DEVELOPMENT PSYCHOLOGY

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Specificity of orientation in the scheme of own body of preschool children with the delay of mental development

Results of experimental studying of features of orientation of children with DMD in the scheme of own body are resulted. Qualitative originalities of orientation of children throughout preschool age are described. Character of interest to the task of children with the detained development, acceptance of the task by them, character of difficulties, the relation to result of the activity is defined.

Key words: *orientation in space, the body scheme, perception-reproduction, a delay of mental development.*

Orientation problem in space – one of significant problems of psychology of the person as orientation in space is a necessary condition of knowledge, active transformation of the surrounding validity. In psychology and pedagogics the considerable material on various problems of orientation of the person in space is saved up: sensation, perception of space; spatial representations; understanding of spatial relations orientation genesis in space, stages of its formation [1, 2, 3, 4, 8, 11, 12] also Is etc. revealed. The researches resulted in the literature show orientation influence in space on mastering by children by bases of sciences. Being a necessary condition of successful knowledge and active transformation of the validity, it becomes that basis which unites different kinds of educational and labor activity.

Researchers designate spatial orientation as ability of the person to define the site, a site of other objects in space concerning what or readout system, to differentiate directions of space and freely to move in it. The concept of orientation joins also studying of properties, both the space, and its objects filling [2, 3, 4, 11, 12, etc.].

Allocate two interconnected and interdependent kinds: orientation in the scheme of own body and in surrounding space. They develop gradually: with feeling of own body before development of strategy of behavior in the social world [1, 2, 3, 7, 11, 12 etc.]. Genetically early form of orientation is orientation in the scheme of own body. It is known that interaction of the person with Wednesday includes also a body of the person with characteristic system for it spatial signs and relations. According to researchers B.G. Ananev, B.M. Velichkovsky, V.L. Zinchenko, A.R. Lurija, E.F. Rybalko, the body scheme it is considered as an image of mutual position of parts of the body, evolving proprioception [1, 2, 6]. According to A.S. Batueva's representations, the body scheme makes «a basis of a static image of a body» and «… represents rigid system

of communications» [5]. G. Hed and G. Holms consider the body scheme as process of synthesis of various sensations and representations formed on this basis not only about size, position and interrelation of parts of a body, but also about a body as the structural whole [13]. Mastering by the child of the scheme of a body promotes practical development of properties and space directions.

Problem of formation of spatial representations – one of the most important problems of preschool education as this age is most sensory in orientation development. Special value is got by this problem when conversation goes about children with a delay of mental development.

Problem of development of orientation in space at early stages ontogeny at children with DMD – one of the most actual problems in the field of special psychology. The analysis of the data available in the literature testifies that process of knowledge of space at children with a delay of mental development is broken in all defining directions. Infringement of interaction of visual, impellent and tactile analyzers which develops with lateness is marked and long remains defective. That is in turn reflected in analitiko-synthetic activity at processing raznomodalnoy perceptual information.

E.S.Ajrapetjants, O.I. Galkina, Z.M. Dunaeva, S.V. Letunovskaja, L.A. Pepik, R.D. Triger, etc. is connected by the difficulties arising at children with DMD at mastering by bases of sciences, with hypoplasia spatial orientation. Children experience difficulties at mastering by knowledge on mathematics, reading, the letter.

Important direction of studying of orientation in space of children with DMD is the analysis of initial forms of orientation.

Research objective studying of an originality of orientation in the scheme of a body of children with a delay of mental development of preschool age.

A research hypothesis:

At children with difficulties in training the essential delay in terms of formation of ability is observed to be guided in the scheme of own body.

1. Children with DMD by the end of preschool age own the developed character of roughly-research actions.
2. Preschool children have complexities at correlation of three-dimensional space with the two-dimensional.

90 children took part in experiment with DMD tserebralno-organic генеза 5th, 6th and 7th years of life (on 30 persons).

Research passed in three stages:

– Perception-reproduction of movements on imitation, the sample and the verbal instruction of the adult;
– Perception-reproduction of movements with use of a wooden didactic toy (the little man with mobile joints);
– Perception-reproduction of movements on drawing – to the sample.
– Processing of the empirical data was carried out by methods of mathematical statistics and the qualitative analysis.

The basic results

Data of a comparative method of mathematical processing is presented in drawing №1.

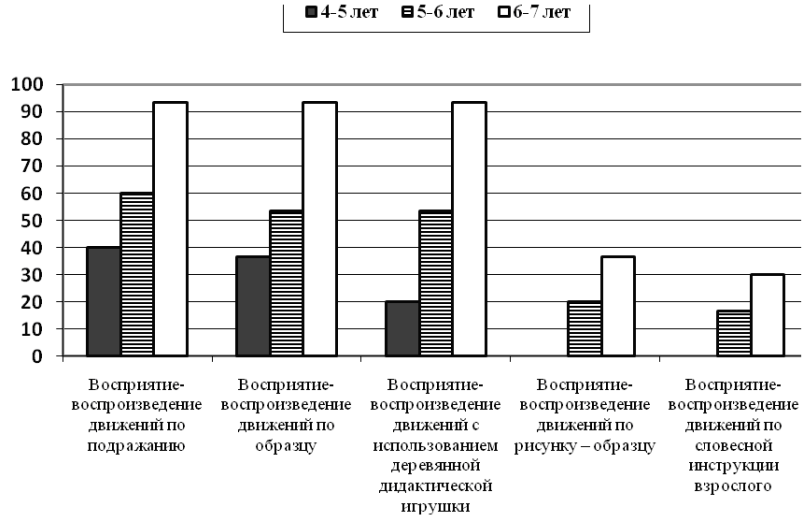

Fig. 1 Orientation in the scheme of own body

(Because children of 4–5 years with a delay of mental development couldn't carry out the task 4 and 5, on the histogram there is no reflection of their results)

Discussion of results

The qualitative analysis of the received data has revealed that on 5th year of life proof interest to tasks for modeling of spatial relations wasn't generated yet. The game component of a problem caused the greatest interest in children, they were involved with toys, instead of process of performance of the task. As soon as the toy it came into the hands, children aspired to operate with it to a task presentation. Activity of children differed undirected, frequent derivations, manipulative actions.

On 6th year of life increase of interest to the task was observed. It is necessary to notice that at this age diverse results have been revealed. Some children, also as well as at children of 4–5 years didn't have an interest to tasks, at others steady interest (basically children reacted to novelty of the task, screen occurrence at actions on the sample, a picture, a toy) was observed not; but there were also children who have shown informative interest to tasks, they tried to supervise correctness of performance of the task, their orientation in the task amplified, activity (the three children trained in correctional establishment 3rd year) increased. The given group of children aspired to argue, make comments on the actions. So, for example, Katya Y. on the offer

to carry out the task, began to be interested: «And what for? So it is necessary? How gymnastics? Gymnastics it is necessary …».

On 7th year of life, at children steady interest to tasks was observed, there was an aspiration better it to execute. At a stage of a presentation of the task children watched closely actions of the experimenter, obediently performing work. Activity of children has grown also. But thus it was possible to see and superficial, negligent performance of tasks.

The analysis of the received data speaks and about absence of a rough stage at the decision of spatial problems at preschool children of the fifth year of life with the detained development. They, without listening attentively to words of the adult, started to operate at once, aspired to finish work faster. Quality of performance of their task didn't interest. Character of set questions by children with the detained development is interesting also. On the fifth year of life at many children didn't arise neither rough, nor informative questions. They started at once the task. It was possible to hear a question «what is it?». But thus obvious interest at children it was not observed, as they there and then, asked such questions as: "I will make and I will go for a walk? And all so did? And we quickly?, Etc.". Thus, the question became for them as means of verbal dialogue. On the sixth year of life the quantity of children asking such questions, as increases: "what is it? and how? Where?". Children trained in educational institution the third year, asked such questions as: "what for? Why?" With the informative purpose. On the seventh year of life the situation sharply changes, many children have additional questions. They could ask "what for? Why? How has made? Where? Etc.". It is necessary to notice that authors N. Babich, V.A. Ljublinskaja, E. Hurlock, A. Jersild, etc. mark at normally developing contemporaries, delay of development of questions, to the beginning of school age the quantity of questions in speech of children decreases. At children with DMD, on the contrary, by the end of preschool age the quantity of questions increases.

Further it is necessary to stop on character of difficulties which were tested by preschool children with the detained development. On the fifth year of life the perception-reproduction of movements on imitation is accessible to children. Reacting to novelty of the task, they started at once actions, but thus in their movements the illegibility, low co-ordination, impossibility of deduction of a pose was observed. Children didn't aspire to repeat all movements correctly. Slackness of movements, not ability to be switched to other movement was observed also. About increase in age of the technician of performance of movements there is a clearness, ability to keep a pose, co-ordination. But thus, to some children inability to finish action under the first requirement was peculiar. For example, Dima G. (5 years 11 months) after the offer to stop, continued to carry out the task, making comments:" And I still so can ". The obtained data speaks about understanding children of the success at performance of the task which is shown in repeated repetition of the reached result and in unwillingness to stop activity.

The received results at perception-reproduction of movements on the sample in 4–5 years, show that the third part of children well understanding of the sample, thus at some children was observed original confusion therefore they committed errors.

Since five years also as it was marked earlier, improvement of results on qualitative and to quantity indicators is observed.

The perception-reproduction of movements with use of a wooden didactic toy was inaccessible to many children of the fifth year of life. They couldn't understand sense of a task in view though interest to a toy was high. Entering game with a toy them the attention to the shown task wasn't paid. Special difficulties have been found out in inadequate transfer of actions. If the sample was given in a dissymetric kind, children replaced it with the symmetric. So, for example Sergey P. having seen on a toy the bent right hand in an elbow upwards and the bent left hand in an elbow downwards has bent both hands in an elbow in top. That fact is important also that smooth surface of a direction of movements of parts of a body was peculiar to them. So Lesha R. (4г.2мес. 4 years 2 months) Instead of an arrangement of the foot bent in a knee ahead, bent a foot a knee back. With the years the situation changes also children with DMD by the end of preschool age practically catch up with the normally developing contemporaries, both on quality of performance of the task, and on quantity indicators.

Well-known that the perception or "reading" of the space reflected in a plane, demands understanding of its special symbolics, ability to establish connection of the real and reflected space. The Perception-reproduction of movements on drawing-sample on the fifth year of life is inaccessible to children with the detained development. Attempts primerivaniya the movements to a picture it was observed at children who in correctional establishment are trained the second year. The cited data speaks about a huge role of rendering of the early correctional help to children with a delay in development. With the years results change slightly, only the third part of children by the end of preschool age could carry out completely the task. The increase in quantity of children which correlated the movements to a picture is thus observed. So, for example Lena G. (6 years 4 months) Considers attentively a picture, moves with a hand approaching it to drawing, correlates constantly body to the image. Thus in a whisper proves task performance: "it here … so … here... It and etc.", and only after primerivany carries out movement.

As it is marked in the literature, children with DMD differ an originality of formation of speech. Analyzing results of the conducted research, it is necessary to notice that speech tasks caused in them special difficulties. So at task performance under the verbal instruction misunderstanding of the shown task was peculiar to children of the fifth year, they moved chaotically, lifting and lowering hands and feet without being guided by the instruction. Four children have refused to carry out the task, saying that don't know, how it is necessary to move: «I can not, I do not know, we so didn't do, etc.». With increase in age results change, but also by the end of preschool age only 30 % of children could carry out correctly the task.

Conclusions

1. Children with DMD lack those ways of perception, transformation of space which their normally developing contemporaries freely own. At many children by the end of preschool age the developed character of roughly-research ac-

tions is observed. Only by the end of preschool age ways of the decision of tasks in view change: from practical development before visual correlation.

2. At children the essential delay in terms of formation of ability is revealed to be guided in the scheme of own body.
3. Lacks of development of the basic movements, discrepancy, non-coordination of movements aren'ted. Only by the end of preschool age, their movement become more and more comprehended, operated, coped and assured. But also by the end of preschool age there is no exact reproduction of certain position of a body, the form, amplitude and a direction.
4. The most expressed infringements with DMD were found out in children in understanding of the verbal instruction which remain till the end of preschool age that is in turn reflected in formation of spatial concepts.
5. Difficulties of perception by children with DMD the spatial relations offered in drawing-sample are revealed. At any stage of transition from one modality in another the help is necessary for them from the adult.

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