

DOI: 10.1515/atd-2017-0022

### From the Theory of Play into the Practice in Kindergarten: Verification of the Original Didactic Toys for Preschool Children

#### Hana Navrátilová – Barbora Petrů Puhrová\*

Received: November 8, 2017; received in revised form: November 20, 2017; accepted: November 21, 2017

#### Abstract:

Introduction: This study deals with the phenomenon of play in the preschool environment. Based on establishing the links between theories and practice applicable in preschool conditions, the students from study programme of Preschool Teacher Training at Faculty of Humanities at Tomas Bata University in Zlín created a set of original didactic toys for preschool children. The main objective of the study was to verify this set in kindergartens and to find out how teachers perceive play and how they work with toys in preschools. The study also focused on preschool children's view of play and toys.

**Methods:** We have chosen a qualitative research design to explore the research problem and to answer the research questions. The data collection in this research was based on participant observation and interviews with the participants who were preschool children and their teachers from four selected kindergartens in Zlín Region in the Czech Republic. These were 12 teachers with secondary or university education (Bc. degree), aged 23 to 48, with a length of practice from 1 year to 25 years at the position of kindergarten teacher. The research study then included interviews and video recordings of 77 preschool children (age 2 to 6 years).

**Results:** Data gathered by a qualitative research with preschool children in the kindergarten environment represent a partial picture on the importance of toys and playing with them. The results emerging from the observation and interviewing the preschool children and their teachers shows the way of toy selection with the importance of variability of possible modifications of the toys offered to children in the preschool environment. The progress of play with the verified didactic toys was influenced by the need for a partner in the play, the role of the teacher, the chances to freely discover the elements of toys. We found a restrictive perspective expressed by the participating preschool teachers about the dominant influence on selected toys in kindergarten environment.

*Discussion:* The findings suggest that it is not prospective to focus solely on the toy itself. In agreement with Pyle and Bigelow (2015), it is possible to monitor the impact of playing on the development of children's social, emotional and educational skills. Based on the observation and interviews with both children and teachers, we have come to the view that it is increasingly important to support the didactic thinking of preschool teachers. We also considered the issue in the sense

<sup>\*</sup> Hana Navrátilová, Tomas Bata University in Zlín, Faculty of Humanities, Zlín, Czech Republic; hnavratilova@fhs.utb.cz

Barbora Petrů Puhrová, Tomas Bata University in Zlín, Faculty of Humanities, Zlín, Czech Republic; petru\_puhrova@fhs.utb.cz

of feedback for authors of the toys and for future preschool teachers. Child-based research opens up the opportunity to interpret and analyse their own childhood perspective reflected in their own social worlds, emphasizing the complexity of understanding their experiences through the eyes of adults.

*Limitations:* We consider important to point out certain limits of the presented research, given the circumstances that a sample of 15 classrooms observed in the total number of 4 kindergartens cannot bring results to be presented for wider generalizability. The intentional choice of toys for preschool children could also belong to the possible limits of this research.

**Conclusions:** Children do not choose a toy for the purpose of conscious development of fine motor skills or with the aim to strengthen their social relationships with other children. Children just play. And they can play with toys similar to the original products made by students and verified in this research. Choosing toys and activities suitable for preschool children can also be a challenge for experienced teachers.

**Key words:** play, kindergarten, preschool teacher, preschool child, toy.

### 1 Introduction

This study deals with the phenomenon of play, specifically playing with toys in the preschool environment. Research shows that teachers often do not see the links between theories and practice applicable in preschool conditions (Parker-Rees & Leeson, 2015, p. 254). The main objective of the study was to verify a set of original toys for preschool children in the kindergarten environment and to find out how teachers work with the play and toys available in preschools. The original set of toys was created by a group of students of study programme Preschool Teacher Training at Faculty of Humanities at Tomas Bata University in Zlín.

#### 2 Theoretical framework

Play is one of the most important phenomena in a child's life but the authors of studies focusing on preschool childhood agree that play is not yet clearly defined (Nutkins, McDonald, & Stephen, 2012; Theobald, Danby, Einarsdóttir, Bourne, Jones, Ross, & Carter-Jones, 2015). Although playing has always been a part of human experience, the theories seeking for the definition, cause, value or meaning, nature and influence on a child are often different and even controversial (Brooker, Blaise & Edwards, 2014, p. 9). In addition, we consider playing to be a natural part of the social, material and conceptual world.

Langmeier and Krejčířová (2006) confirm the most that playing is considered a physical or psychological activity that is performed only because it brings satisfaction without an external target. Playing is a spontaneous activity of a child connected to the child's inner world, it reflects his or her life, it brings satisfaction and children can express their current needs by means of playing (Tomanová, 2006). Children overcome obstacles through the play as they answer questions and solve problems trying to cope with difficulties.

From a child's perspective, the play can also be any kind of activity that is not only based on manipulating or playing with the toys. Almost anything can become the object of playing including the human body. Thus, children can take advantage of every opportunity or incentive to play. The importance of playing in children's world is related

to their motivation and the needs which can be provoked and then satisfied throughout the play. A child does not realize the developmental effects of the play, although the child learns naturally and develops through the play. The play does not represent only a kind of activity defined by the content, but it comprises a form of activity whose content is variable (Mišurcová & Severová, 1997). Children are gifted with the ability to spontaneously create a playful activity from each stimulus (Tomanová, 2006).

#### 2.1 Play as a means of learning, cognition and experience

The play enables to build a bridge across the child's needs, wishes and reality. While playing, the child thinks, decides and acts accordingly. The child gains new experiences. Despite the fact that the play is a means of learning and the development of social, emotional or motor skills, it still remains a free and natural activity. Children usually do not think about the purpose of the play or the toy systematically. It is natural for a child to experience the play/toy and to further develop it or simply to change it for another play or different activity.

In the preschool environment, we often encounter the concept of a play connected to the classification of two types of plays – spontaneous and guided by a teacher. If all the conditions are fulfilled, the play becomes a free activity based on learning (Horká, 2015, as cited in Wiegerová, 2015) and the standard classification of plays is not required anymore.

The play is closely linked to the development of cognitive, social and volitional structures of a child's personality. We can monitor the development of a child through the play in the field of gross and fine motor activity, sensory perception, perception of time and space, but also in the field of child's cognitive level. Therefore, we emphasize the importance of the teacher as an observer of the child's progress. Teachers' have the opportunity to observe the play and to see situations in which the child reflects the reality in his own conception of the play. There is an image of how children perceive themselves, their surroundings, how the family life is reflected in the play and each child's awareness of the world individually construed.

Children of early age are still closely connected with their families and their close environments before entering preschool institutions at the beginning of their education. The first social communication in the group of children is often realised in kindergarten for the first time. The play becomes the indicator of children's current mental and social development. In addition, children attending kindergartens meet an organized activity led by the authority of a kindergarten teacher, they get into pleasant or negatively perceived situations they are forced to solve. The play is a situation, a model in which the child recognizes the relationships between people, and recognizes oneself (Horká, 2015, as cited in Wiegerová, 2015).

#### 2.2 Teacher and child as the main actors of play in preschool environment

Preschool environment is a specific place to support the play based ideally on the child's natural interests and needs. At the same time, it is the space in which the process of intentional learning of a child takes place with the teacher playing an important role. The teacher creates conditions and incentives in the educational process to ensure the optimal mental, motor, emotional and social development of a child (Kolláriková & Pupala, 2010, p. 135).

#### 2.2.1 Teachers' part in the play

Teachers can engage in children's play in different roles (Kontos, 1999). A teacher becomes a partner, a helper, a guide, an inspirer, but at the same time, that teacher can take on the role of a partner who himself will be inspired and lead. The influence of the teacher on the play is reflected in creating the conditions for the play as a meaningful form of life-support practice that is based on the child's needs and respects his/her interests (Kolláriková & Pupala, 2010, p. 135). A conceivable teacher's intervention during the child's play is represented in several forms: from helping the child to solve the problems to questioning, directing the unwanted behaviour or involving children into thematic play.

A teacher's position in the educational process is based on creating the teaching situations, in which the teacher builds on the current experience and knowledge of children. If the teacher develops a higher level of children's thinking, then we are talking about adopting the role of scaffolding by creating conditions for a child to have the opportunity to construct and reconstruct new knowledge, skills and comprehension. The teacher provides support, direction, and basic structure for developing learning through this method of guidance (Rogers, 2011, p. 35). Similarly, Svobodová (2010, p. 101) calls such a teacher a facilitator because the teacher in this role allows the child to become an active co-creator of the play. The teacher only guides the play with the aim of children's development. An equally important role of the teacher in the process of playing concerns reflection and evaluation where the teacher is the intermediator of feedback, providing corrective information to the child.

#### 2.3 The child – the most important actor in the play

Current research interest mainly abroad is increasingly focused on the view of the issues through the perspective of a child. The research team Hejlová, Opravilová, Uhlířová and Bravená conducted a several-year field research in the Czech environment with the aim to look into the children's mind and their value orientation (Hejlová, Opravilová, Uhlířová, & Bravená, 2013). The project "Child on the Threshold of Education and its World" is an example responding to the current call for focusing research on the child itself. The project was realised by the team of the Faculty of Education at Matej Bel University in Banská Bystrica in Slovakia (Majerčíková, Kasáčová, & Kočvarová, 2015). The aim is to try to listen to the "children's voices" so that through their experience we can better understand learning possibilities in preschool conditions (Stamatoglou, 2004; Brooker, Blaise, & Edwards, 2014). Thus, the child also becomes an active participant in the research process.

One of the educator's tasks is to provide preschool children with an inspirational, motivating context for the play that will enable them to actively test their own theories, to listen and be heard in a reciprocal process of interaction with peers or teachers (Vujičić & Miketek, 2014).

American and Icelandic studies examining the importance of play from the view of preschool children have shown their preference for an outdoor environment for play activities that allow them to have more free interactions than in the enclosed space in a classroom. They have also been positive about interacting with various items and toys that are a part of their play. The research findings resonated with the children's consensus that their teacher's ease and adult absence in their play contributed to their good sense of play. The children described sadness when their play was abruptly

terminated by a teacher who decided to implement a different planned educational activity. The Canadian research team (Samuelsson & Johansson, 2009) concerned children's perspectives of the situations when they wanted to involve teachers in their play. They identified the five main reasons for it, but rather the need for assistance with a demanding solution, or the need to have a partner listening to one another (Samuel & Johansson, as cited in Theobald et al., 2015, p. 347).

The play can be initiated by a child as well as an adult/teacher, but it should always be remembered that each child creates his or her own agenda of the play rules. Learning to perceive and respect this principle is one of the basic recommendations for an adult/teacher, so that the planned course of play is not always the dominant one (Bruce, 2004, p. 149). If a child enters the teacher's play on a voluntary basis, then the teacher should be willing to reflect on the child's natural need to express him/herself through the play as much as possible without the intervention of an adult (Droppová, 2015). The play as a child's activity with his/her own ideas and choice of toys and other objects or places and roles is defined specifically for the so-called free play (Koťátková, 2005). The research study by Droppová (2015) provides an insight into the views and ideas of preschool teachers in Slovakia on the didactic use of play and it shows that some teachers are still convinced that the child is just a passive recipient of the play as a process prepared by the teacher. These teachers do not respect the child's autonomy in the play (Droppová, 2015, p. 111).

Planning a play for a group of children is not a simple task for preschool teachers if we mean a play responding to their current needs and interests. It is useful for children to place their play in an environment in which they feel comfortable. When creating the opportunity to engage a child in the play, the teacher must think about the desired framework of the play and to follow a set target in the child's development. A clear set of rules should be a fixed component for the child's orientation within the boundaries and the teacher's expectations. However, teachers' thinking about the children themselves should be the starting point for the preparation of play activities. Planning a play means to create a positive atmosphere and to provide enough time, space and erudite support that encourages the child to play (Bruce, 2004). By observing and listening to a child, the teacher gains an important input about the child's interests, possible motivation, needs and experiences outside the preschool environment.

A release in the structure of the play preparation can allow children to:

- choose from several play options;
- negotiate these options;
- involve their thoughts and ideas;
- be physically and intellectually active overall;
- experiment, discover and explore.

Therefore, it is advisable to support an active partnership of the teacher and the child through the knowledge of the child's perspective (Nutkins et al., 2013, pp. 34-35). The risk of building a routine approach to the play in the kindergarten by a teacher is diminished by teacher's interest in monitoring the child's current activities. It means to know what the children do spontaneously.

Being an actor in play situations does not only concern the child's interactions with the teacher. The form captured in interviews with preschool children (Theobald et al., 2015) also includes management and decision making among children. They can describe their own strategies that they use when playing with preschool peers, which usually involve

choosing a play, including the rationale for choosing and then negotiating the rules and course of the play.

#### 2.3.1.1 A child in the play with a toy

The moment of choosing a toy by a child can be integral to the approach to a child as the primary actor in the preschool. Within the framework of didactic strategies, the teacher should respect the child's choice, even in the sense of his/her right to refuse the play or the toy (Havlínová, 2000, p. 59-62). Only one part of the participants of the abovementioned research by Droppová (2015) expressed the opinion that preschool children should have the opportunity to choose a toy according to their own needs including the environment where the children's toys are freely available. A stimulating environment is one of the basic conditions for the children's opportunities to play, so it should be planned and implemented in their own way. Bruce (2004) describes an example of a kindergarten where teachers, on the basis of the observation of children at play, modified the environment of the class so that the children have always the richest equipment imitating the normal equipment of the house (kitchen, bedroom, room, etc.) This space has also been equipped by means that served not only to play, but also directly to the development of the areas given by the curriculum (e.g. calendar, newspaper, restaurant menu, etc.). Appropriate incentives, including materials and indirect support by the teacher, give children a reasonable opportunity to develop their learning in a process that offers them a degree of independence, thus fostering a common construction of knowledge (Vujičić & Miketek, 2014).

#### 2.3.2 Child as a passive recipient of the play

The importance of the play as an accepted element of preschool education can be reduced by the fact that the teacher sees the play primarily through his/her own perspective. The play then becomes a formal activity structured by the teacher instead of its natural integration into diverse activities throughout the day in the kindergarten (Theobald et al., 2015). It can be assumed that the perspective of the play through the eyes of a child is changing due to diverse circumstances in the life of the child who has access to more sources of knowledge, including digital technologies but does not have enough time and space to play (Holmes, 2012). The difference between the perceptions of preschool activities was the focus of a research conducted by an Australian team (Theobald et al., 2015). The children identified certain activities with the name other than "play". The children expressed displeasure with the management of adult activities during the interviews with the use of video recordings of their daytime activities in the kindergarten. They also described their experiences in situations where only one group of children wanted to manage the others by behaving "as an adult", "as if there was a teacher" (Theobald et al., 2015, p. 352).

An excessive structure and day-to-day management of children's activities in kindergarten, which prevented children from having enough time for the free play, was also reflected by the teenage students observing children's play in Canadian kindergartens. Teachers tried to meet the requirements of the curriculum, but they were unable to meet these requirements appropriately by using child-centred didactic play and creativity in working with a variety of materials (Pyle & Bigelow, 2015).

If we accept the child's passive role by entering a routine in the play based mainly on the instruction and management by the teacher or another adult in the preschool environment

(and it may also consider transferring this experience from family interactions), it will cause that the child expects the authority (in the kindergarten represented by the teacher) to solve the problem offered by the play situation. The frame of play in the preschool environment is fundamentally influenced by the teacher's choice of the underlying theory of a child's learning.

### 3 Methodology

#### 3.1 Aim of the research

The aim of the research was to verify the original set of didactic toys in the real preschool environment. Therefore, we consider the main research question:

How is the preschool children's play enacted with selected toys in preschool environment?

When considering the possible progress of children's play with the toys and also after obtaining the first data, we divided this main question into several specific research questions. They should capture the central phenomenon represented by the main research question and spread it into several subtopics (Creswell, 2007, p. 109):

How is the toy chosen by a child in a set environment?

What toy modifications occur during a child's game?

How does a child communicate in the interaction with peers during the play?

The partial objectives of this research were to find out how teachers work with the play and the toys available in the kindergarten and how the most important participants of the research, namely preschool children perceive the play and the toys. We chose a qualitative research design to explore the research problem and answer the research questions.

In the context of the research strategy to verify the use of didactic toys in the kindergarten environment, we chose two sets of original toys, one specifically designed for children up to three years of age and the other one for children between two and six years of age. We used a total of 17 original didactic games and toys. These toys were made by student kindergarten teachers in the context of the subject Play and its educational utilisation in the kindergarten. The toys are proprietary works of their authors. Every toy was produced on the basis of a student's design based on a specific didactic objective (development of the child in a certain area). The toys were made from available materials respecting the requirement of safety of the material and the toy handling. The didactic toys are listed in Table 1 below:

Table 1

Description of the didactic toys

Name of the toy	Age	Goal		
Teddy bunny	2-3	Development of the child's fine motor skills and recognition of colours and shapes.		
Inserted tree	2-3	Development of the child's fine motor skills and visual perception.		
Textile pad with shapes	2-3	Development of fine motor skills and recognition of geometrical shapes. The toy may also be used for development of visual perception.		
Flower with butterflies	2-3	Development of observation and recognition of colours, development of pre-mathematical operations.		
Playful book	2-3	Development of motor skills and encouraging to think. The toy develops speech skills.		
Forest teddy bear	2-3	Development of pre-mathematical operations and fine motor skills.		
Motor skill square	2-3	Development of the child's fine motor skills.		
Colour squares	3-6	Development of visual perception and pre-mathematical operations.		
Marble track	3-6	Development of creativeness, patience and concentration. The toy also supports cooperation of the playing children.		
Doll box	3-6	Development of cognitive skills, support for creativeness and imagination, development of fine motor skills.		
Dressing book		Development of visual and tactile perception, learning of colours, use of handling skills, development of the child's thinking, creativeness and imagination.		
Farm	3-6	Development of the child's creativeness and linguistic skills.		
Table football	3-6	Development of cooperation, sense of fair-play and fine motor skills.		

Glove puppet theatre	3-6	Encouragement of self-expression and self-fulfilment, group work and storytelling.
Animals of the world	3-6	Development of visual perception, encouragement of interest in the animals' habitats.
Interweaving board	4-6	Support for creative work with material, development of fine motor skills.
Music instruments	2-6	Development of hearing, visual and tactile perception. The toy supports rhythmic feeling and improvisation in music.

The research project was created on the basis of the creative students' work. The students – future kindergarten and elementary school teachers studying at the Faculty of Humanities at Tomas Bata University in Zlín are prepared within the concept of study, which combines meaningful theoretical preparation with practical applications of acquired knowledge (Wiegerová, 2015, p. 74). By creating a set of original didactic toys for preschool children, the students tried to demonstrate their ability to link their knowledge from the child's play theory and to undergo practical training in faculty kindergartens.

#### 3.2 Participants

The participants of the presented research were preschool children and their teachers from selected kindergartens. These were 12 teachers with secondary or university education (Bc. degree), aged from 23 to 48, with a length of practice from 1 year to 25 years at the position of a kindergarten teacher. The research study enrolled 77 children of the 2-6 age group from four selected kindergartens in the Czech Republic. We formed both heterogeneous and homogeneous groups of six children per group. The parents of the participating children granted their written informed consent to video recording of the observed play of their children. The children at an early age (from 2-3 years) were observed separately, they were offered different toys, appropriate to their age.

Table 2

Data of children participating in the study

Age of child	<u>Boys</u>	<u>Girls</u>
2 years	1	1
3 years	3	2
4 years	10	9
5 years	8	17
6 years	14	12
Total	36	41

For the purposes of the research, we chose four different kindergartens in the South Moravian Region of the Czech Republic. Two of the kindergartens are urban schools,

one is located in the outskirts of the city and one school is located in a village near the city. Village schools are set in a quieter environment around family houses, close to greenery and with greater opportunities for outdoor stays. On the other hand, the municipal schools, located near the block of flats and roads, have more space, so there are more classes in these kindergartens.

In the classroom environment of all kindergartens, the classroom was well equipped with games and toys. The kindergartens have both modern toys and still use traditional toys. In all kindergarten classes, we noticed toys from various materials (plastic, wood, natural materials, fabric), didactic toys, themes, creative, design and manipulative games, also board games, social and logical games, books, art supplies and aids, utensils, costumes and backdrops, relaxing elements, musical instruments and natural materials from living and inanimate nature. It was also possible to watch the groups of toys designated for boys (cars, trucks, kits) and girls (strollers with dolls). In the classes, we also noticed interesting game elements — relaxation bags, pools with balls, elevated decks (boat deck), corners of the wild (turtle, snails).

#### 3.3 Methods of data collection and processing

Research focused on children's views on the play has grown in recent years. Child observation and interviewing, both individually and in groups, are the most frequently used methods. These methods of data collection were also chosen for our study, supplemented by interviews with preschool teachers in the participating kindergartens. Data collection took place in the kindergartens within three months.

#### 3.3.1 Participant observation

The research was based on one of the recently most popular methods of involved observation of children. Observation is a classical pedagogical and psychological research method also used in practice. Observation helps the teacher get to know the child and thus, obtain valuable knowledge of their independent and group behaviour (McLachlan, Fleer, & Edwards, 2013). To grasp the details of the children's play, we used video recording. Video recordings offers the options of repeated replay, returning to the recorded situations with the possibility to discover what one cannot notice in the course of a single observation. The presence of the researcher can obviously affect the behaviour of the observed children, and also the use of the video camera may introduce a certain bias. The obtained data, however, suggest that the children behaved as usual with just minor deviations. The children were interested in the camera, sometimes a child waved to it or made a funny face, but the camera did not seem to interfere with the children's play with the toys.

We decided to offer the children two sets of original toys, one specifically used for the groups of children under the age of three, in the second set, the toys were designed for children aged 3 to 6 years. In total, there were 17 toys and games that offered a specific goal or problem to be explored through the play. The child could thus classify, sort, track the parts and the whole, compare, experiment and investigate the cause and effect (Burns et al., 2012, 73). Each of the kindergartens prepared a space for the play which the children knew. The space was big enough to allow the distribution of the toys across the floor in a way that provided enough space for playing in groups with a single toy. Involvement in a play requires sufficient time for playing. That is why the children were given as much time as they needed. The mean length of one recording was 30 minutes,

subject to the age and composition of the group of children. Data were collected in the environment of four selected kindergartens across the time span of three months. The data obtained in the form of video recordings and field notes were transcribed and subjected to qualitative analysis.

#### 3.3.2 Interviews with preschool children

Preschool-oriented research is enhanced by listening to these children (Mukherji & Albon, 2015, p. 55). Interviews with children to help us better understand their own view of the play and toys were a clear choice within the methods of data collection. The interviews were always realized at the beginning of each meeting with children before they picked the toys for the play. This resulted in a total of 14 interviews recorded on the video camera, but the field remarks were also accentuated by discussions with children at the end of the meetings. The children perceived us as "substitute" teachers, and they also addressed us - "we all call Teacher."

Unstructured interviews with children were focused on the toys that they prefer or wish to have in the kindergarten, how and with whom the play is done in preschool but also other environments that children spontaneously spoke about. Respect for ethical principles in child-centred research as described by Mukherji and Albon (2015) was reflected in the effort to communicate sensitively with children and with respect for their wishes.

#### 3.3.3 Interviews with preschool teachers

Semi-structured interviews with 12 kindergarten teachers focused on their perceptions of a child's role in the play and then on the concept and functionality of toys. Teachers showed interest in seeing the offered original toys. They were also interested in how children would play with them and whether this information would match how they themselves knew the children.

#### 3.3.4 Data analysis

Data in the form of field notes and video recordings were carefully transcribed into a text format. The analysis was processed cyclically using the open coding approach first. With the increasing number of records from observations and interviews, the coding was refined, and clear concepts emerged and formed the basis for the development of main categories.

#### 4 Results

#### 4.1 Tov selection

Toys offer the basis for the promotion of the development of problem solving strategies and they are active elements of the play. A toy offers an opportunity for social play and play with other children (Blakemore & Centers, 2005). And if a toy becomes the play, a play becomes the toy, then the play functions as a target, instrument and means of communication at the same time. The toys being verified caused a wave of questions from participating children. The questions were directed not only at the researchers but also at the children in the observed group. We can state that they did not need to name the toy with a certain exact word, they mostly called them "this, it, or that". During the process of toy selection or in following play, children were not interested in the name of

the toy. Most often, the children asked about the nature of the toy, and they were interested in the purpose of the toy. Since the aim of the research was to verify a set of toys according to a supposed didactic goal, the researchers did not deliberately interfere within the observation and did not explain to children how to play with the toys. Therefore, inquiring questions naturally arose:

 $G^{I}$ : Teacher, how should I play with this?

R: There's another box there, well, maybe somebody will advise you.

G2: I advise you (another girl responds).

We consider this short part of interview as a good example of mutual cooperation between children, a certain level of social learning and mutual help. We noticed that the toy selection by children under the age of three who were also included in the observation, was limited by their level of social level of development (shame, surprised expressions, uncertainty) and by a communication barrier (they were not speaking, rather silent). This limitation is explained by the short time for getting acquainted with the children, the way the research was conducted and a certain disturbance of their day-to-day regime in the kindergarten. Children did not see the toy in advance or ask questions and, basically, they just chose the first toy.

### 4.1.1 The way of toy selection

The process of toy selection passed really spontaneously. As children were enjoying new, other toys, their joy was reflected in their approach to these toys. In some groups, children were more open to improvised play. We noticed that many children first wanted to explore what toys they were offered, they approached them and observed them and then they left them freely to access another.

Other children who were influencing the children's choice also entered the toy selection. There were more moves, somehow from toy to toy. We perceived the joy of discovering the toy as a real, unprejudiced emotional situation that arose whenever a child discovered a toy that allowed it to transform into something completely different. Fontana (2003) confirms the importance of emotions at the early child age when feelings of joy should be perceived as highly desirable. Children stayed spontaneous when they were deeply immersed in the play. Their emotionality was enhanced not only by their voice but also by their movements. The play means a serious activity for the child, accompanied by feelings that are true. Play activities bring joy, satisfaction, even happiness to a child (Mišurcová, Fišer, & Fixl, 1980).

When observing a child's toy selection, we identified several factors that influenced the interest of children.

#### - Toy versus friend

We also focused on the observation of children who watched the other children playing in the group. Children learn not only by cooperation but also through observing and imitating others. They try and play observed situations. The ways of acting are then tested on children themselves or even on other peers. We noticed that children conformed to friend's play preferences.

<sup>&</sup>lt;sup>1</sup> G= girl, B = boy, R= researcher, T= teacher to indicate participants' recorded statements

*G*: *I don't want to play with it anymore.* 

G2: Neither do I.

#### - I must know how to play

Both the follow-up of the play and the toy selection were limited by whether the child felt confident about the ability to understand the principles of the play. Some children verbalized the conditionality of selection. This approach corresponds to children's initial questioning about the rules and possibilities of the presented toys. We assume that this learned mechanism could be the result of their teachers' or parents' approach.

*G*: *I will try to play with this.* 

*G2:* We will play with this if we know how to do it.

The above-mentioned toy selection ends after the moment when the girls watch the toy. One of them strongly pronounces that they cannot play with it.

G: (She rotates the magnetic board from the "Animals of the world", and finally places the selected magnet on the white back surface). We will not play with it! (She puts the board back into the wooden box.) We cannot do that!

### - The need for a partner in the play

A kindergarten is the place for children to meet, to share their learning and to experience a substantial part of the day. We noticed that the participating children were adapted to play naturally in the group. Children were used to playing together, talking and sharing compromises. Their need to play together with someone else prevailed.

CH: I know that we have it at home, but we always play it in pairs.

We found examples of interesting solutions for playing with toys made by the children. But we also observed contrary situations. The little girl picked up the playbook and she was so intrigued by the toy that even though the teacher had come into the view, other children spoke loudly, reflecting the play with all toys, she still continued to compose and stick the paper clothes into the book. The aspect of full concentration on play is determined by the child's own interest and inner motivation to play regardless of the surroundings.

### 4.1.2 Progress of toy selection

Throughout the observation, we noticed that children mostly played with more toys because they moved to another when the toy could not be used in various forms. These situations lead us to the assumption that children's free play with didactic toys is effective when the toy itself offers the possibility of further variations and transformations. In such a case, the child is forced to think and look for a different solution. Otherwise, the toy would only fulfil its primary goal, without any innovation and creativity.

#### - Teacher in the background

Since the beginning of the observed play, children have been struggling to get support from the researchers, who have been asking questions about the functions of toys.

*D: Mrs...teacher? What should we do with this toy?* 

*V:* That's what you want to do.

Children are used to asking the teacher for help, they can ask when they need to share their experiences, joy or discovery. We conclude that in the presence of the teacher, the child feels the authority and respect. At the same time, it is necessary that the teacher puts forward a proposal to resolve disputed situations, conflicts among children, but not to interfere before it is needed into the children's play. Looking for teacher's strategies to act as a guide and facilitator of the play is increasingly discussed issue in preschool education. Playful pedagogy, based on the involvement of teacher and children in joint learning (David, Goouch, & Powell, 2016), is accentuated in the current theory of play. The process of toy selection by a child depends on many factors. The research shows that the quality, visual aspects, and purpose of the toy are not enough. The data indicate that there is more than the need for comprehensive thinking about the use of toys in kindergartens. Differences in children's individuality, not only gender, but also their own character and temperament and many other aspects influence the possible progress of playing with the toy and its effectiveness.

#### 4.2 Progress of play with the selected toy

Not only the first choice of the toy, but also the progress of play, can be partly influenced by children's gender. Children at age of three readily distinguish between males and females, and associate certain objects more strongly with one gender (boys) than with the other one (Osad'an, 2012, p. 25). In line with Oncu and Umluer (2012), we observed obvious boys' preferences for toys characterized by a joint play in a group of more children together, the play was more dynamic with a frequent physical contact. There was also a dominance manifested in decision making and determining the rules. The girls' preferences of the play were characterised as being calm, more conscious and persistent in the time spent with the selected toy. At the same time, the girls turned more to the researcher, they expressed the need for adult proximity and they often controlled the group.

The progress of the play with the toys was obviously affected by interactions among the children. Especially in groups of older children (5 - 6 years of age), shorter concentration on a single toy was manifested; the children often changed positions and partners in their play and moved from one toy to another, eventually returning to previously abandoned toys. Thus, they were more demanding "clients," but, at the same time, did not investigate the toys down to such a level of detail as younger children did.

#### 4.2.1 Discovering a toy element

First, the selected toy was perceived as a whole by children and then they gradually explored its use, individual possibilities and elements. If the toy did not catch their interest enough or one of the children decided to explore the new toy, the children did not even finish the toy exploration. Due to missing specific instructions from the

researchers, it was up to them to decide whether and how to discover the principle of a given toy.

G: I'll do it right, ok? I'll give you the big ones. I will give the car there.

B: No, that must not be so (Another child puts the ball in a different place than it is intended). You must do that (He gives the ball at the marked point).

Discovering toy elements also happened during the individual child's play. It was interesting to observe the discovery of the play principle especially with toys when the children really had to identify the functions themselves. In other cases, however, the children intentionally did not want to use some of the elements. Preschool children give new meanings to play (Fleer, 2011, p. 249). The observed children created various modifications to the original plan intended by the authors.

#### 4.2.2 Modification of toys

A total modification that transformed the toy into a completely different subject was also used by children from the group of the youngest participating children, i.e. those who only reached the age of three in the given school year. Therefore, it can be assumed that it may indeed be useful to let the children first examine new objects according to their own scenario.

Most of the offered toys were presented in their dismantled state, for example the marble track was presented as a plain board where the individual obstacles needed to be placed. If the teacher told the children that the obstacles must be put in the track, the children would not look for other options, at least when first playing with the track. As we intentionally avoided interfering with the play unless the children asked for help (for example when they need someone to read the instructions they discovered for the game), we could observe variant uses of the toys. The marble track was used by a group of girls without an interest in the obstacles for making the route more difficult. Instead, the girls violently pushed the marbles across the empty track as if playing football. Even when they discovered the box with the obstacles, and although they knew how to use them, they did not show any interest in them. In another case, the girls played with the track as if it was a house for guinea pigs. Thus, they adapted the toy to their current interest in pets.

A child's need to get at least partial instruction for a toy or play can be influenced by the child's character and by the examples outside the kindergarten. At the same time, we believe that the teacher, who offers the play as an externally managed activity, plays an essential role here. As stated by Opravilová (as cited in Kolláriková & Pupala, 2010), a whole number of such structured teacher materials is presented prematurely or even unnecessarily to children, because children can actively discover the principles of the play.

### 4.3 Discrepancy between the view of a teacher and a child

Considering that toys or plays in kindergartens are usually chosen by the teachers and parents, it is undoubtedly interesting to ask directly the children what toys they prefer, what they would like to have in the kindergarten classrooms. In addition to common toys found in the classrooms and children's rooms, some of the children expressed less usual wishes. A tree as a toy that is missing in the kindergarten could give a surprising

impression. However, participating children in that group did not show any surprise (unlike the adult researcher present), on the contrary, they developed the idea, describing how they would actually play with a tree in the classroom. The children's wishes outside the assortment of regular toys included also live animals.

In the children's expressions of toys as unfulfilled wishes, there were objects which appeared to be undesirable from the point of view of preschool teachers. The children wished to have a gun or a rifle in the classroom. A child chooses the theme of the play based on his/her own experience, although gives a new dimension to this experience. A play is not a mere reproduction, but the child creates a whole new reality (Vygotsky, 2004). In contrast to the often declared zero tolerance for the toys imitating weapons, Holland (2003) has a different view. Instead of a strict refusal, it is possible to use the teacher's sensitive guidance to experience some play situations (e.g. being a superhero). We found a restrictive perspective expressed by the participating preschool teachers about their dominant influence on the selected toys in the kindergarten environment. If children play for too long with one toy (e.g. slide or cars), they solve the situation by not allowing children to use toys for a few days. Children are so forced to find other toys, playing differently than they prefer. Teachers explain their intervention as an effort to boost child development through a wider range of toys for children.

*U:* When they're playing with cars for a whole week, we offer something different to them, or we are foisting them wooden figures to add them into the play.

#### 5 Discussion and limits

Preschool is a specific environment in which teachers are important actors in initiating, supporting and developing the play, in particular by what conditions to offer concerning the organization and the quality of play materials and play environment for children (Martinsen, 2015). The research interest focused on children, who had a simple instruction – "Kids, you can play with these toys". This impulse was enough to open the world of play.

Data gathered by a qualitative research with preschool children in the kindergarten environment represent a partial picture on the importance of toys and playing with them. We consider important to point out certain limits of the research, given the circumstances that a sample of 15 classrooms observed in the total number of 4 kindergartens cannot bring the results to be presented for wider generalizability. Even though we have introduced a research that originally aimed to verify the toys for preschool children, we offer arguments for discussion on pedagogical theory and practice. Another recommendation for future preschool teachers is to be open to children's play, as children's views on the play differ from those of adults (Theobald et al., 2015).

An intentional choice of toys for children could also belong to the possible limits of this research. The criteria for choosing toys were set rather subjectively. However, the efforts to refrain from classifying toys according to material, children's age or from a didactic point of view was reflected as a successful starting point. Toys were verified in terms of their primary function and purpose.

The findings suggest that it is not prospective to focus solely on the toy itself. In agreement with Pyle and Bigelow (2015), it is possible to monitor the impact of the play on the development of children's social, emotional and educational skills. Based on the

observation and interviews with both children and teachers, we came to the view that it is increasingly important to support the didactic thinking of preschool teachers. We also considered the issue in the sense of feedback for authors of the toys and for future preschool teachers. Child-based research opens up the opportunity to interpret and analyse their own childhood perspective reflected in their own social worlds, emphasizing the complexity of understanding their experiences through the eyes of adults. It was crucial for us to not set up toy rules for children in this research (except for safe toy handling and respecting the basic rules of the class), so no instructions or demonstrations were provided to children about how to play or how to use the toy. In parallel with the verification of toys for children, we felt strongly about the discourse that the research space offered us. Children are perceived as reflective participants, competent producers of knowledge about their lives and everyday learning experiences (Christensen & James, 2008).

The limits of openness in children's play are based on the school system itself and the traditional day care in kindergartens, which is adapted to the day-care regime. As shown in the study by Bilewicz-Kuźnia (2016) from the Polish educational environment, also the Czech educational system focuses on specifically-directed activities by a teacher in the classroom. A teacher's role in free play is more of a control character. Considering play from a childhood perspective allows children and teachers to construct and build knowledge and skills together.

#### 6 Conclusion

Children do not choose a toy for the purpose of conscious development of fine motor skills or with the awareness of strengthening their pro-social relations with other children. Children just play. And they can play with toys similar to the original products made by students and verified in the presented research. Choosing toys and activities suitable for preschool children can also be a challenge for experienced teachers. Effective toys are not only safe, they are appropriately chosen according to the child's age, abilities and interest. But, above all, they are provided as a possible challenge. The toy becomes a ticket to experience, their performance and experience. If we do not provide instructions on the play and toy, children will keep asking what to do with it for a while, but they gradually become used to finding their own path, building creative modifications.

A careful observation of children in diverse activities helps the teacher to understand the motives or intentions of children concerning the selection strategies in the play. Therefore, teachers' observation skills belong to the pedagogical competencies that help to use efficient educational strategies (Bruce, 1996). In addition, if a teacher prepares or creates an original toy, it will be interesting to learn how children discover the principle of the toy and whether the teacher can even predict what toys will be of interest to children in his/her kindergarten classroom.

#### References

- Bilewicz-Kuźnia, B. (2016). Places, Toys and Activities Observed in the Course of Children's Free Play in Preschool. *New Educational Review*, 44(2), 257-269.
- Blakemore, J. E., & Centres, R. (2005). Characteristics of Boys' and Girls' toys. *Sex Roles*, 53(9/10). Retrieved from http://web.mit.edu/sp.778/www/Documents/ToyGender.pdf
- Brooker, L., Blaise, M., & Edwards, S. (2014). *The SAGE Handbook of Play and Learning in Early Childhood.* London: SAGE.
- Bruce, T. (1996). Předškolní výchova. Deset principů moderní pedagogiky a jejich aplikace v praxi. Praha: Portál.
- Bruce, T. (2004). Developing learning in early childhood. Los Angeles: SAGE.
- Burns, M. S., Johnson, R. T., & Assaf, M. M. (2012). *Preschool Education in Today's World. Teaching Children with Diverse Backgrounds and Abilities*. Baltimore: Paul H. Brookes Publishing Co.
- Christensen, P., & James, A. (2008). Research with children Perspectives and practices. New York: Routledge.
- Creswell, J. W. (2007). Qualitative inquiry & research design: choosing among five approaches. Thousand Oaks: SAGE.
- David, T., Goouch, K., & Powell, S. (2016). *The Routledge international handbook of philosophies and theories of early childhood education and care.* New York: Routledge.
- Droppová, G. (2015). Ako učitelia využívajú hru v predprimárnom vzdelávaní. In M. Podhájecká, & M. Miňová, *Teória a prax trvalo udržateľného rozvoja v materských školách*. Prešov: Zborník príspevkov z medzinárodnej vedecko-odbornej konferencie 5. 6. Október 2015.
- Fleer, M. (2011). Kindergarten in Cognitive Times: Imagination as a Dialectical Relation Between Play and Learning. *International Journal of Early Childhood*, 43(3), 245-259
- Fontana, D. (2003). Psychologie ve školní praxi. Praha: Portál.
- Havlínová, M. (Ed.). (2000). Kurikulum podpory zdraví v mateřské škole: rozšířený a aktualizovaný modelový program (dokument a metodika). Praha: Portál.
- Hejlová, H., Opravilová, E., Uhlířová, J., & Bravená, N. (2013). *Nahlížení do světa dětí*. Praha: Univerzita Karlova v Praze, Pedagogická fakulta.
- Holland, P. (2003). We don't play with guns here. Buckingham: Open University Press.
- Holmes, R. M. (2012). The outdoor recess activities of children at an urban school: Longitudinal and intraperiod patterns. *American Journal of Play*, 4, 327-351. Retrieved from http://www.ttacnews.vcu.edu/2014/02/what-is-the-teachers-role-in-supporting-play-in-early-childhood-classrooms/
- Horká, H. (2015). Učitel/ka jako iniciátor rozvoje prožitku, zkušenosti a tvořivosti v mateřské škole. In A. Wiegerová, *Profesionalizace učitele mateřské školy z pohledu reformy kurikula*. Zlín: Univerzita Tomáše Bati ve Zlíně.
- Kolláriková, Z., & Pupala, B. (2010). Předškolní a primární pedagogika. Praha: Portál.
- Kontos, S. (1999). Preschool teachers' talk, roles, and activity settings during free play. *Early Childhood Research Quarterly*, 14(3). Retrieved from https://doi.org/10.1016/S0885-2006(99)00016-2
- Koťátková, S. (2005). Hry v mateřské škole v teorii a praxi. Praha: Grada.

- Langmeier, J., & Krejčířová, D. (2006). *Vývojová psychologie* (2nd revised edition). Praha: Grada.
- Majerčíková, J., Kasáčová, B., & Kočvarová, I. (2015). *Předškolní edukace a dítě: výzvy pro pedagogickou teorii a výzkum.* Zlín: Univerzita Tomáše Bati ve Zlíně, Fakulta humanitních studií.
- Martinsen, M. (2015). Structural conditions for children's play in kindergarten. *Journal of Nordic Early Childhood Education Research*, 10(1), 1-18. Retrieved from www.barnssosialeutvikling.no
- McLachlan, C., Fleer, M., & Edwards, S. (2013). *Early childhood curriculum*. Port Melbourne: Cambridge university Press.
- Mišurcová, V., & Severová, M. (1997). Děti, hry a umění. Praha: ISV nakladatelství.
- Mišurcová, V., Fišer, J., & Fixl, V. (1980). Hra a hračka v životě dítěte. Praha: SPN.
- Mukherji, P., & Albon, D. (2015). Research Methods in Early Childhood. An Introductory Guide. Los Angeles: SAGE.
- Nutkins S., McDonald, C., & Stephen, M. (2013). *Early childhood education and care:* an introduction. Los Angeles: SAGE.
- Oncu, E., & Umluer, E. (2012). Preschoolers' Views About Gender Related Games and Toys. *Social and Behavioral Sciences*, 46, 5924-5927. doi:1.1016/j.sbspro. 2012.08.006
- Osad'an, R. (2012). Gender Stereotypes and Elementary School Teachers. *Acta Technologica Dubnicae*. 2(2), 25-29. doi: 10.1515/atd-2015-0057 25
- Parker-Rees, R., & Leeson, C. Early childhood studies: an introduction to the study of children's lives and children's worlds (4th edition). Los Angeles: SAGE.
- Pyle, A., & Bigelow, A. (2015). Play in Kindergarten: An Interview and Observational Study in Three Canadian Classrooms. *Early Childhood Education*, 43, 385-393. doi: 10.1007/s10643-014-0666-1
- Rogers, S. (2011). Rethinking play and pedagogy in early childhood education. New York: Routledge.
- Samuelsson, I. P., & Johansson, E. (2009). Why do children involve teachers in their play and learning? European Early Childhood Education Research Journal, 17, 77-94.
- Stamatoglou, M. (2004). Listening to young children's voices: an ethnographic study on nursery play. British Educational Research Association Annual Conference, University of Manchester. Retrieved from http://www.leeds.ac.uk/educol/documents/00003674.html
- Svobodová, E. (2010). Vzdělávání v mateřské škole: školní a třídní vzdělávací program. Praha: Portál.
- Theobald, M., Danby, S., Einarsdóttir, J., Bourne, J., Jones, D., Ross, S., & Carter-Jones, C. (2015). Children's Perspectives of Play and Learning for Educational Practise. *Education sciences*, 5, 345-362. Retriewed from http://www.mdpi.com/journal/education/
- Tomanová, D. (2006). Úvod do pedagogické diagnostiky v mateřské škole. Olomouc: Univerzita Palackého v Olomouci.
- Vujičić, L., & Miketek, M. (2014). Children's Perspective in Play: Documenting the Educational Process. *Croatian Journal of Education*, 16(1), 143-159.

- Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology*, 42(1), 7-97.
- Wiegerová, A. (2015). *Profesionalizace učitele mateřské školy z pohledu reformy kurikula*. Zlín: Univerzita Tomáše Bati ve Zlíně.