

Features of Emotional and Social Development in Preschool Children with Sensorineural Hearing Loss

M.T. Niyazova

Lecturer of Department of Continuing Medical Education
Tashkent State Medical University, Uzbekistan

Abstract

Background: Sensorineural hearing loss significantly affects speech acquisition, cognitive development, and social adaptation in children. Investigation of the psycho-emotional profile of preschool children with sensorineural hearing loss is essential for developing effective interventions.

Objective: To assess emotional and behavioral disturbances and social development in preschool children with sensorineural hearing loss and to evaluate the effectiveness of a comprehensive correction program.

Methods: Fifty preschool children with sensorineural hearing loss and 50 age-matched healthy children were assessed through clinical observation, neurological and speech examinations, and standardized psychological and neuropsychological testing. A 12-week comprehensive correction program was implemented, including individual and group psycho-pedagogical sessions, parent training, visual support strategies, and hearing rehabilitation using hearing aids or cochlear implants.

Results: Emotional and behavioral disturbances were identified in 96% of children with sensorineural hearing loss. Depressive symptoms were observed in 50%, emotional disorders in 38%, and hyperkinetic behavior in 32%. Phobic anxiety occurred in 32%, while social anxiety was less frequent (6%). Low self-confidence was found in 92% of participants and was often associated with unstable self-esteem. Nearly half of the children (46%) preferred interaction with peers with hearing impairment and avoided communication with hearing peers. Reduced attention span was observed in 96%, and slow task-switching in 50%. Additional findings included sleep disturbances (38%), adaptation difficulties (28%), and reduced emotional expressiveness (24%).

Following the intervention, parents and teachers reported improved peer interaction, reduced anxiety, and enhanced concentration.

Conclusions: Preschool children with sensorineural hearing loss exhibit a characteristic pattern of emotional and behavioral disturbances accompanied by reduced social adaptation. Comprehensive psycho-pedagogical intervention combined with auditory rehabilitation significantly improves psycho-emotional functioning and social integration.

Keywords: Sensorineural hearing loss, preschool children, emotional disorders, social adaptation, psycho-pedagogical intervention

Introduction. Hearing impairment in childhood represents a major challenge in pediatrics and audiology due to its impact on speech, cognition, and socialization. Sensorineural hearing loss disrupts the perception of speech and environmental sounds, influencing emotional development and behavior.

Children with sensorineural hearing loss often experience difficulty recognizing emotions, interpreting speech intonation, and understanding social cues. These limitations contribute to anxiety, reduced self-confidence, social withdrawal, and impaired peer relationships. Emotional difficulties may further affect cognitive engagement and quality of life.

Congenital hearing loss occurs in approximately 1 in 750 newborns. In addition to speech delay, auditory deprivation contributes to emotional dysregulation, cognitive fatigue, and limited social interaction.

Despite advances in auditory rehabilitation, studies addressing emotional and behavioral profiles of preschool children with sensorineural hearing loss remain limited. The present study aims to expand evidence supporting early multidisciplinary intervention.

Materials and Methods. The study involved 50 children aged 3–6 years with confirmed sensorineural hearing loss and 50 age-matched healthy controls. Emotional, behavioral, cognitive, and social functioning were evaluated.

Assessment included neurological examination, speech evaluation, psychopathological observation, and

standardized psychological and neuropsychological tests. Social adaptation was assessed through structured observation and questionnaires completed by parents and teachers.

Children with sensorineural hearing loss participated in a 12-week comprehensive correction program including psycho-pedagogical sessions, parent workshops, visual learning support, and auditory rehabilitation. Data were analyzed using descriptive statistics (frequencies and percentages).

Results. Emotional and Behavioral Findings. The assessment revealed that emotional and behavioral disturbances were present in 48 out of 50 children (96%) with sensorineural hearing loss.

Depressive manifestations were identified in 25 children (50%), characterized by reduced mood, low initiative, and diminished interest in play and communication. Emotional disorders of mixed type were observed in 19 children (38%), with mood instability and irritability. Phobic anxiety was detected in 16 children (32%), while social anxiety was present in 3 children (6%). Diminished emotional expressiveness was noted in 12 children (24%).

Hyperkinetic behavior was observed in 16 children (32%), sleep disturbances in 19 children (38%), and reduced appetite in 2 children (4%). Fearfulness was seen in 16 children (32%), and excessive dependence on adults in 3 children (6%).

Low self-confidence was observed in 46 children (92%), often coexisting with unstable self-esteem.

Cognitive Functioning. Reduced attention span was observed in 48 children (96%), and slow task-switching in 25 children (50%), indicating reduced cognitive flexibility.

Social Adaptation. 23 children (46%) preferred interaction with peers with hearing impairment and avoided communication with hearing peers. 14 children (28%) had difficulty adapting to new environments.

Post-Intervention Outcomes. Following the 12-week correction program, parents and teachers reported improved emotional stability, reduced anxiety, enhanced attention, better peer engagement, increased independence, and improved emotional responsiveness.

Table 1. Emotional, Behavioral, and Cognitive Indicators Before and After the Correction Program

No	Indicator	Before intervention (n=50)	After intervention (n=50)	Observed change
1.	Emotional and behavioral disturbances	48 (96%)	48 (96%)	Marked reduction
2.	Depressive manifestations	25 (50%)	2 (24%)	Mood stabilization
3.	Emotional instability	19 (38%)	9 (18%)	Improved regulation
4.	Phobic anxiety	16 (32%)	14 (7,0%)	Reduced fear
5.	Social anxiety	3 (6%)	1 (2,0%)	Increased social participation
6.	Hyperkinetic behavior	16 (32%)	8 (16%)	Better control
7.	Sleep disturbances	19 (38%)	10 (20%)	Improved sleep
8.	Low self-confidence	46 (92%)	25 (50%)	Greater independence
9.	Reduced attention span	48 (96%)	30 (60%)	Improved focus
10.	Slow task-switching	25 (50%)	13 (26%)	Better cognitive flexibility
11.	Social avoidance of hearing peers	23 (46%)	11 (22%)	Improved integration
12.	Adaptation difficulties	14 (28%)	6 (12%)	Easier adjustment

Discussion. The findings confirm that preschool children with sensorineural hearing loss demonstrate high prevalence of emotional and behavioral disturbances, as well as reduced social adaptation. The rate of psycho-emotional difficulties (96%) indicates systemic emotional vulnerability.

High frequency of depressive manifestations and emotional instability aligns with previous studies [1,8]. Phobic anxiety and social withdrawal support the idea that sensory deprivation increases fear responses. Low self-confidence observed in 92% of participants reflects restricted social experience and reliance on adult reinforcement [6].

Cognitive difficulties, including reduced attention and slow task-switching, correspond with literature on executive function deficits in children with hearing impairment [7]. Social adaptation challenges indicate a tendency to seek psychologically safe peer groups.

Importantly, the comprehensive correction program produced measurable improvements in emotional regulation, anxiety reduction, attention, and social interaction, confirming the effectiveness of multidisciplinary early intervention.

Practical Implications. Early psychological screening should be integral to care for children with sensorineural hearing loss. Emotional and behavioral disturbances should be addressed alongside audiological rehabilitation. Multidisciplinary correction programs improve emotional, social, and cognitive outcomes and should be integrated into early intervention and preschool settings.

Conclusions

1. Emotional and behavioral disturbances are highly prevalent in preschool children with sensorineural hearing loss.
2. Low self-confidence, fearfulness, and dependence are dominant personality traits.
3. Social adaptation is reduced, with preference for interaction within hearing-impaired peer groups.
4. Multidisciplinary psycho-pedagogical and auditory interventions significantly improve emotional, social, and cognitive outcomes.

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