>Post-test</td>
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<tr>
<td>Communication skills</td>
<td>78.75 (9.40)</td>
</tr>
<tr>
<td></td>
<td>76.92 (8.29)</td>
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psychological problems of adolescents with hearing loss (e.g. cognitive abilities).

Conclusion

Psychodrama have positive effect on communication skills of adolescents with hearing loss. Therefore, the use of this intervention is recommended to the experts in this field.

Ethical Considerations

Compliance with ethical guidelines

It should be noted that this article has a code of Ethics from Academic Center for Education of Mashhad (IR. ACECR.JDM.REC.1400.001)

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Authors' contributions

AN: Study design, acquisition of data, interpretation of the results, statistical analysis and drafting the manuscript; FD: Study design, interpretation of the results, and drafting the manuscript; MS: Interpretation of the results.

Conflict of interest

The authors declare that they have no conflict of interest.

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