

VII International Forum on Teacher Education

The Model of Parental Competence in Ontogenesis and Dysontogenesis of Early Speech Development

Marianna A. Muratova (a), Gulnara V. Valiullina (b), Victoria V. Klimenko (c)

(a), (c) *Southern Federal University, 344006, Rostov-on-Don (Russia), 105/42 Bolshaya Sadovaya street,*
mamuratova@sfedu.ru

(b) *Kazan Federal University, 420008, Kazan (Russia), 18 Kremlyovskaya street, GVValiullina@kpfu.ru*

Abstract

Speech is deemed to be a mental process that is formed only in society. Therefore, parents, as a key component of the micro-society, play a pivotal role in the speech development of their children. Speech is formed in stages under certain laws of the psyche. Observing the changes occurring in the child's speech, parents fail to analyze the age-deviation correlation, and thus, miss the time to see a proper specialist. The purpose of this study is to analyze the parents' awareness of their children's speech development and to design a project of correctional and pedagogical competence of parents in terms of impaired and normative behavior. The current research contains all the elements of scientific work, including the stages of ascertaining, formative, and control experiments. At the ascertaining and control stages, a questionnaire and a survey of parents were administered, the diagnosis of children's speech using classical methods was implemented, a qualitative and quantitative analysis of the results was carried out. The formative stage included a description of the parents' competence program as far as speech development is concerned. The article reflects the results of the study and parental experience in ontogenesis and dysontogenesis of early speech development. The content of the program aims at the cutting-edge knowledge of ontogenesis and dysontogenesis of the speech development in young children and the possibility of correction. The finding features the merits of parents' participation in the correction of such a functional system as speech. The current study explores the ways of development of correctional and pedagogical parental competence in speech development of their children. The topical investigation is intended to prime the directions of work for specialists in this field. The materials of this research can be used by speech pathologists, psychologists, speech therapy coaches, students of the direction 44.00.00.

Keywords: competencies, early speech development, correctional and developmental competence, information and educational environment, speech therapists, ontogenesis, dysontogenesis, psychological and pedagogical support of parents.

© 2021 Marianna A. Muratova, Gulnara V. Valiullina, Victoria V. Klimenko

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Published by Kazan federal university and peer-reviewed under responsibility of IFTE-2021 (VII International Forum on Teacher Education)

Introduction

The Russian State Standard of Preschool Education (2013) specifies the requirements for the structure, conditions, quality of program implementation, which indicates:

- family-preschool collaboration
- psychological and pedagogical support to the family and increasing the competence of parents (legal representatives) in matters of nurture and education, protection, and promotion of children's health
- rendering assistance to parents (legal representatives) in raising children, protecting, and strengthening their physical and mental health, developing individual abilities and the necessary correction of impairment.

Following these requirements, there is a need for interaction between specialists and parents aimed at creating favorable conditions for the development of children to meet their individual needs.

Knowledge of the ontogenesis and dysontogenesis of speech development allows you to contact a specialist in a timely manner and create the necessary conditions for the correct speech development of a child at an early age. Parents' involvement and awareness of early development issues were called competence. Thus, the problem of toddlers' parents' competence in speech development dysontogenesis is relevant.

The problem of parental competence in speech development of dysontogenesis is urgent. The upbringing of a child depends on the awareness and involvement of parents in this process. Therefore, it is necessary to pay attention to parental participation in the process of diagnosing and correcting the speech of young children. Psychologists point out twofold outcome: parents are very little involved in the development of children and are not competent in such matters, alternatively, they are very actively involved, but since they cannot separate the reliable and distorted information about the developing organism, then their actions do not always improve or correct any skill of the child. It is necessary to find out how competent the parents are in speech assessment and to adapt the methods of diagnosing and correcting the speech development of their youngsters.

Purpose and objectives of the study

The objectives of the research are:

- 1) to obtain new insights into the teacher-parent interaction;
- 2) to analyze parents' awareness of the peculiarities of children's speech development;
- 3) to design a model for the formation of correctional and pedagogical competence of parents in matters of impaired and normative development in their households.

Literature review

Strebeleva and colleagues (2004), Alexandrova and Vatoropina (2014) subscribe to the belief that the problems of psychological and pedagogical support, its organization and content are of paramount significance.

Collaboration between preschool educational institutions specialists with parents to overcome speech disorders in children in the family is reflected in modern scholarly works. The issues of interaction of specialists with the family are in the limelight of Levina (1966), Miklyaev and Miklyaeva (2008), Mastjukova (2004), Filicheva (2017), Chirkina (2013), Sheremetyeva (2005).

Many authors working in this field are monolithic in their stance that psychological and pedagogical support of the family is a critical condition for the success of the corrective influence on the child, and it promotes continuous communication between specialists and parents. All those factors contribute to the timely adjustment of the individual route of the child in the educational process.

A plethora of domestic and foreign educationalists and psychologists scrutinized the problem of forming parental competence in psychological and pedagogical support of toddlers. The prepotency of early development from the point of view of theory and practice in domestic science was reflected in a host of both Russian and overseas authors, such as Bozhovich (1979), Zaporozhets (1986), Leontiev (2005), Lisina (2009), Piaget (2003), Stern (1998). The concepts associated with the development of speech and the problem of the formation of thinking and speech by Vygotsky were more clearly discriminated. The multitude and complexity of factors affecting bringing up children with disabilities offer new potential for addressing this problem Tkachova (2008). However, the process of forming parental competence in ontogenesis and dysontogenesis of early speech development has not been sufficiently studied, although such researchers as Sikorsky (1904), Sully (1912), Drummond (1910), Buller (1930) discussed the influence of the speech environment on the development of a child. Rooted in foundational research, this investigation introduces novel perspectives that parlay the experience and understanding of the pressing and enduring problem – upbringing children and the impact of adult participation in this process Wiesel (2018), Bezrukikh (2000), Chernigovskaya (2003), Brenifier (2016).

Methodology

When choosing the methods, we were guided by the need to conduct an in-depth study of the parameters of parental competence, notwithstanding the features of speech development in young children. To analyze parental involvement in the development of the speech of their children, we took into account the background of parents, the anticipation of parents from a speech therapist, the desire to receive information about the normative development and manifestations of impaired speech development. The study has laid out meticulously leveraging the following methods:

- 1) The test "Family education strategy" by Ovcharova (2006);
- 2) "The nature of communication between parents and children" by Sheremetyeva (2005). This diagnostic toolkit allowed us to develop a conversation plan that contained formal information about family composition, parental education, and social status. As well as significant information, topics of interest were identified for further communication with parents, the attitude of parents to the process and the expected results of speech development were revealed.

By exploiting the above methods, we have devised the questionnaires to assess the four components of the formation of parental competence in matters of impaired and normative development. An important direction at the stage of diagnostics were questionnaires to study the various factors that make up the competence of parents. The motivational factor was used to determine the presence of a stable internal motive for interacting with a specialist in the speech therapy process. The conscious desire is necessary to independently replenish the stock of special knowledge and skills.

The questionnaire survey for the study of the cognitive factor included an analysis of the understanding of the goals of speech therapy activities for the development of children's speech; the presence of a certain minimum of theoretical knowledge about the normal course of speech development of a young child; understanding the basic technical terms often used by a speech therapist in communication with parents. The next analyzed component is the activity factor, reflecting the peculiarities of the formation of the basic practical skills necessary for independent work with the child; the ability to organize your child in class. The last criterion of the analysis was the reflexive factor, which demonstrated the ability to assess the productivity and efficiency of the parental work. The questionnaires included questions containing several options and had a quantitative and qualitative assessment with the definition of high, medium and low levels of parental competence formation in the development of speech in young children.

The second direction of the survey was the peculiarities of speech development in young children. We exploited the methods based on a broad array of studies of Arkhipova (2017), Strebeleva et al. (2004), Razenkova (2003), Sheremetyeva (2005). The study of speech development included four interrelated sections that have a direct impact on the formation of non-verbal and verbal means of communication: psychophysiological components of mastering speech at an early age; cognitive components; natural speech environment; the child's own language production. Next, we enumerated the sections by which an in-depth study of the speech development of children in the experimental group was built:

- Studying the psychophysiological components of speech development includes visual perception, non-speech auditory perception, phonemic perception, understanding of the adult's instructions; motor prerequisites for articulation.
- Investigating cognitive components involves consideration of the formation of the child's subject awareness, the state of mentalization of play actions, the child's ability to volitional efforts.
- Natural speech environment at the stage of diagnosing the level of parents' competence.
- A child's own language production is a study of the state of non-speech means of communication, initial language acquisition.

This direction made it possible to substantially characterize various levels of speech development from normative to developmental delay, which in turn had the following gradation: slight delay in speech development, significant (medium) delay, severe delay in speech development. The study involved 10 children aged 2,1 years old - 2,9 years old, and 10 parental couples (a mother and a father) of these children. The experiment was carried out on the basis of the Municipal budgetary preschool educational institution of Rostov-on-Don "Kindergarten No. 293".

Results

The structure of our research involved the study of the pedagogical competence of parents in the selected components, the peculiarities of the speech development of children in the experimental group. The main goal of our study, based on the diagnostic data obtained, is to develop a model for the formation of correctional and pedagogical competence of parents in impaired and normative development at home.

The present experimental study is judged as valid reflecting the core issues in the speech pathology of toddlers. Against the backdrops of the research, it was found the following results at the diagnostic stage. As for the social status of parents, 80% of parents have higher education, 20% incomplete higher education, secondary specialized training.

40% of parents (mothers) work in educational institutions, 50% of parents are managers, the rest are unemployed (mothers are housewives). An average standard of living and income are idiosyncratic for many parents. To identify the level of parental competence, 4 questionnaires were analyzed focusing on the levels of pedagogical competence of parents with young children.

Analyzing the results of evaluating the motivational component, we obtained the following data. 70% of parents showed a high level of motivation, responding with the highest possible scores. This suggests that these parents are motivated to work together in correctional speech therapy and are tuned in for a positive result. 30% of parents, gaining a fairly large number of points (17-20 out of 26), still showed an average level of motivation. Parents are prone to a positive result, but since they do not have knowledge in the field of speech development of young children, and cannot organize classes with children on their own, they feel insecure. For this component, Figure 1 depicts the levels of formation of the motivational component.

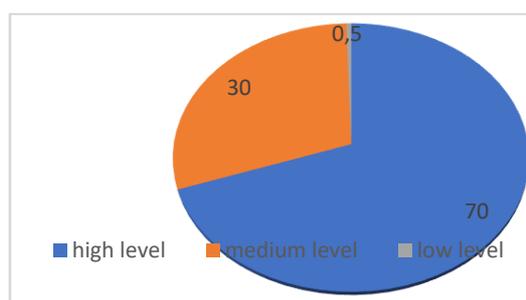


Figure 1. Formation of the motivational component in the parents of the experimental group

The next step is to identify the results of the cognitive component formation. Most parents are not familiar with the terminology: phonemic hearing and auditory memory, the syllabic structure of the word, articulatory motor skills. Half of the respondents found it difficult to answer the question about the stages of the formation of speech development in young children. 4 people would like to get advice from a speech therapist to clarify issues related to the speech development of a young child. By and large, we can conclude that the average level of the formation of the cognitive component prevails in the parents, although the distribution of low and high scores is equal. But even the subjects with a high level need a specialist's help to deal with the meaningful part of the correctional process. The results are vivid in Figure 2.

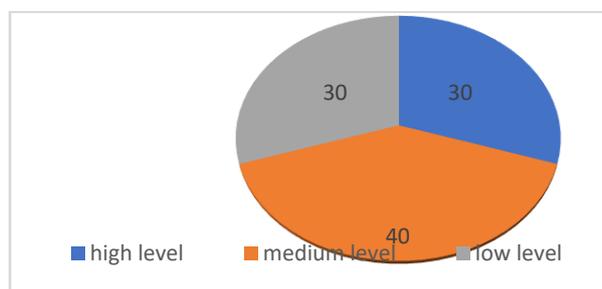


Figure 2. Formation of the cognitive component

Tackling the data obtained during the survey of parents on the formation of the activity component, it was found out that in six families the role of teachers is performed by mothers, it was mothers who organized games with children.

The current study revealed that the majority (60%) of parents do not work with their children, do not read books, do not play with their child, do not restrict the use of gadgets, do not track speech patterns when talking with their child. The results presented in Figure 3 show the prevailing low level of interaction with a child, which negatively affects their speech development.

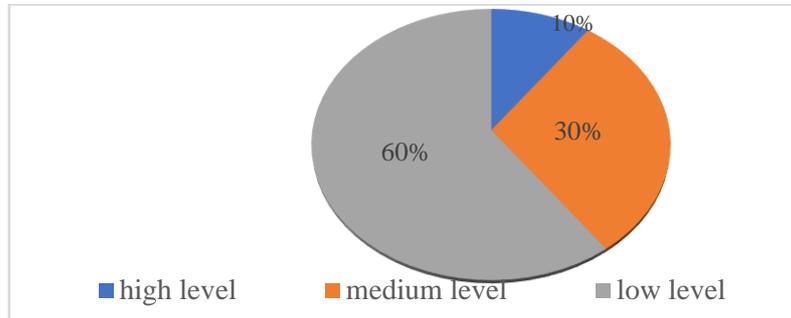


Figure 3. Formation of the activity component of the parents of the experimental group

As far as the reflexive component is concerned, we see that most parents (60%) do not attach importance to the stages of the early development of a baby up to one year old (humming, babbling, the time when the first words appear), do not monitor the state of speech in a later period, after two years (first phrases and sentences). However, they perfectly understand the fact that if a child does not have speech at the age of over 2,6 years old, then this is a signal of speech disorder. The data of the reflexive component are demonstrated in Figure 4.

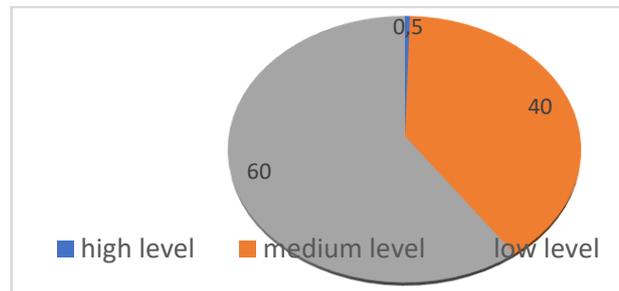


Figure 4. Formation of the reflexive component of the parents of the experimental group

Exploring the features of the reflexive component, we revealed the ability of parents to diagnose their child's speech. It turned out that some of the parents did not understand the tasks and did not get involved in the work, but the other part of the group showed an average level of understanding, partially inferring the tasks and the children's answers. This indicates that it is difficult for parents to analyze the speech of their children, nevertheless, parents should be aware of the normative development of various aspects of speech, in order to begin correctional work on time. The results of the diagnosis of children's speech by parents are shown in Figure 5.

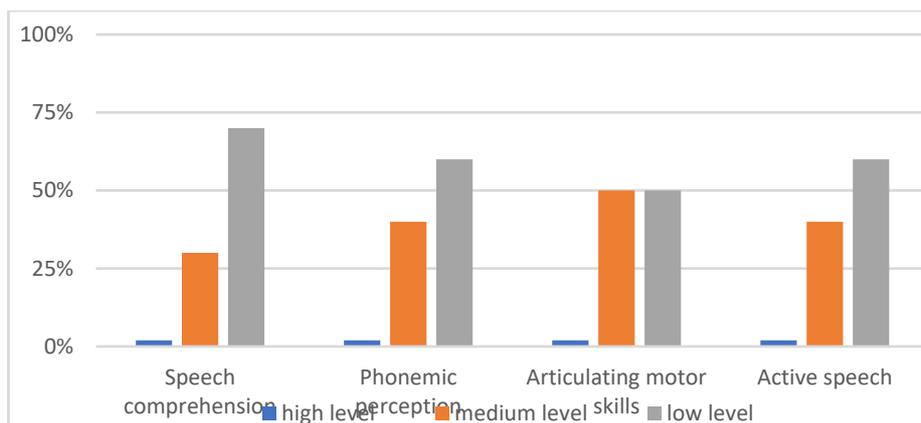


Figure 5. Diagnostics of children's speech by parents

The general results of diagnostics of the correctional and pedagogical competence of parents define this group as typical for the majority of families with young children. A small number of parents (40%) admit an incomplete understanding of speech therapy terminology. The parents of this group need advice on diagnostics and classes. Parents do not understand the importance of pronouncing their actions dealing with children. But the high criteria of the motivational component help them fix their positions at the average level of correctional and pedagogical competence. The vast majority of parents (60%) showed a low level of competence due to the fact that the criteria for all components were insufficiently formed. These parents do not show proper attention when meeting and parting with a child in kindergarten, do not ask the teacher how the child's day went. The child often uses gadgets at home to read fiction several times a month.

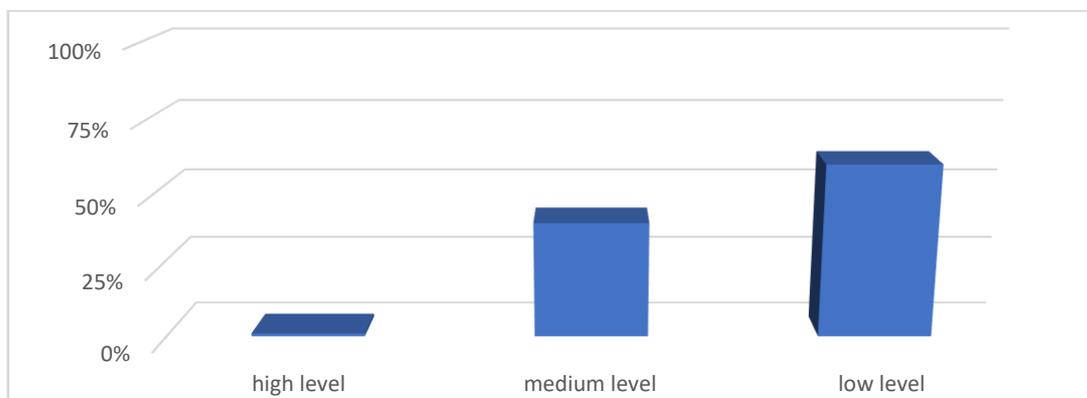


Figure 6. The level of correctional and pedagogical competence of parents of young children

Distilling our results in the second direction, we carried out the speech check-up of young children. The experiment was conducted in the morning in a calm, benevolent atmosphere, together with parents, which made it possible to achieve the goal of the experiment. The rapport was established with the subjects, an individual and differentiated approach to each child was carried out. Each child was subject to careful examination. More than half of the children in the experimental group had a neurological nature of delayed speech development and an erased form of dysarthria. A pool of children whose positive neurological status is documented, lagged in speech development by several epicrisis periods, which indicates a delay in speech development.

The check-up was split into the following parts: speech understanding, phonemic perception, articulatory motor skills, active speech, syllable structure, sound side of speech. Figure 7 shows the results of the study of all diagnostic parts.

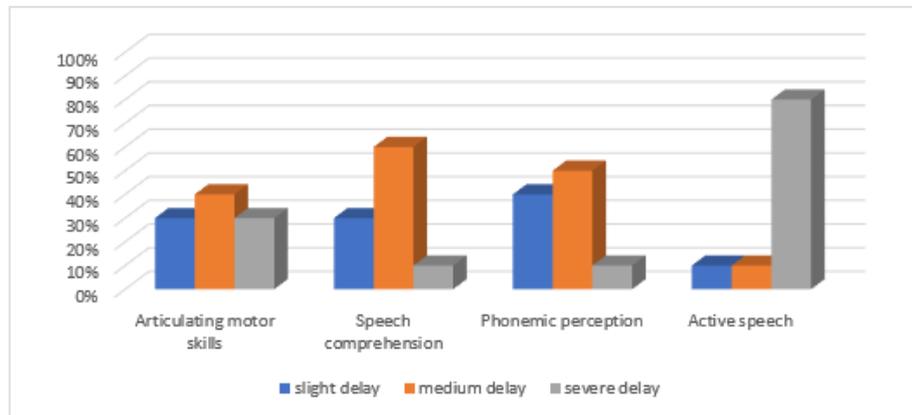


Figure 7. Speech therapy diagnostics of young children

Regarding science-backed results, there is a delay in each parameter in speech development. Articulatory motor skills, understanding of speech and phonemic components have soared, while the active speech was not formed.

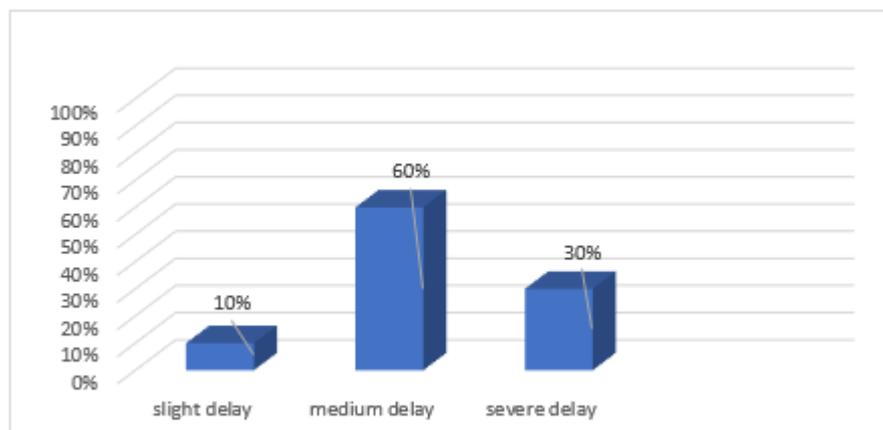


Figure 8. The general level of speech development of children in the experimental group

If we compare the results of young children's speech checked by parents and a speech therapist, we can see that the parents' results do not correspond to reliable evidence of children's speech development. Some indicators were overestimated, others were underestimated. Apart from ignorance in the diagnostic procedure, the parents lack the true and objective opinion of their children's development. The results are shown in Figure 9.

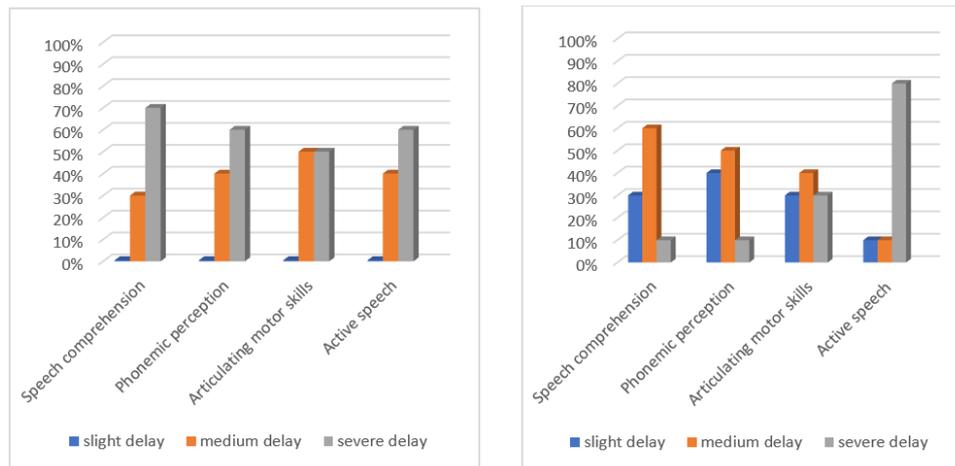


Figure 9. Comparative analysis of speech therapist and parents

Our approach has gained fresh acceptance lately with the reawakening of speech pathology science. The main goal of our experiment was to develop a model aimed at parents' correctional and pedagogical competence in terms of the early speech development of their babies. The model was included in the program for correctional and pedagogical competence of parents of young children in speech development. The structure of the program is made up of the target, content, and organizational sections. The tasks in the target section have been defined:

- 1) to increase the motivation of parents for correctional work by increasing confidence in their actions to form the speech skills of young children.
- 2) to expand the parental correctional and pedagogical knowledge and skills in speech development of children.
- 3) to teach parents methods and techniques for assessing the effectiveness and efficiency of the quality of correctional and pedagogical influence.

When developing the program, scientific approaches to the teaching and development of the child were taken into account:

- activity approach (Leontiev, 2005)
- personal approach (Vygotsky, 2015; Elkonin, 1974)
- cultural and historical approach (Vygotsky, 2015)

The program was based on scientific principles:

- the principle of developmental education;
- the principle of scientific validity and practical applicability;
- the unity of educational, developmental, and teaching goals and objectives. Knowledge, skills, and abilities are applied to raise young children.
- a complex-thematic principle of building an educational and developmental process.
- solving educational problems in the joint activities of an adult and a child.

In this part of the program, the main directions of work to improve the correctional and pedagogical competence of young parents were highlighted: diagnostics by parents of young children; counseling for parents; correctional competencies in speech development in toddlers. To build more productive work, we prescribed planned results that covered the process of interaction between a speech therapist and parents, tracked the formation of parents' motivation to work with a child, and identified the ability to evaluate their actions from the point of view of the correction process.

In the content section, we underscored the educational process. We employed social media to improve the correctional and pedagogical competence of parents. A page on Instagram was created, which posted information about upcoming webinars, consultations, as well as workshops on the implementation of the activities included in the curriculum. In this section, three criteria were implemented:

- 1) diagnostic - aimed at the formation of a reflective component by mastering the skills of parents to diagnose the speech of young children. As part of this criterion, we recorded video instructions on how parents can diagnose children's speech. A speech diary was prepared for parents, where they indicated the achievements of their children.
- 2) The methodological criterion revealed the conditions for parents to acquire knowledge and skills on the formation of speech abilities of young children. As part of this block, webinars were recorded and broadcast on the topics of speech development in young children, which we will consider in more detail when describing a set of measures for a formative experiment. Also, together with the parents, we determined the optimal time for speech development classes at home. To improve the efficiency of the educational process, we have developed didactic aids for the formation of the ability to compose phrases, replenishment of the vocabulary with various parts of speech of the main lexical topics, the development of the phonetic system and onomatopoeia.
- 3) Within the framework of the consultative criterion, consultations were developed on issues of interest arising from parents of young children in the process of carrying out correctional and pedagogical measures to increase the level of speech development of young children. Above all, each parent could ask questions that arise in the process of completing assignments and receive feedback in the general chat.

In the content section, we included calendar-thematic planning of classes for parents with children on different topics. For thematic planning, they relied on the correctional program for children with speech disorders (Nischeva, 2004) "Organization of correctional and developmental work in the junior speech therapy group of the kindergarten." In the structure of the work, the schedule for classes, the number of tasks and a thematic plan were presented.

The organizational section included a description of the correctional and developmental environment that had to be created at home by the parents. Educational toys, didactic aids, children's musical instruments can be used to develop speech. In addition, methodological and didactic materials were available, containing a variety of workbooks, manuals and books.

All parts and blocks of the program constitute the model of parental competence in ontogenesis and dysontogenesis of early speech development. The model for the formation of correctional and pedagogical competence in speech development is shown in Figure 10.

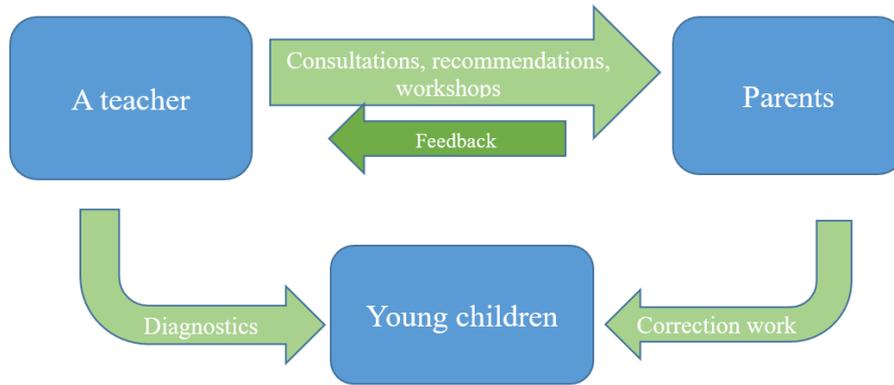


Figure 10. Model of support for families with young children employing correctional and pedagogical competence in speech development.

An important basis of the model is the interaction between three objects: the child - the parents - the teacher, and the teacher and the parents direct their attention to the child. Analyzing the models of interaction between a teacher and a parent in the process of overcoming violations in a child, we see that they are aimed at psychological support, creating motivation to work with a child, and shaping acceptance of a child with developmental disabilities.

The novelty of this model is a teacher conducts diagnostics and identifies the characteristics of the child, then the parent carries out diagnostics accompanied by a specialist. After that, the most crucial stage for parents is correctional work. This model of support indicates that the teacher is an observer who allows parents to affect the development of the speech of their children. The teacher-speech therapist is a mentor for the parent, organizing consultations, giving detailed recommendations, conducting workshops, and the parent, in turn, gives feedback, asking questions to the teacher, showing the results of his new activity in the role of “teacher” for his child.

We have developed various activities for parents: consultations, seminars, training masterclasses; live broadcasts, joint exercises via Internet, consulting in the WhatsApp group; webinars. A comparative diagram of the levels of competence at the ascertaining and control stages of the experiment is presented in Figure 11.

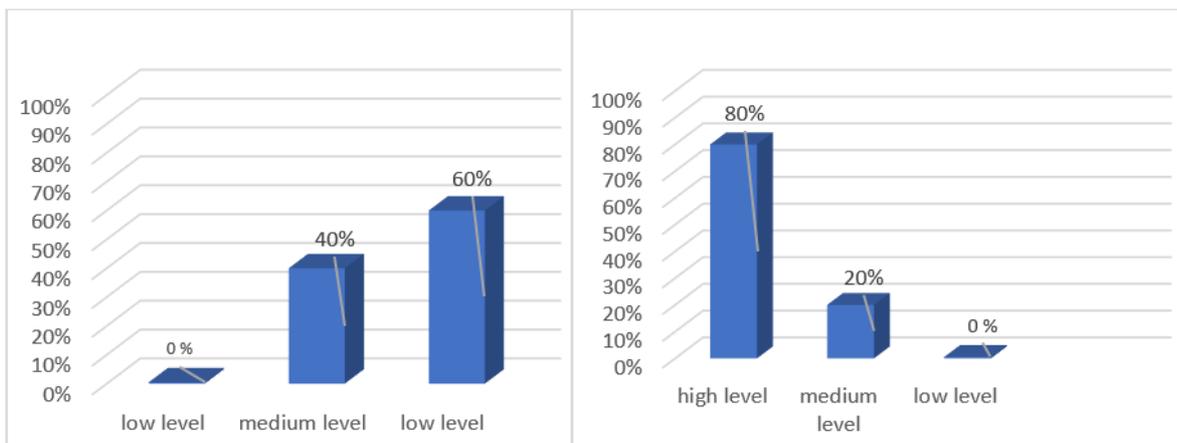


Figure 11. The level of parental correctional and pedagogical competence at the stage of ascertaining and control experiment

Such a variety of forms of interaction and informative practice-oriented communication with parents made it possible to obtain, at the end of the experiment, fairly high results for each formed component. The model we have chosen and the described program of ontogeny and dysontogenesis of early speech development showed the planned results.

Discussions

In this research, we conducted multiple studies to identify and examine how current methods affect junior speech development. We administered different surveys, questionnaires, and methods to the respondents. The advantage of engaging activities produces certain outcomes.

Modern parents make sure that their child's development is in accordance with generally accepted norms. Some parents may notice a delay in the development of their child in time, other parents are not knowledgeable of this disorder. At the beginning of our experiment, we identified various level gaps (medium and low) in the competence of parents regarding the development of the speech of young children. However, the common feature was self-correction of speech impairments. Our approach helps parents to understand the peculiarities of normative and impaired development, in this case, speech. The "Model of accompanying families with young children in correctional and pedagogical competence of speech development" helps to build a productive relationship between a parent and a specialist. On the one hand, parents could acquire and use new knowledge and skills in the field of child development, on the other hand, a specialist guided the parent and corrected his steps.

The model we have developed relates to the relationship between a parent and a specialist, which is aimed at increasing the competence of parents in speech development in ontogenesis and dysontogenesis. Participation in the program of forming pedagogical competence, allows parents to select methods of primary diagnostics and think over the main directions of correctional work in accordance with normative development. Systematization and adaptation of methods of diagnostics and correction of speech development in young children allow achieving positive dynamics in correctional work, taking into account the versatile study of children, and tracking the results both by specialists and parents.

At the control stage of the experiment, the high level of parents' competence was confirmed not only by questioning adults, but by high results in children who began to understand the speech of others better, their vocabulary increased, a lot of sounds appeared in their speech, and in general, the speech of children became more expressive and understandable to others.

Conclusion

The outcome of the longitudinal study has some significant implications. The current finding holds great promise for speech therapists, educators, and parents. The findings in the present research have a universally unidirectional positive effect of techniques on junior speech development. The described model of interaction between a speech therapist and a parent, included in the program for correcting the speech of children, makes it possible to increase the correctional and pedagogical competence of parents in the development of speech in juniors.

The results of the final diagnostics of parents and children showed a positive dynamic of the speech development of children. The components of the pedagogical competence of parents that we have selected, comprehensively cover the activities of adults aimed at improving the speech of their young children. Thus, the work on the motivational component increased the level of parents' motivation for active joint work with the child. The cognitive component allowed parents to be theoretically prepared in matters of normative and dysontogenetic development of speech.

The activity component made it feasible to independently organize classes with the child. The reflexive component revealed the ability of parents to assess the level of speech in children. Parents began to better understand and highlight difficulties in nurturing a child. In conclusion, all these parameters influenced the quality of speech development in young children.

Acknowledgements

This paper has been supported by the Kazan Federal University Strategic Academic Leadership Program.

References

- Alexandrova, L.Yu., & Vatoropina, S.V. (2014). Mother as a subject of speech development in a young child. *Concept* (13), 41–45. Retrieved from <http://e-concept.ru/2014/64090.html>
- Arkhipova, E.F. (2017). *Speech pathology work with children of a young age*. Moscow: AST: Astrel.
- Bezrukikh, M.M. (2000). *Problem children*. Moscow: URAO.
- Bozhovich, E.D. (1979). *Psychological Peculiarities of Adolescent Personality Development*. Moscow: Znaniye.
- Buller, K. (1930). *A sketch of a child's moral development*. Moscow: Rabotnik Prosvescheniya.
- Brenifier, O. (2016). *The art of teaching through discussion*. Moscow: Mosaika-Sintez.
- Chernigovskaya, T.V. (2003). Children with Specific Language Disorders in terms of Contemporary Discussions in Linguistics and Psychology. *Proceedings of the International Conference after A.R. Luria, (189-194)*.
- Chirkina, G.V. (2013). *Methods for examining children's speech*. Moscow: Vlados.
- Drummond, W. (1910). *An introduction to child study* (translated from English). Moscow: Prosvescheniye.
- Elkonin, D.B. (1974). *Psychology of teaching a junior school student*. Moscow: Prosvescheniye.
- Filicheva, T.B. (2017). *Elimination of the general underdevelopment of speech in children of preschool age*. Moscow: Ayris-press.
- Levina, P.E. (1966). *Features of acoustic use in children with speech impairments. Development of the psyche under conditions of sensory defects*. Moscow: Prosvescheniye.
- Leontiev, A.N. (2005). *Activity. Conscience. Personality*. Moscow: Smysl, Academy.
- Lisina, M. (2009). *The formation of a child's personality in communication*. St. Petersburg: Piter.
- Mastyukova, E.M. (2004). *Family education of children with impairments*. Moscow: Vlados.
- Miklyaev, N.V., & Miklyaeva, Yu.V. (2008). *Preschool pedagogy. Theoretical and methodological foundations of correctional pedagogy*. Moscow: Vlados.
- Ministry of Education Order «On approval of the federal state educational standard for preschool education» № 1155 (October, 17th, 2013). Retrieved from Ministry of Education of Russian Federation: <https://docs.edu.gov.ru/document/7dcd2fd1d14f608ec97e9ef6699f99ae/download/2037/>

- Nischeva, N.V. (2004). *Organization of correctional and developmental work in the junior speech therapy group of the kindergarten*. St. Petersburg: Detstvo-Press.
- Ovcharova, V.R. (2006). *Parenting as a psychological phenomenon*. Moscow: Psychological-social Institute.
- Piaget, J. (2003). *Psychology of Intelligence*. Moscow: Peter.
- Razenkova, Yu.A. (2003). Ways of corrective work with children of the first year of life in the conditions of a child's home. *Almanac of the Institute of Correctional Pedagogy of RAE*, (6). Retrieved from <https://www.alldef.ru/ru/articles/almanah-6/rannij-vozzrast-vypusk-chetyre-67>
- Stern, V. (1998). *Differential Psychology and Methodology*. Moscow: Nauka.
- Strebeleva, E.A., Mishina, G.A., & Razenkova, Yu.A. (2004). *Psychological and pedagogical diagnostics of the development of children of early and preschool age*. Moscow, Prosvescheniye.
- Sikorsky, I. A. (1904). *About the treatment and education of underdeveloped, retarded and feeble-minded children*. 2nd edition. - Kiev: Lito-tipografiya I. N. Kurshev i K.
- Sheremetyeva, E.V. (2005). *Ontogenesis of speech activity: norm and pathology. Pedagogical approaches to identifying delayed speech development at an early age*. Moscow: Prometey.
- Sully, J. (1912). *Educational psychology*. Translated from English. Ed. A. Grombach. Moscow.
- Tkachova, V. (2008). *Family of a child with developmental disabilities. Diagnostics and counseling*. Moscow: Knigolub.
- Vygotsky, L.S. (2015). *The problems of speech pathology*. Moscow: Prosvescheniye.
- Wiesel, T.G. (2018). Features of correctional work in cases of speech perception disorders by ear. *Samara Scientific Bulletin*, 1(22).
- Zaporozhets, A.V. (1986). *Selected Psychological works*. Moscow: Pedagogics.