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The Effects Of Game-Based Learning Activities On Vocabulary Formation And Expansion In Learners With Moderate Intellectual Disabilities

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Abstract

The aim of this research was to study the perspectives and features of vocabulary development of children with moderate intellectual disabilities in play based learning process. Total number of research participants were 26 children with moderate intellectual disabilities from 13-14 years old (13 children in each experimental and control groups). During the pedagogical experiment, based on the characteristics of their intellectual, mental and motor development, specially selected and coordinated games, game exercises and assignments have been used.

Interpretative data analysis method was used for describing scientific experiments and the features of vocabulary development of children with moderate intellectual disability with the use of specified play based activities.

As a result of developed games, play based activities and tasks, both passive and active vocabulary of children with moderate intellectual disability had been developed and, in general, the abilities to perceive the semantic field of the word was enhanced. Children who were involved in the experimental group mastered not only the words of the objects, the actions, but also could designate the characteristic and quantity words. As a result of the scientific experiment, the recorded development indicators made up 85% among the research participants.

Keywords: *moderate intellectual disability, vocabulary, game, play based activity.*

INTRODUCTION

Current understandings of intellectual disability recognize it as a spectrum of limitations involving cognitive abilities, which can result in challenges with social participation (Saratikyan, 2023; Isaev, & Kolosova, 2014). Conferring to Lebedinsky (1985), intellectual disability is a type of dysontogenesis characterized by mental underdevelopment that compromise by a set of stable, non-progressive mental underdevelopment syndromes of various origins, hereditary, congenital or acquired in the early stages of development. Mostly it is expressed especially by the difficulties of social adaptation, the main and primary reason of which is "intellectual disability" (McCagg, 1989).

Studies from the University of Ottawa Health Reports (2008) indicate that roughly 1-3% of the population identify as having intellectual disability. This means their cognitive abilities may differ from the majority, potentially impacting various aspects of daily life like communication, self-care, and social interaction. Such a feature of mental development is expressed by qualitative changes in the development of all other mental processes ("underdevelopment").

Important aspect was that among children with intellectual disability the number of children with moderate and severe intellectual disability make up 4-10% of their total number (those with mild intellectual disability make up 8-5%) (Pettoni, 2011). Research had shown that

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among this group of children the social motives of performing activity was preserved, so they used to learn work skills relatively easily. Although the vast majority of children with moderate intellectual disability were generally mobile and able to perform some physical activity. Due to having severe speech and motor impairments these children often need supervision and support in all aspects of their living activities. Despite this, it has been confirmed that properly organized special psycho-pedagogical support contributes to the formation of their social adaptation, communication and basic literacy skills, as well as the acquisition of basic numeracy skills (Azaryan, 2016).

Based on the fact that correctional-educational works contributed to the development of these children, and the socially working motivations of their activities were preserved, the "expectations" of psychological-pedagogical support were based on the perspective of the development of social knowledge, abilities and skills. Thus, the formation of these abilities closely related to the development of speech of children with moderate intellectual disability. Since they have profound impairments in perception, communication and communication abilities, above mentioned approach became vital. Specialists attribute the effectiveness of solving the mentioned problem through properly organized corrective education (Andreyeva, 2018; Hovyan, 2003).

Despite extensive research on language development in children with mild intellectual disabilities, there's a critical lack of studies specifically addressing the unique challenges faced by children with moderate intellectual disabilities.

They were mostly limited by specifying the main directions of speech development, the forms of work and the principles of learning (systemic and individual approach, interest, connecting learning with life situations, repetition, screening, etc.) (Piki et al., 2016; Yakkundi et al., 2017). Also there were lack of studies that separately investigated the scientific methodological justifications for the implementation of each direction of speech development. These circumstances negatively affect the general upbringing of children with moderate intellectual disability which was most evident in inclusive processes, which cause many difficulties in the modern education system.

Taking into consideration the importance of above mentioned problem, current study focused to analyze the reasons for the insufficient and incomplete development of the toolkit for the organization of corrective processes for children with moderate intellectual disability, particularly from the point of view of speech development. Therefore, the aim of this research was to study the perspectives and features of vocabulary development of children with moderate intellectual disability in play based learning process.

LITERATURE REVIEW

To understand and address the diverse and profound obstacles to verbal communication in children with moderate intellectual disabilities, it was necessary to delve into the theoretical underpinnings of speech development, a long-standing pillar of support strategies. Many authors, both Armenian and foreign, state the need for systematic educative works as the basis of increasing their adaptation in the social environment (Maller, & Cikoto, 1984).

Scientific literature proposed to introduce a certain system of speech development works into the process of psycho-pedagogical support, but when talking about the tools, only speech therapy classes, familiarization with the environment or forms of children's activities were mentioned: unfortunately, the use of specific approaches and instructions regarding the methods of their organization were not specified or presented. Thus, above mentioned was not assumed that the issues of speech development of children with moderate intellectual disability have not been raised at all in the psycho-pedagogical science (Banks et al., 2023).

According to the professional concepts, even the not-so-deep observations of the issue proved that certain provisions were registered in the researches related to the speech development of these children. Thus, "The verbal speech of a severely mentally retarded child needs to be formed during their understandable and necessary activities", Lipakova, proposing to combine these works with the gradual development of activities (Lipakova, 1989, p. 162).

Western special educators, alongside researchers, have played a significant role in demonstrating the effectiveness of these approaches. Their contributions, including

practical play therapy models for children with moderate intellectual disabilities, offer valuable insights for educators globally. (with certain contraindications) (Kondratyev, 1985; Smith, 1991). However, these organizational methods have no experimental justifications and, mainly pursuing the goals of recovery the motor sphere and development of self-care abilities, did not contain particularly precise methodical instructions for speech development (Panfilova, 2000).

Almost the same can be said about the special pedagogues of the former Soviet period, who highly valued the role and importance of play activities, but in practice more often emphasized the development of work activities. If in the professional literature there were a number of programs in the direction of preparing children with moderate intellectual disability for work education and work activities (where a special place was given to the development of speech), then the same cannot be said about specially developed game programs and play based activities (Pakhomov, & Makarova, 2021).

Studies have shown that specially developed game programs simply still needed design, coordination, experimental validation and in-depth research. Regarding the organization and conducting games for speech development purpose for these children, it was important to emphasize that these issues have not been fully studied even today. The analysis of scientific literature sources has shown that play activities were the means of high observation for the development of these children. Accordingly, it had always been implicitly claimed that through the direct application of game activity elements it became possible to stimulate the sensory perception of persons with moderate and profound intellectual disability (Kalmykova, 2007).

Studies demonstrate the successful implementation of these approaches in programs designed for children with special needs, both in residential settings and individual classroom models within special schools (which, were missing today, and similar programs can be found only in the archives of school libraries). Studying those programs, it became possible to discover that included games in that programs were distinguished by their multifaceted significance, which stated the fact of did having specific directions (Harutyunyan et al., 2019).

At the same time according to the organization process of inclusive education, individual education plan should be developed for every child with intellectual disability. However, even nowadays, the issues of education and development of children with moderate intellectual disability, as well as the planning of their resources, were developed very incompletely. As in the past, today, also the problem of children of this targeted group still assimilated to the educational and correctional problems of children with mild intellectual disability or with normal development (Saratikyan, & Harutyunyan, 2017).

In that system, clear mechanisms of methods, means and pedagogical approaches for overcoming and developing their speech disorders and communication difficulties were almost completely left out. Moreover, today, within the scope of inclusive education, the speech development programs for children with moderate intellectual disability was still missing, that could facilitate and enhance the possibilities to overcome their educational needs. Instead, there were educational standards in which the games and tasks were not systematic from the point of view of speech development and did not have clear scientific justifications (Lalayeva, & Serebryakova, 2001).

Scientific and pedagogical literature mostly suggested the importance of using mobile, didactic and puppet games, but the methods of their application were not detailed. Instead, the interconnectedness between play and communication and communication demands had been repeatedly reported (Zikeyev, 2000). According to K. Marx, “During communication, people strengthen each other physically and mentally” (Mastyukova, 1997, p. 90). For this reason, specialists suggested to start corrective development work directly from game activities, because in this process it became possible not only to stimulate the social needs of a person, but also to simultaneously form cognitive interests, communication and motivations for a person's activity.

Studies of the role and significance of games for speech development of children with moderate intellectual disability confirmed that game situations and game activities

stimulated the development of both non-verbal and verbal communication and thinking (Strakovskaya, 1987). Moreover, in game situations, children spontaneously learnt to solve elementary problem situations, accordingly, subject activities and game situations should be directed to the formation of outstanding practical thinking (Yefremenko, 2001). Thus, the role of play activity in the development of speech and thinking was highlighted, there was a need to develop an effective support system based on a number of leading principles of special pedagogy and include those correctional works that provided an opportunity to stabilize all mental processes (Isayev, 2003).

However, within corrective development processes of children with moderate intellectual disability most often table, object, musicalized, constructive and rarely role-playing, mobile, word, plot games were used. Also the absence of plans for the organization of gaming activities, and the use of games in a haphazard way were identified (Saratikyan, & Harutyunyan, 2023). This had a negative impact on the entire remedial development process, because the game activity and play based learning for children with moderate intellectual disability were formed with a serious delay and retained its leading significance for a longer time. Other authors also confirmed that in the system of remedial classes conducted with children with moderate intellectual disability, the development of reading, writing, and counting abilities were necessary, but not of primary importance; the use of developed tasks had to lead the child not to think, but to play (Maller, & Cikoto, 1988, p. 31-42).

Summarizing the analysis of discussed problem, it became possible to state that speech development process for children with moderate intellectual disability and the enhancement of the psycho-pedagogical support system in that direction had an important social significance. Despite the extensive studies related to the issues of social adjustment and inclusion of children with intellectual disability, many issues of their professional support, including the improvement and adaptation of the methods and means for speech formation and development, still had not been sufficiently studied.

The accumulated data lead to study the perspectives and features of vocabulary formation and development of children with moderate intellectual disability as a result of play based learning activities in specialized institutions and schools of the Republic of Armenia.

METHODOLOGY

Current research used educational experiment method for analyzing qualitative and quantitative data gathered from the research participants. Overall 26 children with moderate intellectual disability from 13-14 years old (n=13 children in experimental and n=13 children in control group) took part in this study.

In data collection process within educational experiment the main characteristics of participants' intellectual, mental and motor development took into account for developing and using specially selected and coordinated games, game exercises and many other paly based assignments.

To analyze and describe the results of scientific experiments regarding play based learning perspectives and features for developing vocabulary of children with moderate intellectual disability the interpretative data analysis method has been used.

DATA COLLECTION AND ANALYSIS

Research data collection was based on a pedagogical experiment, during which, based on the intellectual, mental and motor developmental characteristics of children with moderate intellectual disability specially selected and coordinated play activities, games, exercises and assignments were used to determine their effectiveness for vocabulary formation and development.

During the experimental works, object, table, word, plot, role-playing, mobile, speech therapy games were organized to investigate the role of play activity in the development of speech and thinking. In contrast to the usual study of pedagogical phenomena in natural conditions through direct observation, the experiment made it possible to purposefully change the conditions of play based activities' influence on the subjects, since as evidenced by previous pedagogical research (Zagvyazinsky, 2005). These activities had been used in the correctional-educational process even before the experimental works, but they did not

particularly contribute to the formation of children's vocabulary. As the pedagogical experiment considered to be a complex method and involved the joint use of observational methods, conversations, interviews, questionnaires, creation of special situations, in current study structured observations were used to explore and highlight the shortcomings of the sequence and consistency of the games, as well as observing, categorizing, and recording the scientific methodical justifications of the ways of their application (Kawulich, 2005).
Interpretative data analysis method was used to analyze and describe the indicators of the pedagogical scientific experience of different types of play based learning effect on the development of these children's vocabulary on an annual basis. As well as the changes in the indicators of vocabulary formation and development as a result of the annual pedagogical experiment was defined.

RESULTS AND DISCUSSION

Research data analysis was based on the recorded results of participants who were involved in the experimental and control groups (in each group were 13 children with moderate intellectual disability). To investigate the perspectives and features of play based learning process for vocabulary development of children with moderate intellectual disability both experimental and control groups the equality of initial conditions as an important term of recording the main indicators were taken into account, since that was significant from the point of view of this study.
Literature analysis confirmed that the general issues of education and upbringing of children with moderate intellectual disability received attention only at the beginning of the 19th century. It was true that the peculiarities and difficulties in the development of verbal speech of these children attracted the researchers' attention almost immediately, trying to classify "imbecile children" according to the level of their speech development (Lipakova, 1979), but did not offer instructions and justifications for specific means of promoting speech development.
Based on the fact that nowadays still there was not developed and verified the specific means and ways of vocabulary development for children with moderate intellectual disability within current research in contrast to other types of presented games also object, table and plot games were used and their effectiveness was evaluated. Done experiment showed that at the beginning of the experimental work, as a result of the use of object games, there were cases of vocabulary development in the results recorded by 7 (54%) children of the experimental and control groups (table 1). This was explained by the fact that particularly active children participated in the object games used by educators, while others were left out of attention. Meanwhile, if these games were specially selected and developed, they would provide wider opportunities to include a large number of children (Maller, & Cikoto, 2003).
Current scientific experiment done in this direction had the following specific objectives: helping children recognize toys, comparing and contrasting objects according to different standards, teaching the names of toys and children in the group, recognizing colors, etc. As a result of six months' pedagogical experiment of using object games ("Find your toy", "Dolls", "Collect mushrooms", etc.) 77% of the children in the experimental group had mastered quite a large stock of new words, and by the end of the year, everyone not only recognized the surrounding objects and toys, but also clearly distinguished and named them (Table 1).
Cunducted research data showed that the number of children who recorded vocabulary development as a result of the influence of **table and plot games** in the experimental group gradually increased (54%, 39% within sixth month), while no changes were observed in the control group (31%, 15% within sixth month). It can be stated that the reason for the low indicators of the control group in this direction (despite the frequent use of table games) was the lack of specific educational and speech development tasks in the games. The annual indicators of research data analysis conducted in the control group confirmed that the **object games** did not contribute to the enrichment of the vocabulary of children with moderate intellectual disability. Studies had also shown that object, table and plot games,

in contrast to the control group, greatly stimulated the vocabulary development of almost all children included in the pedagogical experiment (Table 1). Also, if the majority of children in both research groups did not know or confused the role and significance of different objects in everyday life ("What are scissors for?", "What is a knife for?", "What cuts bread?", "What cuts a piece", "What should be used to break wood", "What is an iron for" etc.), then after specially designed pedagogical works, during the first six months 7 (54%) participants from the experimental group, and already after one year almost all the other children had acquired stable knowledge about the functional significance of the objects. All the participants of the research, who made developmental progress were also skilled in self-care, orientation in life and hand work skills. During children's activities, sewing classes, they were using work tools obviously correctly and appropriately.

Table 1. Indicators of different types of games' effect on the development of the vocabulary of the participants,on an annual basis of the pedagogical scientific experience.

Indicators	RESEARCH GROUPS											
	Experimental group (n=13)						Control group (n=13)					
	Until the experience		6 month later		12 months later		Until the experience		6 months later		12 months later	
Game types	number	%	number	%	number	%	number	%	number	%	number	%
Object game	7	54	10	77	13	100	7	54.0	7	54.0	7	54.0
Table game	4	31	7	54	13	100	4	31.0	4	31.0	4	31.0
Word game	2	16	4	31	6	46	2	15.0	2	15.0	2	15.0
Plot game	2	16	5	39	12	92	2	15.0	2	15.0	3	23
Role-playing	-	-	3	23	7	54	-	-	-	-	1	8
Mobile game	2	16	3	23	3	23	2	15	2	15	2	15
Speech therapy game	-	-	3	23	5	39	-	-	-	-	-	-

Meanwhile, the game activities that held in the classrooms were mainly aimed at keeping the children occupied. Thus, the observations confirmed how children without the teacher's instructions and help, were "dealing" with mosaics or constructive games. As for the low results of the impact of plot games, it was explained that for children with moderate intellectual disability that was considered to be a complicated game, and very often educators left them out of their attention or used rarely (Cano et al., 2015A). At the same time, the analysis of vocabulary development processes carried out through play based activities showed that table games mostly contributed to generalizing, memorizing, comparing and contrasting knowledge about objects and the surrounding reality, strengthening acquired abilities, as well as developing orientation and adaptation abilities. For this reason, pedagogical scientific experiment was conducted based on specially selected and developed table games, using the following topics: "Tableware", "Geometric

figures", "Smels – tastes" that facilitate and enhance the possibility of children to clarify and stabilize the knowledge about the meaning of objects, to supplement the active vocabulary with words expressing action and characteristic (Dandashi, & Karkar, 2015).
In addition, the behavior of the children in the experimental group was marked by progress of developed ability to perform actions with objects and separate them independently according to their functional meaning. They no longer confused things that were similar in characteristics or functional significance. Thus, if before the experimental works, more than half of the children (62%) in both research groups had difficulty memorizing the names of familiar objects and toys, then after a year the number of such children in the experimental group gradually decreased (after half a year it made 31%, at the end of the year it was 0%). Thus, it was confirmed that 85% of the children in the experimental group acquired this kind of vocabulary quality during the game activity instead of the previous 31% after one year, while in the control group their number increased by only 15% throughout the year. In addition, the children with developmental indicators of the control group, in contrast to the experimental group, had mastered a smaller stock of adjective words. Development and formation of the vocabulary of children with moderate intellectual disability confirmed also fact, that instead of the previous 23% in the experimental group, 77% of the children were able to form phrases as a result of using game based activities, moreover, these abilities were expressed both in object, as well as during table and plot games (Table 2).

Table 2. The change in the indicators of vocabulary formation and development of the participants as a result of the annual pedagogical experiment

Indicators	**RESEARCH GROUPS**					
	Experimental group (13)			**Control (13)**		
	Until the experience		12 months later	Until the experience	12 months later	
The degree of vocabulary development		$\chi \pm m$ σ	$\chi \pm m$ σ		$\chi \pm m$ σ	
Recognizes but mix the names of objects	**number**	8±0,66 2,39		8±0,66 2,39		8±0,66 2,39
	%	62		62		62
Recognizes and names surrounding objects	**number**	5±0,41 1,49	13±1,08 3,89		5±0,41 1,49	5±0,41 1,49
	%	39	100		39	39
Familiar with the function and the meaning of the objects	**number**	4±0,33 1,19	13±1,08 3,89		4±0,33 1,19	5±0,41 1,49
	%	31	100		31	39
Active vocabulary contains action words	**number**	4±0,33 1,19	13±1,08 3,89		4±0,33 1,19	6±0,49 1,79
	%	31	100		31	46
Active vocabulary contains words that express a characteristic	**number**	4±0,33 1,19	11±0,91 3,29		4±0,33 1,19	6±0,49 1,79
	%	31	85		31	46
Using words that indicate place and	**number**	3±0,24 0,89	9±0,74 2,69		3±0,24 0,89	4±0,33 1,19

time	%	23	69	23	31
Able to form phrases	**numbe**	3±0,24 0,89	10±0,83 2,99	3±0,24 0,89	4±0,33 1,19
	%	23	77	23	31

In contrast to the children of the experimental group, in control group the number of children who were aware of the functional significance of the objects throughout the year (with indicators of expanding the meaning of objects) increased by only by 1 (39%) which was a result of using table games (Fig. 1(a)). The research allowed to notice that along with the above-mentioned works, the vocabulary of the research participants was supplemented with words showing action. In particular, the example games on "Profession" and "Tableware" contributed to the use of action words in connected speech. If before the experimental sessions the children used only simple words, phrases and sentences expressing basic needs ("I want", "Give", "Eat", etc.), then later they were able to deny, refuse ("Does not play", "I won't give"), were able to describe not only their actions, but also the actions of the conversation partner: "Doll", "Bear".

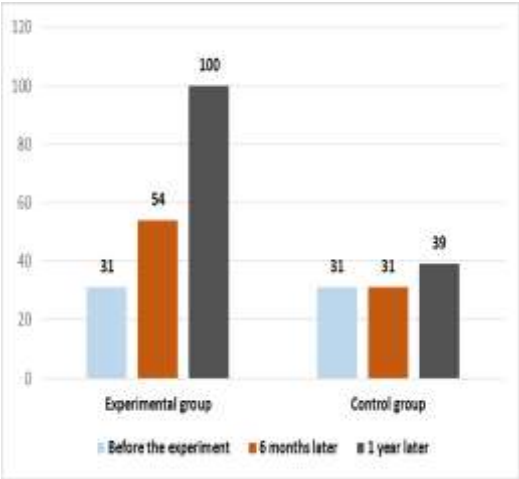

Figure 1(a). Indicator of understanding the semantic side of the objects and level of verbal expression.

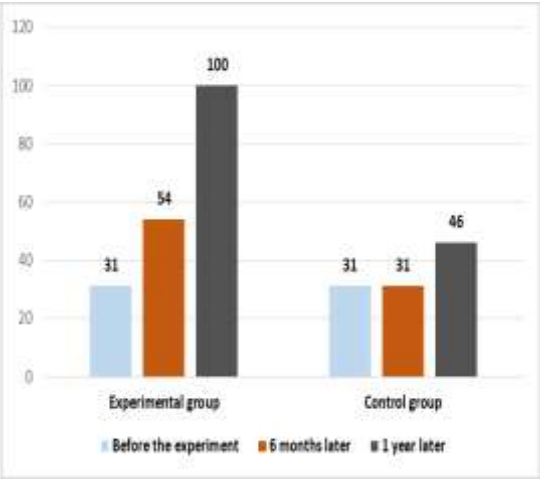

Figure 1(b). Indicators of enrichment of active vocabulary with action words.

It was noticeable that they began to use simple action tenses quite correctly ("I write", "You write", "I drew"), but still had great difficulties in verbal programming, planning and reproduction words of even simple actions and things to do. Despite this, if 4 (31%) children of the experimental and control groups used action words in their active vocabulary as a result of that game activity, then, according to the data at the end of the year, the number of such children in the control group increased only by 2 (46%), and by 9 in the experimental group (Fig.1(b)).

Characterizing the impact of table games features on the enrichment and development of the vocabulary of the researchers' it was noted that they also contributed to the learning of adjective words. Moreover, it was obvious that the most effective for the implementation of these tasks were those table games, during which children were given the opportunity to recognize toys, fruits, flowers both visually and aurally, by touching and through verbal analysis (France et al., 2005). Thus, during the game "What to do"... children had the opportunity to recognize tastes (sour, salty, sweet, bitter), smells of fruits, flowers, food, perfume, etc., the feelings of cold and hot (cold, chilling, hot, sweaty, etc.), as well as learn words expressing other characteristics.

If before the experimental work children saw and named the secondary, even completely insignificant features of the object, then during the subsequent work they began to distinguish the essential, characteristic parts of the object, their sizes, shapes, colors, quantity, weight. Some children were able to count even up to twenty, some had learned subtraction and addition signs, "more-less", "big-small", "short-long" expressions, as well

as space aspects: “under-on”, “up-down”, “near”, “in” and other concepts.
Based on the fact that plot games were also a fairly accessible and effective tool for vocabulary development when using targeted and specially developed pedagogical approaches, developed games contained not only specific plots, but also combined with supplementing elements taken from other types of games. That kind of plot games acquire a “collective”" nature. A similar reworking of the game structure allowed solving several problems in the same game: sensory education, raising the level of cognition and forming the ability to create cause-and-effect connections. This was due to the fact that despite the rather simple content of the games, they were also enriched with music, verse and aesthetic elements. Using similar approaches for plot games made it possible to involve children in play activities more actively and for a longer period of time. Moreover, these games also had elements of role-playing games, which obviously contributed to the imitation of heard speech and the formation of communication skills with adults.
The themes of “Animals”", “Flowers”", “Seasons”, “Clothes” and “Profession’ have been developed and chosen for plot games, which were also based on vocabulary enrichment questions (Saratikyan, & Zohrabyan, 2001). The experiment data confirmed that as a result of the sample educational material and plot games the experimental group participants’ had learned not only to distinguish seasons, clothes, the sex of people, etc., but also to use their names and characteristic features in speech. Conducted observations also determined that during these games, children especially easily mastered the words indicating place and time. And this was an important index because it contributed to the formation of spatial and temporal thinking.

Thus, 9 (69%) children of the experimental group and 4 (31%) of the control group learned words indicating time and place during the game activity. It was notiable, that the number of children who learned words expressing time and place in the experimental group increased actively (Fig. 2).

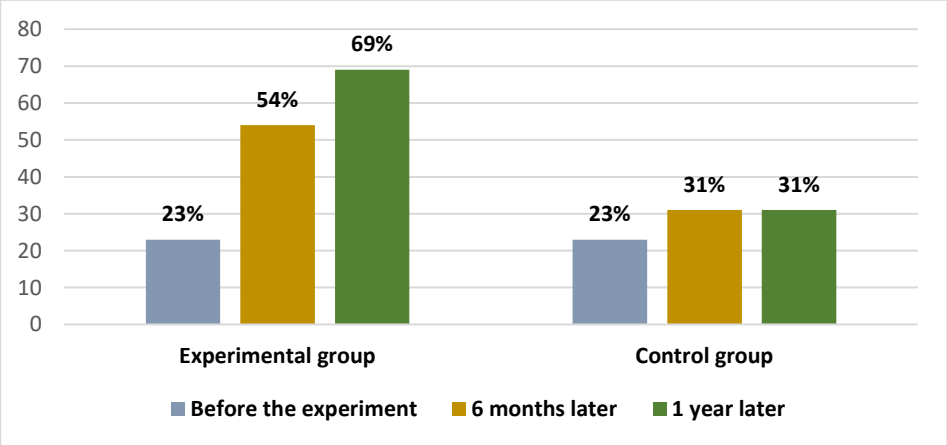

Figure 2. Indicators of developed words showing time and place recorded during game activity.

Referring to the results of other types of games study which contributed to the vocabulary formation and development of children with moderate intellectual disability, it was possible to state that they also support to the solution of the given problem to one degree or another, but their effectiveness was not as high as object, table and plot games. By characterizing the meaning of word games, it confirmed that they were not frequently used during the corrective exercises organized before the experimental works. This type of game was mostly “merged’ with several table (picture-assisted game exercises) so that it did not stand out as a separate type of game (Andreyeva, 2017).
While picture-focused word games offered initial vocabulary practice, teachers recognized the need for further language development. They introduced plot games, allowing children with moderate intellectual disabilities to naturally integrate their mastered words into phrases and rhymes.During these games, a line or word in the quatrain was changed and

the children were asked to decide what was wrong. All word works were accompanied by various game tricks and reinforcement of sensory experience. As the studies have shown, speech therapy games were not particularly important in the development of the vocabulary of children with moderate intellectual disability. It was true that some changes were observed in the vocabulary of children in the experimental group (39%), but this type of game was more effective when it was used especially for the development of phonological abilities and pronunciation.

Despite the aforementioned, the necessity of using speech therapy games was undeniable, as it contributed to increasing the effectiveness of work on separating parts from the whole, familiarizing with speech organs and developing other speech factors (Smbatyan, 2014). Based on the results of the conducted scientific experiment, it became obviouse that mobile games contributed the least to enriching the vocabulary of the research group. It was notiable that at the end of the year, only 23% of the children in the experimental group learned new words during this type of game, while in the control group there were none at all. This was explained by the fact that the used mobile games were mostly sports games and did not aim at vocabulary development.

Within pedagogical experiment the base of mobile games, which were held in parallel with object and plot games, and sometimes were used in combined way, the aim was speech development. However, experience had shown these playing based activities indeed, contributed to the development of impressive speech, but they had a slower impact on the development of specific vocabulary rather than other types of games. Therefore, it was also found that during mobile games, children learned to orient themselves in space by hearing and activate the mobility of their own body.

CONCLUSION

Generalizing and summarizing the annual pedagogical scientific experiment results of vocabulary enrichment and development of children with moderate intellectual disability, it was possible to confirm that the use of play based activities significantly decreased the number of children who were confusing the names of objects, besides that all other indicators showed the improvement of vocabulary formation.

Done experience had shown that vocabulary development activities had a positive impact on all activities of children with moderate intellectual disability. At the same time, it was confirmed that not all taypes of games were highly effective for the speech and vocabulary development of these children. At the same time, it was discovered that object, table, and plot games were particularly effective for this aim. Other types of games (speech therapy, mobile, word, etc.) had relatively little contribution to the development of vocabulary. This was explained by deep disturbances in the psychological processes, physical development and sensorimotor sphere of children moderate intellectual disability.

The use of selected systematic and developed games and approaches, which were applied according to the preserved capabilities and mental developmental characteristics of children with moderate intellectual disability, also contributed to the solution of complex problems of their general development, identification of potential and formation of social skills. Meanwhile, the use of special developed games and organization of play based activities with specific themes for vocabulary development purpose had a positive effect on general development of children with moderate intellectual disability and for the world perception formation. This was the basis for further work on the development of all aspects of connected speech, communication and communication processes.

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