

Maria Curie – Skłodowska University
Lublin
Pedagogical University
Kraków

ANNA BUJNOWSKA, AGNIESZKA LASOTA

*Ability to use symbols in communication and play
by healthy children and children
with developmental disabilities*

**Umiejętność użycia symboli w komunikacji i zabawie
przez dzieci zdrowe oraz dzieci z zaburzeniami rozwojowymi**

DEVELOPMENT OF COMMUNICATIVE COMPETENCE
AMONG HEALTHY CHILDREN AND CHILDREN
WITH DEVELOPMENTAL DISABILITIES

The child masters the language, not because they have an innate knowledge of it, but because it is the most useful tool in communicating with other people and in interacting with them [29]. It is a tool that serves to exchange information, to express needs, desires and wishes and to influence the behavior of others.

The first two years of child's life are dominated by non-verbal communication. The child communicates with people from their surroundings by the use of gestures, crying, screaming, eye contact, facial expressions, smile, etc. The child gathers knowledge through observation, repetition of action and imitation. At the end of the first year of life there appear first voice messages. Then the child is capable of talking about something that is not present in their environment. They refer to the symbolic representation and start to use linguistic symbols [10].

Vocabulary development should be examined in two categories: passive (understanding of individual words) and active (use of words in statements). Understanding always precedes speaking. The child's vocabulary development depends, to a large extent, on the environment in which they grow. A child who is constantly surrounded by a speech, is read books, is talked about the world in a manner appropriate to their age and cognitive development would be characterized by a greater communicative competence [12].

The first words spoken with understanding occur between the first and second year. Children utter more and more individual words. From the second year of life, these early verbal statements are called holophrases, or one-word sentences, in which one word expresses a wider thought. Such statements, consisting of a single word, can have a dual nature. One - referential, which consists in relating the verbal label to the denoted object (with a clear link between words and their referent). The other - combinatorial, consists of combining words with the situational context. Then the word uttered by the child becomes a meaningful sentence, depending on the attitude and behavior of the child [19]. For example, a child points to the mother's shoes and says "mummy", which implicitly means "these are mummy's shoes." The child raises hands up saying "mummy", which means that they want their mother to pick them up. The child points to the door and says "daddy", so to say, "dad left the house." As a result of better language skills, gestures and words are replaced with multiword utterances, originally nouns, and then nouns connected with other parts of speech. Compound sentences appear in the third year of life [13, 14, 24, 19].

With age and an increasing linguistic dictionary, and hence higher linguistic competence, the child uses speech to regulate the relationship with the environment. Linguistic behaviors are linked to actions and the actual situation. The preschool child develops conversational skills. This process is accompanied by learning new phrases to maintain the interaction and to acknowledge the role of the recipient while creating the child's own utterances. Initially, the interaction is based on joint action, at a later stage of development it is the dialogue that plays a dominant role. Coming up to school age, communication skills grow, so that the language becomes an effective tool for establishing and maintaining contacts.

Communicative competence is carried out in the adaptation of linguistic behavior to "who speaks, to whom, in what circumstances and for what purpose" [7]. You can go one step further and note that in the first phase of child's development these do not have to be linguistic behavior; children properly developing very quickly learn to communicate with adults through gestures, facial expressions or looks, i.e. non-verbal behavior. Children with

developmental disabilities to a large extent show distortions of communicative competence, as well. While language skills may be very low, strong willingness and desire to be a participant in the process of communication (e.g., children with delayed speech, handicapped children, or deaf children) do not make communicative competence necessarily very weak. These children benefit from available modality – non-verbal - to communicate others their desires, intentions or needs.

Speech development in children with developmental disabilities proceeds differently than with healthy ones. Many researchers believe that, for example in relation to children with intellectual disabilities, one should talk about two models of speech development. The first model applies to children with slight mental retardation, which is not significantly different from the development of people in intellectual norm within the scope of mechanisms of transmission or reception of linguistic messages [25]. Speech of children with mild intellectual disability is characterized by qualitative rather than quantitative changes. Children with mild intellectual disabilities are characterized by a lower linguistic and communicative competence. The second model of speech affects persons with profound mental retardation and is absolutely different from the language development of healthy children. At each stage of speech development (word, sentence, statement) children with profound mental disabilities have deficits that cannot be corrected. As a result of their accumulation, the shaping language is extremely limited [8, 25].

The primary sign of mental retardation is the delayed development of speech. Parents and the child's environment are very concerned that a child does not speak or says much less than their peers. The deeper mental retardation, the more serious delay in speech development is. Although language development among children with developmental disorders is often delayed, they are not devoid of communication skills. These children often prefer non-verbal to verbal communication because the former is much easier for them [25].

An even greater determination to communicate with the environment is expressed by children with hearing loss. The cooing phase can be observed in the first months of deaf children life, but there is no babbling, which greatly limits the further development of speech. The child with hearing problems has an extended period of melodies. The appearance of the sound signal as a symbol for communicating with the environment often stretches beyond the first year of life. There are several reasons. Sounds emitted by the child, which should be the signals, are not received by them. A child cannot discover a symbol, because they do not see its real existence. In addition, there are no conditions to the discovery of the principle that through

voice commands a child can affect the environment. Most children eventually begin to use screaming - appeal. Feeling a strong need to communicate and act, the child begins to communicate in a manner available to them, i.e. a non-verbal way. The system of gestures is expanded and becomes the basis for sign language communication [6].

Every child with impaired hearing has an individual rate of development of speech. Some reactions may develop earlier and others later. Child development with profound hearing loss may occur disharmoniously and individually. Not all parents will have the opportunity to observe their child's progress in the development of sound speech. Then it may be that their primary language is sign language [18].

Children with developmental disorder, which is autism, should be perceived slightly differently with regard to the development of communicative competence.

Among children with autism there are two types of severe restrictions in communication. On the one hand, it is delay towards the standards governing the correct communication process; on the other hand, there are specific disorders, typical of cognitive dysfunctions. These children are characterized by very limited development of communicative competence: the lack of creating a dialogue with another person, indifference to the messages of others, inability to adapt their messages to the recipient's situation and abilities, lack of or limited non-verbal communication, rare eye contact with the interlocutor. Among infants with autism vocalizations typical of first months of life are less common. It is also noted that these vocalizations are accompanied to a lesser extent by wordless facial reactions, gestures, or movements of the body. It was observed that vocalizations in the form of babbling do not appear among these children as often as in the case of healthy infants, associated with social situations, such as the appearance of their mother or another person in view [4]. A common phenomenon in the communication of people with autism is echolalia. It involves the repetition of words or even whole sentences made by others. It is a faithful reproduction of the message of the sender, even if these messages are not aimed directly at the person with autism. Among these people neologisms, i.e. the newly coined words, are often observed.

The basic communication language deficits among people with autism are the following: no speech or delayed speech, lack of or limited gestures, echolalia, stereotyped language, incapacity to alternate communication, lack of communication both with adults and peers, restricted use of facial expressions, glances to communicate, prosody to express the intention, and the inability to symbolic use of objects [11].

DEVELOPMENT AND SPECIFICITY OF PLAY AMONG CHILDREN WITH TYPICAL AND ATYPICAL DEVELOPMENT

According to many psychologists and educators games play a crucial role in both the diagnosis (for example, should be taken into consideration with the diagnosis of autism) and therapy (e.g., children with emotional and social problems) and rehabilitation (e.g. children with disabilities of certain functions).

Play consists in the child's contact with the real world. This way of experiencing reality not only provides pleasure, but also ensures balance and harmony between man and their surroundings [16].

In reference to the theory of Piaget, the eminent classical scholar of small child's developmental psychology, we can refer to the developmental phases of children's games. The first phase, from 2 to 4 years, is characterized by a projection of symbolic schemes onto new items and objects. There appear imitative patterns, and simple cognitive structures are transformed into more complex patterns. Among pre-school children pretend play is changing its character. First, in the plays of these children more accurate mapping of the real world can be more clearly seen. For example, playing a doctor is a faithful representation of how the child experienced and remembered the situation in which they really took part, such as a medical appointment during an illness, vaccination, or even stay in the hospital. Another characteristic feature of the play at this age is the ability of an organized game, greater than in the previous period of development. A typical game of children between 4 and 7 years of age contains sequences of events, and not single actions. Children acquire the ability to use symbolic representation in full. They can represent real world by drawing, pretend play, gestures, mental images and description with the use of words. Both the play at this age and the stories become more logical and structured. Children make use of linguistic and non-linguistic symbolization to describe reality.

Symbolic games are preceded by imitative games. The first signs of imitation in games can be seen at the end of the first year of life. With age, these games become more creative. Simple at first, at preschool age - they are very complicated and have a narrative pattern.

Direct imitation is illustrated by games, which contain the child's currently perceived situation, e.g. mother is watering flowers and the child is playing by pretending that they are performing the same activity (watering flowers). In the second year of life there appears a deferred imitation. In the game the child presents activities that they observed in the past.

With the development of cognitive processes, mainly of speech and reasoning, the game changes both in form, and its content is more extensive.

Children can reproduce the entire sequence of events during the game, not like in the first two years of life, i.e. single pretend plays. These are thematically diversified games, rich in new features.

In pretend play, the child creates their own subjective world. The symbol is a representation of the object which is currently unavailable to the child. In order to understand the symbolic representation, the child must understand the relationship between the real element (e.g. a pen) and an element the child imagines (syringe) and its fictional representation (that the pen is a syringe, and that the child is doing the doll an injection). Such a relationship between the denotative object and the object denoted very often takes the subjective nature [16].

Many studies have brought confirmation that the content and method of play are not only affected by merely age but also by the level of cognitive, emotional or social development of the child. Children with developmental disabilities display different behavior, not only in the communication process but they also display difficulties with the symbolization in the game. For example, observations of children with autism show that they are not interested in toys, they cannot play with them.

Autistic children often manipulate objects in a non-specific way, that is inconsistent with their purposes. It happens very often that children turn objects, hitting and destroying them. Their characteristic feature is stereotypical behaviors, the repetition, the routine in action.

Differences in quality in terms of both functional and symbolic games are noticeable among children with autism and their properly developing peers. Functional play involves the use of an object according to its purpose. Children with autism rarely play in a functional way, and if they do play, they use a small number of items. In their games, there are no new elements, or creative behavior. In relation to the symbolic play, abilities of children with autism are very limited.

Pretend play is associated with the development of symbolic thought. The child learns to treat an object as something different than it actually is, assigning it a different (symbolic) meaning. Children with autism have problems with creating symbols, their understanding and using them. The development of symbolization in both speech and play is connected with the child's theory of mind. The indisputable fact is that children who have reached higher levels within the scope of theory of mind can easier create a fictitious reality.

It turns out that we observe a lot of deficits which condition symbolic capacities among autistic children. It is the lack of understanding of social situations, other people's emotions, or inability to understand the minds of

other people. Deficits existing among children with autism form the basis for the lack of ability to play based on pretense. Obstacles in the development of this type of games occurring among children with autism are: rigidity in reasoning and behavior, and stereotypical use of objects [17].

The great therapeutic role for children with autism can be play, mainly the one that is based on imitation. It should start with imitating simple actions of adults (preferably parallel), to imitating more and more complex sequences with rules. This allows the formation of patterns of action in the mind of the child.

SOCIAL INTERACTIONS

In the early stage of child's development the major role in building a proper relationship and social communication is played by the face to face interaction of child with their mother. It occurs during feeding, care and fun activities. The child becomes a better recipient of their mother's messages, passed by both verbal and non-verbal way. The child also learns to communicate with another person.

Initially, the child communicates only with gestures, and then combines gestures with words. This enables the implementation of key communicative functions, namely: the ability to participate in social interactions, to share attention and to regulate behavior.

Every healthy child already in infancy is able to communicate with the world especially on an emotional level, and the first person favoured with a feeling is generally their mother. These first interactions with the mother are extremely important for the formation of the communication system and they contribute to the formation of strong attachment. J. Bowlby points out that good emotional relationships between children and their carers determine active exploring of the world and promote the formation of an exploratory attitude, extremely important for gaining knowledge about the world, in which the child lives [10].

In early childhood, during the interaction between mother and child there appear episodes of joint involvement [21].

Between 9 and 12 months of children's age there appear behaviors that require joint attention with the partner of interactions [27]. The equivalent of the ontogenetic language is non-verbal communication behavior, e.g. gestures and behaviors that require joint attention, involving children and adults [27]. The child must understand the other person's communicative intention, which can occur in the context of joint attention, which is the socio-cognitive basis.

Many researchers have commented on the non-verbal discourse occurring in the mother – child dyad, which is the foundation of the basic forms of early language development [1]. Such an exchange is not observed with autistic children and the absence of such interactions is a major limiting factor for proper development of the communication process. The observation of infants' behavior, with special signs of indifference to the presence of their mother or other people from the closest surroundings, provide data showing the lack of willingness to play interactions based on exchange and reciprocity of behavior. Playful activity, commonly occurring among healthy infants, by which they acquire and consolidate forms of non-verbal discourse, laying the ground for linguistic habits, is not observed among autistic children [5]. The development of children with autism takes place disharmoniously. Borden and Ollendick study [9] shows that infants with autism show indifference to the sensitive gestures of mothers (as though they did not notice them), irritability, and that they rarely communicate their needs or dissatisfaction using tears. Although autism can be diagnosed fully until about 30 months, it turns out that as early as in the first or second year of life, we can observe some disturbing behavior. Children do not show interest in the first, joint play with adults, having a social character (for example, peek-a-boo, or row row row your boat). The inability to establish a positive emotional contact with members of the closest environment is considered as a primary syndrome of autism [31].

THE RESULTS OF THE AUTHOR'S OWN RESEARCH

The observation of not only communication skills, abilities to communicate with others and to provide them with their desires and needs, but also the observation of children's play provide us with valuable information about their development in the first years of life. There is a growing body of evidence that the way of play, and the child's ability to play depend on many factors, such as the level of communicative competence, i.e. the level of linguistic and non-linguistic development, level of thought development, or other more specific abilities.

The presented results constitute just a small part of large-scale longitudinal studies [14, 15, 13] conducted on a group of properly developing children and children with impaired language development.

The analysis includes the results of 66 children in the third year of life, which have been classified on the basis of their level of language development into two different groups. The level of linguistic and non-linguistic communication was evaluated on the basis of the Polish adaptation of the MacArthur-Bates questionnaire. The first group consisted of children properly

developing, the second - children with impaired language development. The research method was the observation of behavior and communication of children during free play with available toys (dolls, teddy bears, cars, etc.) under controlled, close to real conditions, in the presence of a parent.

**COMMUNICATION OF CHILDREN WITH NORMAL
AND ABNORMAL DEVELOPMENT OF LANGUAGE COMPETENCE**

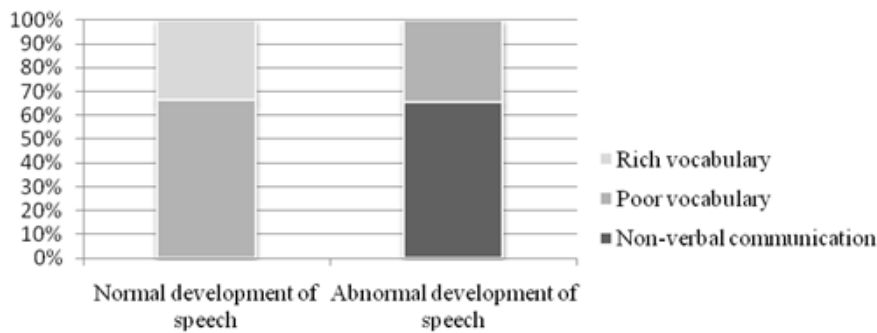


Figure 1. The percentage of children presenting non-linguistic or linguistic communication during play

During play, children, depending on the development of linguistic competence, presented either poor vocabulary, using simple single words, or rich one, using sentences. It appeared, however, that children who did not show any other aberrations, only in the development of speech, strongly differed in terms of linguistic competence from healthy children. A group of children with impaired language development was characterized by the use of non-verbal communication. Over 65% of the surveyed children aged 2 years, showed a reduced level of speech development, aged two and a half years still presented no or very poor vocabulary (only 34.6% of children). Over 2/3 of children in the language norm during play presented simple verbal communication based on single words, holophrases. However, 33.65% of the children used simple sentences composed of at least two words, which were mostly combinations of simple words.

ABILITY OF SYMBOLIC REPRESENTATION IN PLAY

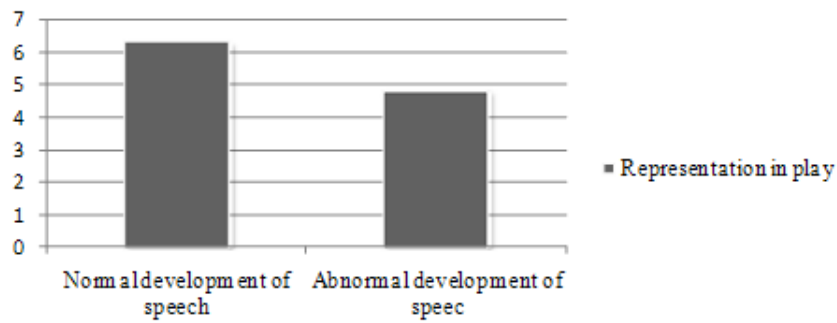


Figure 2. The average number of expressions of symbolic representation in children's play

Analyzing figure 2, you can answer the question: whether the development of symbolization in speech is similar to the development of symbolization in play. That is: whether children who have difficulty with reasoning and creating symbols in communication also have problems with the symbolic representation in play?

The data obtained allow an affirmative answer. Children with proper language development presented on average a greater number of symbolic actions in play than children with impaired language development at the same time.

Thus, you can put another question: Do the way of play, its complexity, and its creativity depend on the language development of children?

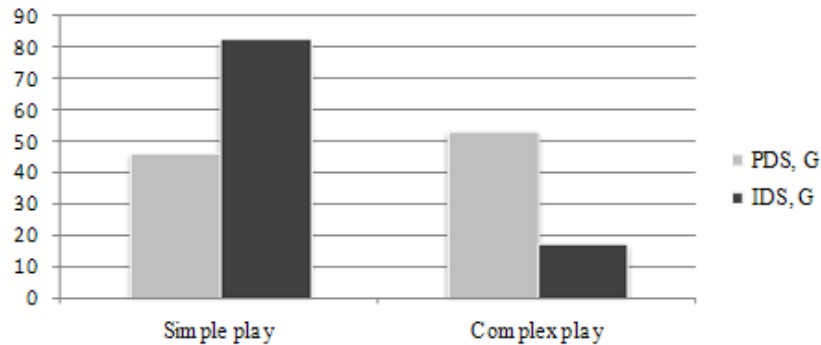


Figure 3. The percentage of symbolic action (single / complex) presented by the surveyed girls at play. (PDS)- the proper development of speech, (IDS)impaired development of speech, (G.) - Girls

The next two graphs (3 and 4) show us the number of pretend plays - simple or complex. Simple plays are single pretend actions, such as: the child takes the doll and hugs it, the child pretends to be feeding a doll. In complex plays children combined several activities at play which were aimed at a doll or teddy bear. For example, a child pretended to be cooking dinner for a teddy bear, then they sat the teddy down at the table, fed it, wiped it, etc. It turned out that differences concerned not only groups of children according to the level of linguistic competence, but also according to gender. In the group of girls, they differed significantly in the number of individual activities as well as in the number of activities of sequential character. Girls developing properly showed a similar number of individual events of a symbolic nature, as well as activities involved in the entire story of play. However, in a group of girls with impaired development of speech, more than 80% of the presented behavior were individual pretended actions. Only 17.3% of the activities constituted the specific story of symbolic play. The difference between the groups of girls is statistically significant in terms of a number of actions in a complex play ($U = 43, p < 0.00$).

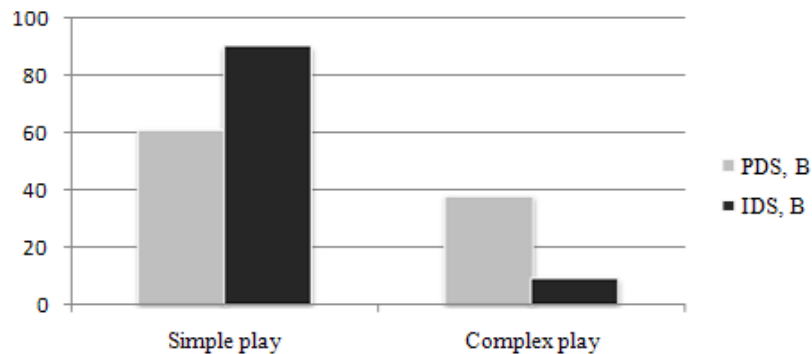


Figure 4. The percentage of symbolic action (single / complex) presented by the surveyed boys at play [(PDS)- the proper development of speech, (IDS) impaired development of speech, (B.) - Boys]

Among boys, the difference in individual actions of symbolic representation is not so significant. The boys in the language norm presented little more than 60%, while for the boys with impaired speech development it was a dominant way of play. As many as 90, 7% of the observed reactions were of individual pretended character aimed at the toy. A significant difference was also observed in the complex plays, with the use of toys in pretend plays. Boys with impaired linguistic communication presented only 9, 3% of such situations, whereas the boys with proper language development - up to four times more, i.e. 38.3%. The difference between the groups of boys in this respect is statistically significant ($U = 102$, $p < 0.00$). Boys with a low score in the speech presented much less plays than the girls with low levels of speech. This means that gender is one of important factors affecting the development of symbolization and pretend play.

After calculating the correlation coefficients, a statistically significant positive correlation was obtained between speech understood as linguistic communication, and play, conceived as a sum of the symbolic actions presented by the children at play. The smallest number of symbolic actions was shown by the children with impaired development of linguistic competence, that is, children with delayed speech development.

Children who already had used speech to communicate, presented a significantly higher number of actions and representing games, that is, symbolic games.

SOCIAL INTERACTION CHILD - ADULT WITH REGARD TO CHILDREN WITH NORMAL AND DELAYED SPEECH DEVELOPMENT

If an adult plays with the child, the scene of a joint attention is those objects which the child realizes (is aware of) and to which both an adult and a child pay attention. If an adult and a child focus their interest on the same object, but they are not aware of what their partner pays attention to, there can be no scene of joint attention [26].

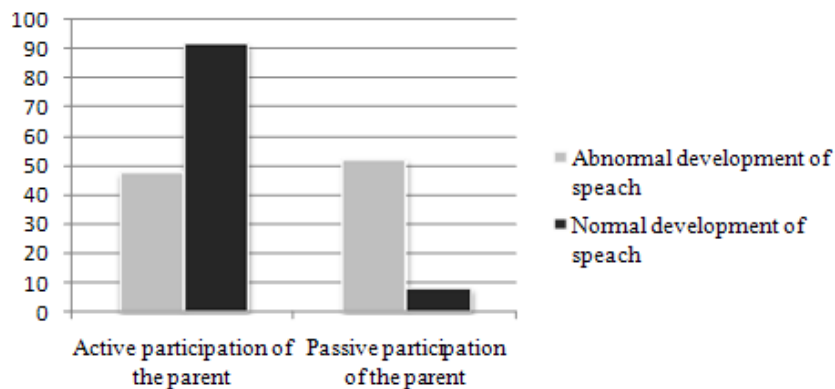


Figure 5. The percentage of parents having an active or passive attitude during play of children with proper / impaired speech development

Research showed that parents of children did not always willingly participate in the play of their child. Interestingly, it turned out that there is a correlation between the child's language development and their parent's participation in the play. The active participation of parents in their child's play could be observed among children in norm in 92.1% of cases, only less than 8% did not engage in their child's play, with an attitude of the observer. However, there is a big difference with regard to parents of children developing abnormally in terms of speech. As illustrated in figure 5, over 52% of parents of these children did not

participate in their play. Only 48% of parents actively joined the play, asked, instructed, and answered children's questions.

But, as we will see in figure 6, not all parents who took an active part in the play of the child, especially parents of children whose language development is slower than their peers' of the same age, lacked the commitment to the joint scene of attention paid to a particular object.

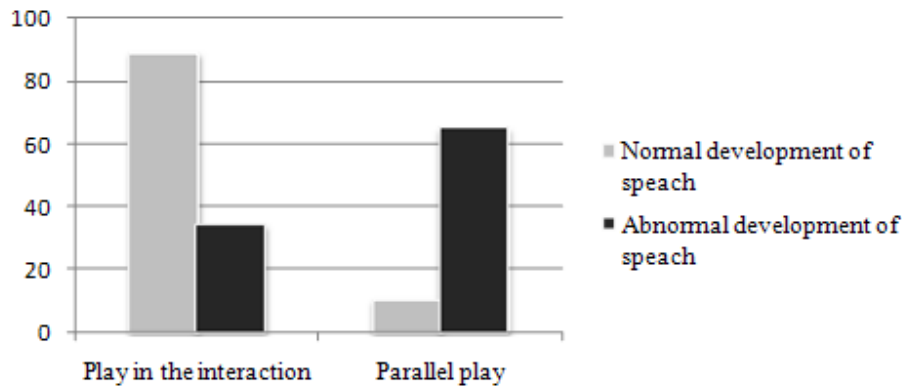


Figure 6. The percentage of children characterized by a normal / impaired development of speech presenting the play with a parent or solitary play

The observation results confirmed that not all parents play with their child, some children preferred the so-called parallel play, that is next to the other person, and not together. Thus, the play was not of joint character.

As for properly developing children in terms of linguistic competence, it was found out that almost 90% of them played together with their parent, usually the mother, only 10% preferred the play alone, without making contact with their parent. Whereas in the group of children with impaired development of speech, it was found out that even if their parent wanted to take part in a play, they were ignored by the children. More than 65% (or 2/3) of the children avoided communicating with adults at play, parents approached the child, sat next to them, but it was not the play with a joint attention.

DISCUSSION OF RESULTS

Acquisition of the ability to use conventional language of symbols requires several actions from the child. First, the child must understand other persons as the creators with specific intentions, e.g. communicative. Second, the child must participate in the scenes of joint attention, which are the basis of acts of symbolic communication. Third, the children needs to understand

the intentions of the message senders. The final element is the ability to adopt the role of not only the sender but the recipient [27].

Speech serves the child from the beginning as a communication tool, thus not only pragmatic but also interpersonal factor, i.e. the intention, with which a child turns to the recipients of their messages.

Among children with developmental disorders we deal with impaired or limited development of communicative competence. It is a competence which people acquire in the course of their lives. According to many authors, some innate predispositions are necessary to achieve that objective. The following elements are vital in establishing communication in the process of interaction: ability to direct attention to external stimuli (e.g., voice or a human face), ability to babble [30, 20]. Yet other authors argue that the necessary factors are these: ability to joint attention, reasoning of intentionality in communication or understanding of theory of mind [26].

Our research results confirm the thesis that "communicative competence is acquired during the interaction with people and through these interactions in order to then serve them - to develop, transform, improve" [29, p. 120].

Our study is a part of a social-interactional concepts of human development, which show that the relationship between the child and their environment has a huge impact on their cognitive, emotional and social development. You can then address a fundamental question: whether, and if so, to what extent do deficits in communication between parent and child in early childhood affect children's development of cognitive processes, such as speech, reasoning, attention and memory.

Joint attention is a socio-cognitive basis for early language acquisition. Ability to understand intentionality in communication is the most important factor in cognitive and social development, thanks to which children understand the symbols displayed by adults. With the ability to reverse the roles children are actively involved in understanding and producing linguistic and non-linguistic symbols. Mother's following the child's attention may be the basis for early language acquisition.

The child learns new words and the labels of new objects in social situations in which they share attention with others. Often such situations, occurring every day, become routine, e.g. eating, washing, playing, walking.

The research results confirm that children whose mothers used the words following the child's attention, for example, speaking of the objects that were currently in the center of attention and interest of the child, had richer vocabulary than children whose mothers used the language to draw the child's attention to the new elements of reality, the new situation, or object [28, 3].

Carpenter, Nagell, and Tomasello [2] found out that children who spend more time absorbing their attention with their mothers understood and used more words in the twelfth month of year than the average. It was also found out that their mothers were more likely to follow the child's attention at play, than at other situations.

Two very important aspects: the time of the joint attention of mother and child and maternal tendency to follow the child's attention with the simultaneous comments of children's behavior, greatly influenced the understanding and creation of verbal utterances by children in the second year of life.

The child turns to the adult to obtain new information about the world, in which they live. The way adults carry out the child's request is very important for their cognitive development. The mother understands her child's reactions as intentional messages and responds to them. With age, a child becomes more aware of their behaviors and messages sent to others. Our findings show how the behavior of parents towards their children changes, depending on the problem that their children face. Parents can help or delay the development of communicative competence of children, depending on stimuli and experience they provide.

Similar conclusions were reached by researchers who focused on communication between mothers and children with Down syndrome. It turned out that the way of communication between mothers of children with Down syndrome and mothers of properly developing children did not differ significantly. However, children with Down syndrome, less than their healthy peers, showed signs of joint attention with the mother. They less frequently established eye contact with their mother, while looking toward the toy during the play. This presented a difficulty for their mothers in getting into the interaction [22]. These mothers were also more likely to become the initiators at play. Similar results were obtained by Lasota [15, 14] in the situation of both free and controlled play. Many studies have shown that communication of autistic children's mothers is heavily impaired. Children with developmental disabilities such as autism cannot share the perceptual perspective of others, do not share joint attention with another person, do not form a joint scene. Autistic children have problems with tasks that require joint attention, with learning through imitation, especially deferred, they cannot play in a typical symbolic play, in which replacing one item with another, real or imaginary plays an important role. These children have great difficulties in learning and using the symbols both at play and the linguistic symbols in the communication process. Autistic children rarely absorb in pretend play, because it requires to enter the role of another person.

Most researchers confirm that disorders of cognitive processes lead to a

delay in speech development in children. But can delayed speech development affect other aspects of cognitive development, such as the development of play? Our study shows that the ability to symbolize concerns both the communication process (symbols - words) and play (symbols - objects). Symbols allow and facilitate the cognitive and social interactions. Mastering the linguistic symbols leads to the development of a new form of cognitive representation of the child, which changes their way of perceiving the world.

Both our and other studies show that the ability to imitate and functional and symbolic play in children with impaired communicative competence are very limited. Comparative studies [23] of ninety-one children aged between 3 and 6 years with various developmental disorders such as autism, hearing loss, impaired speech development showed that children diagnosed with autism received by far the lowest scores in relation to the other children within the scope of the ability to use symbols at play. These children devoted least time to functional play, more commonly used the objects contrary to their purpose, presented less imitative play, compared with non-autistic children, who showed other developmental problems. These results may suggest that the level of development of the capacity for imitation and pretend play can be useful in the clinical diagnosis of pathological unit, such as autism.

Observation of children with autism in the first year of life has allowed researchers to capture the disturbing behaviors, such as: limited self-activity, non-smiling in social situations, reduced muscle tension, impaired concentration. In children in the second year of life, the signs of autism were much more strongly manifested than in infants. These children preferred to stay in solitude, avoided eye contact, assumed strange poses, expressed emotions in a very limited way [17].

Many researchers emphasize the existence of several specific forms of behavior that distinguish children with autism from their properly developing peers. These are: lack or limited eye contact, no response to the message like the child's name, no gesture of indication in the situation of sharing a joint attention, lack of showing, lack of passing the objects of child's interest (no proto-declarative gestures) [15, 14]. Others add such factors as poor visual orientation and unwillingness to be picked up as early as at the end of the first year of life. It seems important that parents often did not realize the nature of the symptoms appearing in their children, yet they displayed actions aimed at compensation for existing deficits by multiple repetition of messages and longer waiting for response from the child [17].

Disorders in the behavior of young children with autism were also investigated by Stone [17]. She stated that as for social interaction and communication, these children are characterized by: limited ability to imitate the

behavior of others, delay or lack of speech development, restriction of non-verbal communication - gestures, facial expressions, lack or limited eye contact, inability to create scenes of joint attention, lack of interest in another person, failure to draw attention of an adult to their activity, preference of solitude. Among children with autism dominates sensorimotor play, which relies heavily on repetition of manipulative actions on an individual object.

According to parents' statements, one can create an image of an infant with suspected autism, who rarely shows interest in other people and ignores the proposals of play based on the exchange and dialogue. The development of play is also different than in properly developing children. Therefore, it is extremely important to draw attention to the use of play in the treatment and therapy for children with developmental disorders.

The studies and other empirical studies point to the development of symbols in communication and playful activities with properly developing children and children whose development is atypical. They also show importance of the participation of adults in the development of small children. Moreover, they confirm that the observation of a small child's play is an essential element in both the process of development diagnosis and therapy undertaken in relation to the child or rehabilitation.

REFERENCES

1. Bouvet D.: Mowa dziecka. Wychowanie dwujęzyczne dziecka niesłyszącego. WSiP, Warszawa 1996.
2. Carpenter M. i wsp.: Social cognition, joint attention and communicative competence from 9 to 15 months of age. Monographs of Society for Research in Child Development, 1998/63.
3. Dunham, P. i wsp.: Joint attentional states and lexical acquisition at 18 months,. Developmental Psychology, 1993/29, pp. 827-831.
4. Gałkowski T.: Zaburzenia mowy [w:] (red.) S. Grabias: Zaburzenia mowy. Mowa. Teoria. Praktyka. Wyd. UMCS, Lublin 2001.
5. Gałkowski T.: Zaburzenia komunikacji w autyzmie [w:] (red.) T. Gałkowski, G. Jastrzębowska: Logopedia – pytania i odpowiedzi. Tom 2. Zaburzenia komunikacji językowej u dzieci i osób dorosłych. Uniwersytet Opolski, Opole 2003.
6. Gałkowski T. i wsp.: Zaburzenia mowy dzieci niedosłyszących i głuchych [w:] (red.) T. Gałkowski, G. Jastrzębowska: Logopedia. Pytania i odpowiedzi. Wyd. UO, Opole 2001.

7. Grabias, S.: Język w zachowaniach społecznych. Wydawnictwo UMCS, Lublin 2003.
8. Jęczeń U.: Uwarunkowania rozwoju kompetencji językowej i komunikacyjnej u dzieci upośledzonych umysłowo. Logopedia tom 32, Lublin 2003.
9. Kendall P.C.: Zaburzenia okresu dzieciństwa i adolescencji. Gdańskie Wydawnictwo Psychologiczne, Gdańsk 2004.
10. Kielar-Turska M., Białecka-Pikul, M.: Wczesne dzieciństwo [w:] (red.) B. Harwas-Napierała, J. Trempała. Psychologia rozwoju człowieka. Tom 2. Charakterystyka okresów życia człowieka. Wydawnictwo Naukowe PWN, Warszawa 2000.
11. Konstantareas M. M.: Autyzm jako deficyt języka i komunikowania się. Biuletyn Audiofonologii 1992/ tom IV-1.
12. Kurkowski Z. M.: Kształtowanie się zdolności językowych a rozwój mowy [w:] (red.) S. Grabias: Zaburzenia mowy. Mowa. Teoria. Praktyka. Wyd. UMCS, Lublin 2001.
13. Lasota, A.: Jak małe dziecko poznaje rzeczywistość. Czyli o komunikacji i zabawie we wczesnym dzieciństwie. Wydawnictwo UP, Kraków (w druku).
14. Lasota, A.: Dwoelementowe kombinacje lingwistyczno-niejęzykowe w dziecięcej komunikacji. Psychologia Rozwojowa (w druku).
15. Lasota, A.: Świat gestów i symboli w komunikacji dziecięcej, Oficyna wydawnicza Impuls, Kraków 2010.
16. Okoń, W.: Zabawa a rzeczywistość. WSiP, Warszawa 1987.
17. Pisula E.: Małe dziecko z autyzmem. Gdańskie Wydawnictwo Psychologiczne, Gdańsk 2005.
18. Polakiewicz M.: Pierwsze kroki w rozwijaniu mowy i języka małego dziecka z wadą słuchu [w:] (red.) J. Kobosko: Moje dziecko nie słyszy. Materiały dla rodziców dzieci z wadą słuchu. Stowarzyszenie Przyjaciół Osób Niesłyszących i Niedosłyszących „Człowiek – Człowiekowi”, Gdańsk 1999, pp. 185 - 196.
19. Przetacznik-Gierowska M., Makiełło-Jarża G.: Psychologia rozwojowa i wychowawcza wieku dziecięcego. WSiP, Warszawa 1992.
20. Schaffer, H. R.: Początki uspołecznienia dziecka. Warszawa 1981.

21. Schaffer, H. R.: Rozwój języka w kontekście, [w:] (red.) A. Brzezińska i wsp. Dziecko w zabawie i świecie języka, Poznań 1995a.
22. Schaffer, H., R.: Przyswajanie zasad dialogu [w:] (red.) A. Brzezińska i wsp. Dziecko w zabawie i świecie języka, Poznań 1995.
23. Stone W.L. i wsp.: Play and imitation skills in the diagnosis of autism in young children. *Pediatrics*, 1990/86(2), pp. 267-72.
24. Szuman S.: Studia nad rozwojem psychicznym dziecka. T. 1. WSiP, Warszawa 1985.
25. Tarkowski Z.: Zaburzenia mowy dzieci upośledzonych umysłowo [w:] (red.) T. Gałkowski, G. Jastrzębowska: *Logopedia. Pytania i odpowiedzi*. Wyd. UO, Opole 2001.
26. Tomasello, M.: Joint attention as social cognition [w:] (eds.) C. Moore and P. Dunham: *Joint attention: its origins and role in development*. Lawrence Erlbaum Associates 1995.
27. Tomasello M.: *Kulturowe źródła ludzkiego poznawania*. PIW, Warszawa 2002.
28. Tomasello M., Farrar J.: Joint attention and early language. *Child Development* 1986/57, pp. 1454-1463.
29. Twardowski A.: Rola kompetencji komunikacyjnej w poznawaniu świata i siebie przez dziecko z niepełnosprawnością intelektualną [w:] (red.) W. Pilecka, K. Bidziński, M. Pietrkiewicz: *O poznawaniu siebie i świata przez dziecko ze specjalnymi potrzebami edukacyjnymi*. Wyd. Uniwersytetu Humanistyczno - Przyrodniczego Jana Kochanowskiego, Kielce 2008.
30. Vasta R. i wsp.: *Psychologia dziecka*. Warszawa 1995.
31. Winczura B.: *Dziecko z autyzmem. Terapia deficytów poznawczych a teoria umysłu*. Oficyna Wydawnicza „Impuls”, Kraków 2008.

ABSTRACT

The paper is an attempt to show the similarities and differences in the development of capacities for symbolization among healthy children and children with developmental disorders. The development of symbolic representation in early childhood refers to the two main and basic types of children's activities. The first is the ability to communicate, focused especially on expressing needs and child's desires, and the other is the ability to

play. Attention was drawn to three important aspects: the development of communicative competence, the development of play and the development of socialinteraction skills. The research results showed differences in the ability to represent reality with the use of linguistic and non linguistic symbols among properly developing children and children with developmental disorders. It also turned out that a significant role may be played by the quality of interaction between an adult (parent) and child.

STRESZCZENIE

Prezentowany artykuł podejmuje próbę ukazania podobieństw i różnic w rozwoju zdolności do symbolizacji u dzieci zdrowych i dzieci z zaburzeniami rozwoju. Rozwój reprezentacji symbolicznej we wczesnym dzieciństwie dotyczy dwóch głównych i zarazem podstawowych rodzajów aktywności dziecięcej. Pierwszą jest umiejętność komunikacji, nastawiona w tym wieku głównie na wyrażanie potrzeb i pragnień dziecka, a drugą zabawa. Zwrócono uwagę na trzy ważne aspekty: rozwój kompetencji komunikacyjnej, rozwój zabawy oraz umiejętność interakcji społecznych. Wyniki badań wykazały różnice w umiejętności przedstawiania rzeczywistości za pomocą symboli językowych i niejęzykowych między dziećmi prawidłowo rozwijającymi się a dziećmi z zaburzeniami rozwojowymi. Okazuje się także, że znaczący wpływ może mieć jakość interakcji między dorosłym (rodzicem) a dzieckiem.

Artykuł zawiera 45405 znak31ów ze spacjami + grafika