

THE STUDY OF BASIC FEATURES OF ATTENTION AMONG JUNIOR SCHOOLCHILDREN WITH INTELLECTUAL DISABILITY

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Abstract: The relevance of the research is determined by the need of providing children with intellectual disabilities (mentally retarded) with socially appropriate qualitative education, that is connected directly with the work on developing the basic features of attention, the study of which the article is dedicated to. Leading research methods are observation and experiment, allowing pointing out the level of development and attention peculiarities of mentally retarded junior schoolchildren. The article reveals the characteristics of span, capacity, switch and division of students' attention with intellectual disability; it also shows the interaction with other mental functions. The materials of the research can be successfully used in organizing educational process in special (correctional) schools.

Keywords: mental retardation, schoolchildren, features of attention, span, capacity, division.

1 Introduction

Psychological and pedagogical support of the children with limited opportunities of health in the educational process is regarded as a priority of national importance at current time. Teachers of the correctional pedagogy, psychology and speech therapy department also pay special attention to this problem. Every child, regardless of the type of his development, deserves the conditions, fostering integration into the society in the best way possible. (Emelyanova et al., 2015, 2018; Karynbaeva et al., 2017).

Schoolchildren with intellectual disability (mentally retarded) are the biggest category of the children with limited opportunities of health. Mental retardation is regarded as steady decrease of cognitive activity based on organic lesion of central nervous system. According to the works of I.M. Bgazhnokova (1987), A.D. Vinogradova (1985), D. N. Isaeva (2003) and V.G. Petrova (2007), mental retardation is characterized by defective memory, speech and thinking delay, that makes difficult to realize the process of education and acquire the social experience in whole. By this reason, education and training of the children with mild and moderate degrees of intellectual decrease are realized in special (correctional) schools according to the particular educational program, which differs from the ordinary school one by the scope, content, as well as the methods of implementation.

Characterizing cognitive activity of the mentally retarded children, experts attach particular importance to the attention. As in normal state, it is included into all types of activity of the schoolchild, and defines mainly their effectiveness. But the attention of the children with intellectual disability isn't so clear, as the one of normally developed children of the same age and it differs by a number of peculiarities, few of which are studied well.

As a result, the problem of our research lied in more detailed study of basic features of the attention among mentally retarded children. Its relevance is determined by the need of providing socially appropriate quality of education for the people with intellectual disability, and the novelty of the study is shown by considerable scope of facts, completing significantly the conception of the attention development in case of mental retardation existing in science.

2 Literature Review

Attention is a concentration of the mind on the certain objects or activity. It doesn't refer to the cognitive processes, because it doesn't have its own content. Being included into all mental processes and types of activity, attention provides their efficiency and it is filled up with their content.

Influence of the intellectual disorder of the attention development was studied by I. L. Baskakova (1982), S. D. Zabramnaya and I. Yu. Levchenko (2007), N. H. Hugenin (1997), K. M. Antshel et al. (2006), V. E. Fee et al. (1994). Their researches show that the attention disorder, while not explaining all peculiarities of mentally retarded child's mentality, but should be reviewed among basic symptoms of mental retardation. It is also emphasized in the works of M. G. Aman et al. (2002), A. de Bildt et al. (2003), K. Courtenay (2001), R. S. Martinez and M. Semrud-Clikeman (2004). It was found out that the attention of the children with intellectual disability is attracted hardly to the required sides of the object and is concentrated badly. Any sudden noise diverts children's attention from the educational work, or another activity, which requires focus and concentration.

There are three types of the attention: voluntary, involuntary and postvoluntary. In case of mental retardation, the voluntary attention suffers the most. It is studied more than other types and differs by difficulty of attraction, impossibility of long concentration, fast and easy distractibility, instability and absence of mind. L. S. Vygotsky (2003) explains the weakness of the voluntary attention by the immaturity of the mentally retarded child, underdevelopment of will and self-control. As our research showed, even in high school, volitional qualities of the personality of the children with intellectual disability are developed on the low level. It complicates considerably their concentration on performing this or that task (Shapovalova et al., 2018).

The involuntary attention of such schoolchildren is safer, because it depends less on the conscious. But it also differs from the norm, because it is connected with interests, and their scope is poor enough in case of mental retardation. Therefore, the number of objects is limited, which could attract schoolchildren's attention.

The postvoluntary attention in case of mental retardation wasn't studied intentionally. The condition of its appearing is acceptable level of voluntary attention, which the most of such children don't have. But it was found out, that the postvoluntary attention usually appears in those types of activity which express lively interest for them (Groshekov, 2002; Myrsky, 1990; Pinsky, 1985). Unfortunately, the lack of conscious attitude of the children with intellectual disability toward learning, practically excludes the possibility of appearing postvoluntary attention in educational activity (Shapovalova et al., 2017).

It was turned out that the basic features of the attention depend on the peculiarities of schoolchildren's neurodynamics (Liepinya, 1977). Nervous schoolchildren are active, mischievous, and distractible. Illogical changes from one decision to another are inherent to them. But according to the indicators of the attention capacity they are getting behind normally developed children of the same age less than retarded students.

Schoolchildren with prevailing process of retardation are assiduous; they have relatively stable attention that allows them not diverting from performing basic tasks. But because of the serious attention capacity disorders and pace of mental activity, efficiency of their work remains low.

Other features of the attention are also broken. It switches badly over changing mental activity, as well as inside of one and the same activity, if it requires changing the objects of attention. The ability of dividing attention between different types of activity weakened. Most schoolchildren cannot perform simultaneously even the simplest motor actions, moreover distribute attention between two types of cognitive activity. Therefore, the attention in case of mental retardation is characterized by the series of disorders, concerning practically all their features.

3 Research Methodological Framework

This research was held during 2017-2018 academic year in the city of Birobidzhan on the basis of municipal budget educational institution "Special (correctional) school". 16 schoolchildren of the second and third forms took part in it.

The aim of the research is to study basic features of the attention of the mentally retarded junior schoolchildren. The tasks were aimed at pointing out the level of development and peculiarities of showing attention stability, capacity and division by the junior schoolchildren. The aim and tasks of the investigation came from the need of using methods applied in psychology "Correctional test", "Spot 10 differences" and "Vice versa". The work was held in an individual form. Participants' interest to the tasks was stimulated with the help of small prizes for successful work. To clarify the experimental data, we were observing the behavior of participants at classes during the academic term. The units of observation became the expression of basic features of their attention while carrying out training tasks.

In our version of the correctional test, the letterform was used (15 lines, 25 capital letters, located at random in every line). Schoolchildren should attentively look through line after line, CROSS OUT all letters "A" and ENCIRCLE all letters "K". Using sample (zero) line, children were explained the instruction and shown how to perform the task within 2 minutes. While evaluating we took into account the number of mistakes and peculiarities of schoolchildren' behavior during the work, but in the first place we were interested in the lines without mistakes, which we evaluated by 1 point each:

- 0 – 5 points - low level of task fulfillment;
- 6 – 10 points - medium level;
- 11 – 15 points - high level.

The method "Vice versa" resembles a funny game. Children one-by-one read true and false statements and they should answer "no" if the statement is true, and if it is a false one, they should say "yes":

- Every person has a name;
- Soup is poured into the hat;
- All cats can fly;
- Wild animals live in the forest;
- The grass is green;
- Dog has four tails;
- Milk is made of paper;
- Schoolchildren have holidays in summer;
- The sun shines at night;
- Pig is a piece of furniture;
- Smoking is bad for health;
- Moscow is the capital of Russia;
- Autumn comes after winter;
- Sugar is sweet;
- Exercise books should be kept in the fridge.

Every right answer, received on the first try, was evaluated by 1 point, on the second try - 0,5 point. If there were more than two tries, the answer wasn't evaluated. While evaluating the number of mistakes and total amount of points were taken into account:

- 0 – 5 points - low level of tasks fulfillment;
- 5,5 – 10 points - medium level;
- 10,5 – 15 points- high level.

While implementing the method "Spot 10 differences", children one-by-one were shown 3 bright cards, where fairy-tale characters were painted twice (Farther Frost, Snow Maiden, and Witch Baba Yaga). There were 10 differences in each picture, which participants should have found. The time of work wasn't limited, but it was taken into account in evaluating as well as the number of differences found in the pictures:

- 0 – 10 differences - low level of pointing out basic features of attention;
- 11 – 20 differences - medium level;
- 21 – 30 differences - high level.

4 Results and Discussion

It should be mentioned that we didn't find out considerable difference in the work of the children of the 2d and 3d forms, that is why we present the generalized results. It was found out that the method "Correctional test" was the most difficult for the schoolchildren. Some of the children were hurrying, others were working at an easy pace, but all of them performed this task on the low level, although they got it in time, and some of them even completed for 1-1,5 minutes. Nobody could carry out more than three lines without mistakes, and the results of seven schoolchildren reduced to zero.

According to S. Ya. Rubinshtein (1999), if the mistakes, made by the children with intellectual disability, have permanent character, then they are connected with misunderstanding. And those mistakes, which are caused by inattention, they make only in certain period of time, when there was a lack of concentration on the object of activity. Our participants understood the instruction, repeated it with confidence and called correctly the way of marking letters "A" and "K". Having begun the work, they almost immediately got confused, because they couldn't concentrate their attention both ways (crossing out and encircling). Many of them began using only one way from the 1st-2d lines, omitting the necessary ones, and marking the odd letters. Children didn't react the comments, didn't show interest, but they kept asking if they won the prize. Thus, before the work, the student asked if there was another game for him. He started the task unwillingly, began getting distracted from the first line. He kept asking about the prize promised by the teacher, and when he would receive it, meanwhile he was crossing out the letters at random. He was hurrying, "jumping" over the lines and getting angry, when the expert asked to come back to the omitted one. As a result, we evaluated his work by zero point. His classmate tried to be attentive. During the first minute of the work she looked through 4,5 lines and 2 of them were right, then she began getting distracted. She asked how long she would work, if there were other games, if she received the prize. She began encircling all letters one after another. The last line she crossed out with horizontal line and said that she performed the task fast and well.

The method "Vice versa" was realized successfully by junior schoolchildren, although the medium level was shown only by 4 children. The work of the rest 12 students was implemented at the low level. If normally developed children are asked to deny well-known facts and confirm glaring falsehood, they are laughing. Our participants were absolutely indifferent, they didn't think that the task was interesting and funny, and answering "vice versa" wasn't humorous for them. In the process of the work they often "got stuck" on some statements, kept repeating "yes" or "no". Many of them diverted from the instruction, which they understood well, and tried to answer in other words. For example, responding to the statement "All cats can fly" the student smiled uncertainly, then said: "No, they jump...yes...no... yes...or no?". The next statement "Wild animals live in the forest" made him enumerating wild animals: "Rabbits, wolves, cats...also run...wild". We see that cats were included into the list of the previous statement; this fact also confirms the distracted attention.

The method "Spot 10 differences" was realized by 8 participants at the medium and low levels. The experiment was held

expecting the New Year holidays, and Father Frost, Snow Maiden, Witch Baba Yaga are the main characters in holiday matinees. By these reasons schoolchildren were looking at the pictures gladly and searching and finding differences with pleasure. But even while performing such an interesting task, children's attention was perfunctory, unstable, distractible, and its basic features were pointed out weakly. Children didn't enumerate the differences sequentially, for example, top down, but jumped from one picture to another. They had troubles connected with the comparison of similar features:

- "Father Frost has a blue scarf, here (at another picture) we can see snow boots";
- "This Snow Maiden smiles, this one has a magic wand";
- "Witch Baba Yaga wears a kerchief, another doesn't have slippers", etc.

Children didn't pay attention to many bright details (the color of headwear; existence-absence of buttons, scarf, gloves, jewels; hairstyle; length of clothes, etc.), although they called different nonexistent features:

- "This Father Frost has a bigger bag", - "Really?", - "Bigger bag, more presents";
- "This Snow Maiden is rosy", - "And another?", - "This one has frozen";
- "Hooked nose" (Witch Baba Yaga has), - "And in another picture?", - "Also long", etc.

The observation confirmed sustained interrelation between the attention peculiarities inherent to the junior schoolchildren with intellectual disability and their cognitive activity. If they listened attentively to the teacher, they understood the instruction well, and many of them even remembered it till the end of the task. If they were not distracted during the work, they made fewer mistakes. But it was found out that to make conclusions about the level of pointing out basic features of attention of our participants according to the external expression of their face and gestures isn't often rational. We observed many times how the boy and the girl, as if listening attentively to the teacher, cannot repeat that thing which was said by the teacher and he or she even didn't react at the reference at once.

We saw how difficult it was to provide satisfactory concentrating level of such schoolchildren's attention, especially at the last classes. Regardless of the competent interchange of different types of activity, physical activity breaks and numerous ways of attraction and capture of the attention, children often got distracted, couldn't concentrate on the work for a long time and as a result they carried out it badly. According to A. R. Luria (2000) it means that when the children's attention weakens, further work is implemented at the low level of activity that reflects considerably in the results. The additional stimulation is needed, but it is not always effective as well. The attention, which a child devoted to the motivation made by the teacher (encouragement, competitive ground, advance confidence, strong request) doesn't mean that the child will switch over to the intended work.

As the observation showed, junior schoolchildren with intellectual disability switch over training task to the entertainment easily enough, for example, physical activity break. But the attention of such children to appropriate objects and types of activity was hardly attracted, that reveals its bad mobility and weakness of voluntary regulation.

5 Conclusion

As a result, psychological and pedagogical researches show, and correctional-pedagogical practice confirms, that in the structure of cognitive activity of mentally retarded children, there is a number of the attention disorders, concerning practically all the features. The capacity and voluntary regulation of the attention decreased, attention span, switch and division differ from the norm, and external expression does not always say about goal-aimed activity. All these disorders determine the special

character of learning educational material and complicate the process of socialization. Meanwhile, it was found out that appropriate psychological and pedagogical support of the educational process in the special school for children with intellectual disability fosters the correction of their attention disorders, development of cognitive activity and personality in general.

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