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THE FORMATION OF THE DECENTRATION ABILITY AT PRESCHOOL AGE

Alla Andreeva (a)*
*Corresponding author

(a) Psychological Institute of Russian Academy of Education, Moscow, Russia, alladamirovna@yandex.ru

Abstract

The article presents the results of an experimental study devoted to the development of decentration ability at a preschool age. The phenomenon of decentration is considered as a cognitive ability to understand the point of view of another person, characterized by its own way of formation. The analysis of ontogenesis of the decentration ability in the framework of the conception of the mind's systemic structure showed that the egocentric position can be overcome at a young preschool age, and decentration expands as the child's self-consciousness develops, the interfunctional relations of the cognitive processes change, the child's experience of social interaction gets broader. Although the decentration ability of a child is limited by the age-related capabilities of his/her cognitive sphere, it doesn't mean that the child doesn't have this cognitive ability at all. The development of the decentration ability starts with social interaction between child and adults in everyday life situations and continues with differentiation of mental processes and their subsequent integration at a new, higher level. The formation of social decentration creates the basis for development of the ability to overcome cognitive egocentrism. When identifying the age limits of child's egocentrism, it is necessary to consider the contents of experimental task and the way it's presented to children of different ages, as well as the peculiarities of socio-cultural conditions of children's upbringing.

Keywords: Egocentrism, decentration, cognitive abilities, systemic structure of mind, preschool age.

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1. Introduction

One of the most important mechanisms of a young child's social cognition is the decentration ability that is considered as an ability to understand the point of view of a different person, to see the situation through his/her eyes. This cognitive ability builds a basis for emotional intelligence: it creates psychological conditions for children's successful interaction with other people (both children and adults), for the ability to respond emotionally to the feelings of friends and relatives as well as to the contents of an artwork. Empathy with the characters of fairy tales, stories, movies is the most important condition for the child to understand the content of informational texts and an indicator of his/her readiness for conscious learning.

2. Problem Statement

It is commonly believed that children at preschool age can't overcome the egocentrism characteristic for their thinking. Piaget demonstrated experimentally that children under 7, who, according to his periodization of mental development, were at the pre-operational stage (aged from 18 months to 7 years), couldn't understand the point of view of another person and imagine how others saw the things they saw. Piaget believed that children's egocentrism was totally dominating and affected all the spheres of their mental activity up to the school age (Piaget, 2004, 1999).

However, some literature data of a later period (Hughes, 1975; Pogozhina, 2011; Smirnova, 2006; Spivakovskaya, 1986; Subbotsky, 2005; Vygotsky, 1983, 2012) as well as our own observations of preschool children let us suggest that some manifestations of the decentration ability can be detected at the early and preschool age.

Thus, D.B. Elkonin (Elkonin, 1989) believed that some elements of decentration could be observed in the behaviour of preschoolers. For example, taking on the role of another person in a game already presupposes some decentration, for it requires the child to act in accordance with the accepted role and to coordinate his/her own point of view with the points of view of other players. This type of decentration is achieved relatively easily because it is preconditioned by the emotional factors, not by intellectual mechanisms. B. White (White, 1982) proved experimentally that well-developed children at the age of 3—6 years are already able to decenter. He explains the discrepancy between his own results and J. Piaget's data by the fact that on average modern child reaches new stages of mental development earlier than his/her peers did in the 30s of the 20th century, when J. Piaget conducted his famous experiments. M. Donaldson (Donaldson, 1985) concluded after a series of experiments that 90% of children at the age of 3.5—5 years old demonstrated the ability to take into account the point of view of another person. She believes that the problem lies in the procedure of the experiment: the tasks proposed by J. Piaget are devoid of motivational aspect, they look as an abstraction from human feelings, goals and aspirations, which makes it more difficult for the child to understand the problem proposed. I. N. Pogozhina mentions studies that showed that children at the age of 3—5 years could understand wrong visual representations of another person. In particular, they were able to understand that a person who, unlike themselves, did not see that there were pencils in the cookie box would think that there were cookies there; that a picture book lying in front of the child was turned "upside down" to the person sitting opposite (Pogozhina, 2011).

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Our own observations of children at the early age have shown that even a two-year-old is capable of solving a simple perceptual task that requires defining visual position different from his/her own. For example, when playing with a doll, a girl "offers" her to look at her mother, her grandmother, the dog or herself, turning the doll's face to the person named. A boy of the same age turns the picture with its back to himself so that the other person could see the picture, too. Moreover, the ability of a small child to take into account the position of another observer is manifested not only in dealing with objects, but also in communication via modern technologies, such as Skype: the child turns the picture to the face on the computer screen, considering the "talking head" as a real interlocutor.

Thus, there is a lot of experimental and empirical evidence proving that child's egocentrism isn't total nor it is static psychological entity that disappears by the end of the preschool age. The decentration ability appears much earlier than the child reaches the stage of development that J. Piaget defined as the stage of concrete operations. Of course, the decentration ability of a child is *limited* by the age-related capabilities of his/her cognitive sphere, but it doesn't mean that the child doesn't *have* this cognitive ability – just as the imperfection of the speech development of a small child doesn't let us say that he/she has no speech at all.

We agree with I. N. Pogozhina's opinion that the discrepancy between the data given above and J. Piaget's classical experiments reflects the development of different types of decentration – social and cognitive ones. She showed that the ability of young children to solve problems that were close to their everyday experience of interaction with other people hardly correlates with their level of logical operations, such as classification, seriation and conservation, that directly depend, according to J. Piaget, on the decentration (Pogozhina, 2011). This conclusion does not contradict the general logic of cognitive functions' development, which starts with social interaction between the child and the adults in everyday life situations and continues with differentiation of mental processes and their subsequent integration at a new, higher level. Formation of social decentration creates the basis for development of the ability to overcome the cognitive egocentrism: the ability to abstract from the observed everyday situation makes it possible to solve the problem in the mental aspect. In other words, development of social and cognitive decentration is a single process, and these are its various stages that are fixed in the experimental studies cited above.

We assume that the general principle connecting these diverse but very convincing data can be the approach to the problem of child's cultural development proposed by L. S. Vygotsky. According to his theory of mind's systemic and semantic structure, "a change in the functional structure of consciousness is the main content of the whole process of mental development" (Vygotsky, 1983, 2012). Thus, in the early childhood it is perception that dominates in the system of interfunctional relations and determines other cognitive processes – that's why it is perception that differentiates and develops in this period. Other people talk with the child only about the things that he/she perceives immediately, and memory at this age functions as recognition. At the young and middle preschool age, memory takes over and becomes the dominating function. It works as recall, which creates conditions for mental manipulation of memory images, and the speech development lets child operate with the meanings of words, names of objects, actions and attitudes, mentally restructure situations, draw first conclusions; at this age child is already able to retell the content of an event or an artwork. At the older preschool age, imagination takes

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over the dominant role: the child can abstract from the situation immediately observed, partition the situation, differentiate the motive and the result of the action. The external speech, functioning as a means of communication, is transformed into the inner speech, functioning as a means of thinking. This is the beginning of the abstract thinking, thinking in concepts, logical thinking.

It is also necessary to take into consideration a significant change in the social situation of modern children's development compared with their peers in the 30s of the previous century, as well as the fundamentally different informational, technological and social environment of the 21st century. The value of children's early intellectual development raises in the public mind, which stimulates the parents and the educators to various activities that often require the child to accept points of view different from his/her own. The democratization of social life influenced the style of child-parent relationships. The authoritarian parenting, characteristic of the early twentieth century, has been replaced by a more democratic style of family interaction. Modern parents prefer to build the relationships with their children on the principles of cooperation, which undoubtedly affects children's ability to take into account the point of view of another person. This is indirectly evidenced by the dynamics of the coefficient of egocentric speech (Obukhova, 1972, 2001): in the environment featured by the adult's authority and coercive relationship, the egocentric speech is often used; in the peer environment, where discussions and arguments are possible, the percentage of egocentric utterance decreases. Even L.S. Vygotsky said that logical thinking didn't appear before there was an argument in children's community (Vygotsky, 1983).

3. Research Questions

3.1. The ontogenesis of preschoolers' ability for social decentration in the framework of the conception of mind's systemic structure by L. S.Vygotsky.

3.2. The criteria of experimental tasks determining the age parameters of the decentration ability manifestation.

3.3. The influence of socio-cultural conditions of child's development on his/her ability to overcome the egocentric position**.**

4. Purpose of the Study

The purpose of the study is to identify the stages of the development of preschoolers' ability for decentration as a cognitive function in the framework of the conception of mind's systemic structure by L. S. Vygotsky.

5. Research Methods

The methods used in our research are similar to the methods by J. Piaget. However, there are some differences that concern the procedure of the experiment and the ways of presentation of the stimulus material to the children.

5.1. Methods of studying spatial decentration

When constructing the experimental situations, we took into account that the mind of children at the younger preschool age is limited by actions in their visual field. In our experiments, as well as in the

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experiments by B. White and M. Donaldson, the child is an active participant in the situation: he/she identifies him-/herself with the "character" and describes in words or shows by gestures what the "character" sees. In contrast, in the famous “Three Mountains Problem” J. Piaget proposed children photos of different viewpoints in order to exclude possible errors related to their poor speech development. In his experiments, the child was made to compare two images: the image of what the doll saw, and the image of what was depicted in the photograph. It is also important that the technologies of that time could only provide black-and-white photographs, which also made it difficult for the child to compare the observational positions. Apparently, that task could be solved only by a child whose imaginative thinking had reached the stage of development characteristic of the age of seven. Younger children just couldn’t cope with that task in the form it was presented by J. Piaget; however, it doesn’t prove that they can’t decenter at all. The same task, presented to the children in a way that takes into account their thinking abilities, is accessible to them.

That is why, in order to study the peculiarities of spatial decentration of the preschool children, we chose such experimental situations in which child could compare two points of view – his own and others' ones – by action. Verbal description of what he/she sees was considered as an action, too.

- "The Dolls"

The child is offered the following situation.

On the table in front of him/her there’s a doll and there is a beautiful bow at the front of her clothes. The experimenter tells the child a story: "There’s a doll called Masha and she’s watching an interesting fairy-tale on TV. Then a doll called Lena comes, sits down behind Masha and starts watching the fairy-tale, too" (Lena “enters” and “sits down” behind Masha). Then the experimenter asks the child: "Do you think Lena can see the beautiful bow on Masha's dress?"

- "The Picture: Who doesn’t see the TV screen?"

As incentive material we used a picture which depicted characters of a popular children's television programme sitting in front of a TV screen. One of the characters can’t see the screen from where he sits. The child has to answer the question who doesn’t see the TV screen.

- "The Picture: Draw a TV screen"

The child is given a sheet of paper depicting the characters of the same programme, but without a TV. He/she is asked to draw a TV screen following the experimenter’s instructions

5.2. Methods of studying decentration of relations

As a basis we adopted J. Piaget’s “Three Brothers Test”, requiring the child to reveal a contradiction between the existence of three brothers in a family and the proposition “I have three brothers: Paul, Ernest and I”. One of the factors for the successful solution of the problem, according to J. Piaget, is a certain detachment from one's own or immediate point of view in order to take someone else's position.

In our study, we used a slightly modified version of J. Piaget’s test. The child was offered the following situation:

"Imagine that you have got two brothers (two sisters): Kolya and Petya (Lena and Masha). How many brothers (sisters) has Kolya (Masha) got?"

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The situation offered to the child was rather artificial, so we decided to use the child's immediate life experience. We assumed that the child's ability to decenter in the field of relations would be higher if the task posed to him/her were more emotionally saturated and affected the spheres of relations more important for him/her. The child was asked the second question: "Has your mother got a son (daughter)?" We used to find out beforehand if there were other children in the subject's family; depending on this, the child could be asked additional clarifying questions.

5.3. Method of studying self-recognition ability

To study self-recognition ability, we developed "Recognize yourself in a description" technique which revealed the child's ability to see him-/herself through the eyes of others and to recognize him-/herself in a description.

The subject is given the following instruction: "Now I'll tell you about a boy (girl) who goes to our kindergarten, and you'll have to guess who this boy (girl) is and call him (her)". The experimenter describes the child who he talks to, telling him/her about his/her inclinations, about the features of his/her character and appearance.

If the child doesn't recognize him-/herself, the experimenter can mention the child's clothes or other distinctive features, thereby urging the subject to the correct answer. If the child still can't recognize him-/herself ("I don't know him/her", "We don't have such a child"), the dialogue is over.

5.4. Methods of studying motivational decentration

In order to study motivational decentration we made up stories that let us identify the feature of children's thinking that J. Piaget called "moral realism".

Studying children's representations of causality, J. Piaget showed that the child at a certain stage of development considered objects as they were directly perceived, he/she didn't see the internal connections between them. Realism of such a kind prevents the child from considering phenomena independently of a subject, in their internal relations. The child's instantaneous perception seems to him/her absolute and true.

The paradox of child's thinking is expressed in this realism: the child is simultaneously closer to direct observation and more distant from reality; he/she is simultaneously closer to the world of objects and farther from it than the adults. J. Piaget distinguished two types of realism: intellectual and moral ones. The gist of the moral realism is that child doesn't take into account the internal intention while estimating an action and judges it only on the external effect, on the material result.

The stories made up to identify child's ability to take the place of one of the characters and understand the true motives of character's behaviour or actions reflect real situations involving children.

- Story 1

"In the evening mother started cleaning. The son (daughter) decided to help her. While wiping the dust off the table, he (she) accidentally knocked over his (her) mother's favorite vase. The vase fell down and broke into pieces".

After telling the story, the experimenter asks the child: "Do you think what the boy did was good or bad?"

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- Story 2

"After lunch in the kindergarten the children were sleeping. Kolya (Dasha) didn't want to sleep, started talking and woke everyone up. Roma (Lena) said loudly: "Don't disturb me, stop talking". The teacher heard it and scolded Roma (Lena) for talking loudly during the sleeping hour".

The question: "Do you think the teacher did the right thing?"

The child is also asked to explain his/her answer.

Thus, most of the methods we used were close to the methods developed by J. Piaget. But there were differences in the procedure that were of fundamental importance for us, because they made it possible to detect the decentration ability in preschoolers of different age groups.

The study involved 90 children of Moscow kindergartens, aged from 3.5 to 7 years old. The experiment was conducted individually, and we offered a full set of tasks to all the participants. Then we analyzed the obtained data, using quantitative and qualitative methods of evaluation of research results.

6. Findings

Our experimental research has shown that the formation of the decentration ability begins at the turn of the early and the younger preschool age. The marker of its development is child's ability to solve the expanding range of tasks that require him/her to overcome his/her egocentric position and understand other people's points of view different from his/her own.

The analysis of the data obtained during the research has shown that preschool children of all age categories are able to decenter. However, the manifestation of the decentration ability depends on the age of children as well as on the content and the way of presentation of the experimental material.

The table 1 demonstrates that the ontogenetically earliest kind of decentration is the self-recognition ability. Even in the age group of 3–3.5-year-olds 50% of children can recognize themselves in description, and in the interval from 3.5 to 4.5 years the percentage of successful solutions reaches 85%. Following the criterion proposed by Piaget (decentration ability is considered to be formed if no less than 75 % of children are able to cope with the experimental task/test), it is safe to say that children obtain the fundamental ability to overcome their egocentric position by the age of 4 on the average, for the ability to recognize themselves in description means that children accept point of view different from their own. As it is convincingly shown in N. N. Avdeeva's research (Avdeeva & Meshcheryakova, 1993), the development of the self-recognition ability begins very early: by the end of the first year of life the child has a visual image of him-/herself, he recognizes him-/herself in the mirror. According to Vygotsky's conception of mind's systemic structure, perception dominates at the early age: the adults talk to the child only about what he/she sees or hears, and memory works as recognition, allowing the child to identify a visual or an auditory image as a familiar one. As speech develops, the child gets able to perceive not only observed images but also the descriptive ones (including the image of him-/herself). At the younger preschool age, memory takes form of recall and plays the key role in the child's consciousness: preschooler can operate memory images shaped in different modalities and formulated as concepts.

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Table 01. Solving decentration tasks by children at 3—7 years depending on the type of the experimental task (in percent)

The age of the children (years)	Self-recognition ability	Spatial decentration		Decentration of relations		Motivational decentration	
		The Dolls	The Picture	Brother's test	Son's/daughter's test	Story1	Story 2
3-3,5	50	10	40	0	10	0	10
3,5-4	84,62	46,15	69,23	38,46	38,46	7,69	46,15
4-4,5	85,71	50	85,71	50	57,14	7,14	57,14
4,5-5	100	66,66	100	66,67	83,33	33,33	66,67
5-5,5	100	71,42	100	78,57	84,71	42,86	92,86
5,5-6	100	83,33	100	83,33	100	50	100
6-6,5	100	93,75	100	100	100	87,5	100
6,5-7	100	100	100	100	100	100	100

The emotional dynamics of children's answers is of particular interest. The 3-year-olds are rather shy in their statements, they often speak in an interrogative tone, many of them call themselves by name ("Is this Polina?"). They are not sure that they give the correct answer and want to get confirmation or assistance from the adult, which confirms that the ability to overcome the egocentric position and to recognize oneself in description lies in the zone of proximal development of the younger preschoolers. The 4- and 5-year-olds are more confident of their solutions, they smile and laugh while answering the questions ("That's me!"), and the 6–7-year-olds easily recognize themselves ("It's about me, I got it at once"), sometimes even ask to tell them more ("That's me! Tell me more about me!") and obviously enjoy the conversation about themselves. Such behaviour evidences the growing need for self-knowledge in the preschool children.

Nevertheless, younger preschoolers' ability to accept an external attitude towards themselves doesn't allow us to say that their decentration ability is mature. The data show that the children at the age of 3—3.5 are practically unable to solve the tasks that require decentration of relations and motivational decentration. To solve such tasks, they have to distract from the direct interpretation of the situation and carry out mental actions in the sphere of representations and imagination, which is impossible for them.

The tasks that require spatial decentration seem to be easier for children at this age. However, the solution of the experimental task depends on the way of presentation of the stimulus material. We studied spatial decentration using two methods – "The Story Picture" and "The Dolls". In the first case epy children had to change their point of view concerning the picture figures, and in the second case they had to identify themselves with the dolls sitting one behind the other in front of the child.

As it is shown in the table, the 75% criterion for the formation of the decentration ability is achieved at the age of 4–4.5 years in the picture experiment, but as for "The Dolls" task, the necessary level of decentration is achieved only by 5.5–6 years of age. The age dynamics of the formation of spatial decentration shows that the ability to accept the point of view of a picture figure increases rapidly while the ability to analyze the spatial situation develops slowly and gradually. Commenting on their solution of the picture task, the children do not appeal to their own visual position, while the answer to the second task is often proved by their own point of view: "I see the bow on Lena's dress, then Masha sees it, too". These differences reflect the influence of modern socio-cultural tradition of preschoolers' education. The

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popularity of the ideas of early childhood development leads to the fact that children get accustomed to solving perceptual tasks presented in the format of a flat image (educational aids, both printed and digital), but this skill surpasses their real practical experience. That's why it is more difficult for the child to overcome his/her own point of view when solving a problem that includes personalized dolls and a story told by the experimenter, than to fulfil habitual picture tasks. We can see that memory determines middle preschoolers' thinking capabilities, forming the basis for their intellectual activity. Vygotsky said that for a child of this age to think meant to remember: the child replaces an independent mental action by the playback/reproduction of a familiar situation from his/her previous experience (Vygotsky, 1983). Nevertheless, the level of self-consciousness of 4-year-olds lets them solve simple perceptual tasks. Thus, the full development of the spatial decentration ability lies in their zone of proximal development.

In order to study the ability to decenter in social relations (decentration of relations, in J. Piaget's terminology), we used the test about brothers similar to the one suggested by J. Piaget as well as the question "Has your mum got a son (daughter)?" The decentration of relations appears a little later than the spatial decentration and the self-recognition ability. As for the "Three Brothers" problem, the 75% criterion is reached only by 5–5.5 years, although the first manifestations of the ability can be already detected between 3.5 and 4 years (38.5% of children). The reasoning given by the 4-year-olds who coped with the task showed that the most difficult thing for them was not to overcome the egocentric position, but to accept all the conventions of the experimental situation. For example, Artem K. (3 years 7 months old) persisted for a long time that he had no brothers, and then said: "Well, if we say that I do have brothers, then Kolya (pause) will have two".

Similar difficulties were experienced by the older children who couldn't cope with the "Brothers" test. Apparently, the concreteness of children's thinking, caused by the dominance of memory over other cognitive processes, prevents solving such experimental tasks. It should also be noted that social self-identity is formed in children primarily with respect to the members of their own families, so it is difficult for them to realize their place in an imaginary family. Nevertheless, the basic possibility of solving such tests with the adult's assistance shows that this ability refers to the prospects of proximal development of middle-preschool children. This is confirmed in the next series of experiments.

We offered children another question that was emotionally more meaningful for them and was aimed at understanding their own role in their family: "Has your mum got a son (daughter)?" The results showed that younger preschoolers (children aged between 3–4.5 years) experienced considerable difficulties answering the question as follows: "Yes, she has, this is my brother," "I don't know, I'll ask my mum," "No, she hasn't", "This is my sister Zoya, "Yes, she only has dad, that's all". However, by 4.5–5 years of age 83.3% of the subjects were already able to decenter from their own position and see their place in the family from their mother's point of view. Different dynamics of coping with the egocentric position concerning the social role in real and imaginary situations confirm our assumption that the way of presenting experimental tests significantly determines child's ability to decenter.

Thus, we can assume that preschoolers' ability for decentration in social relations is limited by the fact that their intellectual activity is still based on the memories of familiar situations from their personal experience, though partly they are already able to restructure the memory images (Katerinina, 2013). The active work with the memory images creates the foundation of imagination that will determine, according

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to the conception of the mind's systemic structure, the interfunctional relationship between the cognitive processes at the turn of the preschool and school age.

The most difficult problem for the preschool children is to understand the motives of another person's behavior and evaluate his/her actions in accordance with simplified moral standards. The data given in the table show that the experimental task (the story about the boy who was helping his mother and accidentally broke a vase) was almost inaccessible for younger preschoolers: only 7.7% of children were able to interpret the situation correctly. By the age of 5 only one-third of the subjects managed to overcome the so-called "moral realism" and to understand the true motives of the story's character. The 75% criterion was reached only after 6 years. Before this age, the prevailing judgements sounded like this: "That's bad, you mustn't break vases" (3 years 3 months), "Bad, he offended his mother" (4 years 4 months), "Bad, the vase is expensive. Mum is upset" (5 years 2 months).

It is obvious that the younger and middle preschoolers assess only the external aspect of the event, guided by the norms of moral behavior they have learned. It is still difficult for them to overcome the egocentrism of their own observational position and see the situation through the eyes of the story's character. Only after the age of six, most children get able to understand the true intentions of the character and adequately evaluate his fault. The children at this age give more detailed and grounded statements such as: "He didn't do it on purpose. Probably he told his mother what had happened, and that's good, because nobody should be scolded for truth"; "In general, the boy was doing something good, he was helping his mother, and the vase is nothing"; "Neither good nor bad. Apparently, he didn't want to do it. He tried to help his mother, and she saw it. She will forgive him". The older preschoolers are able to understand the hidden motives of another person (the intentions that do not coincide with the real action) because their cognitive processes have already developed enough, so that they can accept a conditional situation and recall their own experience of similar circumstances, analyze the story and make a conclusion concerning the degree of the boy's fault. All these complex actions, performed by the child in the sphere of mental representations, are based on the imagination as the most important attainment of the senior preschool age, governing the entire system of interfunctional relations between the cognitive processes.

To test the assumption that the content and the form of presentation of experimental tasks have significant influence on the age limits of the decentration ability's manifestation, we offered the children the second story. Its content was more emotional and closer to their life experience: the character of the story was unfairly punished by a kindergarten teacher.

The results showed that about half of the children at the age of 3.5—4.5 years were able to interpret the situation correctly, and in the age range from 5 to 5.5 years 92.9% of the subjects demonstrated the ability to overcome the egocentrism of a detached observer and to perceive the situation from the point of view of the story's character. (Remember that only 42.9% of children at the same age were able to evaluate the first story adequately). Consequently, if the content of the experimental task is close to children's real life experience it makes it easier for them to overcome the egocentric position: the first manifestations of the ability for motivational decentration can be already identified at the average preschool age. When solving such a task, the children use their own memories of familiar situations and compare their own experience to the conditional situation. In other words, if there are two tasks that

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require the child to accept the point of view of another person, the one that is closer to the child's real emotional experience is easier to solve. The simplification of the experimental tasks, which can be considered as an equivalent to the adult's help, shows that the full overcoming of the moral realism lies in the zone of proximal development of senior preschool children.

7. Conclusion

The research we conducted confirms the hypothesis that the phenomenon of decentration should be considered as a cognitive ability to understand and take into account a different point of view. Analyzing the ontogenesis of the decentration ability in the framework of the mind's systemic structure conception, we have found out that preschoolers' egocentrism isn't total and doesn't determine all the spheres of their thinking activity. The ability to overcome the egocentric position doesn't appear at a certain stage of child's development, but follows its own way of formation. First it manifests itself at the younger preschool age and expands as child's self-consciousness develops, interfunctional relations of cognitive processes change, child's experience of social interaction gets broader. The development of the decentration ability, like that of any cognitive function, starts with social interaction between child and adults in everyday life situations and continues with differentiation of mental processes and their subsequent integration at a new, higher level. The formation of social decentration creates the basis for development of the ability to overcome cognitive egocentrism.

Ontogenetically, the first manifestation of decentration, recorded already at the younger preschool age, is the self-recognition ability (first visual and then descriptive one). Then the other abilities appear: the ability to decenter in the sphere of spatial representations (at the turn of the junior and middle preschool age), the ability for social decentration (at the middle preschool age) and the ability to overcome the egocentric position in the sphere of motivational and moral representations (at the older preschool age).

Comparative analysis of the procedural differences between our research and J. Piaget's classical experiments has shown that the content and the form of presenting the experimental task to the child determines the age parameters of the decentration ability's manifestation to a large extent. If the conditions of the task correspond to the level of cognitive development and the zone of proximal development of a child at a certain age, it is easier for him/her to overcome the egocentric position. Therefore, the question is to what extent the so-called "age-related patterns" established in a psychological experiment reflect the reality of child's mental development, and to what extent they are conditioned by the very structure of the experiment.

Another aspect of the problem concerning the age-related patterns of child's mental development is the need to update and refine the age parameters of the formation of mental processes according to the peculiarities of modern socio-cultural environment. Our study has shown that the experimental tasks, similar in complexity to the tasks by J. Piaget, are solved by modern children at an earlier age than by their peers at the beginning of the 20th century, which is attributed to considerable changes in the standard of children's upbringing and education. Rapid development of science and technology lead to the fact that children begin to study earlier, the early intellectual development is considered more and more important, the adults are fascinated by the idea of plasticity of child's mind, of active and purposeful

influence on it. The formation of the modern childhood standard is also affected by the market of "useful" goods for children: toys, developing aids, food and care products. The childhood marketing manipulates the adults' consciousness and makes an appreciable contribution to the formation of modern parenting models (Andreeva, 2016), thereby changing the age-related psychological characteristics of the children.

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