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# Study of the Relationship between Forecasting Strategies and Successful Socialization in Children with Speech Pathology

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## Abstract

The relevance of the research is determined by the need to study the psychological characteristics that contribute to the successful socialization of preschoolers with speech disorders. The development of the ability to predict is considered one of the key areas for the successful socialization in children.

The aim of the research was to conduct an empirical study of the socialization success factors in preschoolers with speech disorders, to identify correlations between indicators of successful socialization and prediction skills in preschoolers with speech disorders.

The research involved 139 children with speech disorders aged 5-7 years. We used methods of expert assessment of children's behavior (Kazmin et al., "The scale of emotional distress and atypical behavior"); observation of children during organized and free activity (Samokhvalova); methods of studying communication and interaction with peers and adults (Semago's "Emotional Faces", Veraksa); understanding of social norms and values by a preschooler (Bayanova "Determining cultural congruence of a younger schoolchild"); study of children's prognostic activity (Peresleni, Podobed).

In our empirical study, we have revealed difficulties in communication of children with speech disorders with their peers during free activity. Insularity of children with speech disorders, their high level of anxiety makes it difficult for them to adapt to new social conditions. Children using ineffective forms of "changing strategies" and "random strategies" predictions demonstrated maladaptive behavior. Children's prediction strategies turned out to be closely related to such factors of cultural congruence as "obedience" and "security", with free and organized activity of children and regime moments. The research results will help to develop the programs for socio-psychological adaptation of preschoolers with speech disorders.

*Keywords:* children; preschool age; speech disorders; forecasting; socialization.

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## **Introduction**

Numerous psychological and pedagogical studies prove that children with developmental disorders are in the risk group of developing socialization disorders (Denisova, Lekhanova & Golitsina, 2012). Darmodekhin (2015) highlights the needs of every modern preschooler for groups of positive sociocultural experience: the experience of analyzing and evaluating people's behavior in various life situations, the experience of self-organization, planning one's own activities, forecasting and subsequent analysis of its results (Kuznetsova, Akhmetzyanova & Artemyeva, 2018). With regard to the preschool age, we can single out such aspects of socialization as development of rules by a preschooler; the formation of child's personality in the social space of relations with other people (Mirabile, Oertwig & Halberstadt, 2018); interaction of child and culture; the role of adults in transmission of cultural norms; the development of the cultural congruence of a preschooler (Bayanova, 2016; Veraksa, 2010; Pashchenko, 2010); knowing the rules and understanding of their moral meanings, awareness of their moral value; self-regulation of actions with reference to moral rules and emotional states of peers in 5-6 year old children; development of social and emotional intelligence (Kiyanchenko, 1999; Pronina, 2010; Fatikhova, 2017; Shchetinina, 2004).

## **Purpose and objectives of the study**

The purpose of this study is to monitor the success of socialization of preschoolers with speech disorders and to study the relationship of forecasting strategies and indicators of successful socialization in children of preschool age with speech disorders.

*Hypothesis.* We assumed that children with speech disorders would have rather low socialization indicators in the field of communication and children's free activity. The ability of children to use rational forecasting strategies would be interconnected with indicators of successful socialization.

## **Literature review**

Studies emphasize that successful socialization of modern preschoolers is hampered by undeveloped technologies of social and personal development of children and the lack of free communication between children (Federal State Educational Standard for Pre-School Education); all these factors do not allow to effectively develop certain personal qualities that are formed in different situations and forms of activity (Grishaeva, 2015). Violations of socialization manifest themselves in poor assimilation and reproduction of social roles, social rules and can adversely affect individuals and social groups, as well as community and society as a whole (Akhmetzyanova, Artemyeva, Nigmatullina & Tvardovskaya, 2017; Akhmetzyanova, Artemyeva & Tvardovskaya, 2017).

In relation to socialization of children with different forms of dysontogenesis, researchers note the specific features of assimilation and reproduction of social connections and relationships in children with speech disorders (Akhmetzyanova et al., 2014, 2018; Lekhanova, 2008). Scientists consider the development of the ability to anticipate as one of the key areas of socialization process, and this ability indicates a high level of development of orientation in reality both in its cognitive and emotional-personal components.

Intensive development of prognostic skills in senior preschool age makes it an important resource for positive socialization of a child (Regush, 2003). The results of the study by Zhadayeva (2006) suggest that in preschool age, in addition to the emergence of a special attitude to the task being performed, children are oriented towards such elements of the situation that do not directly relate to the execution of a

cognitive task, but represent a part of the emotional image of this situation. The perception of this element of the situation (object) contributes to the emergence of emotional and imaginative anticipation in the structure of child's behavior.

This is especially important for children with disabilities; their lack of ability to predict is associated with the difficulties of organizing their activities, with the difficulties of determining and low variability of adequate behaviors in significant life situations, as well as with inability to assess the consequences of their actions and the behavior of other people. Federal educational standards of preschool education highlight positive socialization of children, the development of positive self-awareness and the formation of a positive attitude towards human activity and the environment as the most important tasks at this age stage.

## **Methodology**

### *Sample*

139 children with speech disorders aged 5-7 years attending preschool educational institutions.

### *Methods*

The study involved the following methods:

1. Expert assessment of children's behavior was based on the method of Kazmin, Konovko, Salnikova, Tupitsina, Fedina "The scale of emotional distress and atypical behavior" (2014).
2. Observation of children in organized and free activities (Samokhvalova).
3. The examination of the specifics of communication and interaction of children with peers and adults, social and emotional intelligence was conducted using Semago's "Emotional faces" technique (Evaluation of the adequacy, accuracy and quality of identification of the emotional state).
4. A set of methods for determining the development of communicative skills of preschool children (Veraksa): child's understanding of tasks set by adults in various interaction situations; understanding of the emotional state of peer; ideas about expressing one's attitude towards adults and peers).
5. Preschoolers' understanding of social norms and values was determined with the help of the method by Bayanova, Mustafin "Definition of the cultural congruence of younger schoolchildren"; "Obedience, meeting the expectations of an adult"; "Safety"; "Self-care, hygiene"; "Self-control" (2015).
6. The study of the features of prognostic activity was carried out using the "Try to guess" technique created by Peresleni and Podobed (1982).

## Results

Table 1. Descriptive statistics

Techniques	Indicators of techniques	Minimum Min	Maximum Max	Medium M	Standard deviation SD
<i>Cultural congruence</i>	Obedience	14	64	39.81	11.15
	Security	23	76	50.91	12.46
	Hygiene	13	52	34.34	8.63
	Self-control	13	40	29.76	6.97
<i>Communication skills</i>	Understanding of tasks	1	4	2.52	0.66
	Understanding of states	0	3	2.48	0.66
	Attitude to an adult	0	3	2.15	0.63
	Attitude to a peer	0	3	2.12	0.60
<i>Samokhvalova's questionnaire</i>	Regime moments, c-p	32	80	61.87	10.25
	Regime moments, c-t	27	79	59.87	11.21
	Regime moments, c-pe	23	78	57.30	11.21
	Organized activity, c-t	23	79	60.31	10.40
	Organized activity, c-pe	23	78	57.81	11.03
	Free activity, c-t	4	80	58.49	12.69
	Free activity, c-pe	4	80	56.75	13.10
<i>Atypical behavior</i>	Insularity	0	17	4.12	3.57
	Anxiety	0	13	3.96	2.68
	Depression	0	10	1.84	2.27
	Maladjustment	0	8	1.08	1.70
<i>Forecasting</i>	Hyperactivity	0	14	3.57	2.93
	Prediction errors	1	3	2.41	0.76
	Distraction errors	1	3	1.40	0.60
	Reproduction	0	3	1.94	0.69
<i>Semago's technique</i>	Strategies	1	4	3.42	0.74
	Emotions	0	10	6.07	1.97

In order to study the correlation between forecasting strategies and socialization indicators, we used Pearson's correlation analysis having focused on correlations at the level of 0.01. The analysis revealed inverse relationship between forecasting strategies and the "insularity" indicator according to the

“Scale of emotional distress and atypical behavior” method ( $r = -.22$ ).

Forecasting strategies are also associated with the activity of children with speech disorders in regime (daily routine) moments (arrival to kindergarten, undressing / dressing, taking hygienic procedures, eating) in the situation of “child-parent” interaction ( $r = .44$ ); “child – tutor” ( $r = .41$ ); “child – peer” ( $r = .46$ ); with child’s activity during educational sessions, organized collective games in a situation of interaction “child-tutor” ( $r = .41$ ); “child-peer” interaction ( $r = .48$ ), as well as in the situation of no strict rules and rigid norms of behavior in the “child-tutor” interaction ( $r = .44$ ); “child-peer” interaction ( $r = .41$ ).

We have discovered interrelations between forecasting strategies and cultural congruence factors: “obedience” ( $r = .32$ ) and “safety” ( $r = .29$ ).

### **Discussions**

The ability of children to interact with their peers and adults, to obey and follow generally accepted rules and norms helps them to easily adapt to new social conditions and contributes to the development of favorable conditions for their further development (Veraksa, 2010). Cultural congruence is an indicator of a child’s compliance with culture as a system of standard situations which are specific for this age (Bayanova).

The study found that in the sample of children with speech disorders, the highest value was reached by the “Self-control” factor (72%), indicating that children are able to control their actions, having matched them with certain rules. A sufficiently high value was reached by “Safety” and “Hygiene” factors (65%), children successfully comply with safety rules and systematic requirements that imply observance of daily rules. The lowest value for cultural congruence factors was obtained by the “Obedience” factor (62%): children’s behavior does not always correspond to the expectations of adults.

Preschoolers with severe speech disorders understand the tasks set by adults in various interaction situations ( $M = 2.52$ ) quite well and understand the emotional states of their peers well enough ( $M = 2.48$ ).

With the help of the expert method, we could study children’s actions in organized and free activities, daily routine situations while interacting with parents, tutors, and peers. The average values for the sample are higher in daily routine situations with “child-parents” ( $M = 61.87$ ) and “child-tutor” interactions ( $M = 59.87$ ), and also in the activities organized by the teacher ( $M = 60.31$ ). The lowest values were revealed in free activity of children with their peers ( $M = 56.75$ ). The results are confirmed by the studies of Denisova et al. (2012), who asserts that children with disabilities, due to certain features of their development, face difficulties in mastering the above-mentioned categories of sociocultural experience. The study conducted by Kazmin et al. (2014) emphasizes that children with speech disorders have difficulties in communicating freely with people, especially with those who are not family members or tutors.

Preschoolers experience difficulties with differentiation of such emotional states as “spite”, “anger” and “fear”. Children with speech disorders are dominated by negative emotions (spite, anger).

The study revealed slight deviations in children with speech disorders according to the “insularity” subscale ( $M = 4.12$ ), as well as a rather high level of anxiety ( $M = 4.12$ ).

It was revealed that the success of forecasting largely depends on the strategies that children choose in the process of cognitive activity. 67% of children have demonstrated rational forecasting strategies in their educational activity effectively applying their life experience to new specific situations. Ineffective forms of forecasting: “change of strategies” and “random strategies” of predictions that do not take into account past experience of previous forecasts were detected in 33% of preschoolers. In her research Akhmetzyanova (2014) confirms the lack of prognostic function in children with speech disorders.

Children with speech disorders experiencing difficulties in free communication with adults and peers more often demonstrated the inability to predict situations of the future as well as ineffective forms of forecasting.

Forecasting strategies turned out to be closely associated with the activities of a child with speech disorders in daily routines, with free and organized activities in “child - tutor”, “child - peer”, “child - tutor” situations of interaction. Children who have rational forecasting strategies successfully follow the safety rules and requirements of adults.

### **Conclusion**

The study on children’s actions in organized and free activities, in daily routine situations when interacting with parents, tutors, and peers made it possible to identify difficulties in communication with peers in unregulated, unorganized activities. The behavior of children does not always meet the expectations of adults, making it difficult to adapt to new social conditions.

Children with speech disorders experience considerable difficulties in organizing free activities with their peers, and it is difficult for them to freely communicate with people who are not their family members or tutors. We have noted insularity of children with speech disorders as well as their high level of anxiety.

The study allowed us to identify prediction strategies for preschoolers with speech disorders: one third of the experiment participants used ineffective forms of forecasting, such as “changing strategies” and “random strategies” of prediction – precisely these children showed maladaptive behavior. The level of communicative development of children in various types of activities is also associated with their prediction strategies.

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