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# Linguistic Competence of Hearing Children of Deaf Parents. A Case Study

#### **SUMMARY**

The article constitutes a description of selected aspects of the development of linguistic knowledge of an eight-year-old hearing boy against the background of the process of his language development with deaf parents who communicate using sign language. The results of previous studies, mostly English-language, in terms of the impact of an unusual language environment on the speech and language development of hearing children of deaf parents, are not unambiguous. This publication describes one of several cases comprising the empirical material of broader research<sup>1</sup> whose goal is, among others, the identification and description of the communicative and language competences (mainly in terms of phonological language) of hearing children of deaf parents.

**Key words:** linguistic knowledge, language competence, communicative competence, bilingualism, language development, case study

# LINGUISTIC KNOWLEDGE AND CONDITIONS FOR ITS DEVELOPMENT

"(...) Everyone knows, from his own experience, that both a language itself and its rules of syntax, as well as how to use it in different social situations, must be learned in dealing with other people, in the family, at school. (...)"

I. Kurcz (2007, 11)

<sup>&</sup>lt;sup>1</sup> The research was carried out as part of the research project "Deaf" parenting. Selected psychopedagogical aspects of the functioning of people with hearing impairments in parental roles carried out as part of statutory research – development of research potential (507) of the Pedagogical Faculty of the University of Rzeszów, in 2015/2016, 2016/2017.

It is assumed, after N. Chomsky, that language competence is "a man's ability (skill) to understand and form sentences in some language", and communicative competence, according to D. Hymes, is "the ability to use that language according to the listener and to the social situation in which the communication interaction takes place" (Kurcz 2007, 11; cf. Grabias 2003). Both indicated competencies contribute to the linguistic knowledge of each of us, which is inherent, though unconscious, and we only become aware of it in contact with the social group with whom we interact and communicate in the long process of initially acquiring, and with time, learning language (Kurcz 2007; Krakowiak 2012). The competences - language and communication - are independent of each other (each of them is subject to separate disorders, independent of each other; for language competence – SLI, for communicative competence – autism, for more see Kurcz 2007), but only together do they allow the full development of the linguistic knowledge of a human being, which is conditioned by many factors (Grabias 2003; Kurcz 2007; Krakowiak 2012). Generally, it can be pointed out that in addition to access to the social group (social dimension), the development of linguistic knowledge is also associated with individual factors (individual dimension), with the intellectual, emotional and social development of a person, their cognitive abilities and activity. The process of understanding speech, conditioning the formation of linguistic knowledge, precedes the process of transmitting their own language messages. The competences described are realized in the form of "mental performance skills": systemic, understood as the ability to build grammatically correct sentences and communication skills – the ability to use language in various social situations. In addition to mental abilities, the biological perceptual skills are necessary for the "emergence" of competences (Grabias 1997, 32). Therefore, it can be assumed that by directly determining the abovementioned skills, we indirectly ascertain the linguistic knowledge of a given language user.

It is worth emphasizing the existence of a relationship between language, thinking and reality. Language, being a product of a given society, has an active role in the process of perceiving reality (cf. the theory of Sapir–Whorf on the subject of relativism and language determinism, Dąbrowska, Kubiński 2003; Grabias 2003). It is not only a tool, but also a form of thinking, it defines the boundary and outline of human cognition. In turn subjective perception of reality leads to the creation of new linguistic facts (Herder's thesis, Humboldt's theory, Grabias 2003).

In conclusion, language is understood, after Ferdinand de Saussure, as a system of conventional signs, usually phonics (or manual ones – in sign languages), used for communication (exchange of meanings, information). It is characterized as dual-class, i.e. including the participation of grammar, allowing the creation of an unlimited number of new structures (Grzegorczykowa 2008). This system consists of interdependent components (subsystems): phonetic-phonological, lexical-

semantic, morphological-syntactic. Language understood in this way makes up the content of the linguistic competence of a human being. The use of language in a social group (pragmatic aspect) is the crux of communicative competence. Both competences – language and communication – as components of linguistic knowledge, are formed during the functioning of a human being in a communicating social group. This linguistic knowledge, most often unconscious in the early years of each of our lives, over time leads to conscious language use according to appropriate orthophonic, grammatical and social (pragmatic) norms in various forms (including written), in order to implement a specific communication plan, in a specific group of people.

# SELECTED ASPECTS OF THE LANGUAGE DEVELOPMENT OF HEARING CHILDREN OF DEAF PARENTS

The essence of language development is the deliberate, though not always conscious, shaping of linguistic and communicative competence (linguistic knowledge) of a child by adult people from the child's closest social environment (including parents, relatives, and also teachers and educators in educational institutions), in the most natural physical and social conditions possible, so that the child can master the language of their social community in order to achieve specific communication goals.

M. Tomasello (2002) pointing to the fact of how much a child's development depends on the social environment, emphasizes the significance of the child's and adult's interaction in the process of learning speech and language. J. Porayski-Pomsta, who also ascribes an important role to "adult-child" conversations in linguistic development, points to the requirement to apply such principles in the discussed process as:

- 1. providing the child by personal example, not by orders and prohibitions, with good examples of language behaviour,
- 2. providing the child with information about the natural and social world, starting from the immediate surroundings of the child, explaining to him the meanings of words and expressions,
- 3. verbal instruction and explanation of activities and actions performed by the child,
- 4. respect for the child's expressions, his interests, devoting attention to the linguistic creativity of the child, participation in children's games,
- 5. partner-like, subject-based treatment of the child in a conversation (for more see: Porayski-Pomsta, http://www.tkj.uw.edu.pl/poradnia/art10.htm [access: 16.02.2017]).

Language development is particularly important in the environment of people who speak two or more languages. In an extremely specific situation, which is interesting from the research point of view, there are hearing children raised by people who communicate in sign language, meaning hearing children of deaf parents<sup>2</sup>. It is estimated that only 4.4% of children born to deaf parents are also deaf, which means that over 90% of children born to deaf parents can hear (Mitchell, Karchmer 2004). These children are usually bilingual (cf. parallel bilingualism, Kurcz 2007) – sign language vs. phonic language, also bimodal (cf. Emmorey et al. 2005) – in the process of receiving and broadcasting language messages they use the auditory-voice modality vs. the visual-gestational modality, which in consequence may also make them bi-cultural – identifying with the hearing community and shaping the identity of the hearing person vs. identifying with the deaf community and shaping the identity of the deaf person (cf. Bartnikowska 2010; Toohey 2010).

Being a bilingual person means using two languages, which shapes a different way of processing language information. In the case of children raised in sign and phonic languages, there is also the question of the specific way of language expression with the use of not only a transmitter/transceiver of speech. The bilingualism (and bimodality) of hearing children of deaf parents can be and is something natural; however, there are no explicit reports on the impact of such bilingualism on the development of their linguistic knowledge (cf. Bartnikowska 2010; Toohey 2010). It seems that the development of speech and phonic language (which most people use to communicate) of hearing children of deaf parents requires the creation of special conditions for language development.

### CASE STUDY

The pages of this publication describe one of several cases, comprising the empirical material of broader research, the aim of which was reduced to:

<sup>&</sup>lt;sup>2</sup> Hearing children of deaf parents are sometimes called Children Of Deaf Adults (abbreviation CODA), but most often this is inadequate, because it is difficult to recognize that young children are aware of their situation or identify with a different culture, resulting from the use of a different way of communicating. The CODA abbreviation was created by Millie Brother, the founder in 1983 of the CODA International organization, whose main goal is to support and disseminate knowledge about the experiences of hearing children of deaf parents, for more see: https://www.coda-international.org. In Poland, in 2010, the CODA Polska Hearing Children – Deaf Parents Association was formed, bringing together people interested in working for the hearing children of deaf parents, for more see: http://www.codapolska.org. The term CODA, as explained by U. Bartnikowska (2010, 91) "seems to be reserved for persons identifying themselves with the CODA community, who recognize that being a hearing child of deaf parents has significantly influenced the formation of their identity".

- identifying, in the subjective perspective of deaf parents, problems related to, *inter alia*, everyday language communication in a relationship of deaf parent–hearing child;
- recognition and description of communication and language competences, mainly in the language of the majority of society, i.e. the Polish phonic

   "spoken" language, of hearing children raised by deaf parents.

The research problem was reduced to the question of whether there is a relationship between the course of language development of the hearing child of deaf parents and the development of his linguistic knowledge. The case study³ described is an attempt to determine the linguistic knowledge of an eight-year-old, hearing boy – Michał G.⁴ – in the context of his language development, conducted by deaf parents.

# RESEARCH TECHNIQUES AND TOOLS, RESEARCH PROCESS (INFORMERS)

In order to describe the case study, with simultaneous care for the reliability and accuracy of the results obtained, the following research techniques were used: observation of the boy examined, a partially structured list of questions for episodic interviews (Flick 2011, 101,102) with the deaf mother of the child examined<sup>5</sup>, testing selected school skills (Bogdanowicz et al. 2011; Straburzyńska, Śliwińska 1992) and language competences (Smoczyńska et al. 2015), document analysis, questionnaire – opinion of the form tutor on the pupil (the child examined). Two additional tests were carried out, with the active participation of the boy's mother, to determine the child's abilities in understanding and communicating in sign language, identification of the mental efficiency of implementation, communication understood as "the ability to use language – in this case sign language, in various situations of social life" (Grabias 1997, 32), in the form available to the child and

<sup>&</sup>lt;sup>3</sup> The instrumental case study, according to R.E. Stake (2009, 628), is conducted when a specific case is intended to deepen knowledge about a broader phenomenon or to draw more general conclusions. Research using this method serves to find both what is unique and what is average and take into account the following elements: 1. Case type, with particular emphasis on its operation and functioning, 2. Historical background of the case, 3. Physical environment of the case, 4. Other case contexts: economic, political, legal, aesthetic, etc. 5. Other cases constituting the background for the examined case, 6. Informers (persons providing information about the case) (Stake 2009, 630, cf. Tellis 1997a; b).

<sup>&</sup>lt;sup>4</sup> Due to the confidentiality of the data, the names of all persons participating in the survey have been changed.

<sup>&</sup>lt;sup>5</sup> During the first meeting in the presence of a sign language interpreter, next time without an interpreter because the researcher (M.Z.-S.) knows and fluently communicates in the sign language system, while the deaf mother of the examined boy also uses Polish language in written form quite well; though in everyday communication she prefers to lipread and sign communication – SLS.

his mother. The respondent's task consisted of silently reading three short statements (each consisting of three sentences), choosing one and giving the message to the mother in sign language ("signing") – the mother's task was to read the information (an attempt to check the ability of the child to transmit a message in sign language). The second attempt, determining the boy's understanding of sign language messages, consisted of receiving information from the signing mother (the boy's mother signs a short story – the statement is written on a piece of paper, the researcher knows the content), and then Michał answered questions relating to the content.

An observation of Michał was conducted in the aspect of the development of his communication skills, paying particular attention to how he enters and maintains relations with an adult stranger who hears whether he adjusts his statements to the status of the interlocutor, whether he can talk on any topic, how he behaves during verbal communication (whether it is accompanied by excessive gestures).

In order to determine the level of development of language competence, the Language Development Test (LDT) was used to assess the child's competence in active and passive vocabulary, understanding and using grammatical structures and understanding spoken text (Smoczyńska et al. 2015). The way of articulating individual speech sounds was also determined along with the commitment and motivation of the child to work (based on observation, cf. *Information on the course of testing with the* LDT. Answer Sheet, p. 11).

Additional diagnoses were made of the level of development of the auditory-language functions, being the basis of reading and writing, Michał G.'s level of school skills, including reading aloud technique, pace and comprehension, and listening (with attention to the graphic level of the recording, spelling correctness, auditory memory). To this end, selected tests from the Battery method for diagnosing the causes of school failure in eight-year-old children were used (Bogdanowicz et al. 2011)<sup>6</sup>.

Information about the course of the child's speech development and his language development was provided by the deaf mother of the boy studied. During the interview, a list of questions was used, regarding, among others, experiences (including problems) in everyday communication with the hearing child, support in communication received from others. An additional source of information on

<sup>&</sup>lt;sup>6</sup> The argument for determining the pedagogical diagnosis was the assumption that "in class II there is a transition from elementary reading (decoding) engaging perceptual strategies based on the work of the right brain hemisphere to advanced reading, using linguistic strategies, implemented thanks to the dominance of the left hemisphere of the brain. If the expected change in the reading strategy takes place, the child proceeds to fast and correct reading with understanding and thus gains a tool for communication and retrieval of knowledge using writing" (Bogdanowicz et al. 2011, 28). Research conducted by the co-author of the article – M.Z.-S. (pedagogue, speech therapist, PPP employee).

the course of development of selected language skills of the boy examined was also the diploma work of A. Osenkowska (2014).

Michał G.'s form tutor, by answering the questions on the questionnaire provided information, among other things, about the child's school career, his communication behaviour during lessons and breaks at the school establishment.

The research was carried out in the fourth quarter of 2015 (first meeting, interview with the mother, examination of the child with the LDT) and in the first quarter of 2017 (second conversation with the boy's mother, meeting with the child's form tutor, diagnosis of school skills, observation of Michał). The research was divided into two stages due to the desire to observe the dynamics of the linguistic development of the examined boy, demonstrated in the form of performance skills.

### CHARACTERISTICS OF THE SUBJECT. SOCIO-CULTURAL BACKGROUND, FAMILY CASE

Michał G., aged 8.4 at the time of the second examination, is the first son of Ewelina P. (36 years old) and Henryk G. (36 years old), he was born naturally, in good general condition. In the mother's opinion, the psychomotor development of her son was normal (sitting around 7 months, walking around 12 months, the first signs appeared about 9 months, the first verbal words about 18 months, and the first sentence at the age of 2.5 years). The subject has a younger, hearing brother at the age of 6.3 years. Michał's parents are not married. On a daily basis, the raising of the two boys is done by their mother and also the deaf grandmother on the mother's side. The father has continual, everyday contact with the children (except during the days when he goes to work abroad). The family lives in a tworoom flat in a block of flats, in one of the large, dynamically developing cities of south-eastern Poland. Their material and housing conditions are assessed as average. The mother of the subject is a person with higher education, does mental work, communicating with hearing people by means of writing or speech, while the father has a professional construction education, and is a person who prefers using mainly sign language (natural) in social contacts. The boy's mother (with a permanent moderate degree of auditory disability) actively works for the local community of deaf people, while, at the same time, she propagates the idea of sign language among hearing people.

Both of Michał G.'s parents and grandparents, being deaf people, communicate in Polish sign language. Michał's mother, being an educated person, communicates rather in the sign language system (she builds complex sentences, she also understands longer statements made in Sign Language System, SLS). In a discussion on sign language and its variants, she claims that he does not see any

significant differences between Polish Sign Language (PSL) and Sign Language System, SLS (in the simplified version). She communicates with other deaf people without any problems. Both Michał and his brother, also in contact with their relatives (parents, grandparents) communicate in sign language, which is often accompanied by speaking (with clear articulation). In a situation of misunderstanding, the mother asks Michał to repeat the content or spell out the message, using the finger alphabet – dactylography. The boys, playing together, communicate phonically, during which time the mother does not have access to the language content (which is noticed in the interview) because the children speak quickly, not paying attention to her communication needs. She spends a lot of time with her children, nevertheless, she also tries to stimulate her sons by organizing extracurricular activities in the hearing community. In everyday communication she uses audio language in contact with her children, accompanied by signs. She claims that she is understood by her sons and she also well understands their needs, intentions and language messages. When assessing her parental competences, the subject's mother describes herself as a self-confident person, consistent in her actions towards her children, good at raising her sons, but, at the same time, open and spontaneous, taking care of a sense of security for her and her children.

In his contacts with his father (who does not speak), Michał uses only sign language, but sometimes the mother's intervention is necessary to mediate the translation of conversations. According to the interview, Michał does not participate in situations in which he would play the role of an interpreter for his parents. The child's mother emphasizes that this could have a bad effect on his development.

### **EDUCATIONAL CONTEXTS**

Michał G. is currently a pupil in the 2<sup>nd</sup> grade of primary school (2016/2017 school year). From the age of 1, he attended a public nursery, and from 3 years – a kindergarten. He began his school education as a seven-year-old. In study, the mother most often helps the child, and she notices that it is more and more difficult for her to help Michał with tasks in the field of Polish language education.

From the *School opinion about the pupil* (author's – M.Z.-S., questionnaire for the teacher-educator) it appears that Michał has mastered the basic school techniques. He reads correctly, with understanding. The boy has the most difficulty expressing himself in writing. The most common mistakes include spelling mistakes, phonetic errors, missing out letters. Self-constructed sentences are sometimes grammatically incorrect, with logic preserved and a quite rich vocabulary. The teacher emphasizes that the indicated difficulties are intense. The graphic level of his writing does not raise concerns. Michał's oral statements are correct and extensive, although difficulties in starting a response are observed, sometimes

also in oral speech there are grammatical errors. Michał's pronunciation is understandable. His tutor points out that the pupil is always prepared for lessons, active and committed, willingly carries out instructions and is independent in the activities undertaken. Michał participates in additional classes, and his behaviour, both in contacts with peers and adults, does not raise any concerns.

In the pedagogical study, it is stated that Michał has mastered the ability to read and write well. He reads at a fast pace, with a word method, dividing longer and unknown words into syllables. There are, however, quite many distortions of words or guesses. The boy understands the contents of text he reads, both aloud (instructions in maths textbook - observation while doing homework with the child) and quietly (House of the Dwarves test by G. Krasowicz-Kupis). He remembers connected information transmitted in words, but a limited amount of auditory memory is observed (phonological, in Our Language test by M. Bogdanowicz – auditory memory, consisting in repeating as many words as possible, results: for 15 words heard in three samples of 5 words, the boy remembered a total of 8 words /3 in the first sample, 3 in the second and 2 in the third/ which gives a low score, taking into account age standards). When he writes, he makes spelling mistakes and sporadic phonetic errors (he writes as he hears), he quietly pronounces words he is writing. The boy's writing is legible. Grammatical errors are noticed in written statements. The boy is right-handed (homogeneous lateralization). Audio-language functions are shaped at the level of age standards; however, analysis of paronyms and phonological memory require improvement. It has been observed that tests involving hearing are carried out by Michał with great attention

# DIAGNOSIS OF COMMUNICATION AND LANGUAGE COMPETENCES

From the interview with the mother of the respondent, it appears that at about 9 months Michał began to communicate in sign language (the first simplified gestures: drink, mum, dad, grandmother, aunt, which were precisely interpreted and understood by the immediate surroundings of the child). The mother remembers that this was pleasing for her. Words appeared at about 18 months old, when Michał started attending a nursery. In Michał's upbringing, a significant role was also played by the deaf grandmother who signs better than the mother of the boy hears and more often communicates phonically (e.g. with her grandchildren). At the age of 3, Michał started going to kindergarten. Initially, the kindergarten teachers were concerned about the child's development of speech and language and reported his communication problems, hence the child was covered by speech therapy in the institution. There followed a quick and satisfactory development of

speech and language, the mother herself observed that the child speaks more and more (and signs less and less, including at home). In addition, she organized for her son speech therapy activities outside the pre-school institution, in one of the local hearing and speech rehabilitation centres. Michał still attends these classes two times a month.

At the age of 5, Michał was examined by a speech therapist who pointed to the following abnormalities: reduced level of articulation motility in the field of tongue verticalization and circular muscle movements of the lips (test according to H. Rodak's Articulation motility test cards (1997), no abnormalities found in the anatomical structure of the articulatory organs), difficulties in the auditory differentiation of oppositional sounds, especially three dental series (according to the proposal of a phonemic hearing test by I. Styczek (1977), in audiological examination, no hearing loss found – analysis of the child's health records), in pronunciation substitutions and simplifications of consonants (based on listening and observation of the way of implementing phonemes of the Polish language, with the help of the auxiliary *Pictorial questionnaire* by G. Demel (1996) – unfortunately there is no detailed information on whether the above-mentioned implementations were developmental or pathological!). Additionally, problems were found in the inflection of words, difficulties in the correct use of personal pronouns, building longer statements. After completing the diagnostic process, Michał participated in a 20-hour speech therapy at home with the participation of his mother as an observer (Osenkowska, 2014).

In November 2015, the boy's communication skills were again diagnosed, using a Language Development Test normalized for children aged 4;0–8;11. The study was carried out by the co-author of the article.

On the day of the examination, Michał G. was exactly 7;1;5 years old. The diagnosis lasted almost 40 minutes. During the meeting (in the afternoon hours), Michał was cheerful, he responded vividly to the investigator's instructions, he was initially interested in the course of the tests, and over time required reinforcement in the form of encouragement. The child's statements were understandable, there were no defects in the articulation of individual sounds and voice produced.

In the Vocabulary sub-test – understanding words, Michał made nine mistakes when choosing between 28 pictures (he achieved 19 points out of 28 possible, which, after calculating the results and their reference to stanine general standards for children aged 7;0–7;5, because the aim of the study was to assess Michał's performance compared to other children of the same age, with a probability of 85%, gives a stanine of 3 and means a low score).

In the Grammar – repetition of sentences sub-test, the boy committed 4 errors, incorrectly reproducing the sentence he was given to repeat. In this sub-test

he obtained 30 points (out of 34), the results are within the range of stanine 6, which is average-higher.

In the Vocabulary – word production sub-test, the subject correctly named 13 out of 25 pictures, reaching 13 points. Thus, the results calculated as stanine (stanine 4) are within the limits of typical lower results.

In the Grammar – understanding sentences sub-test, Michał incorrectly selected 5 pictures (from 32) for the sentences given. The boy scored 27 points, which means that the result is also within the limits of typical lower results (stanine 4). The boy had the most difficulty understanding sentences with two closer and further complements, such as: The girl shows the knife with a fork (items 22, 24 and 28).

In the Grammar – inflection of words sub-test, the subject made 2 mistakes, incorrectly inflecting words, for example, instead of *dużo pól* (many fields) he said *dużo poli*. He obtained 12 points, which after conversion according to the LDT key, means a typical, average-lower result.

The Discourse – understanding of texts sub-test was carried out using texts T3 and T4 – in accordance with the age of the child (7, 8 years). Michał understands the general content of the messages, but has difficulties remembering the details of the information provided. Also in this test he obtained lower-average results (level 4 stanine).

As a result of further calculation procedures (Smoczyńska et al. 2015), raw results of the subscales were obtained: vocabulary -7 points (stanine 3), grammar -14 (stanine 5), understanding -7 (stanine 3), production -14 (stanine 5) and a general result -21 points (stanine 4).

In summary, Michał obtained an average-lower overall score in the test. Vocabulary results were considered low and grammars were considered typical average. Michał is worse at dealing with tasks that require understanding language (words and sentences), but better, as he is average, at tests requiring repetition of sentences. The result of understanding texts was defined as average-lower.

The boy's current pronunciation is correct, his voice is a little hoarse and quite loud. In contact with an adult stranger Michał uses polite forms, no excessive gestures are observed. He is open and communicative, asks questions about the current topic of conversation, he also gives relevant answers and when he does not understand an expression, he asks for an explanation.

Speaking to his mother, he slows down the rate of speech and his articulation becomes clearer. In a situation where the mother does not understand, he starts using gestures. Michał communicates very well in sign language (SLS), correctly transmits messages and understands those addressed to him.

### CONCLUSIONS AND SUMMARY

Researchers, mainly English-speaking, have tried to define the importance of an unusual linguistic environment for the development of speech and language of hearing children of deaf parents.

J. Sachs, B. Bard and M.L. Johnson (1981), in a case study on the linguistic development of two brothers (3.9 and 1.8), found that both the first and second children had a developmental delay in speech. Particularly in the older boy, Jim, serious articulation problems were observed. The researchers concluded that the delays in the language development of the examined children were caused by insufficient stimulation (the only possibility of learning the spoken language was to listen to conversations on television). However, the authors of the study emphasize that appropriate intervention has improved the children's language skills and the abnormalities have disappeared. In later years of life, the spontaneous language expression of the brothers was normal, although in a study of their language a few weak areas were diagnosed. J. Murphy and N. Slorach (1983) examined six children under the age of five, also concluding that all the subjects had problems related to the development of speech. The authors emphasize that the cognitive development of the children was far ahead of their language development, which was reflected in their attempts to create sentences, though they were marked by grammatical errors. Besides that, the children had a limited vocabulary which they partially compensated for by more frequent use of the words "thing", "object", "building" and "there". The study found a significant correlation between the additional help given to the children (from hearing their peers during games e.g. in kindergarten, teachers, relatives and neighbours), and their cognitive and linguistic development, in the grammatical aspect. In later works of the same or other authors, there was no delay in the acquisition of language skills of hearing children of deaf parents. N.B. Schiff-Myers and H.B. Klein (1985) examined five hearing children of deaf parents. Four of the subjects did not show the speech disorders (mainly articulatory) characteristic of deaf people that occurred in their mothers. Also, the studies by E. Toohey (2010) indicate that the language development of hearing children of deaf parents, mainly in the phonetic and phonological aspect, is generally normal.

Our own research partially confirms these conclusions. It seems that the development of speech and language of hearing children of deaf parents is conditioned not only by the communication capabilities of the parents, but also by a wider group of people from the child's social environment. Therefore, it is important that hearing children of deaf parents can be supported in contacts with other hearing persons (relatives, teachers, speech therapists).

The examined boy – Michał G. – is growing up in an unusual linguistic environment. His parents and grandparents are deaf people who communicate mainly

with sign language, while his younger brother is a hearing person. The mother of the boys, despite having hearing defects and pronunciation that differs from the accepted orthophonic standard, in communicating with her children prefers the phonic language supported by signing, including the finger alphabet. Michał's father is a deaf person; he communicates only in sign language.

The results obtained in our research show that Michał achieved average language development (cf. results of LDT, school skills tests, observations). Particular attention in the process of linguistic support, however, requires grammar and lexical exercises, aimed at enriching passive and active vocabulary, in terms of production and understanding of words and their use in sentences. The essential exercises are those in the field of building and understanding especially those sentences in which inflection is decisive (for example, sentences with proximal and distant complements, in which inflection points to relations between the complements). Sign languages are not inflectional codes, which could be where Michal's grammatical difficulties come from. An important role in linguistic education can be played by reading, because by reading more and more complex texts, Michał will learn and consolidate appropriate language forms, both in speech and in writing. Nowadays, more attention to the improvement of auditory-language functions (including manipulation of phonological material) is required, as well as the consolidation of spelling rules, for this purpose it is advisable, for example, for the boy to use a spelling dictionary.

From the analysis of the course of speech and language development it can be stated that the examined boy is a bilingual person, and his way of communicating with the environment depends on the interlocutor's possibilities and preferences. Signs appeared first in his linguistic development (about 9 months), which did not significantly affect the development of spoken language – the first words (about 18 months). The examined boy learned the phonetic language from his mother, even though she had not mastered it sufficiently (mainly in the phonetic aspect). It is not without significance that from about 12 months, Michał was under the care of an institution – a nursery, then a kindergarten, where he had the opportunity to intensely and also in a rather natural way acquire spoken language. Therefore, it should be recognized that in the linguistic education of the boy, professionals – teachers and speech therapists – also played an important role. Currently (at the age of 8), Michał, despite the indicated minor language difficulties, achieves a relatively good level of communication competence in both sign and phonic language, which has become the basis for acquiring knowledge.

The research question posed should be answered in the affirmative. The development of the linguistic knowledge of hearing children of hearing-impaired parents depends on their language development conducted in a family environment and supported by third parties. It also seems that the very process of lan-

guage development is determined by the communicative and linguistic competence of the parents, their awareness of the course of speech development and the language of the child.

# LANGUAGE DEVELOPMENT OF A HEARING CHILD OF DEAF PARENTS – PRACTICAL TIPS

"Language cannot be learned, and it can only be stimulated, so the role of educators isto give the language a thread on which it will develop by itself'. W. von Humboldt (in: Bieńkowska 2007, 41)

Ensuring appropriate language development conditions for hearing children of deaf parents is a key issue for the development of their linguistic knowledge. It is important that deaf parents do not remain without proper support in the process of shaping the communication and language competence, often in two languages, of their hearing children. For the hearing child of deaf parents to be able to master the language of their community, adequate social and informal support resources should be mobilized – in the form of, for example, family help between relatives as well as formally – building a professional support system in the form of a wider range of speech therapy, pedagogical and psychological services for non-disabled children whose development (in this case linguistic, and consequently psychosocial) may be at risk due to the parents' disability. However, the amount of support must be balanced, tailored to the needs of both parents and children. Persons providing support should be aware of their role as a "language mediator" along with the complex communication and related cultural problems.

Recommendations on language development of hearing children of deaf parents:

- 1. The deaf parents should be made aware that their hearing children can be fluent in sign language and spoken language (of the majority), but children cannot be "left alone".
- 2. If there are hearing siblings in a family of deaf people, all of the children should learn to sign (not only the oldest, especially daughters, who most often take the role of interpreter between younger siblings and parents), and in the presence of parents children should use sign language among themselves, so that the parents have insight into the transmitted content, they can monitor interactions, thus, have a sense of their own parenting skills (Singleton, Tittle 2000).
- 3. It is important to use the experience of hearing people, relatives, professionals (teachers, speech therapists) in the language development process

from the earliest possible age of the child's life. For this purpose, they can, for example, organize in the home help from a hearing babysitter (e.g. 3 hours a day), register the child as soon as possible for a nursery, then kindergarten, enable the child to use speech therapy (e.g. in a psychological-pedagogical clinic) (cf. teaching strategies for children of a second language: people, places, time, alternating – Kurcz 2007, 21, 22).

- 4. The parenting competences, including the language and social skills of deaf parents, must not be undermined in any way. However, they should be supported as much as possible in the process of the language development of hearing children (awareness, instruction).
- 5. It is essential that hearing persons from the children's environment (e.g. hearing relatives, teachers, speech therapists) support communication in sign language and understand that it is a way of communication between a child and their deaf parents (cf. the importance of language prestige in the development of bilingualism, Kurcz 2007). Lack of communication with parents can have serious psychological consequences (Bene 1977; Halbreich 1979). To this end, children should be put into contact with various deaf people, including deaf (signing) children, to improve their better communication in sign language, for example, by participating in cultural events for deaf people.
- People from the child's social environment (deaf and hearing) should respect each other's linguistic/cultural separateness, as well as give the child a sense of security and the possibility of building a bilingual identity.
- 7. Hearing children of deaf parents cannot play the role of translators for their parents, due to the content of language messages that are inappropriate for the child's age and cognitive maturity both deaf and hearing people should be made aware of this. In contacts between deaf people and hearing persons, sign language interpreters should be used.

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