

CHARACTERISTICS OF GAME ACTIVITY ORGANIZATION AND ITS INFLUENCE ON SPEECH DEVELOPMENT OF CHILDREN WITH MODERATE MENTAL RETARDATION

DOI: 10.24234/se.v7i2.7

AUTHORS' DATA

Lilit Saratikyan, PhD, Associated professor, Chair of Special Pedagogy and Psychology, Khachatur Abovian Armenian State Pedagogical University, Republic of Armenia

Contacts: saratikyanlilit41@aspu.am

Zaruhi Harutyunyan, PhD

Chair of Speech and Rehabilitative Therapy, University lecturer

Khachatur Abovian Armenian State Pedagogical University, Republic of Armenia

Contacts: h.zaruhi@gmail.com

ABSTRACT

This research aimed to explore the organizational features of play activities of children with moderate mental retardation and its impact on their speech development. The studies were conducted among 144 children with moderate mental retardation aged 7–18-year-old living in specialized orphanages and 40 educators.

The research methodology was based on the combination of qualitative and quantitative methods including observation, conversation, interview, and validating scientific experiments for data collection. The use of selected data collection methods helped to observe the general activities of children and to obtain data on the specifics of their play activities both from children and the educators working with them.

As a result of validating scientific experiments, patterns of play activities of children with moderate mental retardation, and their playing abilities were recorded, and the most frequently used games and their influence on the development of children were revealed. The regulation of the day, the time allotted for games during educational and speech development classes, the setting, and the reasons related to application features were also exposed. The results of the study stated, that in the list of games used during remedial and speech development activities in a specialized orphanage, such as verbal, staged, role-playing, speech therapy games and motion games were almost absent.

In 5 out of 15 studied groups, 2-3 game exercises of speech therapy were used, about the same number of sports exercises and word games. It was also recorded that the tutor spent approximately

33% of the game time (1 hour) explaining each game, 17% on individual work, 28% on correcting mistakes and other corrective work, and on the game itself, it was used only 22% of the time which negatively affected the effectiveness of using games. It has been found that in insufficient conditions of the organization of game activities, the effectiveness of corrective educational work decreased, and the development of speech was delayed.

Keywords: *game behavior, wandering behavior, game activity, didactic game, plot game, motion game, board game, word game, game-staging, role play, speech therapy game.*

INTRODUCTION

Nowadays the demand for the humanization of education is still a global issue throughout the world. It led to new challenges to public education, which was a serious motivation, especially for increasing the organizational efficiency of educational processes for children with psycho-physical developmental disorders and meeting the requirements of universal educational formation (Banks, Shevellar, & Narayanan, 2023; Black-Hawkins, Florian, & Martyn, 2007; Francisco, Hartman, & Wang, 2020).

Today, when the legal requirements of international conventions emphasized the ethical issues of society's development and society was fighting for the rights of persons with mental retardation to be fully included in educational and social life, the issues of developing specific tools for the development of speech and performance of persons with moderate mental retardation were still vaguely outlined (UNESCO, 2017; UN, 2016).

While describing the characteristics of play activities of children with moderate mental retardation, completely different play activities could be noted in compliance with the play activities of children with normal development. Consequently, based on above mentioned the study of the play activities' characteristics of children with moderate mental retardation became the bases for current research.

The speech development of children with moderate mental retardation, considered to be a tool for communication, thinking, and behaviour regulation, remains the main problem that hindered the independent life and activity of persons with moderate mental retardation.

The analysis of conducted research had shown that these children's speech development was most effectively organized during game activities. However, despite these wide possibilities, almost no scientific research had been implemented to explore the directions of speech development through games for children with moderate mental retardation, and the game systems used in the pedagogical process were unstable, primitive and uncoordinated.

The urgency of this problem is based on the fact that today there is a deep gap between the development of game technologies that were implemented in professional support systems and the

accounting of the features of the game literacy of this group of children and serious scientific justifications for their application (Kara & Cerkez, 2018; Nazirzadeh et al., 2017; Sari et al., 2020).

It was no secret that children with mental retardation, due to insufficient formation and development of verbal communication skills, had difficulty building their lives, carrying out independent activities and being included in educational processes. For this reason, many authors gave the psycho-pedagogical characteristics of these children, while mentioning the inertness, passivity and indifference to the activity (APA, 2013; Maller, 2000; 1986; Lipakowa, 1983).

However, especially in the way of solving the complex problem of preparing children with moderate mental retardation for life, the issues of improving the content and application aspects of the pedagogical support aimed at overcoming speech development and verbal communication difficulties become more essential and targeted. Data from scientific research and applied psycho-pedagogical approaches required that the training organized for the development of the speech and communication of these children were based on the child's developmental potential and preserved opportunities.

The game was a form of children's activity that stimulated the body's compensatory mechanisms at both biological and social-psychological levels (Vigotski, 1983). Also, for children, play is considered a primary occupation that is very important and gives way to the development of motor skills, language and cognition. At the same time participation in play occupation comprised to take part, to feel included, to have choice over what to take part in and to achieve a meaningful goal (Hoogsteen & Woodgate, 2010).

The study of the methodical system for developing speech and communication abilities of children with moderate mental retardation showed that speech structures were mastered only in practical situations, and the requirements of training sessions were learned in game situations. Play was considered the main, accessible and effective means that can shape and develop the speech and communication needs of these children. The game also provides a wide opportunity for sensory integration, which is extremely important and decisive in the formation and development of speech in children with moderate mental retardation (Ayres, 1991).

Taking into consideration the fact that speech development which was implemented during game activities also had wide possibilities for psycho-diagnostic and effective and natural assessment of personality functionality highlighted new challenges for deeper exploration since this type of approach is considered to be a mean for developing speech of a child with moderate mental retardation.

Thus, several scientific and pedagogical arguments confirmed that the problem of speech development and play activities of children with moderate mental retardation not only lost its relevance but also became more emphasized in the educational process. This phenomenon was also explained by the intensively developing inclusive processes in Armenia, which expand the opportunities for

socialization of all, including children with moderate mental retardation. In addition, several other professions (occupational therapy, art therapy, etc.) have developed in recent years, which has become an incentive to introduce new types of professional support in the education system. All these circumstances caused the need for the creation of modern methods, means, psycho-pedagogical techniques and methodologies (Kolupaeva & Taranchenko, 2016; UNESCO, 2020). Well known that especially while working with children with moderate mental retardation, the tools of inter-professional cooperation considered those programs that were game oriented. Based on the above mentioned this research aimed to study the organizational features of play activities of children with moderate mental retardation and its impact on their speech development.

LITERATURE REVIEW

The theoretical analysis documented that modern approaches to correctional work applied to children with mental retardation were anchored to the "law of currentness" of leading activity (Elkonin, 1978). It was known that the entire activity of children with mental retardation in early and preschool age was formed by delay and in all other stages of development proceeds with several disorders (Mikshina, 2001). They leave their negative influence on the ability to relate to the material world, form requirements to recognize it and orientate within it.

For this reason, to form ideas about the surrounding world for children with intellectual development disorders, scientists suggest using didactic games and exercises, which were aimed first at the formation of the requirements of emotional contact with an adult and sensory education, and then at the development of speech and thinking (Hovyan, 2003; Iljuk, 2001; Pospelova, 2019). The patterns revealed during the content analysis of the games played with children with mental retardation showed that enough games and game exercises were used during the activities for developing their speech, however, they were organized mainly along with the general system of games used for cognitive activity and for developing thinking (also combined) (Cano, Garcia-Tejedor & Fernandez-Manjon, 2015A). Despite this, progressive special pedagogues developed and presented the main directions and themes of play education for children with mild mental retardation in the programs of special institutions over the years (Bravo, Ojeda-Castelo & Piedra-Fernandez, 2017; Stebeleva & Bratkova, 2000).

Speaking about separate types of games, Bondarenko (1991) noted that the didactic game, as a means of learning, consisted of 2 main parts: educational (cognitive) and game. However, the observations showed that the above-mentioned goals were not specified in the games used with children with moderate mental retardation, which reduced the effectiveness of the game. Many authors believed that the best way to overcome the difficulties of full perception of children with moderate mental retardation was a didactic game that allowed the developing children's visual thinking and the volume of comprehension. Kataeva and Strebelyova (1998; 1993) also emphasized this circumstance, noting.

"The correct development of comprehensive perception also prepares some aspects of causal thinking" (15, 1993, p.10).

Meanwhile for children with the most profound intellectual development disorders corrective and developmental work had different content. It was notable that in the work carried out with children of this group, pedagogues and educators still use outdated programs and methods, ignoring some modern problems and requirements of special pedagogy (Maller & Cikoto, 2003).

Based on the above-mentioned, the main direction of this research was to practically study the play activities of children with moderate mental retardation and its characteristics, revealing its influence on the development of speech.

METHODOLOGY

For the current research, the groups of children with mental retardation from specialized orphanages were selected who were able to perform certain activities and received remedial treatment. A depth interview with the educators of specialized orphanages was used to explore the conducted remedial training sessions with children, during which they tried to use games.

The use of combined qualitative and quantitative methods discovered the main types of games that were most frequently used in educational processes (Creswell & Creswell, 2017). Group classes, children's play behaviour and activity in general were observed for about a year. Validating scientific experiments made it possible to record the types of games used for speech development of children with moderate mental retardation, the peculiarities of their use, and the difficulties arising in the game-playing process.

Based on the subject of the research, the studies were carried out in 3 main directions:

- analysis of the setting of the organization of gaming activities
- study of play behaviour of children with moderate mental retardation
- analysis of game types and the effectiveness of their application.

DATA COLLECTION AND PARTICIPANTS

A total of 144 children with moderate mental retardation aged 7-18 years old were included in the study, composing a total of 15 groups. Based on the children's developmental characteristics, the groups of children with mental retardation were divided into three subgroups: mild, moderate, and severe. A total of 40 educators participated in this research.

In the frame of the studies, the day schedule was also examined, where the number of hours allocated to the development of game activities, the system of game tools for organizing educational and speech development activities, the types of games used in the orphanage and their settings were studied.

On an annual basis, the lessons were conducted in groups, children's activities were observed, and interviews were conducted with pedagogues to explore the main content of children's playing abilities, the types of games used in groups, their difficulty, effectiveness and impact on speech development.

DATA ANALYSIS

Data analysis was based on the descriptive analysis of validating scientific experiments directed to explore the types of games used during remedial and speech development activities in a specialized orphanage (Marczyk, DeMatteo & Festinger, 2010). The study of observations and records fixed the use of speech therapy games and sports exercises for developing speech and communication in children with moderate mental retardation.

Data analysis outlined the features of play behaviour and organization of play activities of children with moderate mental retardation and the impact on the effectiveness of their speech development. Preliminary studies had shown that even children with moderate mental retardation under special learning conditions can master individual game actions, complete the game with help, and acquire general verbal abilities. This circumstance allowed us to assume that speech development activities could be combined with game activities.

RESULTS/ DISCUSSION

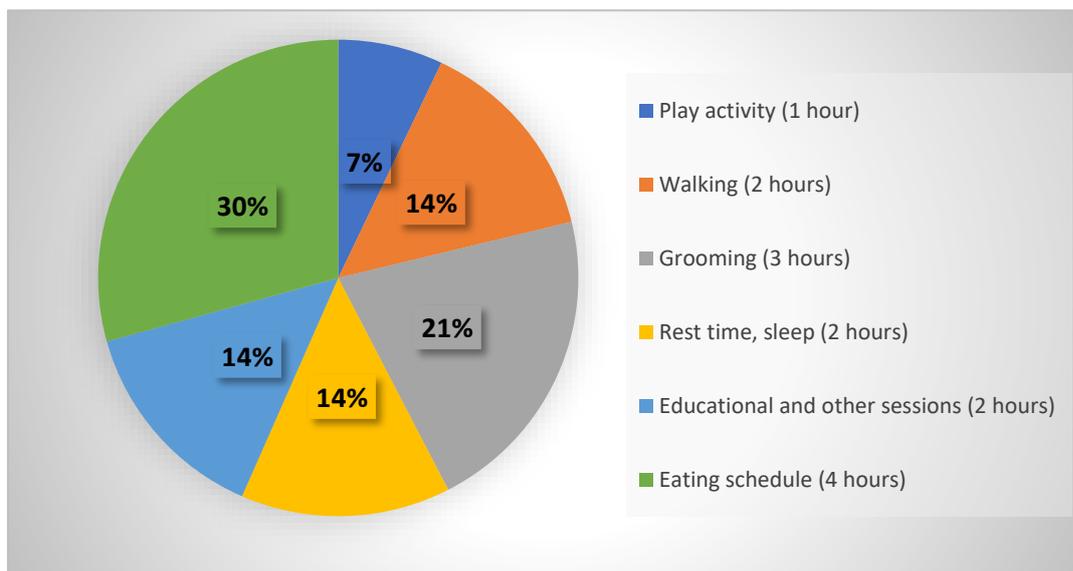
As a result of data analysis conducted throughout observations and interviews showed that in the daily schedule of the specialized orphanage, the games were held at certain times of the day, lasting one hour, and the games and game exercises used during the corrective-educational classes were few, uniform and repetitive (Fig. 1).

Special attention should be paid particularly to the fact that the games used in special institutions were almost devoid of preparatory, actual games and final parts. For example, the preparatory phase was limited to explaining the process of the game, ignoring the organizational part and the need to create a positive attitude towards the game and generate interest.

Negatively considered the fact that during the games' explanation, almost none of the teachers followed the important pedagogical principles. They did not correctly use the methods of demonstration and joint actions, they almost did not use alternative means of communication, and they immediately resorted to verbal methods, which remained incomprehensible to many children and lowered their motivation to work. All this had an immediate effect on the children's communication and speech abilities.

Figure 1.

The daily schedule of occupations and play activities of children with moderate mental retardation



In addition, during educational and speech development classes, which were allocated 2 hours a day, only 17% (20 minutes) of the total training was planned for games and play exercises in the mild group, and 25% in the moderate and severe groups (30 minutes). Table and didactic games were mainly used in the groups, which were just a way to develop common knowledge, and sometimes, to organize free time.

Activities for children were provided and used according only to the pedagogical experience of the teachers. It was evident that in the process of organizing games during the day the principles of consistency and sequence between the parts of the game were regularly broken. This had a negative impact on the correctional-educational goals, making the game a randomly selected means. In this case, cognitive, verbal and mental development processes were severely delayed.

A study of the play behaviour of children with moderate mental retardation showed that they were clearly indifferent to the organized games and exercises; showed apathy, lack of initiative and preferences, isolation or wandering behaviour throughout the activity. These children not only showed a lack of desire and demands to play together but also did not play side by side. Their games were characterized by content and emotional poverty, "fragmented" episodes, ending with separate procedural and mechanical actions that children learned during special training. Meanwhile, these and other similar manifestations contradict the psychological content and logic of gaming activity. A similar attitude towards games had a destructive impact on the formation of children's collective and communicative needs. Based on the above, it was possible to state the necessity of developing such a system of games

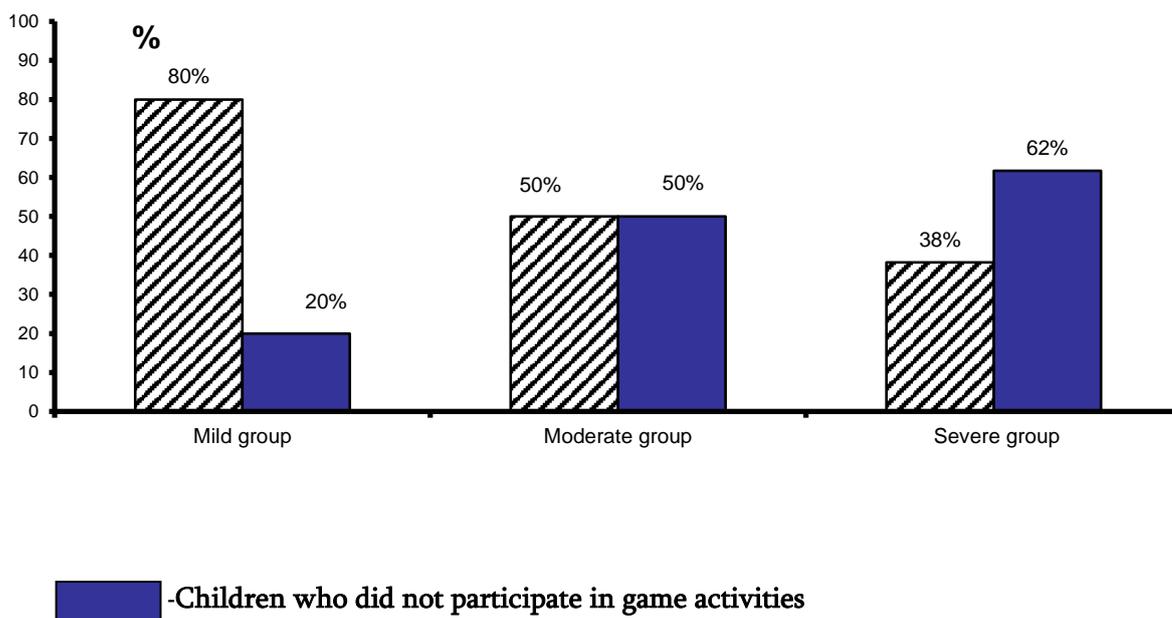
that would provide opportunities for special approaches to involve children with moderate mental retardation in joint games and other activities.

Data analysis of observations highlighted that children with moderate mental retardation were not interested in the functional significance of the toy. They were mostly attracted to brightly coloured, loud, "quick-moving" toys, and sometimes even coloured paper, string, and other small objects. These phenomena were based on the fact that children with mental retardation were not surprised by the toy, something that negatively affects their motivation to play (The Ontario Curriculum, 2006).

The analysis of research data showed that only 29% of 144 participants juggled toys and objects. By the way, during this period based on the observations, the children did not communicate with each other. Among these participants, some did not participate in games at all, making up 20% of the mild study group, 50% of the moderate study group, and 62% of the severe group (Fig. 2). It was also found that all non-playing children in the mild and moderate groups did some juggling with toys and objects, and 22 out of 60 children (37%) in the severe group not only did not play but also did not juggle with objects. This speaks of the lowest level of development of the severe group.

Figure 2.

Indicators of Participants' Involvement in-game Activities



Experimental observations allowed us to record the facts that children with moderate mental retardation were distinguished by their characteristic of unstable participation in games: they could leave the game, often without reason, and, unlike children with other developmental disabilities, not even passively follow the game. Such children made up 20% of the mild group, in the moderate group this indicator was even higher (29%), and in the severe group, their number exceeded the data of the two aforementioned groups (38%). Based on the simple fact that the toy, the content of the game and the

speech were related to each other, the knowledge bases of children with moderate mental retardation in terms of their understanding of toys and their functions also were discovered.

It was found that 80% of the children of the mild group recognized the toys of daily use, knew their place in the closet, and after the game, with the help of the teacher, they were even able to arrange them in the appropriate corner. Thus, 50% of children in the moderate group and only 20% of the severe group showed stable knowledge about toys. All the other children had a careless and indifferent attitude towards them, which was explained not only by their mental development disorders but also by the deficiencies or absence of corrective work.

Remarkable fact was considered that during all months the children played with help anyway (they forgot the rules of the game, the requirements, the sequence of actions, the plot, etc.). It was also recorded that the tutor spent approximately 33% of the game time (in total 1 hour) explaining each game, 17% on individual work, 28% on correcting mistakes and other corrective work, and on the game itself only 22%.

Results showed that mental developmental disorders of children with moderate mental retardation also led to peculiarities in conducting games with them, spending most of the time on explanatory, individual and corrective work. Very little time was given to the actual game: something that was not characteristic of the use of games organized for normally developing children.

Based on the results of the game activity characteristics analysis it was confirmed that children were indifferent to the beginning of the game, as well as the process and the final results. It was obvious that in all three groups under study, they had difficulty adapting to changing game situations and could hardly complete the simple tasks given during the game. It was found that learning a new game took an average of 1-2 months in the mild group, 1-2.5 months in the moderate group, and an indefinite amount of time in the severe group.

Analysis of the research data also discovered that the games organized for the children were not only unsorted, but also extremely few and poor (approximately 10-15 games) moreover, their goals, tasks, course, and arrangement were not specified and lacked methodical instructions. Presenting the play activities' characteristics of researched children according to the types of games and the level of mental development, it was found out that 40-59% of children participated in object games in the mild and moderate groups, and only 15% in the severe group.

According to the summary of the study data, it was possible to state that 60% of the first group, 71% of the second, and 10% of the third group participated in board games, which were mostly mosaic and constructive. It was also noticed that the games were often disorganized (children played alone without the teacher's guidance, and this activity could not be called a game). Despite this, they showed relatively active participation in board games: this was explained by the isolated behaviour of children

with moderate mental retardation, lack of communication needs and low level of motor abilities. It was also evident that board games were mainly given to children for "occupying" them.

While distinguishing the characteristics of the game activities of children with moderate mental retardation, the description of their requirements and characteristics for participating in motion games were highlighted. The psycho-pedagogical analysis of the actual data confirmed that the largest number (68%) of children participated in this type of game from the mild group. They were mainly attracted to sports games: football, relays, throwing the disc/plate etc. However, activities such as construction of stadiums by children, improvement, maintenance of sports property, etc., were missing. Meanwhile, similar works were an accepted means of creating love and interest in motion games in applied special pedagogy. Such a pedagogical experience was recorded by Gorelik (1977) in the children's boarding school No. 4 in Saint Petersburg, which is still relevant today.

Thus, in the moderate group children were participating in motion games (35%) than in the mild group, because the medical records of 94% of the children here had complex types of cerebral palsy. The play activities of children with such difficulties, as confirmed by Simionova (1990) and others, were almost the same (they play with cars: "unloading", they mainly engage in constructive games, dolls, etc.), as a rule, they were short-lived and did not accompanied by a connected word. Speaking especially about the motion games of this group of children, it could be said that they were limited to the abilities of throwing a ball, using wheelchairs as instructed and moving with a crooked gait.

As a result of studies, accordingly, it was confirmed that 23% of children in the severe group participated in this type of game, but all their activities were marked by deep structural deviations in performing purposeful actions. These children, during motion games, were deficient in understanding the given instructions, executing them accurately, and in internal programming of movements.

Turning to the features of plot games used in the orphanage, it was emphasized that this was the most complex type of game for a child with moderate mental retardation. It requires quite a lot of skills and pedagogical knowledge to organize it. Elkonin (1978) noted that the plot of the game was the sphere of reality that the child reproduced during the game. However, a child with moderate mental retardation had disrupted ideas about reality, requirements and abilities to reproduce the social experience. This circumstance naturally hurt the design of the plot game. According to the results of the conducted research, this was the main reason why the number of participants in plot games in the studied groups was too small (10 in the mild group, 5 in the moderate group, and 0 in the severe group).

Thus, it was found that in the list of games used during remedial and speech development activities in a specialized orphanage, such as verbal, staged, role-playing, speech therapy games and motion games were almost absent. Conducted observations and records showed that in 5 out of 15 investigated groups, 2-3 speech therapy games were used, and about the same number of sports exercises and word games.

Summarizing the results of observations and validating scientific experiments it was still possible to say that children with moderate mental retardation under special learning conditions still had possibilities and were able to master individual game actions, complete the game with their help, and acquire general verbal abilities. That is why their speech development can be carried out along with the formation of play activities and the principles of uniqueness of individual development features should be taken into account. Therefore, the development of their speech could be carried out along with the formation of game activities and should take into account the principles of specificity or individual developmental characteristics.

CONCLUSION

This research aimed to explore the organizational features of play activities of children with moderate mental retardation and its impact on their speech development. Conducted research showed that the principles of consistency and sequence between the parts of organized games during the day for children with mental retardation were regularly broken which negatively affected the corrective-educational goals, making the game a randomly selected means. In this case, cognitive, verbal and mental development processes were severely delayed.

A study of the play behaviour of children with moderate mental retardation showed that they were clearly indifferent to organized games and exercises; showed apathy, lack of initiative and preferences, isolation or wandering behaviour throughout the activity. These children not only did not show a desire to play together, but they also did not play side by side. Their games were characterized by content and emotional poverty, "fragmented" episodes, ending with separate procedural and mechanical actions that children learned during special training. Meanwhile, these and other similar manifestations contradict the psychological content and logic of gaming activity. A similar attitude towards games had a negative impact on the formation of children's collective and communicative needs. Based on the above, it was necessary to develop such a system of games that would provide opportunities for special approaches to involve children with moderate mental retardation in joint games and other activities.

It was revealed that the play activities of the researched children were disorganized, and the used games were not sorted, did not have clear content and were too few (approximately 10-15 pieces). Moreover, their goals, tasks, course, and arrangement were not specified and lacked methodical instructions. The characteristics of children's game activity according to the types of games and the level of mental development showed that only 15% of the children of the severe group participated in object games. Only 10% of children from this group participated in board games, which mostly had a mosaic and construction nature.

Relatively active participation in board games was explained by the isolated behaviour of children

with moderate mental retardation, lack of communication needs and low level of motor skills. It was also evident that board games were mainly given to children to “occupy” them. Such approaches and arguments reduced the effectiveness of correctional work, especially from the perspectives of communication, speech and cognitive development, as well as for enlarging their participation in leisure activities. The psycho-pedagogical analysis of the actual data confirmed that the largest number of children participated in motion games from the mild group. Compared to this group children from the moderate group were participating in motion games, which was explained by the fact that 94% of children had complex types of cerebral palsy.

For this group of children, motion games were limited to the ability to throw a ball, and to move in wheelchairs, with a crooked gait as instructed. It was confirmed that 23% of the children in the severe group participated in this type of game, but all their activities were marked by deep structural deviations in the purposeful actions. These children, during movement games, were deficient in understanding the given instructions, executing them accurately, and internal programming of movements.

Plot games were the most difficult type of play for children with moderate mental retardation. It required quite a lot of skills and pedagogical knowledge to organize it. In the studied groups, the number of participants in plot games was extremely small (10 in the mild group, 5 in the moderate group, 0 in the severe group). Thus, it was found that in the list of games used during remedial and speech development activities in a specialized orphanage, such as verbal, staged, role-playing, speech therapy games and motion games were almost absent. Done observations and records showed that in 5 out of 15 investigated groups, 2-3 speech therapy games were used, and about the same number of sports exercises and word games.

Summarizing the results of observations and validating scientific experiments it was still possible to say that even children with moderate mental retardation under special learning conditions had possibilities and were able to master individual game actions, complete the game with their help, and acquire general verbal abilities. That's why the development of their speech could be carried out along with the formation of game activities.

As a result of the observations and validating scientific experiments, it became obvious that the organizational obstacles of gaming activities had a negative impact on the effectiveness of educational and correctional work. Among them, the low effectiveness of the works carried out in the direction of speech development, thinking, and cognition was particularly evident, which, accordingly posed a new research problem.

REFERENCE LIST

1. American Psychiatric Association (APA). (2013). *Diagnostic and Statistical Manual of Mental Disorders: DSM* (5th ed.). Arlington, VA, US: American Psychiatric Publishing, Inc.
2. Ayres, A. J. (1991). *Sensory Integration and Learning Disorders*. Los Angeles: Western Psychological Services.
3. Banks, S., Shevellar, L., & Narayanan, P. (2023). Ethical Issues in Community Development: Setting the Scene. *Community Development Journal*, 58(1), 1-18.
4. Black-Hawkins, K., Florian, L., & Martyn, R. (2007). *Achievement and Inclusion in Schools*. Routledge Taylor and Francis Group. London and New York, p. 161.
5. Bondarenko, A. K. (1991). *Didactic games in kindergarten: a book for kindergarten teachers* (2nd ed., revised edition). M.: Enlightenment..
6. Bravo, C., Ojeda-Castelo, J., & Piedra-Fernandez, J. (2017). Art Activities with Kinect for Students with Cognitive Disabilities: Improving All Motor Skills. *Procedia – Social and Behavioral Sciences*, 237, 1148–1151.
7. Cano, A. R., Garcia-Tejedor, Á. J., & Fernandez-Manjon, B. (2015). A Literature Review of Serious Games for Intellectual Disabilities. In: *Design for Teaching and Learning in a Networked World*. Cham: Springer, pp. 560–563.
8. Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed.; Sage: Newbury Park, CA, USA.
9. Elkonin, D. B. (1978). *Psychology of the game*. Moscow: 304
10. Francisco, M. P. B., Hartman, M., & Wang, Y. (2020). Inclusion and Special Education. *Education Sciences*, 10(9), 1–17.
11. Gorelik, A. I. (1977). Podvijnie igri i ikh korrekciannaya rol v vospitanii detej imbecilov (Outdoor games and their corrective role in raising imbeciled children). *Defektologiya*, N 4, 64-68.
12. Hoogsteen, L., & Woodgate, R. (2010). Can I Play? A Concept Analysis of Participation in Children with Disabilities. *Physical & Occupational Therapy in Pediatrics*, 30(4), 325–339.
13. Hovyan G. R. (2003). *Formation of connected speech and communication development of the mentally retarded in the correctional process*.
14. Ilyuk, M. A. (2001). Methodology for creating a developmental environment for children of the third year of life with speech underdevelopment. In *Current problems of speech therapy: research and correction (Proceedings of the scientific and practical conference, pp. 31-37)*. Saint Petersburg.
15. Kara, D. N., & Cerkez, Y. (2018). “The Risk Factors for the Mentally Disabled in the Use of Social Media,” *Qual. Quant.*, 52, 1211–1218.
16. Kataeva, A.A., & Strebeleva, E.A. (1993). *Didactic games and exercises in teaching mentally retarded preschoolers*. Moscow: "BUK-MASTER".

17. Kataeva, A.A., & Strebeleva, E.A. (1998). *Preschool oligophrenopedagogy: Textbook for students higher schools, institutions*. Moscow: Humanit. ed. VLADOS center.
18. Kolupaeva, A. A., & Taranchenko, O. M. (2016). *Inclusive Education: From Basics to Practice: Monograph*. Kyiv, Ukraine: ATOPOL.
19. Lipakova, V. I. (1983). Education of oral speech in children with mental retardation in the degree of imbecility. In *Studying the dynamics of speech and neuropsychic disorders (pp. 125-128)*. Moscow.
20. Maller, A. R. (1986). *Raising a child with Down syndrome in the family*. *Defectology*, 4, 82-86.
21. Maller, A. R. (2000). *Social education and training of children with developmental disabilities*. Moscow: 122.
22. Maller, A. R., & Tsikoto, G. W. (2003). *Raising and teaching children with intellectual disability: Proc. A manual for students. higher. ped. head* Moscow: Publishing center "Academy", 208 p.
23. Marczyk, G. R., DeMatteo, D., & Festinger, D. (2010). *Essentials of Research Design and Methodology (Vol. 2)*. John Wiley & Sons.
24. Mikshina, E. P. (2001). From the experience of providing early assistance to children with speech developmental disabilities. In *Current problems of logopathology: research and correction (Proceedings of the scientific and practical conference, pp. 56-62)*. Saint Petersburg.
25. Nazirzadeh, M. J., Cagiltay, K., Karasu, N., & I, A. (2017). Developing a Gesture-Based Game for Mentally Disabled People to Teach Basic Life Skills. In *Proceedings of the IADIS International Conference on Development and Learning (p. 5)*.
26. Pospelova, S. N. (2019). *Prosodic features of speech in play communication of preschool children*. (Author's abstract of the dissertation candidate, Higher Attestation Commission of the Russian Federation, Specialty 10.02.19 – Theory of Language).
27. Sari, M., Gazali, N., Daharis, D., Sulastio, A., & Lardika, R. A. (2020). Traditional Game Based Learning Model: Can it be applied in increasing the movement of mentally retarded children? *Proceedings of the 3rd International Conference on Advance & Scientific Innovation, ICASI 2020, 20 June 2020, Medan, Indonesia*. <https://doi.org/10.4108/eai.20-6-2020.2300689>
28. Simeonova, N. V. (1990). *Educational program for severely mentally retarded children*.
29. Stebeleva, E. A., & Bratkova, M. V. (2000). Options for an individual education program: correctional and developmental education for a young child with psychophysical disorders. *Defectology*, 5, 86-96.
30. The Ontario Curriculum. (2006). *Grades 1-8. Language; Revised: Samples of Student*

Work: A Resource for Teachers. Interim Edition, 2006. Ministry of Education. Retrieved from www.edu.gov.on.ca

31. United Nations (UN). (2016). *Convention on the Rights of Persons with Disabilities*.

32. UNESCO. (2017). *A Guide for Ensuring Inclusion and Equity in Education*. Paris: UNESCO.

33. UNESCO. (2020). *Towards Inclusion in Education: Status, Trends, and Challenges*. In *The UNESCO Salamanca Statement 25 Years*.

34. Vygotsky, L. S. (1983). *Fundamentals of defectology* (Collected works in 6 volumes, Vol. 5).

Published by Khachatur Abovyan Armenian State Pedagogical University Publication

The article submitted and sent to review: 22.06.2023

Accepted for publication:01.09.2023



This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International License.