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# SURVEY OF CHILDREN'S PRECONCEPTS IN SOCIAL SPACE AS A PART OF RESEARCH OF THE CURRENT CHILDREN

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ABSTRACT: This article puts forward ideas and challenges of research in examining the current 6-year-old children. In the article the author describes the theoretical and methodological bases of planned research about formation of knowledge of the current 6-year-old children about the social space, understanding of notions, and formation of concepts in their area using both qualitative and quantitative research procedures. Author describe preparing part of planned research of current children and describe partial findings of the research.

**KEY WORDS:** current 6-year-old children, research of children, children's preconcepts, social space

# Introduction

Human society is still developing, transforming and modifying. We live in the 21st century, while lifestyle is accelerating, families and values are at crisis and we witness huge increase in technological achievements. All this and much more largely affect adult and children. Current kids are different compared to children in past. What are today's children? Our intention is to explore the knowledge of the child at the doorstep of education in today's world and then update the hitherto existing theory about children.

# **Theoretical background**

Constructivism as philosophies emerging in the 20th century deal with so called "true knowledge" the essence of which is active knowledge based on own experience. The most famous and also the most important representatives of constructivism are J. Piaget, L. S. Vygotskij and J. S. Bruner.

J. Piaget theory of cognitive constructivism explores the origin and development of human knowledge. An important discovery in this topic is the influence of the environment in formation of knowledge in interaction with the subject. In the process of knowledge an adult or child are discoverers and designers, who designs, or reconstructs knowledge passing from the ideas to the constructing of the knowledge. Therefore it is a personal constructivism (Zelina, 2010).

Underlining the social environment in the process of learning is significantly influenced by L. S. Vygotsky, representative of social constructivism (Vygotskij, 1970). The functioning of the human mind, according to Vygotsky can be explained only by social interaction, because the mind is shaped in social contact with others. Human development and knowledge is directly affected by the social environment, society and culture. An important benefit of Vygotsky's theory is the problem of thinking and speech. According to Vygotsky, speech is a tool of thinking. Thinking and speech aren't two separate processes, vice versa they affect each other. The unity of thinking and speech is reflected in the meaning of words. The meaning of words is generalization. Every generalization is the result of an act of thinking. Therefore the meaning of word is connected with process of thinking.

For the purposes of our research we are also using the theory of J. S. Brunner. J.S. Bruner is representative of cognitive psychology. Bruners theory of empowering the world through representations is important. For representation, Bruner considers cognitive man's relationship to the world (Bruner, 1966). Each area of knowledge can be represented by a set of activities, set of images or a set of logical statements and expressions. Human go through three levels of knowledge / three levels of representation:

- enactive mode (active),
- iconic mode,
- symbolic mode.

Enactive or active representation is in direct interaction with the environment, the result is a new acquired experience. Man explores the world through its own activities and experiences. After mastering the first representations, human gradually begins to see the world through images, symbols, which is a higher level of abstraction compared to the first level. With the advent of iconic representations are withdrawing from direct interaction with the environment, the reality is represented through models, images, respectively iconic representation of specific events gets to the attention. The highest and most abstract level of knowledge of the world is through the knowledge of symbolic representation. Thinking human is breaking away from the immediate reality. The reality is represented in the form of symbolic - symbolic and logical statements and expressions.

## Research of the current children

Hejlová – Opravilová – Uhlířová – Bravená (2013) are also researching current children. These authors realized quantitative-qualitative research consisting of these parts: symbols of luck which are opening the world of children – qualitative investigation aimed at determining of how children of 2<sup>th</sup> – 4<sup>th</sup> grade at elementary school understand and feel term "happiness", mirroring of the children world through the eyes of pupils of younger school age – longitudinal research (1994, 2000, 2012) aimed at determining the preferences of choosing models and ideals of children of 4<sup>th</sup> and 5<sup>th</sup> grade and childhood through the eyes of teachers and the world through the eyes of children – detecting teachers and children perspectives of the current childhood. Research

at teachers is trying to identify what transformations reflect the manifestations of current preschool children and children of younger school age.

Our research of the current children is related to the project VEGA 1/0598/15 "Children at the threshold of education and their world", which is supervised by prof. PhD. Bronislava Kasáčová, CSc (Babiaková, 2015, p. 1339 - 1347; Cabanová, 2015, p. 6027 - 6033; Hanesová, Kasáčová, 2015, p. 1942 - 1951; Kasáčová et al., 2016, p. 11 - 34; Kasáčová, 2015, p. 1034 - 1041).

Based on the research of the child and the child's thinking by J. Piaget, L. S. Vygotský a J. S. Bruner we can conclude that from the time of these great pioneers in psychology of the child and subsequent reflection in educational theory and educational reality, there was no research focused on validating their results.

At the moment, except the partial research, we lack innovative knowledge about current children, although there are significant researches aimed at determining the level of knowledge of the child at the doorstep of education. The aim of the research is to explore the knowledge of the child at the doorstep of education in today's world and then update hitherto theory about the child of said age in order to improve educational practices in pre-primary and primary education. The vision heads into the research of formation knowledge of the current 6-year-old children about the social space, understanding of notions and formation of concepts in their updating area. One part of the research is to measure the actual form of cognitive development of the current 6-year-old child in the social areas. Research strategy is a qualitative research using quantitative research procedures. Research samples are children at the doorstep of education, i.e. 6-year-old children attending last year at the kindergarten respectively the first year of primary school in the period of 2016 - 2018. Schools will be selected in different districts of Slovak Republic.

Research of the current children consists of the following stages using different research methods:

## Part: Children

Phase 1: The primary stage is a *content analysis of the text*, through which analysis of contemporary pedagogical, psychological and sociological literature about 6-year-old child for the purpose of reflection of current theoretical paradigms was done. This theory reflects any "blank spots" in the theory

about current children. The aim of content analysis is to analyze hitherto theory about children with a view to subsequent comparison with the research findings of the current 6-year-old children.

# Phase 2: Preparatory phase - pre-research:

In the preparatory phase of research of the children was created set of terms as symbolic representation by J. S. Bruner, related with social-emotional sphere. These terms represent the questions used in the interview. We verified the structure of the first questions on a smaller sample of respondents with the aim of validation of research tool *Interview to survey of children's preconcepts about notions related to social space*. In the pre-research, we therefore implemented eight interviews with children at the doorstep of education with more detailed family history. The result of pre-research is a validated structure of interview, which will be used in the implementation phase of research.

# The implementation phase:

Based on the theory of L. S. Vygotsky, language is an instrument of thought, we had chosen *flexible semi-structured interview* as the method of data collection. During the interview the researcher is asking the child about different concepts, and encourages the child to their explanations. Based on the responses of children using appropriate data analysis methods we come to the realization of children's preconcepts about notions related to social development space of the current 6-year-old children.

# Part: Teachers/parents about children

Phase 3: In the following phase of the research we have ambitions to establish the knowledge and ideas of parents/pre-primary teachers/teachers of primary education of the current 6-year-old children using questionnaire.

# Partial results of research

In the period from August 2016 to October 2016, we partially realized part of the research named *Children*.

At the end of October 2016, we began to realize part of the research named *Teachers/parents about children*. In early January 2017, we have paused collection of data and we have processed partial results from part *Teachers/parents about* 

*children*, which we have subsequently compared with the partial results of the part called *Children*.

## Part: Children

# The research sample:

The research sample consisted of 15 children (6 boys and 9 girls) at the doorstep of education, i.e. ranging in age from 5-7 years, specifically four children aged 5 years, seven children aged 6 years, four children aged 7 years, attending last year at kindergarten, respectively the first year of primary school in Banská Bystrica (see Table 1).

Table 1: Summary of respondents. Partial results of the research part: Children

Sex	Age	School
Boy	5 years, 5 months	State kindergarten at Banská Bystrica
Boy	5 years, 8 months	State kindergarten at Banská Bystrica
Boy	6 years, 1 months	Private kindergarten at Banská Bystrica
Boy	6 years, 7 months	Private kindergarten at Banská Bystrica
Boy	7 years, 1 months	Church elementary school at Banská Bystrica
Boy	7 years, 5 months	Church elementary school at Banská Bystrica
Girl	5 years, 4 months	State kindergarten at Banská Bystrica
Girl	5 years, 2 months	Private kindergarten at Banská Bystrica
Girl	5 years, 7 months	State kindergarten at Banská Bystrica
Girl	5 years, 7 months	State kindergarten at Banská Bystrica
Girl	5 years, 11 months	Private kindergarten at Banská Bystrica
Girl	6 years, 1 months	State kindergarten at Banská Bystrica
Girl	6 years, 3 months	State kindergarten at Banská Bystrica
Girl	6 years, 11 months	State kindergarten at Banská Bystrica
Girl	7 years, 4 months	State primary school at Banská Bystrica

## The research method:

Research method was flexible semi-structured interview with children.

## The research tool:

Research tool has been validated in the pre-research as research tool – Interview to survey on children's peconcepts about notions related to social space.

## **Partial targets:**

To find out what children consider as part of home – persons/things

To find out what are children's preferences of games and toys.

To find out how current children are spending their free time.

# Part: Teachers/parents about children

# The research sample:

The research sample consisted of 21 kindergarten teachers, 21 school teachers and 21 parents in Slovakia.

**Table 2:** Summary of respondents. Partial results of the research part: *Teachers/parents about children* 

Respondents	Total number	Distribution of respondents
Respondents	of respondents	by regions in Slovakia
	21	Bratislava region (4), Trnava region (0),
Parents		Nitra region (0), Trenčín region (0), Banská
Farents		Bystrica region (10), Žilina region (5),
		Košice region (2), Prešov region (0)
	21	Bratislava region (0), Trnava region (3),
Teachers at		Nitra region (0), Trenčín region (1), Banská
kindergarten		Bystrica region (7), Žilina region (7), Košice
		region (0), Prešov region (3)
Too above at	21	Bratislava region (1), Trnava region (0),
Teachers at		Nitra region (0), Trenčín region (0), Banská
elementary		Bystrica region (1), Žilina region (14),
school		Košice region (1), Prešov region (4)

#### The research method:

Research method was a questionnaire to explore the knowledge and ideas of teachers of pre-primary and primary education and the parents of the current 6-year-old children.

## The research tool:

Research tool was the questionnaire - Teachers and parents view at present children in electronic form for parents (further as Parents), pre-primary teachers (further as pre-primary teachers) and teachers of primary education (further as primary teachers). We have distributed approx. 100 electronic questionnaires (Note: The number could be higher, since it was the electronic questionnaire and respondents had the opportunity to easily redistribute it further).

## **Partial target:**

To identify partial knowledge and concepts of teachers of pre-primary and primary education, and the parents of the current 6-year-old children.

## **Partial target:**

To identify partial knowledge and concepts of teachers of pre-primary and primary education, and the parents of selected areas: about children's preconcepts what is considered as part of home – persons/things, spending time of the current 6-year-old children without parents and about children's preferences of games and toys.

# **Partial target:**

To compare partial knowledge and concepts of teachers of pre-primary education with partial knowledge and concepts of teachers of primary education about the current 6-year-old children.

# **Partial target:**

To compare partial knowledge and concepts of teachers of pre-primary and primary education with the knowledge and concepts of parents about the current 6-year-old children.

## **Partial target:**

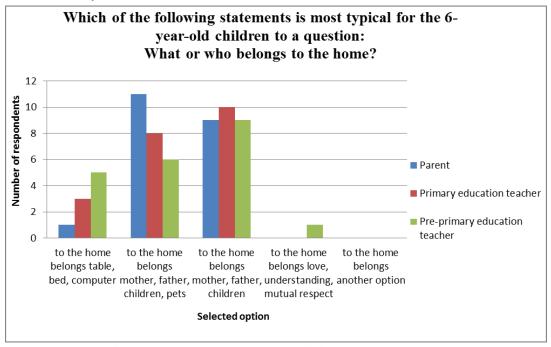
To compare partial knowledge and concepts of teachers of pre-primary and primary education, and the parents of the current 6-year-old children in part: Adults on children with partial research findings about the current 6-year-old children from the part *Children*.

# Interpretation of selected partial findings

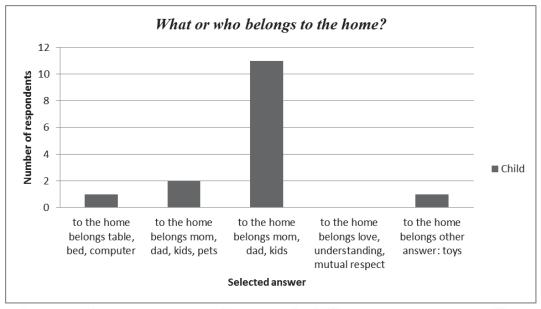
From the partial findings we offer interpretation of the selected areas: partial visions and knowledge of parents, pre-primary teachers and primary teachers on children's perceptions of persons/things belonging to home, spending time of the current 6-year-old children without parents and about children's preferences of games and toys. These are compared with real testimonies of the children about their preconcepts of persons / things belonging to home, spending time without parents and about their preferences of games and toys. In conclusion, we offer an overview of the findings about parents, teachers of preprimary and primary education about views on current children in the form of positive and negative characteristics of the current children according to parents, teachers of pre-primary and primary education.

## Home by current children

It is clear from chart. 1, that the question of the questionnaire with a choice of only one option, identifying partial visions and knowledge of parents, teachers of pre-primary and primary education on persons and objects belonging to the home by current children.



**Chart no. 1:** Partial response representation of knowledge and concepts of parents, pre-primary education teachers and primary education teachers on children's perceptions of persons / things belonging to home



**Chart no. 2:** Representation of partial responses for children perception of persons / things belonging to home

Question was: "Which of the following statements is most typical for the 6- year-old child to the question: What or who belongs to the home?" 11 of 21 parents answered that mother, father and pets. 9 of 21 parents answered mother, father and children. However, the difference between the most common and second most common option among parents is very low, similarly it has been at teacher's answers. The most common option among teachers of primary education (10 of 21) and teachers of pre-primary education (9 of 21) was "to home belongs mother, father and children". It is clear that parents assume that children take pets as part of home - because children perceive home from a wider perspective. Certainly many of the children have some pets, which are seen as a family member. According to teachers as professional employees of schools, open-minded, child assigned family to the home, which includes family members not pets. Teachers expect this definition of home by children. Option that love, understanding and mutual respect belongs to the home has been selected by teachers of pre-primary education once, because children are learning in kindergartens about issues of those abstract terms. The third most frequently chosen option by parents, teachers of pre-primary education and teachers of primary education was answer: to home belongs table, bed and computer. This materialistic perception of home by current kids was marked mostly by preprimary education teachers (5 of 21), then primary education teachers (3 of 21) and at least parents (1 of 21). It is surprising that it is the teachers of pre-primary education and primary education who tend to imagine that children perceive home as material security.

Comparing the partial findings of parents and teachers concepts about which things/ people belongs to the home according to the current children with real testimonies of the current children, following partial findings are evident. Closer to the children view were answers by pre-primary education teachers and primary education teachers, than parent's answers. As can be seen in chart no. 2 significantly most frequent answer by children were replies falling under category: to the home belongs: mom, dad, kids (11 of 15). 2 of 15 children said that pet belongs to the home. Materialistic perception of home was evident in the responses like: to the home belongs table, bed or toys (2 of 15).

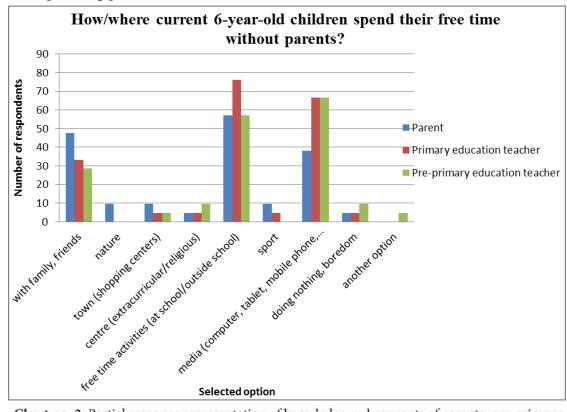
#### Theory formation:

From detailed analysis mentioned above it is possible to generalize concepts of parents and teachers about home of current children as **home as place**, **where mother**, **father and children belongs** (teachers point of view) and **home as place**, **where mother**, **father**, **children and pets belongs** (parents point of view), current children perceive **home as place**, **where mom**, **dad and kids belongs**. In this area

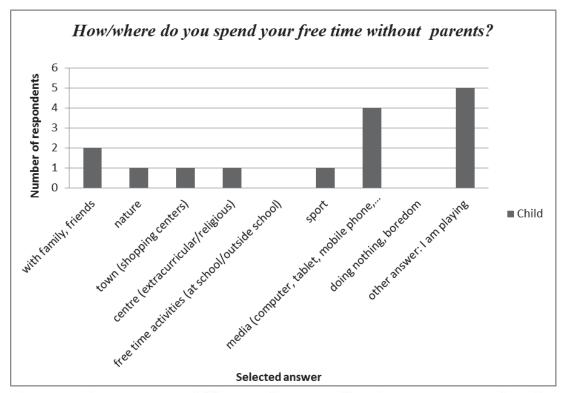
of our research concepts of teachers are very similar to preconcepts of children. However, parents have distorted preconcepts of the children's distinction between members of the family and things belonging to home, if they expect, that children takes pets as members of home. Statement: children are able to logically generalize persons and clearly distinguish family members. Children's preconcepts are more familiar to both teachers of primary education and teachers of pre-primary education.

# Free time of the current children

Chart no. 3 shows answer given by parents, primary education teachers and pre-primary education teachers to the question: *How/where current 6-year-old children spend their free time without parents?* As a result, we get vision and knowledge of parents, primary education teachers and pre-primary education teachers about how current 6-year-old children spend their free time without parents. Respondents were allowed to choose at most two of children free time spending possibilities.



**Chart no. 3:** Partial response representation of knowledge and concepts of parents, pre-primary education teachers and primary education teachers on current 6-years-old children free time spending without parents



**Chart no. 4:** Representation of children partial responses about free time activities without their parents

It is clear from chart. 3, that the most common free time spending of current children without parents according to primary education teachers (16 of 21) and parents (12 of 21) are free time activities (at school/outside school). According to pre-primary education teachers (14 of 21) it is different types of media. The possibility of spending time using various forms of media was the second most common options for primary education teachers (14 of 21) and only the third most common options for parents (8 of 21). Parents (10 of 21) preferred answer with family and friends before the media. The issue of media in the lives of the children is an urgent issue which is strongly perceived by teachers and parents. Encouraging is fact that most of the parents still perceive family and friends as a more powerful element in the lives of their children, although with low difference to media influence. Nature, city, shopping centers, sport are according to parents and teachers significantly underrepresented ways of free time spending of current children without parents. Lack of motor activity of current children due to the lack of sport in the lives of current children, among other things, is another urgent issue which is also recognized by parents and teachers.

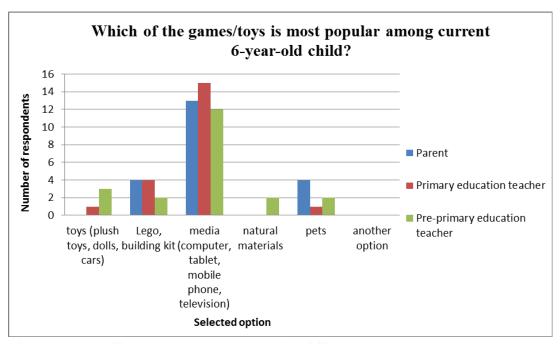
Comparing concepts/knowledge of parents and teachers about free time activities of the current children with real testimonies of the children we found this: While parents and teachers assigned primacy of free time spending of children to free time activities (at school/outside school), children most often responded, as is apparent from the chart no. 4, the statement "I am playing" (5 of 15). Playing mostly meant activities connected with toys (plush toys, cars or dolls). So perception of adults and children was similar, but it was expressed differently. The first place in free time spending of current children is free activity – game. Playing computer games, playing games on tablet, computer or watching television, tales and so on was second most common answer (4 of 15). Few children associated their free time without parents with other family members and friends (2 of 15). Sports, nature, town or extracurricular/religious centers are the least visited place in free time spending of the current children.

## Theory formation:

In the field of free time spending of current children, one part of our research, parents and teachers concepts about free time of children and free time by children are expressed differently. Children perceive their free time as "I am playing". Adults perceive children free time as free time activities at school, or outside school. It is needed to continue research and further determine whether the concepts of adults and children are the same, or adults perceive children free time as organized, managed however children perceive their free time as unmanaged.

## Games/toys of the current children

Theme of knowledge / ideas of parents and teachers about the preferences of games / toys of the current children is dealing in this question of the questionnaire: Which of the games / toys is most popular among current 6- year-old child?



**Chart no. 5:** Partial response representation of knowledge and concepts of parents, pre-primary education teachers and primary education teachers on preferences of children games / toys

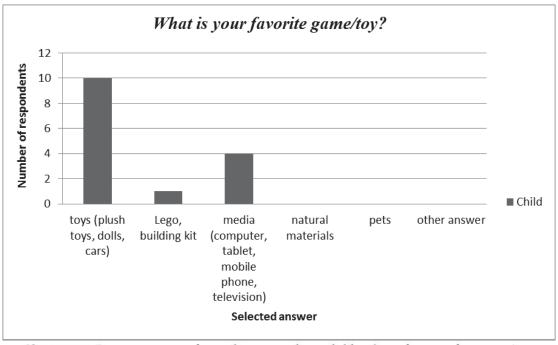


Chart no. 6: Representation of partial answers about children's preferences for games/toys

From chart no. 5 it is clear that for the most popular toy of the current 6- year-old children are considered, in a significant advance compared to other options, by primary school teachers (15 of 21) parents (13 of 21) and pre-primary school teachers (12 of 21) various types of media (computer, tablet, cell phone, television). Issue of media affecting humans, children included, in our daily lives and in the daily life of the current children has been proved again. According

to parents current children prefers (after various types of media) Lego and building kit (4 of 21) as well as pets (4 of 21). Pre-primary education teachers placed toys (3 of 21) on the second place. In their responses, as with primary education teachers, appeared the possibilities of preferences in gaming of the current children with pets, natural materials, Lego and building kit. We assume that this is because of the experience of teachers from practice, where teachers try to satisfy children natural need of play (with real toys), teachers also lead children to respect animals and nature.

We noticed that there is significant difference in the knowledge/ideas of parents/teachers on children's preferences of games/toys with real testimonies of the children. While parents and teachers thought that the most popular toy of the children will be the media, children in their statements revealed, as shown in the chart no. 6, that they prefer toys (dolls, cars, plush toys) (10 of 15). Children put different types of media (computer, tablet, mobile phone, television) on the second place (4 of 15). The children also love to play with Lego or building kits (1 of 15).

## Theory formation:

In the games preferences, one part of our research, adults concepts of children are different than children concepts. Adults thought that the most popular children toys are different kinds of media, while children stated that their most favourite toys are classic toys (doll, car, plush toys, etc.).

We had introduced a certain partial findings of research of the current children. Research is ongoing, the research group is expanding and findings are obtaining quality. We hope that we reach enriching results, beneficial not only for teachers and parents, but especially for the right future direction of education in favour of "our" children. There's still a long way to the knowledge of the children of the 21st century.

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