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Concept of 'Life' Phenomenon for Pre-school Children

Abstract

The article describes qualitative research into the interpretation of the "life" phenomenon in 12 selected pre-school children. These are children with special educational needs from the Special Nursery School for children with more defects. Their individual disorders and handicaps may affect their comprehension of the life phenomenon. The research techniques applied were as follows: an analysis of children's drawings, a non-structured interview and selection of pictures specially prepared in advance. The results achieved are presented in general, showing also several exemplary case studies of specific pupils with the specification of their handicap. The article discusses possible effects of children's handicaps on the process of their forming comprehension of the common life phenomenon.

Key words: *life, pre-school children, children with special educational needs, qualitative research, integration of handicapped children*

Introduction

The 'life' phenomenon, which is a subject of the presented research, is such a complex concept, so extensive, so often used, that we have lost track of what is hidden in it. We can try define it from naive sayings:

- work is my life,
- family is my life,
- children are my life,
- book means life for me.

To wise-sounding principles such as:

- life in its complex form is a set of mutually dependent processes bound on organisms,

- life is featured with particular forms of metabolic changes, energetic and creative processes in contrast with events in the inorganic nature, 'dead',
- life is a form of matter, created according to certain conditions of its evolution.

Even if we are not able to satisfactorily answer the question 'what is life?', most of us have the same concept of the meaning of this word.

Research into the area of children's understanding of the world, phenomena which surround it, has already been numerous – but we always focused on children who are already 'pupils' and participate in designed education (1. and 2. level of elementary schools, secondary schools).

In this document we will present the results of the research realised within the lowest age group – children of pre-school age, who are starting the process of targeted cognition of the world. Some of the children are from special pre-school, where understanding of phenomena can be influenced by their individual oddity (disorders, handicaps). This is the reason why we consider research into their understanding of the life phenomenon so very interesting.

Child's naive theory and interpretation of the world

For the specific way of child's understanding of the world there are specific attributes in the relevant literature. We can encounter several terms. They are usually double-based: the notion of theory and the notion of concept (Čáp, Mareš, 2001, Doulík, Škoda 2003): child's naive theory, implicit theory, child's science, child's naive conception, child's preconception, child's actual conception, child's alternative conception, child's misinterpretation, misconception. Within the scope of this document we adhere to the term children's conception.

Questions evoked by a child discovering the world and opportunities of developing this area have been the subject of research for a very long time. One of the important questions coming into forefront is that the teacher should react to a child's own experiences. In other words, how to present the phenomenon which the pupil has already experienced before it becomes the subject of education. This understanding is diametrically different from the understanding of the world by adults (teacher, scientist). Naive theories are in fact the child's interpretation of events which the child faces. This conception has a cognitive component (recognising and understanding of a phenomenon), affective component (relation to it, its appraisal) and conative component (execution) (Čáp, Mareš, 2001).

A child discovers the world within the first days of life. This discovery is spontaneous, mostly unpremeditated. The child finds itself in various life situations and

through them recognises the events around. The child's understanding of the world is predominantly through experience and experienced events and with strong emotional attachment. This is why the child's concepts are extremely strong and often withstand attempts of adults to change them, because they stem from individual experience.

The child's concepts are influenced by adults and peers, multimedia, the surrounding world. After the commencement of school attendance they are mostly influenced by school. But often the core of the child's concepts remains unchanged. The child can sometimes even develop knowledge superficially, verbally, as the school requires, but it keeps its own interpretation of events to itself. The important aspect of the child's understanding is the fact that it creates one meaningful entity. For the child this entity is a tool used to move in the world. With its help it reacts to life situations. This is why this system is strong and functional. Many naive theories seem trivial, imperfect, and sometimes even absurd from the adult point of view. But they correspond to the child's experiences, seeing of the world and level of its cognitive abilities and intellectual operations (children of pre-school or early school age cannot be expected to have the ability of abstract thinking).

The child's understanding of the phenomenon is not totally stable, it gradually develops in time. This development depends on determinants, i.e. on ontogenesis of the pupil's psyche, on stimulation of the social environment in which he/she lives, on peculiarities of the teachers who taught them, on peculiarities of the pupil's personality, naturally on targeted pedagogical intervention of the school. Let us warn that many misconceptions of the subject matter are deeply ingrained and highly resistant to attempts to change them. Let us add that this applies also in cases where the pupil's concept of the subject matter seems 'primitive, stupid or absurd' from the adult point of view. The reason being that the pupil worked it out him/herself, it is 'his/hers, he/she created it and he/she is not willing to give it up upon adult command (Held, Pupala, 1995).

The child's concepts do, of course, change in time. We can understand these changes in two ways: firstly from the evolutionary-psychological view as a matter which concerns all pupils and is pertinent to cognitive development of the individual, secondly as a pedagogical matter which is pertinent to the subject matter conception, how teachers count on the pupil's concept of the subject matter before tuition, during and after it. We start with the first one. Even pupils who differ in personal characteristics, family background and life experience have similar views concerning certain similar concepts. We can say that they understand certain concepts comparably at a certain age.

The next view is a pedagogical view. There are important time phases: the child's concepts and from them the pupil's concept of the subject matter before the start

of systematic tuition during tuition and with time distance after the end of tuition. The first phase is the most important for us from the viewpoint of research work. This sphere includes the pupil's pre-school and out-of-school experience with topics of future reference. This includes problems studied for tens of years by evolutionary psychology, such as development of the child's opinion of the world, how the child creates common conceptions, problems in creating relationships, it includes problems studied by pedagogy (influence of home environment, friends, teachers, the media, life experience in understanding the world).

The theoretical bases are only a brief introduction into the problems of the child's interpretation of the world. We stated what we consider as the most important in relation to the examined problems. The life phenomenon which includes components such as social, biological, but also emotional ones seemed to be ideal for the research into pre-school pupils. Children daily hear about this phenomenon and come 'into contact' with it, but because it is so abstract it is hard to grasp for them, so they have to concretise it – and just research into this process was the main target of our paper.

Primary results of investigative study

The investigative sample comprised of children from a special kindergarten for children with multiple impairments. They are pre-school children of age group from 5 to 6. Selection of this sample was intentional, within research work children attending special kindergarten were selected. The children we not prepared in advance for research work (drawing, interview, selection of pictures) The research work was conducted spontaneously within their afternoon activities.

In the first part the children were given a task to draw what 'life' is according to them. The children were given no other information, their task was to draw what their concept imagination is. They had various material at their disposal (charcoal, markers, crayons, tempera paints, black Indian ink, chalk, etc.), which they could select and change accordingly.

It was followed by verbal descriptions of their own creation, from which audio recording was made to be evaluated later. The children were replying to questions such as: 'What did you draw?', 'Why did you draw it?', 'What else could you draw?', 'What would you draw for sure?' etc. In the interview we sensitively reacted to the children's answers and further questions were asked according to them, we tried to create a friendly and attentive atmosphere. After a fortnight the children were given a sheet of paper with pictures related to life. The pictures were created strictly for the purpose of the research by one person and one technique (dimen-

sions and colours identical), not to attract the children's attention to differences. The order of the pictures on paper was random and it was the same for all the children. The children first viewed all the pictures and then selected the ones which they attached to the concept of life. The number of the selected pictures was monitored, their representation of the group (below) and also the time they needed.

Groups of pictures:

Group 1: HUMAN BEING (the closest sphere) – baby, little girl, little boy, woman, man, grandfather and grandmother, group of people (family), skeleton.

Group 2: OTHER ORGANISMS (nature) – dog, bird, bee, flower in grass, mushroom, fruit tree, conifer, apple.

Group 3: NATURE ASPECTS OF THE ENVIRONMENT – forest, planet Earth, sea, mountains (hills), sun, fire.

Group 4: SOCIAL ASPECTS (material) – kite, car, television, cutlery, bed, clothing, house, rocking horse and ball.

Group 5: ACTIVITIES – skipping a rope, work in the garden, watering of flowers, game with blocks, flying a kite, cycling, eating, sleep.

The investigative study included 12 pupils of a special kindergarten. The children suffered from various disorders – polio, ADHD syndrome, eczema, bad posture.

Since this was quantitative research, evaluation was conducted for each individual pupil separately, including interpretation of results. Due to the fact that the extent of this paper is limited, we mention some interesting examples of the results and evaluations.

Jaroušek W., 5 years old

Anamnesis: The reason for attending special kindergarten is his bad posture and ADHD syndrome. Jaroušek slightly lags behind other children in the class and will be suggested for postponement of school attendance.

Analysis of picture: According to his words Jaroušek painted fog. In our opinion he had a rainbow in his mind – inadequate vocabulary. For the arts material he selected tempera paints and a brush. He evenly covered the whole area of the paper with paints. The picture is very bright, centre-oriented. In our opinion he does not feel free in his life, rather tied down with duties and requirements, which force him to protect himself. When asked a question what else life is, he answered: doggies, flowers and 'Barbie'.

Sequencing of pictures: group 1 – man (father), grandfather and grandmother, family, skeleton, woman (mother), boy, girl, baby, group 2 – apple, conifer, fruit tree, flower, bee, bird, dog, group 3 – sun, fire, sea, planet Earth, forest, mountains, group

4 – bed, television, car, kite, clothing, house, toys, group 5 – game with blocks, watering flowers, work in the garden, rope skipping, sleep, eating, cycling.

Jaroušek refused all comments to his selections. He replied to everything: 'Because this is life.'

Time needed: Jaroušek did not think much. He showed pictures straight away.

Interpretation: What is interesting, Jaroušek as the only one did not paint any person or animal, he produced an abstract painting. To the topic 'life' he reacted by painting a rainbow – warm, colourful, nice. We think that this means that the child is introvert. In the second part of the research he selected all the options which were offered to him. The concept of life means to him everything in the world he has ever had an opportunity to experience or will experience. In contrast with other children who selected only such pictures that are somehow related to them. It is also possible that this topic was too hard for him, he could not process it and therefore he chose all the options.

Tereška V., 5 years old

Anamnesis: Tereška is the youngest child in the family. She is very shy, very polite. The reason for attending special kindergarten is her problem with eating. Tereška has eczema, a small group is more suitable for her, the diet which is an integral part of her treatment would not be possible in a common kindergarten. She is very bright, and she participates in daily activities.

Analysis of picture: Tereška painted a devil and stones. According to her words they both represent life. For the arts material she selected tempera paints and a brush. She favoured cold colours for stones; the devil is red, smiling, pleasant looking. What is also interesting is that the stones were much bigger than the devil. When asked the question what else life is, she answered mummy, daddy, doggies and pussies.

Sequencing of pictures: group 1 – baby – we all were babies, girl – she will grow bigger, group 2 – mushroom – because it grows, bee – because it flies, group 3 – planet Earth – is in the air, sun – it shines, sea – fish live in water, group 4 – toys – she plays with them, kite – because it flies, group 5 – sleep – she dreams, flying a kite – little girl likes it.

Time needed: Tereška did really think hard before pointing at the pictures. She never selected more than three pictures.

Interpretation: It was necessary to take into account Tereška's shyness. Her selection of painting including the offered pictures shows her current psychic state. During the interview she kept saying that life is a devil and stones she painted, but also doggies, pussies, mummy and daddy. However, after a fortnight she did not select any of these options. From the people she chose just a baby and a girl, who

is the same as her. Similarly, she also chose from other groups, always the pictures related to her only and what she found around her. Just the planet Earth indicates some understanding of the world as a whole.

Adámek H., 6 yers old

Anamnesis: Adámek comes from a materially well-established family. He is an only child and at present he became a subject of parental arguments (mother has a new boyfriend). The reason for attending special kindergarten is his bad posture, flat feet and speech impairment. He was recommended for postponement of school attendance.

Analysis of picture: Adámek painted a person protecting another person. He explained that he liked it. It is right for people to be nice to each other and that is life. The picture is slightly simpler, it documents mild backwardness. Each character is painted with one colour without details.

Sequencing of pictures: group 1 – family – because it is a family, grandfather and grandmother, man (father), boy, woman (mother), girl, baby – no comment, group 2 – dog – because it is alive and obeys us, bee – no comment, flower – it grows in the garden, group 3 – sun – because it shines, sea – fish swim there, forest – mushrooms grow there, planet Earth, mountains – no comment, group 4 – car, kite – no comment, television – they show what is done everywhere, house – it is for living, toy – children play with them, group 5 – game with blocks, watering flowers, work in the garden, flying a kite – no comment.

Time needed: Adámek was not sure about group five, it took him longer to think about it and he could not comment on his selection. In the first group he chose all the pictures, but he was totally against the skeleton.

Interpretation: Adámek's painting is quite surprising for many people. Adults may think about life this way – trust, help to others, friendship. But it is unexpected from a six-year old child. Especially at the time when they construct just pistols from kits and they play soldiers. Adámek's upbringing is excellent, strictly focused on performance. Maybe he is trying to defend himself from something. During picture selection he was impatient, but he was thinking aloud and realistically. To him the concept of life means everything that is alive or very close to living things.

These were three samples of analysis and interpretation of the results for two children. Now we will try to briefly summarise the research results.

The most preferred group of pictures was the group with the topic 'human being', which corresponds mostly to theoretical expectations – children focus on something concrete, which is close to them, what they know, etc. They are the people who are with the children in daily contact and the children understand their role. Out of this

group most of them selected the picture with a baby, which suggests that even at this age they understand time order of life and know that all of us were children. On the contrary, the picture with the skeleton was selected by the fewest children. A skeleton is not connected with the human body (they cannot penetrate inside, cannot imagine body cover), it represents something unknown, scary.

Out of the second group of pictures with nature, the most frequently selected picture by the children was the one with a bee. Interestingly, before they were offered the pictures this insect did not occur to them and all of them named domestic animals. We interpret this that by seeing the picture of a bee they realised all what they had already heard about it – it brings us healthy honey, it is a symbol of diligence. The picture with a dog was second in the order after the bee, which reflects the emotional relationship between children and dogs, a lively and restless dog is a representative of life for children. The picture with a flower and an apple was also frequently chosen. The children know that we have to care for a flower, they have it at home, in kindergarten, it brings joy as a present, etc. They hear about an apple that it is healthy; they have no reason to think that it does not belong to life.

The most selected picture out of the third group with nature aspects was the picture with the sea and the sun. The sea was chosen by the children because there were fish drawn in it. We are not sure if it would be the same without fish. For the children the sun is everyday matter. It is also one of the first pictures a child draws. The sun shines almost every day, when it does not, it is bad weather, children can not go out, and therefore the sun is again a carrier of a life symbol.

Out of the fourth group of pictures with material aspects the most frequently selected picture by the children was the one with a car and a house. Again these are the things which they see every day and are very important for their life and the life of their close relatives. They see safety and certainty in the picture with a house. Other frequently selected pictures were the ones with a kite and toys. Games are fulfilment of life for these children.

Out of the fifth group of pictures with activities the most frequently selected picture by the children was the one with garden work and watering of flowers. In today's world it is a very pleasant discovery. Children appreciate the importance of our help for the life of others.

Conclusion

In the period of pre-school age children work essentially at the level of concrete things and operations, they are not capable of abstract thinking and the unknown does not attract them. (Piaget, Inhelderová, 1997). There is high dependence on

family life and all it represents. This must be our starting point if we want to improve effectiveness of the educational process. Our aim is to include most of the children with special education needs into the school environment. Therefore it is very important to imprint in them basic knowledge and skills adequate to their age and handicap. If we proceed from our research, we use educational and pedagogical tasks which children are surrounded by and come to concrete contact with. There is no problem to choose things that children have explored and are very familiar with as a starting point of new learning. The research shows that children's naive theories can become a starting point for better understanding to a child. As it already results from interpretation of individual children, their understanding of a life phenomenon enabled us to get into the way of their thinking.

At present attendance of pre-school section of kindergartens is free of charge for parents and is fully funded by the service provider. First grades of elementary school should be attended by children with certain fund of comparable knowledge and skills. If kindergarten teachers are able to work with the child's concepts, children will not be afraid or ashamed of their theories; on the contrary, they will work with and use them. Knowledge of the child's concepts will allow to bring education close to the child's actual world, to its true life.

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