SPEECH THERAPY INTERVENTION AS A WAY FOR MAKING DIFFERENTIAL DIAGNOSES OF COMMUNICATION SKILLS FOR PRESCHOOL CHILDREN WITH SHY BEHAVIOUR AND CHILDREN WITH AUTISM

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ABSTRACT

The aim of this study is to categorize the differential diagnostic criteria of communication skills for preschool children with shy behaviour and children with autism within the speech therapy intervention process.

For the current study during the speech therapy intervention process 23 preschool children from 3-5 years old were studied who had communication problems and no speech. To establish the differential diagnostic criteria of communication skills for preschool children with shy behaviour and children with autism observation and complex speech therapy methods were used while combining practical and verbal/non-verbal approaches. The quantitative research methodology was used to generalize and conduct a comparative analysis of the results, in order to emphasize the behavioural characteristics and to outline the existing differences between the means of communication of these children.

The analysis of the research results made it possible to compile a comparative description of communication features and indicators of the quality of communication of children with shy behaviour and children with autism. Communication and behavioural problems which are typical for children with shy behaviour and children with autism were clarified and differentiated, as well as the criteria for differential diagnosis of speech and communication features of children with shy behaviour has been established, and speech therapy intervention rules have been developed to overcome those problems.

Keywords: Shy behaviour /shyness/, sociophobe, alienation, echolalia, false echolalia, stereotype movements, false stereotypes, speech development delay.

INTRODUCTION

It is known that the effectiveness of speech therapy intervention with preschool children depends on many factors. Very often at first sight the obvious difficulties of speech development, may not be related to the core speech processes at all. Such factors, often characterizing the child as having a special behaviour or not yet developed person, can be the main cause of speech development disorder.

Out of these factors, we were most interested in the manifestation of preschoolers' behaviour, such as shyness, as we have repeatedly faced this problem during speech therapy intervention processes. In addition, theoretical and practical analysis have indicated that despite the achievements in age-psychology and extensive research in this field, still the problems of shy children have not been fully explored (Bogachinka, 2008; Sirenko & Bogachkina, 2008; Zimbardo, 2005). Besides that, regarding the organization of speech therapy intervention with them, the system of psychological-pedagogical approaches and the rule of speech therapy intervention still are missing (Murray & John, 2018).

It is well-known that among children with speech development disorders often can be found children with autism, self-contained children, whose first symptom of behaviour is a desire to be isolated. In addition, such children generally avoid communication and choose solitary activities. However, a number of observations have shown that sometimes some children who initially show these symptoms in their behaviour do not have autism spectrum disorder, but simply are shy (Sirenko & Bogachkina, 2008).

This research provides an opportunity to strengthen interdisciplinary connections and to activation of suitable information exchange processes between specialists. Therefore, the aim of this study is to categorize the differential diagnostic criteria of communication skills for preschool children with shy behaviour and children with autism within the speech therapy intervention process.

LITERATURE REVIEW

The first three years of life, once the brain is developing and maturing, is considered to be that the most intensive period for deep speech and language skills development. These skills develop best in an exceeding world that's made with sounds, sights, and consistent exposure to the speech and language of others (Sikula, 2013). The first stage of development in a way youngsters learn to use language is the pre-linguistic stage. Babies use this stage to find out the way to communicate with others. During the primary stage of life, babies vocalize and try to find out how to speak with their caregivers, so by the age of twelve months, most babies perceive what's being aforesaid to them and are beginning to communicate their needs by informing or by showing objects to their caregivers (Cameron-Faulkner, Lieven & Tomasello, 2003).

Biological and social causes are most often mentioned in the etiology of speech disorders. Such a social cause may be a feature of the behaviour of preschool children, such as shyness (it may also have a hereditary character). Researches have shown that such behavioural manifestations can seriously affect a child's speech development and communication needs. It should be noted, that sometimes they cause delays in speech development, sometimes can be considered as a result (Mishina, 2012).

In the special literature, it is possible to find out some hints about the ways and need for the development of the speech of shy children, which are generally reflected mainly in the context of overcoming communication difficulties. However, as speech has the function of regulating behaviour and because in terms of speech therapy intervention importance in this field is not sufficiently studied, the basic rules of speech therapy intervention to address this issue still are missing.

During the practical speech therapy, it became obvious that children with shy behaviour, in terms of communication skills, had a number of similarities and differences in comparison with children having autism, self-conscious children, and stuttering children.

In practice, the concept of shyness is perceived and explained differently especially by non-professionals and parents (it is seen as something "innocent"..."The child is just shy", and in some cases, even the positive and exemplary quality of the child's personality). But shyness is a

unique manifestation of behaviour that can seriously impede the full development of the child's personality, speech and socialization (Sikula, 2013). According to psychologists, shyness is a state of a person's inner world that gives great importance to public opinion (Sirenko & Bogachkina, 2008). Samuel Johnson in his Dictionary of the "English Language" (1804), described it in three words: "self-contained", "caution", " suspiciousness". Some others considered it as "having shyness by birth (Zahavi, 2014). As a result of this research, comparative analyzes have been conducted, especially with the quality of communication of children with autism, taking into account the fact that the self-consciousness, being dissolved with this unique dysontogenesis of child development, exhibits almost the same symptoms. On the other hand, many other psychophysiological mechanisms underlined in the communication characteristics of stutterers and were the subject of a separate study (Harutyunyan, 1993). This fact confirms that current research is relevant not only in terms of speech therapy but also in all aspects of the organization of psychological and pedagogical support.

In addition to the above stated, it would be important to mention, that famous people such as former US President Carter, American actor John Travolta, American virtuoso guitarist Jimi Hendrix, Hollywood star Charlton Heston, famous American actress Lonnie Anderson, king of pop music Michael Jackson considered themselves to be shy. They had told that on the stage and in front of the audience they did not ashamed, because they were able to control the situation in professional matters, but in real-life situations, they were not able to do that, and because of it had felt uncomfortable.

Shyness can lead to varying degrees of sociophobia: from light distrust to undisguised cowardice and fear of communication that interferes with social interactions. All of these fears are accompanied by physical tension, profuse sweating, redness, and other manifestations of the autonomic nervous system, which are very similar to the fears that arise to the stuttering person before a speech (Zimbardo, 2005; Harutyunyan, 1993).

According to the authors Bizarre and Spremberg (2019), shyness as a typical symptom of autism spectrum disorder (usually it is a resonance emotion which associated with the properties of the self) allied with their peculiarities about the worldview and the unique way of reacting to the social environment (Bizarre & Spremberg, 2019).

A number of authors have presented in-depth studies regarding the feeling of shame as an emotional problem, discussed the socio-moral philosophy of it as a complex that underlay in "Self" formation process (which arises first of all in the basis of the multi-sensory system regarding self-recognition of the body) (Tsakiris, 2017, Zahavi, 2014; Deonna, Rodogno, & Teroni, 2012). They have identified the primary role of this feeling in the development of behaviour, interpreting it as a unique type of negative mark of self-esteem that can cause many emotional displays. These studies more thoroughly emphasize the need to differentiate shyness from such similar situations, particularly in the area of autism spectrum disorder.

Therefore, these kinds of analyses are very important for distinguishing this symptom from similar conditions. However, a special literature review did not point out any specific criteria that could help to differentiate such behaviour as a primary disorder from shyness which can be demonstrated as a secondary disorder while having autism. The absence of such clear distinctions may lead to the application of inappropriate principles for the organization of psychological and pedagogical work with the child, most importantly, to fix other symptoms typical of autism spectrum disorder (ex., mechanical operation or behavioural aggravation, increased desire for isolation, regression of the need for verbal communication, etc.).

Taking into account the fact that the age of 3-5 years old is considered as a sensitive period for a person's development, at this age the child's psychological problems can be related to many hereditary, typological features of a person, therefore, experts avoid to definite psychological, psycho-neurological final diagnoses. This circumstance also causes objective difficulties for the differential diagnosis of these and other similar symptoms. From this point of view, speech therapy intervention acquires screening significance.

The theoretical-practical significance of this study is related to the collection and completion of theoretical-practical facts according to the subject of the research, expanding the possibilities of differentiated diagnosis in practice and offering methodological support to the specialists. Accordingly, this article stresses the need to study and discover speech and communication peculiarities of preschool children with shy behaviour. The scientific interest in this issue lies in the fact that this study allows

distinguishing such a condition from communication and behavioural disorders which are typical to children with autism, as well as to develop speech therapy ethical rules for identifying speech and communication peculiarities of children with shy behaviour and overcoming them. It is important to note that this is the first study that focuses on developing these kinds of practical approaches in speech therapy.

METHODOLOGY

For this current study, the quantitative and qualitative research methods have been combined. In the frame of the quantitative method, the behavioural and communication skills characteristics of 23 preschool children aged 3-5 have observed, who lacked in speech and communication and have applied to a speech therapist due to lack of speech or delay, as well because of having communication needs and peculiarities of social contacts.

The application of the quantitative method made it possible to form knowledge based on precise logic, based on mathematical-statistical calculations. The study aims at establishing the criteria for differential diagnosis of communication skills of preschool children with shy behaviour and for children with autism, and for that reason, speech therapy complex methods have been combined including practical and verbal/non-verbal approaches and conducting a semi-structured interview with parents of children.

The analysis of research results made it possible to define and make a comparative analysis of the behavioural characteristics of children with autism and for children with shy behaviour, to study children's means of communication and the differences between them.

Participants

In this study 23 preschool children from 3-5 years old have been observed, who lacked in speech and communication and have applied to a speech therapist due to having no speech or speech delay. The participants also had communication problems and diverse peculiarities of social contacts. All these children had not only straight verbal disorders but also symptoms that were typical to autism, such as not communicating visually, avoiding the new social environment (socio phobia, distrust, anxiety, etc.). They especially used the word - low voice using, telegraphic speech, echolalia, etc. Also, some

manifestations were typical to selective mutism such as behavioural - motor features, stubbornness, aggression (not permanent, but in the presence of a factor that exacerbates a certain discomfort), restless shaking of hands, turn around with head down, etc.

Data collection

A number of complex speech therapy intervention methods were used with 23 preschool children to collect research data, which were:

- Practical methods (games, exercises).
- Verbal methods (storytelling, conversation, explanation).
- Non-verbal methods (action demonstration and imitation techniques). The combination of these methods was aimed at studying the behavioural characteristics of children with autism and children having shy behaviour, identifying main differences in communication between them, which was the basis for defining the criteria for differentiating diagnostic of communication skills of preschool children with shy behaviour and autism.

Very often families of children with these symptoms were in a difficult situation, especially in terms of the need for a differentiated diagnosis, since for them, first of all, it has a psychological meaning (to reject or confirm autism), also for choosing the right intervention. Hence, these were the circumstances that have been taken into account for emphasizing the principle of feedback in parent-specialist collaboration in this study. That was the main motivation, that during the initial consultation through an in-depth interview based on the parents' "complaints", the systematic record of the speech therapy intervention results was conducted to "neutralize" a number of symptoms typical of autism spectrum disorders.

Data analysis

The data analysis was carried out according to quantitative and qualitative methodology. As a result of the quantitative data analysis, the outcomes and results of speech therapy intervention with 23 children were concluded and summarized in the form of numerical patterns, the behavioural features of these children, communication forms and the differences between them were categorized and grouped, which have been presented in relation to the numerical percentage (Yadov, 2007).

To analyze the data which was obtained as a result of used speech therapy complex intervention methods the following specific criteria have been set:

- Determining the permissible threshold for establishing tactile contact with children.
- Identify the need for visual communication.
- Identify the need for a use of pointing gestures.
- Defining the need for cooperation.
- Identify the dynamics of the need for verbal communication and other personal characteristics (for example, shy children speak in fact, but in a low voice looking secretly).

RESULTS/DISCUSSION

The results of the research described the speech-communication features of preschool children with shy behaviour, which intended to develop and define psychological-pedagogical and speech therapy practical rules for overcoming those difficulties. Therefore, this was the first study in speech therapy that anticipated to advance theoretical and practical approaches in this field which led to expanding the possibilities of differentiated diagnosis in practice and offering methodological support to the specialists.

Based on the analysis of the research results, it should be noted that for the effectiveness of speech therapy with such children, it is first necessary to:

- Recognize shy behaviour and distinguish it from similar situations.
- Define the nature of shy behaviour (is it a primary or secondary developmental disorder? It can sometimes be a consequence of speech development delay (Sakula, 2013; Bogachkina, 2008).
- Identify the nature and type of speech development disorder.
- Develop a complete system of psycho-pedagogical and speech therapy approaches.

Thus, the results of theoretical-practical analysis shown that it was difficult to detect children's shy behaviour, very often they were left out from professionals' attention. In this sense, speech therapy was an excellent opportunity to discover this type of behaviour - it provided an opportunity to accurately assess the real picture of children's displayed behaviour.

The reasons for communication fear that shy people had could be concluded in the following way:

- To avoiding reprimands from people around or from the negative public remark.
- Inability to orientate in the current situation or anticipate difficulty.
- To have premonition or fear to be rejected.
- Inability to trust.
- To avoid blushing.
 The reasons might be caused because of:
- Heredity
- Sensitive nervous system
- Upbringing patterns, social environment and living conditions
- The model of family relationships
- Peculiarities of gender education
- Over care or under-care
- Excessive demands or indifference to the child's needs and emotions
- The nature of verbal forms of behaviour modelling "educative words"
- Delay in speech and psychophysical development.

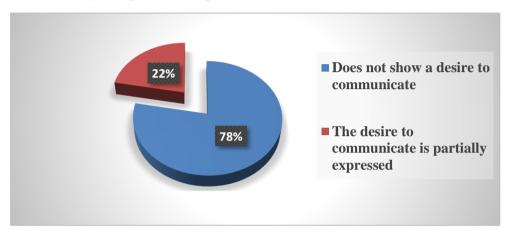
It is important to mention that the content of speech therapy intervention with preschool children with shy behaviour is conditioned by the degree and nature of their speech disorder. These children, as a rule, have a preserved intellect, which gives a very high compensation opportunity to both the specialist and the child. It is generally based on the principles of speech disorders' correction and basic methods, speech therapy intervention rules, approaches and principles for overcoming that (Nelson, 2006).

In this study, the process of data collection and analysis was held in 2019-2020, and about 23 children from 3 to 5 years old with normal development and at the same time having shyness took participation in this study. As a result of the implementation of speech therapy intervention and observation, the phenomena of communication needs were registered among all children. Comparing the data before and after speech therapy, it was possible to declare that before the survey 78% of them did not show any desire to communicate with the speech therapist or others at all (they did not react

or respond negatively to other people's words, attitudes, ran away from the speech therapist's room or refused it without a parent, etc.,), (Figure 1).

Figure 1.

Indicators of the quality of communication of preschool students with shy behaviour before speech therapy intervention



It should be noted that these indicators were based on the severity of the child's psychological problems and the degree of effectiveness of speech development intervention. As a result of the current study, it was possible to affirm, that speech therapy helped to overcome shyness more quickly when shyness was based on a delay in speech development or was a result of general developmental delay. In other cases, speech therapy was accompanied by psychological support.

Out of 30% of children involved in speech therapy had "false echolalia" ("false echolalia" had been considered the echolalia, which was not a result of the unique work of the right hemisphere of the brain, but was a protective mechanism for not expressing its own "Self" and thoughts, which manifested in the mechanical repetition of other's words. Such echolalia disappears completely as a result of well-organized speech development intervention. It was considered to be echolalia of psychological origin).

Thus, after speech therapy intervention, all children's "false echolalia" became into lexical-logical communicative speech. It is important to emphasize the fact that as a result of the work the children's posture was corrected, they stopped performing unnecessary, "hiding, closing"

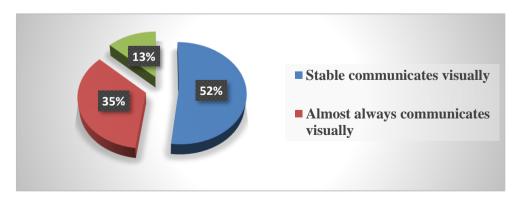
movements and "false stereotypes". All the children began to occupy the "space allotted to them", the use of the demonstrative gesture became more active, they began to use the pronoun "I", the directorial games became role-playing, the children's cooperation with both the speech therapist and the strangers was increased (the last data was confirmed by parents and based on the group work observations).

If before speech therapy intervention about 5 children (22%) made short attempts to communicate visually (1-2 minutes, unstable, timid), then after some time (after speech therapy that lasted from 2 to 8 months) 12 children (52%) were able to look at the speaker's eyes stably and communicated visually, 8 children (35%) almost always started communicating, and an overall improvement in the quality of communication was registered among other three children (13%).

For example, the attempts to look "secretly" increased, the gaze was fixed on the speaker's face through special exercises, and that period gradually was getting longer. In addition, children were timid but eager to answer the speech therapist's questions (by the way, the answering word was given in the rhythmic arrangement of the vowel, which was completely meaningful, corresponded to the tempo-rhythmic logic of the required word, had the correct verbal tone. Later, these types of answers became answers given at the full verbal level) (Figure 2).

Figure 2.

Indicators of the communication quality improvement of preschool children with shy behaviour registered as a result of speech therapy intervention



Current research showed that differential diagnostics helped to change the approaches used in speech therapy (Appendix 1). For example, if strictly regulated (mechanical) and symbolic approaches were used to interact with a child with autism to stimulate communication needs or to develop speech (vocabulary development, enhancing general progress, development of auditory or visual perception, etc.), then, in this case, it was the opposite, the emphasis was given on creative and lexical-logical thinking, child's imagination.

As well as within this study the speech therapy intervention rules have been developed and used with children to overcome communication and behaviour problems which effectiveness had been substantiated experimentally (Appendix 2). In addition, speech therapy exercises and games that were designed to stimulate the child's imitative needs and abilities, to develop non-verbal communication skills, voice, verbal breathing, rhythmic speech, sound processes, should be quickly implanted into practice as they release the child from a number of complexes that he has precisely because of shy behaviour. During speech therapy, especially the exercises that were aimed at feeling the space, taking one's place in it, expanding the motor/movement skills, contribute to the formation and development of the ability to get rid of constraints, to shift the gaze, to fixate and hold the face of the speaker, and finally to communicate with the gaze. Such stimuli, in contrast to a child with autism, strongly promote the verbal speech of a shy child.

The results of this research have approved that these approaches helped to develop well organized and targeted speech therapy, which rapidly stimulated the speech development of children with shy behaviour, increased communication needs with both adults and peers, as well as helped to overcome socio-phobias and encouraged social adaptation.

According to the parents, after effective speech therapy intervention, children even overcome their socio-phobias. They have approved that before the speech therapy the children while being on the street were forced to hug them so that they would not have the opportunity to communicate with others (the situation of avoiding contact was similar to autism, which frightened the parent).

While comparing the results before speech therapy and after it, significant changes were achieved in shy children's behaviour. As a result, during the speech therapy intervention, the children were already "gaining the courage" to walk holding their mothers' hands, and then independently, even a little bit away from them. Such data were recorded in 6 cases out of 23, which were verified during in-depth interviews with parents (in response to the question "How would you describe the manifestations of socio-phobia that were typical of your child?"). These and other similar data were the criteria for this differential diagnosis. Thus, children with autism do not like to be hugged, while a speechless child with the same symptoms, who can be very similar to a child with autism, showed the opposite behaviour - forced to hug him and then quickly got rid of the complex. Something that was not typical for children with autism.

CONCLUSION

This study approved that difficulties in the development of speech in children of preschool age are often not due to disturbances in speech processes and brain structures. Among the children with developmental disorders often it is possible to met self-contained children, children with autism, whose first symptom is a desire to be isolated. Some children who initially show signs of isolation in their behaviour should not be considered as having autism, they can simply be shy children. Shyness is a unique manifestation of behaviour that can seriously impede a child's full development, speech, and socialization. Children with shy behaviour are often misperceived as children with autism spectrum disorders, which negatively affects the content of speech therapy intervention. The elaboration and observance of speech therapy intervention rules promote the need for communication of shy preschoolers, the full development and socialization of the person.

Appendix 1.

DREN WITH SHAY

COMPARATIVE CHARACTERISTICS OF COMMUNICATION FEATURES OF CHILDREN WITH SHAY BEHAVIOUR AND CHILDREN WITH AUTISM

Similarities with autism	Differences from autism

- Are alienated.
- There are no corresponding voice reactions with an adult and peer.
- Emotions are not expressed or hidden.
- They are afraid to be alone in the room with the speech therapist.
- They avoid looking into the eyes of the speaker.
- Some loud noises make them nervous, they close their ears.
- Sometimes they have a unique posture. They hang their head, bend their trunk to the right or to the left, hiding their eyes.
- Avoid new people, public speeches, crowded places.
- They have movements similar to stereotypical movements.
 For example, they rotate.
- Escape from new situations.
- Games have some features.
- They have echolalia.
- Speech may be delayed or may be encountered serious developmental obstacles.
- Difficulty while visiting others, and while accepts guests.
- Prefer to play alone.
- Talking when are alone.
- To avoid unpleasant effects can escape from the territory.
- They do not like when they are touched. For example, they do not like to hold the hand of an adult, peer.
- They may not respond to their name and speak about themselves in the third form of the personal pronoun.
- Have different manifestations of speech disorder, grammatical disorders, poor vocabulary, other difficulties of cohesive speech communication etc. They can make plural forms while adding foreign endings to the word.
- The pronoun "I" is not used and it seems that they do not know it.

- Are alienated, but communicate with a sibling in a typical way that communicates child with normal development.
- Prefer to roll the ball, blob together with an adult for having meaningful and emotional interaction with them.
- They close their eyes while talking: used to avoid but wants to look at the speaker, just do not dare. They look "secretly" (sometimes with one eye) so that he does not see.
- Speak low, but in fact.
- Silently cooperate with an adult.
- As a result of speech therapy, they start firmly to look into the eyes of the speaker.
- Sometimes they speak by giving a general rhythmic picture
 of a phrase or sentence where the words are not heard (for
 example, when we show a picture of a rabbit and ask what
 is depicted, the child answers: "h h h ", while saying "rebbit".
- Do not like to walk alone, want to hug mom or dad.
- The game has not stereotypical nature.
- The directorial game dominates the child speaks meaningfully and alone.
- Knows the functional significance of the objects, recognizes and understands their social relations and existing semantic connections
- The movements are not stereotypical but have a concealing nature, which is overcome as a result of the done intervention.
- As a result of the work, the child's posture is corrected, children stop performing unnecessary, "hiding, closing" movements or stereotypical movements like shaking hands, rotations
- As a result of speech therapy, children begin to occupy the "space allotted to them".
- The pointing gesture is preserved, but the child uses it briefly and timidly.
- Along with the development of speech as a result of special work, they quite quickly start to use "I", as well as other pronouns.
- Echolalia disappears with the development of speech. In addition, they are echolalia typical of the earliest stages of speech development.
- Shy behaviour can have "primary" or "secondary" nature.
 For example, the cause of shyness can be speech retardation, and conversely, shyness can cause speech retardation.

Appendix 2.

SPEECH THERAPY INTERVENTION RULE S FOR WORKING WITH PRESCHOOL CHILDREN HAVING SHY BEHAVIOUR

- While meeting the child for the first time do not keep him/her in the center of attention. Do not ask his name, do not address him directly, do not force him to look into the other person's eyes, etc.
- Do not force him to be alone with the speech therapist. During the next sessions, the parent can sit next to the child, gradually increasing the distance between them.
- Try to avoid physical contact, but use tactile means of communication. Roll the ball, use other moving and rolling games and toys in moderate duration.
- Speak expressively, use interjections in speech, different forms of pre-verbal communication, but pay attention to the child's reactions if they repel the child, reduce or moderate them.
- Do not force the child to verbal communication during the first session for that period, it is enough for the child to show the required answer, etc.
- "Make the child work" by instructing to bring, carry, arrange, transfer, place games and toys.
- Play situations where the child will have to raise his voice. For example, when answering in a low voice, you can say that the bear is asleep, so you have to ask loud what the bear likes so it can hear and wake up, etc.
- Gradually engage in group work where the number of children should be added gradually.
- If the child responds only by rhythmically dividing the word into syllables, nevertheless accept it as an answer and encourage the child, at the same time use the combined speech method.
- If the child shows the picture in response and does not describe the object, function, or event in words, recall the first syllable.
- Play such situations and games that the child has to raise his head. For example, the bag containing his favorite toys can be gradually raised, and he must be able to catch them so that the toys do not "run away". Or first, put the bouncing toys on the floor, then gradually raise them up on the table, on the cupboard, etc.
- Keep toys and pictures at face level when showing them.
- Regularly use constructive games.
- In the later stages of the work, with the help of stimuli, make the child name the object, the function in words, phrases and sentences.
- Before conducting speech therapy refer the child for psychological counselling.
- Organize the actual speech therapy intervention based on specifics of the child's individual development and needs, using speech therapy classical methods and methodic approaches for correcting speech disorders.
- Definitely (regularly) combine speech therapy with psychological support.

REFERENCE LIST

- Bizzari, V., & Spremberg, A. (2019). Shame as a Resonant Emotion.
 The Case of Autism, Spectrum Disorder. in Revista Filosofia Aurora,
 Curitiba, v. 31, n. 53, p. 695-711,
 doi:https://periodicos.pucpr.br/index.php/aurora/article/view/25620/23826.
- 2. Bogachinka, N. A. (2008). Psychologia –konspekt lekcii. M.: Ekismo, 160 s.
- 3. Cameron-Faulkner, T., Lieven, E., & Tomasello, M. (2003). A construction based analysis of child directed speech. Cognitive Science. 27 (6): 843–873.
- 4. Deonna, J., Rodogno, R., & Teroni, F. (2012). In Defense of Shame: The faces of an Emotion. Doi://https://oxford.universitypressscholarship.com/view/10.1093/ac prof:oso/9780199793532.001.0001/acprof-9780199793532:
- 5. Johnson, S. (1804). Dictionary of "English Language".
- 6. Harutyunyan, L.Z. (1993). Kak lechit zaikanie? Moskva, s. 8-12.
- 7. Mishina, E. (2012). Zastenvhiviy rebenok. Kak preodolet strakh obsheniya. Piter, 140 str.
- 8. Murray, B. S., & John, R. W. (2018). Triumph over shyness: Concurring Social Anxiety Disorder, Second Edition //Anxiety Disorders Association of America-ADAA. doi: www.adaa.org.
- 9. Nelson, H. D. (2006). "Screening for Speech and Language Delay in Preschool Children: Systematic Evidence Review for the US Preventive Services Task Force". Pediatrics. 117 (2): pp. 298–319. doi:10.1542/peds.2005-1467. PMID 16452337.
- 10. Sikula, I. N. (2013). Problema zastenchivosti u detey doshkolnogo vozrasta, Obrazovatelnaya socialnaya set.
- 11. Sirenko, R., & Bogachkina, N. (2008). Zastenchiviy malish, M.: Eksmo, 185 p.
- 12. Tsakiris, M. (2017). "The Multisensory Basis of the Self: From Body to Identity to Others". Quarterly Journal of Experimental Psychology 70 (4), p. 597-609.
- 13. Yadov, V. A. (2007). Sociologicheskie issledovaniya, metodologiya, programma, metodi, s. 105

- 14. Zahavi, D. (2014). Self and Other: Exploring Subjectivity, Empathy, and Shame. Oxford, Oxford University Press.
- Zimbardo, Ph. (2005). Zastenchiviy rebenok// Philip Zimbardo, Shirley Redl; per. S angliyskogo E. Dolinskaya, E. - M.: AST Astrel, 294 p.