

Diagnostics of Elementary School Children Social Representations, Concepts, Knowledge Development Level

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The article aims to identify the level of elementary school children social knowledge, representations, concepts development, to define the dynamics of their development at this age stage. It presents the results of a pilot study to testify that the transition from one "age stage" to another is characterized by positive changes that take place in the social sphere of elementary school children personality: with growing up the level of elementary school children understanding of the main social representations, concepts, knowledge increases; the number of social categories used in the speech extends; the content component of the studied notions changes due to the increase of signs and categories that are included in the active vocabulary and as a result of already available data specification.

Keywords: children, elementary school, knowledge, social representations, diagnostics, level of social knowledge development

INTRODUCTION

The research relevance

The difficult situation in modern society demands special attention to the questions of younger generation socialization. Today the study of issues concerning socialization should be implemented not only from the point of view of their procedural characteristic (compliance to stages and phases of the development) (Dodge, Pettit & Bates, 1994; Mudrik, 2000; Joan & Davidov, 2010; Gorshenina & Yakunchev, 2013; Buyanova, 2013, et al.; Zakirova, Gaysina

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& Zhumabaeva, 2015).), but according to the achieved results as well, when the research is focused on structural components of social experience (social representations, concepts, knowledge, experience of activity performance ways, etc.) providing it full development in a society (James & Zanden, 1990; Neyasova, 2011; Shukshina & Serikova, 2014; Yusupova, Podgorecki & Markova, 2015). Elementary school age is considered in the psychology and pedagogical theory as the major age stage in the development of social representations, concepts, knowledge and formation of prerequisites for further social development (Schoonmaker, 2006; Kostelnik, 2006; Bayanova, 2014; Gromova, 2014; Klementyeva, 2014; Kalazka, 2013). It is caused by the fact that coming to school extends child's ideas of the world, takes to a new life position and gives the opportunity to implement a socially significant activity that provides them rich material to satisfy their cognitive interests. These interests act as psychological prerequisites of child's need to assimilate knowledge about social reality: rules of human-nature relationships, society and themselves; about behavior in public places, cultural institutions; about a variety of objects and natural phenomena and societies, their properties, qualities and states, etc. Learners can show social knowledge at the level of social representations in which external signs of the phenomena are reflected, and at the level of social concepts in which essential signs of the phenomena are expressed (Shukshina&Serikova, 2010). Children's knowledge of social reality may be at different level of completeness and depth, awareness and strength, specificity and generalization, and may be characterized by a systemacity level: pupils can have scrappy, unsystematic knowledge ("islands" on the basis of simple associations) and system knowledge. The acquisition of social phenomena knowledge and the formation of social representations and concepts is a difficult process. The perception of many phenomena in people's social life, their social relationships represents certain difficulty for elementary school children because of their age psychological peculiarities. Social knowledge may become the leading force in child's behavior in case if children have experienced and felt it personally.

The possibilities of pedagogical influence on the process of elementary school children social representations, concepts, knowledge development are determined by the following age characteristics: the emergence of theoreticity as a new quality of social knowledge; development of productive techniques and skills of study, "ability to study"; the emergence of self-assessment, self-realization and self-control; establishment of new social relations, friendly contacts; intensive development of valuable orientations; development of creative activity skills (transfer of knowledge and abilities in a new situation, vision of new problems in standard conditions, vision of new functions of a familiar object).

To define necessary organizational and pedagogical conditions to provide efficient socialization there increases the need to diagnose the initial level of elementary school children social representations, concepts and knowledge development; besides there should be specified the dynamics of their development within this age group.

MATERIALS AND METHODS

Research methods

The following research methods were applied to solve the objectives: pedagogical experiment, observation, questioning (questioning, interview,

conversation, etc.); the method of expert evaluations; the quantitative and qualitative analysis of the obtained data.

The research experimental base

The experimental study of social representations, concepts, knowledge development level was carried out on the basis of general education institutions of the Republic of Mordovia: "Comprehensive School No. 23", MBOI "Comprehensive School with Profound Studying of Subjects No. 24", MBOI "Comprehensive School No. 33", "Comprehensive School No. 20", MBOI "Comprehensive School No. 6"; these schools are situated in the city of Saransk.

Research phases

The research was conducted in three stages:

- the first stage - there was selected diagnostic tools to identify the level of elementary school children social representations, concepts and knowledge development; there was elaborated the technique to carry out experimental work;
- the second stage - there was implemented the diagnostics of the initial level of the studied components, and the dynamics of their development in elementary school age was brought out;
- the third stage - there was carried out the systematization and generalization of the research results.

RESULTS

Criteria, indicators and levels of elementary school children social representations, concepts and knowledge development

In scientific literature the term "social representations" is used to specify a transitional step from feelings and perception to thinking. Social representations imply the generalized reflection of the surrounding world, the visual image that has characteristic signs of a subject or phenomenon. It is known that social representations, being generalized with the word, form *social concepts*. The crucial role in the development of social concepts is assigned to the character of that source, that basis on which the concept is formed. In some cases the essence of a social concept may be revealed in the course of social facts and phenomena perception, in others the main source is the word in which the concept essence is expressed in a generalized form.

In the process of socialization the child acquires a large amount of knowledge about society, public relations, social status and roles, norms and rules of social behavior and many other things. The development of knowledge, being characterized by general signs, depends at the same time on what knowledge is acquired. Facts which are externally expressed and subject to sensory perception are acquired in the course of perception, comprehension and retention. Social knowledge is an important indicative basis of human social behavior. Social knowledge is the result of the social reality cognition process. This knowledge is reflected in human consciousness in the form of social representations, social concepts.

The following criteria have been singled out on the basis of the analysis of theoretical sources and features of elementary school children social representations, concepts and knowledge development process: cognitive criterion infers the availability of knowledge, representations, concepts system

as the basis of beliefs and the factor that positively influences the process of a human's entry into a society; evaluative-emotional criterion includes the development level of value judgments and emotional relations to the phenomena of social reality, some actions and acts; the world outlook criterion assumes the availability of the system of goals, values, feelings, beliefs which determines a social active position of the personality; the behavioural criterion defines the focus of actions on socially approved norms, values, judgments, beliefs, sustainability and independence of behavior modes.

According to the brought out criteria there have been specified indicators of elementary school children social representations, concepts and knowledge development: the volume of knowledge and ideas about social ethical standards; awareness of social knowledge, representations, concepts application, connection and interdependence between concepts; the ability to use positive principles to evaluate acts; the availability of an argument and motivational component at evaluating, the availability of judgments containing an assessment of relations to a social phenomenon; the availability of social ideals; completeness and accuracy of social and moral ideal presentations; manifestation of social and moral beliefs in behavior.

On the basis of the presented criteria and indicators there have been hypothetically singled out the levels of elementary school children social knowledge and representations development. High level: social concepts are included into active vocabulary; has desire to expand social knowledge; has extensive information on a social aspect of life; uses positive social principles; an ideal is considered as a bearer of merits; ideas of a social ideal are full and specified; actions are characterized by the focus on interests of people around; behavior demonstrates positive social and moral beliefs. Sufficient level: social knowledge is not always specified; the volume of social order knowledge is sufficient for independent conclusions; gives sufficient number of signs at determining concepts. Intermediate level: representations and concepts about social norms are not specified, the volume of knowledge is not great, problems in their structure are specified; passive mastering of a word concept; average level of concepts awareness. Low level: weak judgments, confusion of basic social concepts and their signs definition; the volume of knowledge is not sufficient; the development of social representations is at the stage of emotional generalizations; the general characteristic of concepts is vague, some of the signs are insignificant, only the modality is true; there is no need for the performance of tasks having entertaining character.

Diagnostics of the level of basic social concepts understanding by elementary school children

Let us address the study of social representations, concepts, knowledge, tendencies and opportunities content and their proximate development in elementary school children. In the course of the experimental work there was undertaken an attempt to investigate the level of elementary school children understanding of the basic social concepts. Children were offered to explain such elementary social concepts as "a friend", "a person", "a family". Statistical data processing showed that most (83%) elementary school children consider that a person who possesses such merits as intellect, beauty, kindness, fidelity, sociability, aspiration to help a friend may be their friend. However, not all children believe that only a person can be a friend: 5% of school children admitted that the best friends are animals. Each child wants to have a friend. Thus the awareness level of the considered social concept varies from one age group to another. If first-graders complete the sentence using one concept

("person", "animal", the name of the person), third-graders' answers are much more substantial and abstract ("the one who will help" (13%), "who can be trusted" (7%), "sociable, true" (15%)).

Characterizing the concept "family", children of elementary school age list their relatives in most cases. Along with this some children specify such characteristics and personal qualities correlated to this social category as "kindness", "wealth", "peace", "friendship", "protection", "native heart".

The analysis of the received materials showed that almost all questioned pupils of the 2nd – 4th grades (97,9 %) have these or those examples of "a good person" who they would like to take after. Adult people (first of all parents, other close people), friends of the same age are usually regarded as such examples; literary and movie characters are thought to be generalized examples (though children quite often perceive them as real-life ones).

As for second-graders the main examples of "a good person" are their close people, parents (47,4%), for third-graders they make 33,3%, and for pupils of the fourth grade – 18,6%. Friends of the same age embody the features of "a good person" for 11,8% of second-graders, 14% of third-graders and for 24,7% of fourth-graders. "A good person" generalized in a literary image becomes more often a guide for pupils of the third (17,5%) and the fourth (25,8%) grades than for second-graders (9,2%).

The representation of "a good person" in the image of an adult is most often characterized by such qualities as: kind, beautiful, ready to help, hardworking, cheerful. Peers are attractive to elementary school children due to their: responsiveness, cheerful character, intellect, honesty. The ideas of "a good person" generalized in images of literary characters, who elementary school children want to be equal to, vary according to their contents and character. Among them there can be characters who have one socially important feature (courageous, honest, "a kind-hearted person"). Quite often representatives of this or that profession act as examples ("I want to be a clever businessman", "I want to be a doctor with kind hands and kind soul").

A number of qualities attracting elementary school children were found in the examples of all three categories. However each category of examples is presented by specific qualities as well: adults are hard workers, love their profession, their family; peers have a cheerful character, readiness to help the mate, skills, honesty; literary characters have courage, tenacity, moderation, resourcefulness. This dispersion of dominating features of "a good person" is rather insignificant but it testifies to elementary school children's selective vision of people surrounding them; that probably makes the basis for the selection of examples they follow.

The results of elementary school children performance of tasks to differentiate two relatives according to the content of the social and moral concepts "sensitivity" and "responsiveness" are indicative. Elementary school children were offered to compare the listed signs and, to specify the shades distinguishing them, to define what terms each of them refers to. It was found out that none of first-graders could give a reasoned, motivated and right answer; 35% of second-graders coped with this task completely (these are children who successfully acquire school program, have a rich vocabulary, are engaged in the work of circles and sections); the exact choice was made by 56% of third-graders. As it follows from the data provided earlier, the leap in the change of the operation development level in case of social concepts shades analysis and classification (specification of phenomena representations designated by them) among first- and second-graders (35%) is greater than at the transfer from a second grade to a third one (21%). Thus, this testifies to the child's personality social sphere intensive development at the elementary

school age which accelerates from the age of 7,5 to 8-9 years old, and then it slows down a little.

Diagnostics of conceptual thinking development level and ability to operate with signs of social categories by elementary school children

The analysis of the reasons of such dynamics resulted in the need to consider the level of elementary school children's conceptual thinking development and their ability to operate with signs of social categories (awareness, clearness and completeness of representations) in more details. Studying the degree of elementary school children development of such concepts, we asked them to answer the following question: "Name qualities which you consider necessary for a person to live in the society of other people". When performing tasks, school children specified: – first-graders – 14 quality-signs (9 of them characterize a positive side of the personality social sphere); second-graders – 26 (17 true); pupils of the third grade – 28 concepts (20 were accurate). Most children, first of all, named kindness – 35,08% (the first grade), 35,52% (the 2nd grade), 40,6% (the 3rd grade). However, if third-graders consider honesty (11,45%) and fairness (7,29%) as the most important personality qualities after kindness, second-graders name joy and fun (17,1%), diligence – 6,58%; first graders appreciate intellect, cheerfulness (10,5% for each of the quality). The provided data suggest that 9-10 –year-old children have more specified representations of positive moral qualities whereas the children of the second grade of comprehensive schools confuse some personal qualities and properties; 5,26% of tested first-graders named external signs which are not connected with a person's social status: "color of the hair", "eyes", etc.

On the other hand, the obtained experimental material testifies to a wide variety in the level of social representations development within one age group as, along with incorrectly named signs, other first-graders named such categories as "obedience", "modesty", "love", "friendship"; second-graders added such concepts as "reliability", "love for ones' neighbours"; third-graders mention "responsiveness", "love", "fidelity", "understanding", "humanity", "mercy".

The conducted survey allowed us to track the dynamics of changes in the amount of social concepts actively used in the speech: whereas first-graders named three (11,42%) – four (3,05%) concepts at most, second-graders used 3 (19,5%) – 4 (12,2%) categories, third- and fourth-graders named five (3,92%), four (9,84%), three (18,72%).

At the following stage of the technique application when children were asked to explain the sense of such categories as "kindness", "honesty", "love" the results turned out to be the following despite the fact that we did not set the goal to define the maximum number of signs known to children:

Therefore, social representations development and conceptual thinking improvement take place both due to the increase of signs and categories included in the active vocabulary, and the specification of already available data, reduction of incorrect representations of a certain concept.

Summing up the aforesaid, relying on hypothetically singled out criteria, indicators and levels of social experience awareness in general and social knowledge, representations of concepts and a goal as their components (table 2), analyzing the tendencies revealed in the course of experimental work we have gained the opportunity to divide all respondents conditionally into typological groups corresponding to the levels of social knowledge, representations and concepts development. The percentage of levels

(quantitative structure of schoolchildren groups) was determined by the arithmetic average calculation formula:

$X = (X_1 + X_2 + \dots + X_n) / n$ where X_1, X_2, \dots, X_n the percent of pupils having this level on each of indicators (according to the results of the applied techniques), X is calculated for each level: X_B – for high, X_+ – for sufficient, X_- – for intermediate, X_H – for low, n – the quantity of considered indicators.

Table 1. The relationship between concepts actively used by elementary school children and their signs

Indicators of concepts characteristics	Found it difficult to answer	Specified the modality	Named a specific person or an act	Named accurate signs
Grade				
1 grade	31,57%	21,05	–	34,21
2 grade	8,1%	16,21%	10,8%	54,05%
3 grade	5,55%	5,35%	23,21%	58,92%
4 grade	3,25 %	3,25 %	25,25 %	65 %

Table 2. Dynamics of the levels of elementary school children social knowledge, representations and concepts development

Levels Grade	Total examinees	High	Sufficient	Intermediate	Low
1	193	–	64 (33,33%)	110 (56,41%)	19 (10,26%)
2	229	12 (5,56%)	69 (30%)	130 (56,67%)	18 (7,77%)
3-4	226	31 (13,91%)	86 (37,75%)	93 (41,18%)	17 (7,26%)

The data provided in the table testify that in the course of transition from one "age stage" to another there take place positive changes in the social sphere of elementary school children personality: gradually, the number of children who initially had "low" and "intermediate" levels of social concepts, representations and knowledge development decreases; that occurs due to the increase of school children who get into groups with "high" and "sufficient" levels of this social experience component development in the course of the research.

On the other hand, even the number of third- and fourth-graders ranged as having high and sufficient levels of social representations, knowledge and concepts development is limited. Thus, we have revealed the following tendency of elementary school children personality development: the social sphere of elementary school children personality is developing (the basic enrichment happens due to the emergence of new social representations, elementary social and moral concepts formation), however the uniform system of social representations, concepts, knowledge is not created. Therefore, the specific system of pedagogical measures aimed to form the diagnosed components is required.

Pedagogical conditions of elementary school children social representations, concepts development

On the basis of the obtained results, it is possible to define the main organizational and pedagogical conditions promoting the development of social representations, concepts, knowledge in elementary school children:

1. *The development of the content aspect of elementary school children social knowledge, representations of concepts formation.* At the level of each lesson arrangement or off-hour lesson there should be implemented the task to develop the given components; it is possible only in the context of an accurate selection of the content. The content aspect of elementary school children social representations, concepts, knowledge development has to cover all spheres of activity and promote the mastering of an elementary knowledge system of the society; this system will later become a basis of the personality's world outlook, ways of actions performance to make a child's adaptation, socialization, accumulation of positive relations with various groups of people (the younger, peers, adults, parents, teachers, friends etc.) easier.

2. *The use of the complex of active methods and corresponding forms and techniques to provide the efficiency of elementary school children social representations, concepts, knowledge development.* Unlike traditional forms, methods and techniques applied in the course of elementary school children's training and upbringing when the understanding of the fact and its storing prevails, active methods are aimed at learners' experience of information. The set of active methods and corresponding techniques allows to up-date children's knowledge and experience, to introduce them smoothly into new material.

3. *The diagnostics and the consideration of the level of elementary school children social representations, concepts, knowledge development* are necessary at each stages of the training process arrangement – from studying initial conditions to the analysis of the results. The creation of diagnostic techniques system will allow to reveal the level of social representations, concepts, knowledge development. Such monitoring is required to control the efficiency of means, forms, methods.

4. *The consideration of social, pedagogical and personal factors.* The process of elementary school children social representations, concepts, knowledge development is influenced by personal factors which assume a certain type of relationship between subjects of the educational process. Pupils, teachers, and parents' personal traits should be considered. It is motivated by the dependence of personal focused pedagogical process productivity on the personality factor: on the one hand, on the level of professional competence, mastering of pedagogical abilities system, availability of personal qualities that promote the implementation of pedagogical activity, and, on the other hand, – on the level of perception or rejection of educational impacts, aspiration to comprehend social information and to follow norms.

DISCUSSIONS

Such researchers as A.V. Mudrik (2000), E. Joan & M. Davidov (2010), L. R. Dougherty (2006), W. Damon, R. Lerner & N. Eisenberg (2006) are developing methodological tools to analyze the issue of social representations, concepts, knowledge development in younger generation in the context of socialization. E. A. Alexandrova (2000), L. A. Serikova & Shukshina (2010), I. A. Neyasova (2014), C. Wichmann, R. Coplan & T. Daniels (2004), L. Dougherty (2006), are studying the specificity of the studied components mastering by children with peculiar individual and age features in view.

However, there are few scientific works devoted to the study of elementary school children social representations, concepts, knowledge development and they have only a debatable character.

CONCLUSION

In the course of the conducted pilot study there has been ascertained: 1) with age, the level of elementary school children understanding of the main social representations, concepts, knowledge increases; 2) the amount of social concepts used in speech extends; 3) the content of the studied component is changed due to the increase of signs and categories included in the active vocabulary and as a result of already available data specification. New formations are not built in a unified system; it is characterized by isolated components of the personality's social sphere. The main organizational and pedagogical conditions providing the success of positive result achievement at elementary school children social representations, concepts, knowledge development are: the elaboration of the content aspect of elementary school children social representations, concepts, knowledge development; the application of a complex of active methods and corresponding techniques; diagnostics and consideration of the level of elementary school children social representations, concepts, knowledge development; the accounting of social, pedagogical and personal factors.

The materials of the article may be useful to scientific workers, elementary school teachers, psychologists, social pedagogues, students of advanced vocational courses, graduates, undergraduates, Master's degree students, bachelors of pedagogical higher education institutions.

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