SCHOOL CHILDREN WITH SPEECH DISORDERS

Students with communication difficulty manifested by widely understood speech disorders are in a particularly difficult situation at school since speech constitutes a major medium of classroom interaction perceived as a tool for exchanging values and information. All physical, emotional and social aspects of human existence depend on communication skills in social interactions. It is estimated that approximately 30% of pre-school and elementary school children suffer from some forms of speech disorders. Their difficult psychological and social situation results from problems which on the one hand disturb the process of interaction with teachers and on the other and on the other create an unfavorable socio-metric situation or disturbance in the sphere of social relations. What is more they disturb the sphere of emotions and feelings which may be partly conditioned by the above mentioned unfavorable social situation. Additionally they hinder the process of entering interactions with peers. Limited options the communication with the environment create a communicative barrier which negatively affects the feeling of security and trust to other people in children. The paper reviews various approaches to the problem.

Key words: children with speech disorders, peer relations, the attitude of teachers, learning difficulty.

1. Introduction

Children with speech disorders are exposed to numerous factors which operate in the school environment and hinder their performance of the roles of students and friends. These factors can be classified into four groups: disturbed emotional and personal sphere as well as social behavior, poor peer relations and unfavorable attitude of teachers towards children with speech disorders, poor school results. These problems may be primary relative to the speech disorder, may occur as its result, may have common basis or may also condition one another.

2. Disturbance in the emotional and personal sphere as well as social behavior of children with speech disorders

Inappropriate peer relations of children with speech disorders may result from disturbance in the emotional and personal sphere. Speech development is strictly connected with the development of all aspects of consciousness and personality [60]. While talking about the relation between speech and personality development, it has to be remembered that there exist close structural and dynamic links between various areas of the cerebral cortex functionally responsible for speech processes and lower levels of the central nervous system because of which the general emotional state of the child directly affects speech functions. Hence disturbance in the emotional and motivational
sphere may result in speech disorders or may be caused by them. For instance, on the one hand verbal insufficiency may discourage children from contacts with peers, on the other hand secondary reduction in verbal activity may occur in result emotional conflicts [17, 25]. Depression, feelings of discouragement, low self esteem due to the inability to maintain contacts with the environment, hypersensitivity to the reactions of the environments or shyness caused by the disorder are observed in children with aphasia [6]. In the case of children who previously were able to use speech, speech disorder amplifies negative emotional reactions and in consequence may lead to lowering the motivation to speak or even selective mutism.

Children with alalia, who are aware of their ‘otherness’ and who have a lot of negative experience, have low self-esteem, are irritable, shy, uncertain and taciturn. This can be accompanied by motor inhibition or hyperactivity. Some of these children are malicious, aggressive towards younger or weaker children, but there are still others who tend to avoid contacts with the environment. The feeling of being defenseless in contacts with other people is caused by the inability to communicate, which in turn frequently triggers such features as oversensitivity, inclination to crying, acts of anger or gloominess. Children with alalia tend to experience labile moods or even ‘wildness in contacts with people and passive perception’ [36, p. 14].

SLI children lack confidence during conversations, fairly rarely initiate verbal contacts. They give up communication if they are not understood immediately [32].

For many stuttering children their disorder is also a source of negative experience. Inability to share their thoughts and awareness of the negative impression their speech makes on the interlocutors results in despondency and despair. Constant thinking about their disability often results in low self esteem. Fear of speaking increases the muscle tension and the occurrence of contractions [30], and ‘when the fear of speaking and low self esteem become ingrained in their subconsciousness, they are more destructive for the personality than the stuttering itself [10, s. 39]. Pre-school and school children are shy, reserved, obedient, emotional, yet internally hostile and dissatisfied. In-depth hostility is hidden under the ‘pseudo-social’ mask of politeness. The children are emotionally immature and suffer from motor and psychological hyperactivity [69].

Embarrassment in front of friends, unfavorable attitude and reactions of the environment may result in irritability, despair, indifference, feelings of humiliation and guilt, abandonment of interests, aims or desires on the part of children with speech disorders, particularly at the beginning of their school careers. Such children become withdrawn, avoid social contacts, become apathetic, shy or otherwise aggressive and undisciplined [61]. Their experience makes them expect unfriendly behavior on the part of other people and simultaneously they feel helpless due to the inability to overcome this obstacle. They suffer from fear to communicate – a peculiar form of behavior accompanying human communication [69].

Psychological and emotional problems disturb the development of the social sphere. It is assumed that the disturbance results from frustration, rejection on part of peers and lack of trust to children with speech disorders [40], and if it is not eliminated at the early age, it tends to accumulate and escalate with age [41].

In case of disabled children, including children with speech disorders, the unsatisfied need of contact leads to the occurrence of the complex of difference manifested by e.g. the inferiority complex. The awareness of standing out from the peer group in minus disturbs social contacts. According to K. Jankowski ‘In this way individuals with inferiority complex living among people who could potentially be their friends, are surrounded by indifference and hostility, feel isolated and lonely. (…) The feeling of
inferiority directly causes this kind of behavior and in result, the environment remains indifferent or becomes unfavorable or even hostile’ [24, p. 180–181]. Negative social behavior of children with speech disorders may have its source in the unsatisfied need to transfer information. While speaking, children can naturally and sincerely show what they feel [68]. The ability to express one’s emotions and experiences directly gives people the feeling of authenticity, autonomy, identity, puts them in the situation whereby they are responsible for their own behavior or allows to release tension which accompanies various forms of human activity. Unreleased tension does not disappear, it tends to cumulate and intensify until it can no longer be controlled. Hence bursts of anger, acts of aggression, somatic symptoms such as headaches, heartache or problems with the digestive system. Sincere and open expression of one’s anger or sorrow offers relief and peace. Hence the ability to communicate with other people constitutes one of the factors conditioning human development and mental health.

3. Disturbed peer realtions

Speech disorders have a negative impact on the social situation of children. Children with speech disorders frequently face problems in social contacts with peers. They are ignored by their peers [42] and are not as popular as children with no speech disorders [18, 49, 51, 52, 56].

Children already at the pre-school age realize that SLI children communicate differently from the majority of their peers [32]. Pre-school children who develop normally have more contacts with other children who develop normally then with SLI children. Attempts to start a conversation undertaken by SLI children are more often ignored than in the case of children who develop normally [32].

It has been observed that pre-school children with speech disorders are less often indicated by their peers who develop normally as those with whom they enjoy playing. Additionally, in the case of SLI children fewer reciprocal indications are observed, that is such in which a child indicates other children as companions in play and at the same time it is indicated my them [18].

Similar relations were observed in school children with various forms of speech disorders [49, 51, 52, 56]. SLI children enter fewer social interactions with friends compared to their peers, and they describe the level of satisfaction from their social relations as significantly lower compared to their peers from the control group [16].

Children with specific speech disorders find talking to their peers difficult, which obviously cannot exert no impact on the relations between them and their interlocutors [32].

Peer approval has a significant influence on the social and emotional development of children. Peer rejection blocks numerous basic needs and hinders aspirations for self-realization and happiness to which all people are entitled. It seems that in view of the functions performed by speech (among others communicative, regulatory and cognitive) peer relations between children with speech disorders and their classmates are disturbed.

4. Attitudes of teachers towards children with speech disorders

Inappropriate attitude of teachers constitutes another factor exerting a negative impact on the situation of children with speech disorders at school. Numerous research papers show that adults (including teachers) consistently evaluate children with communication disorders as less intelligent and significantly below their social competence [16]. An
interesting analysis was carried out by M. L. Rice, P. A. Hadley and A. L. Alexander. The authors asked adults to listen to a recording of verbal interactions involving SLA and normally developing children. SLA children were evaluated lower in terms of their social maturity, leadership skills and popularity [43]. Children who stutter are described by teachers as apprehensive, shy, taciturn and mistrustful [20].

The problem is frequently connected with inappropriate perception of children with speech disorders and formulation of stereotypical associations: bad speech — poor student [44, 20]. Numerous elements are involved in the process of interpersonal perception, out of which physical aspects of speech or language are of particularly significant when the image of another person is formed [46]. Undoubtedly children with retarded speech development, articulation disorders or hearing impairment are perceived negatively by teachers. Listeners evaluate their interlocutors inadequately and consistently low even if a particular articulation disorder is not strong [37, 11, 33]. Physical alteration of the form of transfer may disturb communicative relations between students and teachers [39], particularly if a particular form of speech disorder results in significant disturbance in the realization of the supra-segmental level (e.g. in children with bradylalia or tachylalia), segmental level (in children with total dislalia), both levels (e.g. palatolalia) or in case of the lack of the phonic substance (e.g. mutism). Deformed intonation or skipping sounds may make utterances unclear or sometimes even incomprehensible. This requires concentration on the part of the interlocutor, which in turn may lead to irritation or a tendency to avoid communication [65]. The effort necessary for the appropriate reception of such utterances results in avoidance, particularly that teachers have an alternative in the form of utterances formulated by other students: fluent, comprehensible and nice in reception.

Children with speech disorders are negatively evaluated by teachers with varied work experience, whereas positively by teachers with limited work experience (1–5 years). The image of children with speech disorders depends also on how much teachers know about the disorder itself as well as about the forms of work with such children [48, 65]. Teachers who see no need for further education, do not consult handbooks, specialist periodicals or speech therapists perceive children with speech disorders negatively [47]. Inappropriate behavior of teachers who are unaware of the consequences of their actions, tend to pass the tasks requiring verbal responses to other children or comment in public on the way the phonic substance is deformed, makes children renounce making verbal contributions in the classroom and lowers the level of their attractiveness in the eyes of their classmates [31, 12]. ‘Sympathetic’ attitude of some of the teachers, manifested in offering help when the child pronounces difficult sounds or passing over the child while asking question, makes the situation of children with speech disorders even worse. The attitude of the teacher to the child has a particular significance for peer relations and psychological balance [61, 6]. R. Byrne observes that younger children are not worried by their pronunciation and become more aware of their speech in result of anxiety and special interest on the part of teachers. The role of the teacher in maintaining interpersonal relations can be constructive provided teachers authentically accept their students. Children who are consciously or subconsciously rejected by their teachers provoke criticism and reprimands.

5. Poor school performance among children with speech disorders

Children with speech disorders who start learning in the first grade and later continue education are prone to difficulty in learning literacy [9, 30, 12].
Polish researchers seem to be particularly interested in relations between the types of defects and difficulty in learning literacy, whereas foreign authors devote more attention to the issue of the reading deficit in SLI children.

Languages in which the graphic substance to a large extent reflects pronunciation pose particular difficulty. It becomes evident especially in the case of dislalia, one of the most frequent types of disorder [12, 44, 45, 58, 61, 23, 3, 60] understood as an articulation deficit of varied etiology. Children who start education ‘tend to write the way they speak’ [27, 45]. If a particular sound is mispronounced it is also misspelled. Background literature provides numerous instances which show how departure from normative phonic substance affects the graphic substance – or in other words – how speech disorders are reflected in writing [44, 38]. It is characteristic that spelling mistakes caused by speech disorders apply most frequently to those sounds which are subject to substitution [27]. Hence the problem affects children with para-rhotacism, para-kappacism, less often with interdental lisping or uvular r.

Pronunciation, reading and writing problems may stem from a common basis i.e. from disturbed visual–auditory-motor coordination, which is discussed in papers published by B. Sawa (1971, 1990, 1994), H. Spionek (1985), H. Jaklewicz (1982), J. T. Kania (1982). In such cases speech disorder is not the primary source of poor school performance, yet it may amplify or enhance it.

In case of children with dislalia (i.e. articulation disorder which is not accompanied by other forms of speech disorder) reading and writing difficulty frequently continues even if the child manages to pronounce correctly those sounds which previously were inappropriately articulated. This may be the case since pronunciation is subject to fairly quick change whereas internalized patterns of articulation remain invariable. Despite practice in phonetic hearing and improvement in pronunciation, previously internalized patterns based on inappropriate movements of articulators remain unchanged and are not controlled by the hearing analyzer [60].

Children with retarded speech development also face learning difficulty. Advancement in speech development constitutes one of the criteria used for the purpose of assessing school maturity. Mastery of the language system and use to a significant extent condition school performance [12]. Limited lexical resources and incorrect grammar make construction of verbal utterances impossible, hinder comprehension, are frequently paralleled by failure at school and lower the general intelligence quotient [58].

SLI children may experience reading difficulty, particularly if language development problems are not solved before they come to school and if permanent speech problems are diagnosed [32]. Most analyses (both retrospective and prospective) show that there is a high percentage of occurrence of reading and learning difficulty [2, 28, 1, 59, 7]. Reading problems do not affect all SLI children to the same extent. Reading difficulty is more frequent among children with vocabulary and/or grammar and pronunciation problems than in the case of children with phonetic problems only [32].

Learning difficulty in SLI children is not limited to reading only. In some cases of SLI, ability in mathematics is much below the standards specified for particular age groups [35]. Some of these problems may start fairly early. The research shows that four or five year old SLI children who understand the basic principles of counting (e.g. that the last number is equal with the number of objects counted), but are weaker than their peers in recollecting sequences of numbers, face a similar problem two years later [13, 15].

Learning difficulty occurs not only in children with SLI and articulation problems but also in the case of other types of speech disorders.
Research on the relation between stuttering and school failure shows that children who stutter have poorer school results compared to their friends who speak fluently. This applies mainly to classes in Polish. The basic symptoms of disfluent speech include: 1) repetition of sounds /m-m-m- mama/, vowels ma - ma - mama/, words / mama — mama/, phrases /mama poszła - mama poszła/, 2) prolongation /mmmmama/, 3) blocking /mmm ....ama/, 4) pausing /mama poszła do........sklepu/, 5) fillers /yyy, eee/, 6) self-corrections /mama poszedł ...szła/, 7) too fast tempo of delivery, 8) too slow tempo of delivery, 9) arrhythmic speech. The above mentioned symptoms of disfluency occur in reading Cloud which is a form of speaking. While reading, a stuttering person may repeat sounds or syllables, prolong them, block the utterance, make unjustified pauses, self-correct, speak too fast, too slow or non-rhythmically to the extent which hinders comprehension of the text. These external symptoms of speech or reading disfluency are linguistic in nature. Pathophysiology of stuttering is manifested in reading. The disorder is caused by excessive contractions in speech organs, which hinder fluent text processing. Additional difficulty in reading results from looking away from the text. The essence of stuttering consists in awaiting the occurrence of speech disfluency. Stuttering persons may avoid reading aloud in public e. g. in the classroom. Yet when forced to read a text out, they struggle for maintaining fluency rather than simply read the text [66]. Learning problems occurs also in case of other subjects requiring verbal contributions during lessons [12, 31]. The utterances made by students who stutter are frequently primitive and limited to the minimum since in order to avoid pronouncing difficult sounds children formulate simple and short sentences and select words which do not always fit the context. While speaking, they are not thinking about what they want to say, but instead they focus on their performance. Several cases of reading difficulty, which in turn lowers motivation and confidence, have also been reported [10]. In case of children who stutter school failure results mainly from the specific nature of the disorder – students who stutter are limited in terms of presenting what they know during lessons (verbal responses) [26, 22]. Limited classroom participation negatively affects learning results and students are often perceived as not prepared. Fear of speaking disorganizes cognitive processes, lowers perception abilities, makes concentration and thinking difficult [31]. Children with aphasia are in a particularly difficult situation at school [13]. In case of motor aphasia, speech is comprehensible but selective disorders in expressive speech occur. Pronunciation is distorted and telegraphic speech is used: limited scope of vocabulary, mainly nouns. Other characteristic features include problems with repeating words, naming objects, difficulty in uncontrolled writing, dictation and reading aloud.

Literature

School children with speech disorders

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Summary
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