TOOLS FOR PSYCHOLOGICAL DIAGNOSTICS OF CHRONOTOPE OF COMMUNICATIVE ACTIVITY OF PRESCHOOL CHILDREN WITH DELAY OF MENTAL DEVELOPMENT: THEORY AND TECHNIQUE

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Summary. Usage of a special psychology concept: "chronotope of communicative activity of preschool children with delay of mental development" is substantiated by the author in the paper. Tools for psychological diagnostics of communicative activity chronotope of middle and elder preschool age children with delay of psychological development were theoretically justified and implemented operationally in an experimental model. Principles of psychological diagnostics of communicative activity chronotope of preschool children with delay of mental development were determined and depicted. Parameters of psychological diagnostics of communicative activity chronotope were determined. These parameters are described through diagnostic indicators of chronotope of communicative activity. Methods for psychological diagnostics of components (spatial, temporal and value-semantic) of communicative activity chronotope were selected.

Keywords: chronotope, preschool children, delay of mental development, consciousness, ordinary and extraordinary reality of consciousness, principles, parameters, indicators, tools for psychological diagnostics.

INTRODUCTION

At the present stage of psychological science development, the objective is to up-to-date, to model and research into system objects, to search heuristic mechanisms by which researcher can reveal new horizons of knowledge on psychological phenomena in scientific rationality of post-non-classical types. Therefore, there is a problem of finding diagnostic tools and developing a chronotope of communicative activity of preschool children with delayed psychological development (hereinafter- developmentally delayed ones). Formation, development and functioning in the social environment using inter-subjective and within-subject communication, cooperation and dialogue

with Other (external and verbalized internal) are the most important problems of special psychology and pedagogy.

It was found that, in the context of the "chronotope" psychological research, category in combination with the "communicative activity" category allows for describing a child's spatial-temporal and value-semantic system of communication, cooperation and dialogue with the world. The research concept of "chronotope of communicative activity" was theoretically justified. Moreover, it is particularly important from the practical point of view to scientifically justify and develop the tools for psychological diagnostics of chronotope of communication activity in preschool children with developmental delay.

Therefore, the aim of our paper is to study theoretical, methodological and procedural bases for psychological diagnostics of the chronotope of communication activity of such preschool children. Accordingly, the aim of our research is reflected in the following objectives: firstly, to justify an experimental model of psychological diagnostics of the chronotope of communication activity; secondly, to discuss structural components of the experimental model: components, psychological diagnostic principles, parameters and indicators for the study of chronotope of communication activity of preschool children with delay of mental development; thirdly, to choose methods and to justify the system of psychological diagnostics of the chronotope of communication activity of preschool children with delay of mental development.

METHODS

Theoretical methods: a deductive method (axiomatic-deductive and hypothetical) was used for systematic description of the phenomenon under study; modelling (structural and functional) was used for construction of the model in psychological diagnostics of the chronotope of communication activity of preschool children with delay of mental development.

RESULTS AND DISCUSSION

The theoretical concept of 'chronotope of communication activity of preschool children with delay of mental development' is described as intersubjective and within-subject communication, cooperation and dialogue (external and internal verbalized) with Other implemented by preschool children with delayed mental development and with typical mental and physical development in time and space, and in value - semantic life dimension. Chronotope is a multidimensional system of child's relationships with Others: in society (with real adults and peers); in culture (with adults, peers and characters of animated films); with a personalized Other (with favourite toys and imaginary partners). Preschooler's communication, cooperation and dialogue are implemented in different fields (with adults, peers, with a favourite toy and an imaginary partner, with animated characters) (I. Omelchenko, 2014) [3; 4].

The chronotope of communication activity of preschool children with delay of mental development is deployed at different levels of consciousness functioning: ordinary (communication, cooperation and dialogue with adults and peers) and extraordinary (communication, cooperation and dialogue with a favourite toy, an imaginary partner, with animated characters) levels. The system component of communication activity chronotope is its value and semantic dimension. Time in the chronotope is the fourth dimension of space, and values and semantic are the fifth or first dimension of human life (V. Zinchenko, 2010; 2011) [1; 2].

Thus, the following components can be distinguished in the structure of communication activity chronotope: spatial, temporal (time) and value-semantic that are presented by us through parameters and indicators of their functioning in the experimental model for diagnostics (see. Fig. 1).

The determined components of communicative activity chronotope allows us to approach directly

the formulation of theoretical and methodological principles of psychological diagnostics, which are defined by us as explanatory principles for practical psychologists' work at pre-schools.

Principles of psychological diagnostics always have a strong world-view orientation, they are related to perceptions of human nature and human relationships with the world. According to M. Savchyn, principles, being the core of a scientific method, combine and organize specific methods and techniques into an integral whole, demarcate science from non-science (M. Savchyn, 2013, p. 66) [6].

Development of analytical tools for diagnostics of communication activity chronotope was carried out on the basis of general principles of psychological diagnostics (L. Burlachuk, M. Zabrodin, K. Gurevich et al.), and on the basis of subjective approach principles (V. Druzhinin) and by using theoretical and methodological tools for studying of children with mental retardation (T. Viskovatova, O. Havrilushkina, E. Dmitrieva, T. Illyashenko, K. Lebedynska, V. Lubovskiy, T. Sak, M. Semago, N. Stadnenko, U. Ulyenkova et al.).

Diagnostics of the chronotope of communicative activity of preschool children with delay of mental development is based on the following working principles developed by preschool practical psychologists.

1. The principle of methodology and diagnostics unity (in future, corrective and developmental work shall be added). This principle implies close relationship between theoretical diagnostic ideas and tools designed, based on this methodology. Given the complex and multicomponent structure of communicative activity, it is most appropriate to use a post-non-classical type of scientific rationality (V. Stiopyn, 2000) [7] and multiparadigm approach to methodological frameworks that means to integrate different psychological approaches into diagnostics of the chronotope of communicative activity of preschool children with developmental delay: systematic, cultural, historical; social and psychological approaches; the subjectenvironmental concept; body-oriented psychology. Feasibility of a post-non-classical type of scientific rationality is based on the fact that the chronotope of communicative activity of preschool children with typical and delayed mental development is a highly complex object for diagnostics and assumes psychologist's commitment to values and social and cultural contexts, to object examination from the position of understanding of "person-world" relationships.

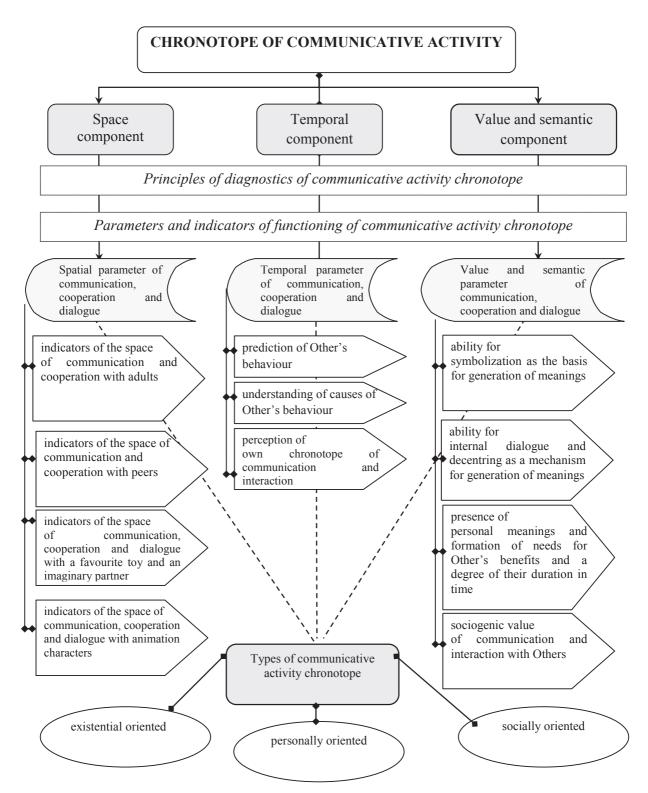


Figure 1. Experimental model for psychological diagnostics of chronotope of communicative activity in preschool children with delay of mental development

2. The principle of consistency and structural and dynamic integrity includes understanding that certain psychological aspects (functions, processes, scopes) are not isolated and manifest themselves holistically and systematically. The implementation of this principle allows psychologists to compare child's individual personal characteristics with the laws of ontogeny and, on this basis, to evaluate mechanisms and causes of specificity of certain areas or functional systems. The main tool is the structural and functional model, developed by us, describing the phenomenon of communicative activity chronotope that can be used for diagnostics performed by a psychologist. Determined states of communicative activity formation at different levels of consciousness functioning (according to E. Subbotskiy, 2007) [8], i.e. an ordinary level (communication, cooperation and dialogue with adults and peers) and an extraordinary one (communication, cooperation and dialogue with a favourite toy or an imaginary partner, animated characters), temporal and value-semantic levels (I. Omelchenko, 2014) are considered as parameters and indicators of mental development of a preschool child with developmental delay [3; 4].

An important methodological basis for diagnostics of communicative activity chronotope is the concept of a systemic nature of the psyche as a diagnosed object exists simultaneously at different levels of consciousness functioning: ordinary and extraordinary. This fact assumes its study in preschool children with developmental delay through basic events (interaction and communication with adults and peers, with a favourite toy, an imaginary partner, animated characters), and it is important for the examination to take into account significant impact of cognitive processes such as perception (the present), memory (the past), thought and imagination (the future) - on child's communicative activity implementation and to determine the framework role of the value-semantic dimension that operates at different consciousness levels.

The main features of the diagnostic and forming the system of communication activity chronotope of preschool children with developmental delay are integrity, conceptuality, purposefulness, structural properties, hierarchy, dynamism, synergetics, balance, strength, vitality.

3. Priority of the teleological approach over causal one. The importance of this principle is that the diagnostic task shall serve not as a system of stimuli, but as an integral part of child's life situations. This principle is implemented through

selection of diagnostic methods that correspond in the most appropriate form to possibilities of a child with mental retardation and can be regarded as parameters and indicators of mental development that are able to reveal the worst formed components of communicative activity. The parameters are used to organize, segment and analyse data. The indicators are separate components of the parameters; they are defined as sum or ratio. Although the parameters and indicators are separate concepts, they are usually used together. Values of the parameters and indicators and relationship between them make data meaningful.

For psychological diagnostics, methodological procedures for understanding, explanation and interpretation are very important. Understanding, contrary to knowledge acquisition, means comprehension of the inner nature, interpretation of knowledge about the object; during such process, sense, presence of psyche, values and personal meanings are revealed. The goal of understanding during psychological diagnostic process is to find an essence of psychological phenomena.

- 4. The principle of subject-subject relationships. Relationships in a child-psychologist dyad are the basis of reliable results of psychological diagnostics of communication activity chronotope. A type of this relationships influences the degree of manifestation of personal qualities and mental abilities of preschoolers with developmental delay and affects result reliability.
- 5. The principle of development. This principle assumes many-sided investigation of any mental phenomena in the process of its development. Based on this principle, a genetically-modelling approach emerged and has been developing rapidly in recent years in the national psychological science. By definition of S. Maksimenko, its essence is that the studied psychic phenomenon is originally constructed as a model of a specific activity and then it is actualized on the basis of specific ways of human activity organization. The genetic approach for psychological diagnostics of communication activity chronotope involves identification of psychological preconditions of qualitative changes of its development at different levels of consciousness functioning: ordinary and extraordinary during middle and elder preschool age.
- 6. The principle of synthesis of nomothetic and ideographic approaches during diagnostics. The nomothetic (natural, explanatory) paradigm is characterized by an objective study of a child using an inductive method to identify common

patterns of object's life activities; and ideographic (humanitarian, descriptive) paradigm is valuesemantic understanding of specific, individual human existence on the basis of acts of understanding and experience.

7. The principle of priority of humanitarian psychological approaches over natural scientific ones. Diagnostics of communication activity chronotope assumes priority of the humanitarian paradigm over natural scientific approach. Psychological diagnostics that focuses on the natural scientific paradigm does not take individual psyche into consideration. However, the main form of psyche existence is its individual uniqueness, activity and self-regulation. Since communication activity chronotope is a highly complex object, its study is only possible under the humanitarian paradigm. In accordance with the humanitarian paradigm, by definition of V. Petrenko, "another person is not a rigidly determined system, he or she is not subject to strict laws but has potential for internal development and possesses free will and acts as not equal, not identical to him/herself at each new moment. Regarding a human personality, final models and predictions based on determinism are incorrect. We can talk only about scenarios of event development when, at any time, a person or a society implement one possibility of a set of potential possibilities" (V. Petrenko, 2002, p. 118) [5].

Our system of psychological diagnostics of communication activity chronotope includes the study of its spatial, temporal and value-semantic components.

The spatial parameter of inter-subject communication and cooperation of preschool children with developmental delay with adults is studied by the following methods: study of motives of child's interaction with adults of A. Ruzska and subjective evaluation of child's interpersonal relations of N. Syemago, M. Syemago (all diagnostic tasks that reveal roles of family, loved ones). This parameter is expressed as the following indicators: predominance of motives of need for personal interaction with an adult and needs for recognition and support, ability to be emotionally involved in cooperation with an adult, ability to maintain over-situation contacts activated by personal motives, ability to maintain a productive and lasting communication with adults, ability to have positive attitude to significant adults (mother, father, both parents, siblings, educators) who are in the field of communicative activity of a child with developmental delay.

The spatial parameter of inter-subject communication, cooperation and dialogue with peers is studied by the following methods: subjective evaluation of child's interpersonal relations of N. Syemago, M. Syemago (all diagnostic tasks that reveal roles of friends), identification of types of children's dialogic cooperation during group creative and game activities of N. Yuryeva in modification of O. Havrilushkina, "Kingdom-state" of T. Gromova, "Test of geometric shapes" of A. Tkhostova, D. Beskova. This parameter is described by the following skills and abilities of a preschool child with mental retardation: positive attitude to friends (peers) who are in the area of communication, efficient communication and cooperation with peers, usage of different means of communication during joint activities, orientation in joint activities, absence of conflicts, conducting interactive dialogues, sovereignty/deprivation of psychological limits during inter-subject communication, cooperation and dialogue at game and creative activities, sovereignty/ deprivation of psychological limits during withinsubject communication, cooperation and dialogue (quality of contact with Others: permeability, integrity of the limit; strategy of building contacts with the world).

The spatial parameter of communication and cooperation of preschool children with developmental delay with a favourite toy or an imaginary partner is studied by the following methods: talk with children and adult questioning "favourite existence of the phenomenon, "I with a favourite toy" of E. Vasina modified by K. Makhover, "Person's contour" of S. Minyurova, "Contour of a favourite toy" of E. Vasina, questionnaire for parents (caregivers) to identify the "imaginary partner" phenomenon of O. Chesnokova, M. Yaremchuk, interviews with a child on an imaginary partner of M. Taylor, B. Cartwright, S. Carlson in modification of O. Chesnokova, M. Yaremchuk. This parameter is described by the following skills and abilities of a preschool child with mental retardation: toy "humanization" (existence of the "favourite toys" phenomenon), maintaining of productive and long communication with a favourite toy (prolongation of the "favourite toys" phenomenon, ability to verbalize internal dialogue using favourite toys), manifestation of attitude (expression of caregiving behaviour, empathy) to favourite toys, features of child's interaction with his/her toy (a toy as a partner of communication, game or means for feeling manifestation, a toy's position: dominant

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(an older friend, parent, teacher), equal (a peerpartner during game activities), features of interaction with a favourite toy from the standpoint of an adult (toy as a partner in communication, game or means for feeling manifestation, a toy's position: dominant (an older friend, parent, teacher), equal (a peer-partner during gaming activities), child's ability to communicate with a quasi-subject (existence of the imaginary partner phenomenon), maintaining productive and long communication (number of imaginary partners and duration of the phenomenon, child's age at the time of appearance and disappearance of his/ her imaginary partner, child's ability to verbalize inner dialogue with an imaginary partner), manifestation of attitude (expression of caregiving behaviour, empathy) to an imaginary partner, methods and forms of child's interaction with an imaginary partner (a partner of communication, game or means of feeling expression, an imaginary partner position: dominant (an older friend, parent, teacher), equal (a peer-partner during gaming activities), frequency of child's interaction with an imaginary partner, characteristics and properties of an imaginary partner and parents' attitude to an imaginary partner.

The spatial parameter of communication and cooperation of preschool children with developmental delay with animated characters is studied by the method for analysis of communication in the game through the story of the animated series "The Funnies" of M. Shakarova. This parameter is described by the following skills and abilities of preschool child with mental retardation: ability to accept/non-accept a proposition to play the cartoon story, ability to be sensitive/insensitive to changes in the plot that makes an adult as a game partner, ability to simulate a game on the basis of the animated story (a two-step, single-step game, a game with a fuzzy structure).

The temporal parameter of cause, understanding and prediction of Other's behaviour and own chronotope in social communicative situations is studied by the following methods: "Predicting of other persons' behaviour", "Understanding of mental causation" of E. Lebedeva, A. Naidenova, E. Sergienko, narrative methods of N. Talanova, E. Sergienko, subjective evaluation of child's interpersonal relations of N. Syemago, M. Syemago (all diagnostic tasks that determine features of communication in space and time with different people "here and now" and in the future – tasks at the sixth

sheet of the method). This parameter is described by the skills and abilities that are presented in Figure 1.

The value-semantic parameter of communication, cooperation and dialogue of preschool children with mental retardation is studied by the following methods: "Pictogram" of O. Dyachenko, "Cubes with pictures" of I. Mavrina, "A little lion" of S. Zabramna, "Flower-seven-colours" modified by L. Semenova, "Robinson" of V. Abramenkova. This parameter is described by skills and abilities that are presented in Figure 1.

CONCLUSIONS

The developed tools for psychological diagnostics of the chronotope of communicative activity of preschool children with delay of mental development, outlined principles and techniques are proposed to help improve existing tools for diagnostics of communication activity in preschool children with mental retardation. Thus, we propose further research into the way of developing theoretical and methodological foundations of communication activity chronotope formation of preschool children with delay of mental development in conditions of special preschool institutions, educational facilities, training and rehabilitation organizations.

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