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Specificity of verbal and non-verbal communication of a child with Asperger syndrome in the context of their role as a pupil and colleague

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Communication is one of the most important elements of human existence, because man as a social being strives to communicate with others. Communication skills influence the degree of acceptance of the person by other members of the community and help to achieve success in various aspects of life and social roles. The article focuses on the analysis of communication skills, both verbal and non-verbal, of a child with Asperger syndrome (AS). The purpose of this article is to show the specific way in which people with Asperger syndrome communicate, which makes it difficult for them to find themselves in the school community – being a good pupil and a good colleague.

KEY WORDS: Asperger syndrome, verbal communication, non-verbal communication, social role

Social role – meaning of the concept

In sociology, the concept of social role is associated with social position, social status that places people in the community. A social role can be defined as "[…] a set of rights and obligations associated with a given position […]"[1]. Certain biological or psychological characteristics of a person can hinder or prevent social roles. This is the case of people with various disabilities, developmental disorders, including Asperger syndrome (AS).

The social role determines the behaviour of a person occupying a particular social position, i.e. it defines the norms of behaviour that are applicable. These standards also apply to communication, […] linguistic behaviours define and illustrate the possibility of human existence in a social group"[2]. The role of a school colleague requires behaviours that involve cooperation, interaction, the point of view of another person, mutual understanding, mutual help, compromise and empathy. The role of a student requires the respect of the school rules, attendance, punctuality, doing homework, classroom activity, concentration, observance of the communication rhythm in the classroom, respect for teachers, teamwork skills.

The violation of norms related to a specific social role involves sanctions, which are more or less formal. A woman who does not fulfil the role of a mother may face formal punishment: she may be deprived of parental rights, or a less formal sanction: criticism and condemnation from the environment. A child who does not fulfil the role of a student is subject to sanctions in the form of a warning, an oral reprimand from the teacher, a negative evaluation, or a lack of promotion to the next class. The penalty for violating the standards of being a "good colleague" may include exclusion from the class community, lack of invitations to school parties, exclusion from fun and games, mocking or teasing. We must bear in mind

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[1] B. Szacka, *Wprowadzenie do socjologii*, Oficyna naukowa, Warsaw 2008, p. 149.

[2] S. Grabias, *Postępowanie logopedyczne. Diagnoza, programowanie terapii, terapia*, „Logopedia" 2008, Vol. 28, pp. 13–37.

that the assessment of the behaviour of a person who performs a specific role depends on the person who makes the assessment. In the case of the role of a school colleague, there may be differences between the views of parents and teachers and the children themselves, who allow peer-to-peer collaboration, such copying homework or cheating on tests. Since social roles are related to being in the community (among other people), the important issue is how to communicate.

Verbal and non-verbal communication

Communication is the exchange of information, demands, requests, views, feelings between the sender and the receiver, it is a bilateral, interactive activity. In speech therapy, interaction is defined as "[…] a system of two interrelated processes: the process of giving meaning to human behaviour and the process of adapting one's own behaviour to the behaviour of members of a given social group"[3]. Therefore, communication, understood as interaction, is a mutual adjustment of the parties involved.

In communication we use different codes: linguistic, para-linguistic and non-linguistic[4]. In linguistic communication the means of communication is language. In para-linguistic communication it is the melody, accent, rhythm and non-linguistic communication uses facial expressions, gestures, body movement, look, proxemics. Verbal communication is a communication based on words, which Bożydar Kaczmarek treats as one of the elements of linguistic communication, apart from written and signalling[5]. Non-verbal communication uses para-linguistic and non-linguistic means. Usually in the communication process, we use all the codes

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[3] S. Grabias, *Interakcja językowa i jej uwarunkowania. Perspektywa lingwistyczna*, [in:] *Bariery i pomosty w komunikacji językowej Polaków*, ed. J. Bartmiński, U. Majer-Baranowska, Wyd. UMCS, Lublin 2005, p. 19.

[4] B. Kaczmarek, *Misterne gry w komunikację*, Wyd. UMCS, Lublin 2010.

[5] B. Kaczmarek, *Misterne gry w komunikację*, Wyd. UMCS, Lublin 2010.

simultaneously, we convey intentions through the spoken words, appropriate accent, intonation, but also with facial expressions or gestures.

When analysing the communication process one has to take into account: the people involved in the information exchange, the so-called communicators, the purpose of communication, the manner and the channel of information, the message itself, namely the text, the message code, and the situation (circumstances) in which communication occurs[6]. The causes of communication difficulties may include all of the listed elements. In order to communicate effectively, both sides (the sender and the receiver) should know the same transmission codes (linguistic, para-linguistic and non-linguistic) and properly interpret the messages. The context in which information is exchanged is also important, failure to take it into consideration, and consequently the inability to adapt the communication to the circumstances may distort communication. Factors impeding communication also include biopsychological limitations of both the sender and the receiver (communicators), as is the case of mentally disabled people or autistic people.

Communication requires co-operation. The philosopher of language, Paul Grice, mentions the following principles of linguistic communication: the quantity (we speak as much as we need), the quality (we say what we know is the truth, we avoid what is false), reference to the subject (we talk about what is related to the subject), manner (we speak in an understandable manner)[7].

Most people use speech in the communication process. According to Stanisław Grabias, it is "[…] a system of activities performed by man with the participation of language, when exploring the

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⁶ S. Gajda, *Jak się porozumiewamy?*, [in:] *Logopedia. Pytania i odpowiedzi. Podręcznik akademicki. Interdyscyplinarne podstawy logopedii.* Vol. I, ed. T. Gałkowski, G. Jastrzębowska, Wyd. UO, Opole 2003, pp. 19–26.

⁷ H.P. Grice, *Logic and conversation*, [in:] *Syntax and semantics* ed. P. Cole, J.L. Morgan, V/3, New York 1975: Academic Press, pp. 41–58; translated by J. Wajszczuk H.P., Grice H.P., *Logika i konwersacja*, „Przegląd Humanistyczny" 1977, no 6, pp. 85–99.

world and passing on knowledge about him/herself and the world to other participants of social life"[8]. The definition implies that language plays not only a communicative, but also a cognitive role. Language allows people to interpret the world and at the same time communicate what we know about the world to other people, influence them. Both language functions (cognitive and communicative) complement each other. It is emphasised that "our success in a variety of situations depends, to a large extent, on how we are able to exploit the opportunities contained in speech"[9], i.e. the possibilities offered by language.

Asperger syndrome – diagnostic criteria

One of the diagnostic criteria for Asperger syndrome is the specific way of communicating, specific speech. The disorder known today as Asperger syndrome was first described by the Vienna psychiatrist and paediatrician, Hans Asperger, who described patients with specific characteristics rerated to behaviour and communication in his work published in 1944 [10]. The term Asperger syndrome was disseminated and introduced into the literature of the subject in 1981 by Lorna Wing.

In the International Statistical Classification of Diseases and Health Problems ICD-10, the Asperger syndrome is located among overall developmental disorders and is denoted by the symbol (84.5)[11].

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[8] S. Grabias, *O ostrość refleksji naukowej. Przedmiot logopedii i procedury logopedycznego postępowania*, [in:] *Logopedia. Wybrane aspekty historii, teorii i praktyki*, ed. S. Milewski, K. Kaczorowska-Bray, Harmonia Universalis, Gdańsk 2012, p. 61.

[9] S. Gajda, *Wprowadzenie*, [in:] *Logopedia. Pytania i odpowiedzi. Podręcznik akademicki. Interdyscyplinarne podstawy logopedii*. Vol. I, ed. T. Gałkowski, G. Jastrzębowska, Wyd. UO, Opole 2003, p. 12.

[10] D. Graaisma, *Rozstrojone umysły. Dzieje chorób i historie chorób*. PIW, Warsaw 2009.

[11] S. Pużyński, J. Wciórka (ed), *Klasyfikacja zaburzeń psychicznych i zaburzeń zachowania w ICD-10. Badawcze kryteria diagnostyczne*. Uniwersyteckie Wyd. Medyczne „Vesalius". Institute of Psychiatry and Neurology, Warsaw 2007.

The American Psychiatric Association included it in its official classification in 1994. In the latest 5th revision, DSM was classified as an autism spectrum disorder, without providing separate diagnostic criteria[12].

There has been a lot of controversy around AS. It is discussed whether it is a separate clinical unit or a variant of autism, which is reflected in its position in various classifications (see: ICD-10, DSM-IV, DSM-V). There is also a lack of agreement as to the initial stages of speech development in individuals with this diagnosis. There are two positions in academic publications and diagnostic criteria. One emphasizes the lack of delay in the development of speech in children with AS[13], others allow for the existence of such a delay[14]. This is how an American psychiatry lecturer, James Morrison, commented on the statement on the lack of delay in the development of

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[12] J. Morrison, *DSM-V® bez tajemnic. Praktyczny przewodnik dla klinicystów*. Wyd. UJ, Kraków 2016.

[13] S. Pużyński, J. Wciórka (ed). *Klasyfikacja zaburzeń psychicznych i zaburzeń zachowania w ICD-10. Badawcze kryteria diagnostyczne*. Uniwersyteckie Wyd. Medyczne „Vesalius". Institute of Psychiatry and Neurology, Warsaw 2007; *Diagnostic and statistical manual of mental disorders*, 4th Ed, rev. (DSM-IV), Washington 1994, DC: American Psychiatric Association; A. Maciarz, M. Biedasiewicz, *Dziecko autystyczne z zespołem Aspergera. Studium przypadku*, Impuls, Kraków 2000; J. Urbaniak, „*Mali profesorowie czy inteligentni autyści. Wczesna diagnoza dziecka z zespołem Aspergera,* [in:] red. B. Cytowska, B. Winczura, *Wczesna interwencja i wspomaganie rozwoju małego dziecka*, Oficyna Wydawnicza Impuls, Kraków 2006, pp. 399–428; B. Winczura, *Autyzm, autyzm atypowy a schizofrenia wczesnodziecięca*, [in:] ed. *Dzieci z zaburzeniami łączonymi. Trudne ścieżki rozwoju*, Oficyna Wydawnicza Impuls, Warsaw 2012, pp. 63–118; J.J. Błeszyński, *Autyzm a niepełnosprawność intelektualna i opóźnienie w rozwoju. Skala oceny zachowań autystycznych*. Harmonia Universalis, Gdańsk 2016.

[14] G. Gilberg, C. Gillberg, *Asperger syndrome – Some epidemiological considerations: A research note*, "Journal of Child Psychology and Psychiatry", Vol. 30, pp. 631–633; T. Attwood, *Zespół Aspergera*, Wyd. Zysk i S-ka, Poznań 2006; M. Korendo, *Językowa interpretacja świata w wypowiedziach osób z zespołem Aspergera*, Omega Stage Systems, Kraków 2013; J. Cieszyńska-Rożek, *Metoda Krakowska wobec zaburzeń rozwoju dzieci. Z perspektywy fenomenologii, neurobiologii i językoznawstwa,* Omega Stage Systems, Kraków 2013; Błaszczyk, S. Kowalska, E. Gacka, *Rozwój komunikacji językowej u dzieci z zespołem Aspergera*, „Problemy opiekuńczo-Wychowawcze" 2015, No 10, pp. 3–13.

speech included in the medical diagnostic criteria for AS (DSM-IV, ICD-10): "…it is a paradox that, due to the delay in the development of language, Temple Grandin would not meet the criteria for this diagnosis (Asperger syndrome – annotation by EG) according to DSM-IV, although he remains a model example of this disorder"[15].

The author of this article supports the viewpoint which differentiates two models of speech development in persons with AS: with a delay in speech development and without delay in the formation of speech. In the case of some children with this diagnosis (as confirmed by many years of speech therapy practice of the author of these words), speech develops with a certain shift in time. Patients begin to speak their first words and utter their first sentences later than the majority of typically developing peers, and their linguistic utterances, which are delayed, include characteristic irregularities. In the second model, speech develops without delay, i.e. children begin to utter first words and first sentences in due time, but their communication (verbal and non-verbal) includes the specific characteristic of AS.

The diagnostic features of the Asperger syndrome include:[16]
– an immature and unilateral type of social interaction,
– empathy disorder,
– inadequate expression and recognition of other people's emotions,
– pedantic, encyclopaedic language
– schematic speech,

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[15] J. Morrison, *DSM-V® bez tajemnic. Praktyczny przewodnik dla klinicystów*. Wyd. UJ, Kraków 2016, p. 47.

[16] ICD-10; DSM-IV; T. Attwood, *Zespół Aspergera*, Wyd. Zysk i S-ka, Poznań 2006; A. Bryńska, *Deficyty językowe w zespole Aspergera jako możliwy wyraz dysfunkcji prawopółkulowe*j. „Psychiatria i psychologia kliniczna" 2010, 10(4), pp. 247–253; M. Korendo*, Językowa interpretacja świata w wypowiedziach osób z zespołem Aspergera*, Omega Stage Systems, Kraków 2013; J. Panasiuk, M.M. Kaczyńska-Haładyj, *Postępowanie logopedyczne w przypadku osób dorosłych z zespołem Aspergera,* [in:] ed. S. Grabias, J. Panasiuk, T. Woźniak, *Logopedia. Standardy postępowania logopedycznego. Podręcznik akademicki*. Wyd. UMCS, Lublin 2015, pp. 517–549.

– literality of language reception,
– poor non-verbal communication,
– impulsiveness,
– intonation and accentuation disorders,
– focus on one's own interests, persistency in certain topics,
– difficulties with maintaining the communication rhythm,
– clumsy moves, "a strange attitude"

Characteristics of communication of children with Asperger syndrome

The analysis of the diagnostic criteria makes it possible to distinguish between verbal (based on words) and non-verbal communication. In the case of Polish children with Asperger syndrome, there are difficulties with the use of inflectional forms, and thus the difficulty in building the text. The lack of such problems in the case of English-speaking children can be explained by the specificity of English, which, unlike Polish, is not an inflectional language. Children with Asperger syndrome have difficulty in understanding and expressing spatial, temporal, causal relationships. For example, during a therapeutic session, a child with Asperger syndrome, when asked "*Why should you wash your hands before eating?*", answers "*To wipe them with a towel*", and when asked "*Why is the boy supposed to sit quietly?*", answers "*To say nothing*"[17]. The narrative of a person with AS is inconsistent, multifaceted, chaotic, which makes it difficult to communicate with classmates, but it can also interfere with communication with the teacher, because "jumping" from one subject to another disrupts the reception of speech by the environment.

Children with AS do not understand metaphors or jokes, therefore they have problems with interpreting poems and understanding the moral of a fairy-tale. Literal and schematic language reception mean that they do not realize the ambiguity of words, the so-called homonyms. Therefore, a patient asked to indicate the difference between the pictures, looks at the speech therapist in a surprised way and says: "*But Ms Ewa, there is no difference here, difference*

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[17] The examples come from the speech therapy practice of the author of the article.

is… (a moment of thought – annotation by E.G) *the result of subtraction, and there is no subtraction here*"[18].

Lack of understanding of jokes, metaphors, sayings become the cause of conflicts with peers. Peer-to-peer interaction is also disturbed by stereotype statements, e. g. using the same form of greeting no matter who it is directed to or addressing classmates using their full name, e. g. "Jan Nowak". The pedantic, formal, and "adult" language of a child with Asperger syndrome is often the reason that he/she is considered "big-headed" or "weird".

A narrow range of interests involves persistency in certain topics (those that are exciting for the child). Marta Korendo emphasizes the uneven development of vocabulary in children with AS, associated with their specific interests and the existence of the so-called language passages, i.e. excessive development of vocabulary from a particular semantic category accompanied by difficulties in areas with which most typically developing children have no difficulty e. g. names of colours or meals[19].

The communication process of children with Asperger syndrome may be disturbed by echolalia: open and hidden. Hidden echolalia is the repetition of heard fragments of speech (e. g. from commercials), adequate to the given circumstances, but without understanding the meaning of the words, only by grasping the context of the situation[20]. Another kind of hidden echolalia is forcing parents or other people to say a word or phrase they used before always in the given circumstances. If a child liked a phrase used by an adult, he or she asks the parent to repeat it in a similar situation, for example, while shopping or cooking dinner. A student with Asperger syndrome may expect the teacher to always address

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[18] The examples come from the speech therapy practice of the author of the article.

[19] M. Korendo, *Językowa interpretacja świata w wypowiedziach osób z zespołem Aspergera*, Omega Stage Systems, Kraków 2013.

[20] J. Cieszyńska-Rożek, *Metoda Krakowska wobec zaburzeń rozwoju dzieci. Z perspektywy fenomenologii, neurobiologii i językoznawstwa,* Omega Stage Systems, Kraków 2013.

him/her in a certain way, e. g. while checking the attendance list or asking him/her to do a certain exercise. Open echolalia is the repetition of fragments of heard speech regardless of the context of the situation.

Children with AS have a problem with observing the rule of alternation in communication (the rhythm of communication). Behaviour contrary to the principle of alternation, i.e. the inability to conduct a dialogue or discussion, often ends with their exclusion from the peer group, the admonition from the teacher or comments of other adults about the lack of proper "upbringing".

Conversation (dialogue) requires the knowledge of certain conventions associated with, for example, initiating or continuing conversation, and "[…] asking questions relevant in a given context"[21], and this is an area of significant deficits in the case of people with Asperger syndrome. Children find it difficult to make statements that are relevant to the recipient, the situation, the place, the purpose of the communication, and therefore in the area of communication skills, resulting from schematic language, impaired empathy, one-sided type of social interaction characteristic for AS.

Non-verbal communication of people with this diagnosis is characterized by supra-segmental disorders, concerning the melody, the accent of the rhythm of expression. Patients use abnormal intonation, their voice can be squeaky, unnatural[22]. They also show difficulties in expressing and receiving communication based on a non-language code. They have difficulty in making eye contact, which is an important part of conversation, a signal that says, e. g. that we want to initiate conversation, a sign of interest in the interlocutor and the topic of conversation. They exhibit difficulties in expressing and receiving gestures and facial expressions, therefore they may not register non-language manifestations, such as impatience, weariness or nervousness.

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[21] T. Attwood, *Zespół Aspergera*, Wyd. Zysk i S-ka, Poznań 2006, p. 61.

[22] D. Graaisma, *Rozstrojone umysły. Dzieje chorób i historie chorób*. PIW, Warsaw 2009.

The aforementioned deficiencies, especially the lack of communication skills, failure to observe the communication rhythm, schematic language, difficulties with understanding jokes, persistency in certain topics make it difficult to fulfil the role of a school colleague. A "strange" voice, the use of too sophisticated, adult language, incomprehensible for other children, can be the cause of ridicule, teasing on the part of the other students. Research confirms the correlation between communication skills and peer acceptance[23]. Also, the study conducted by the author of this article on the school situation of children with communication difficulties – Polish children affected by stuttering – showed that most of the respondents experience harassment from their peers due to communication difficulties[24].

Literal language reception, difficulty in understanding metaphors, narrative abnormalities manifested by problems with understanding causal, temporal, spatial dependencies or inflectional mistakes and failure to observe the rhythm of communication in the classroom may make it difficult to succeed as a learner. It sometimes happens that a child with Asperger syndrome unintentionally violates the school rules that prohibit the use of words that are considered vulgar, "ugly", inappropriate. The reason for breaking the rules in this regard is the failure of the student to take into account the cultural aspect of using certain words[25]. School rules may also be violated intentionally, by using "these" words for manipulation purposes to control and influence adult responses. Therefore, know-

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[23] P.A. Hadley, Rice M., *Conversational responsiveness of speech and language impaired pre-schoolers*. "Journal of Speech and Hearing Research" 1991, no 34, pp. 1308–1317; T.M. Gallagher, *Language skill and the development of social competence in school-age children*. "Language, Speech and Hearing Services in the Schools 1993, no 24, pp. 199–205.

[24] K. Węsierska, E. Gacka, M. Langevin, M. Węsierska, *Sytuacja szkolna dzieci jąkających się w Polsce – wstępne wyniki badań i strategie pomocy,* [in:] ed. K. Węsierska, *Zaburzenia płynności mowy. Teoria i praktyka*. Vol. 1, Wyd. Komlogo, Katowice 2015, pp. 221–235.

[25] M. Korendo, *Językowa interpretacja świata w wypowiedziach osób z zespołem Aspergera*, Omega Stage Systems, Kraków 2013.

ing and understanding the specific behaviour of children with AS helps parents and teachers in appropriate treatment and sets the desired direction of therapeutic effects.

Helping a child with AS

A child with Asperger syndrome needs treatment that takes into account abnormalities in the linguistic, social and emotional areas. All these areas are relevant and related. When organizing help, it is important to emphasize the importance of speech therapy focusing on language and communication deficits, as we develop social and emotional attitudes through language. Language allows us to get to know the reality, it is "[…] a path leading to human emotions and desires, and also the determinant […] of the possibility of human existence in the social group"[26].

Support measures for children with Asperger syndrome should include:

– early diagnosis and early care (psychiatric, psychological, speech therapy, pedagogical),
– providing assistance to both the child and the family; parents need professional knowledge, as well as psychological support, due to the emerging complaints about lack of educational competency (the environment explains the behaviour of children with AS in terms of "bad upbringing"),
– information about the disorder among teachers (in kindergartens, primary schools, lower-secondary schools, secondary schools),
– preventing isolation, social exclusion of children with AS, preventing all forms of bullying, ridiculing, harassment (prevention of bullying), education of the entire school community in terms of anti-bullying activities,
– promoting openness, tolerance and acceptance for others.

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[26] S. Grabias, *O ostrość refleksji naukowej. Przedmiot logopedii i procedury logopedycznego postępowania*, [in:] *Logopedia. Wybrane aspekty historii, teorii i praktyki*, ed. S. Milewski, K. Kaczorowska-Bray, Harmonia Universalis, Gdańsk 2012, p. 61.

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