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Methods of communication with individuals with autism spectrum disorders

Metody komunikacji z osobami ze spektrum autyzmu

Abstrakt:

W niniejszym artykule podjęta została próba scharakteryzowania metod komunikowania się z osobami z autyzmem. Przeanalizowane zostały typowe dla owego zaburzenia nieprawidłowości w obszarze komunikacyjnym w kontekście deficytu teorii umysłu. Zarysowany został uogólniony profil pozakonwencjonalnych stylów porozumiewania się osób z autyzmem, którym zwykle nie przypisuje się intencji komunikacyjnej. Poza wskazówkami dotyczącymi dekodowania zachowań komunikacyjnych, przedstawione zostały także alternatywne i wspomagające sposoby komunikowania się z osobami z autyzmem.

Słowa kluczowe: zaburzenia ze spektrum autyzmu, teoria umysłu, zaburzenia komunikacji, kompetencja komunikacyjna, kompetencja językowa, AAC.

Abstract:

The presented paper is an attempt to characterize the methods of communication with autistic individuals. The abnormalities in the area of communication typical of this disorder have been analysed in the context of the theory of mind deficit. The generalized profile of non-conventional communication styles used by people with autism, to which usually no communicative intentions are attributed, have been described. In addition to the guidelines for decoding the communication behaviors, alternative and augmentative ways to communicate with autistic subjects have been described.

Key words: autism spectrum disorders, theory of mind, communication disturbances, communicative and linguistic competence, AAC.

1. Autism as an interpersonal communication disorder

A seemingly simple question what autism is evokes a range of complex and ambiguous answers. Over seventy years of exploration and research failed to provide a uniform theory determining the essence of that disorder. Is autism to be understood as social, behavioral, developmental, cognitive difficulties, abnormalities determined by learning deficits, or as an eclectic amalgam of all of these problems? (Goldstein, Ozonoff, 2017). The uncertainty of definition results primarily from extremely high heterogeneity of the functioning patterns and the etiological mechanism, undetermined to date, which may be

different for individual cases. According to the reflection by Steve Silberman (2017, p. 22), "If you have met one person with autism, you know one case of autism".

The contemporary definitional consensus is determined by the nosological criteria of the existing diagnostic systems. The latest revisions of the international ICD-11¹ and DSM-5 classifications (APA, 2013) for the axial symptoms of autism recognize a dyad in the form of: (1) disturbed ability to establish and maintain reciprocal interactions and social communication, and (2) a limited, schematic repertoire of behaviors and interests. The clinical picture of autism fluctuates between the lack of speech and exaggerated talkativity; between almost complete social isolation and establishing relationships in an inappropriate way; strict adherence to stereotypical movements and repetitive behaviors and pursuing odd, unusual interests (Volkmar, Klin, 2005).

It is emphasized at present that the difficulties in communication can constitute the key area for understanding autism (Tager-Flusberg, Paul, Lord, 2005). Jacek Błeszyński (2015) suggests that the communication disorders are primary to social and functional irregularities, considering them as an element determining, triggering or enhancing the occurrence of autistic disorders. The history of exploration of the essence of autism indicates divergent interpretations of the meaning of irregularities in the sphere of communication competences in relation to other symptoms. Leo Kanner (1943) recognized the difficulties in communication as secondary to socioemotional deficits, whereas Michael Rutter (1970) considered them to be the direct cause of the autistic behavioral patterns. Can autism, therefore, be understood as a manifestation of the consequences of specific interpersonal communication irregularities? Certainly putting forward the thesis of this kind would be a disastrous overinterpretation. However, there is no doubt that the abnormal pattern of interpersonal communication is the axial symptom of autism, and at the same time a key element of the pathogenetic mechanism of this disorder. Communication is, in fact, a component of the construction of both the cognitive system and the social skills (Błeszyński, 2015).

The nature of the dysfunction of social communication can be explained by the theory of mind deficit (Frith, 1996). Simon Baron-Cohen (1997) introduced the term "mental blindness" to illustrate the irregularities of the cognitive sphere specific to autism, manifested through the difficulty in assigning to oneself and to others various mental states on the basis of clues in the form of the observed behavior and received messages. The merit of the correctly shaped theory of mind is the fact that we find ourselves and the people around us to be thinking beings - individuals with a specific capability of perception of the world, feeling and reasoning (Mitchell, 1997). Thus, "mental blindness" is the inability to decrypt a unique microcosm of the human person. Therefore, people with autism do not

¹ <https://icd.who.int/browse11/1-m/en#/http://id.who.int/icd/entity/437815624>
The 11th revision of ICD will be officially applicable starting from 1 January, 2022.

develop through their own interpersonal experiences a specific “handbook of psychology in practice”, which would enable them to understand thoughts and emotions, as well as to predict behaviors and messages issued by the social environment. People with autism cannot outline the map that would specify the inter-and intrapersonal territory in which they function, which deprives them of a specific communication key.

2. Communication disturbances in autism

John Stewart (2002, p. 28) concludes that “humanity is born in communication”, thus regarding the process of communicating as the essence of who we are. Extensive communication disorders deform the way of existence of autistic individuals in the interactive space, placing them on the track almost parallel to the universal one – running next to it, but apparently devoid of any points in common. It may seem that people with autism lack motivation to communicate (Pisula, 2018; Winczura, 2015) – build the walls where it is possible to build bridges. However, nothing is further from the truth. It turns out that autistic individuals experience difficulties above all at the level of understanding of the meaning and purpose of communication, as well as the rules applicable in it. In self-defense, a person diagnosed with autism provides a very interesting comment, illustrating the communication-related situation of autistic people: “Yes, making contact with us requires more work than making contact with a non-autist, however, it is possible – although non-autistic people are much less skillful in this. We spend our whole life, searching for mutual understanding. Each of us, if we have already learnt to speak to you, everyone who is able to function in your society at all, (...) moves in a foreign territory, maintains contact with alien beings. We spend all our life on this. And you say we cannot make contact” (De Clercq, 2007, s. 220).

Communication disorders in autism should be considered in a very broad context of understanding of the concept of “communication”. Abnormalities in the perception and expression of speech, gestures, facial expressions, etc. are in a sense the culmination of complex competences contributing to the effectiveness of the act of communication. The process of communicating should be understood as a reciprocal exchange of information; besides, from the perspective of autism, the mechanisms constructing the space for transmitting and receiving information appear to be of key importance. Therefore, the primary deficits of interpersonal communication in autism include (1) creation of a common area of attention with the communication partner and, in particular, coordination of concentration between the subject and the interlocutor and (2) the ability to use symbols (e.g. words, gestures) by identifying the importance of conventional meaning, or a meaning built together with the interlocutor (Wetherby, 2006). By the lack of sharing attention, emotional resonances and recognition of intentions, i.e., a kind of “mental blindness”, people

with autism will not experience intersubjectivity, which is the essence of communication. Hence, the aim of communication of the subjects with autism is in particular to forward the message concerning their needs, desires and preferences, and thus to obtain the desired change of the situation (Kaczmarek, 2015). Direct targeting of the interpersonal contact to achieving the goal can lead to communication, which is in a way superficial, based on instrumental treatment of the interlocutor, which can be interpreted as abrupt and abusive behavior (Wojciechowska, 2015).

Understanding of their own intentions and those of the interaction partner, disturbed in the course of autism, as well as the ability to interpret the communicated message are deemed to be the prerequisites to establish a non-verbal contact (Czaplewska, 2012). Hence, significant limitations in communicating by means of facial expressions and gestures have been noted (Chiang, Soong, Lin, Rogers, 2008). Katja Schordinger, a person with autism spectrum disorder, describes the struggle in the area of non-verbal senses, and meanings in the following way: "A neurotypical person (NT) looks at someone's face and sees joy, sadness, reproach. We see puffed up cheeks, frowning eyebrows, asymmetrical wrinkles, short lashes" (Szwajda, 2014, s. 93). At the same time, it should be noted that intense experiences can cause motor agitation stereotypical in character, to which a communicative intention is attributed. (Markiewicz, 2004). It is also thought that the varied difficult behaviors should also be seen in terms of communication, pre-intentional, or semi-intentional, as they are, in fact, intended to force changes in the activity of another person (Schuler, Prizant, 1999).

For a full understanding of the particular communication-related situation of individuals with autism it is necessary to make a distinction between the communicative and linguistic competence. Talking is not always synonymous with communication. The linguistic competence determines the ability to understand and construct sentences in accordance with the rules of the language (Młynarska, 2008), whereas the communication competence should be understood as the ability to use the language-based and non-verbal system during social interactions (Markiewicz, 2004). Communication is essentially the exchange of information, regardless of the form used for this purpose: linguistic or non-linguistic. The use of the language is not synonymous with communication – it is possible, therefore, to communicate without talking and to talk without communicating.

It is estimated that from one-third to half of the children and adults with the diagnosis of autism does not use speech in a functional manner (Wetherby, 2006), which, however, is not synonymous with a lack of linguistic competence – in three-quarters of cases echolalic speech has been noted (Frith, 2008). There are known cases, in which the subjects who did not speak before, under the influence of an adequately motivating impulse begin to demonstrate suddenly a surprisingly high level of linguistic competence (Frith, 2008), as well as the opposite situations, where the change takes place in the reverse direction. So-called

autistic mutism of emotional or cognitive etiology has been indicated (Kaczmarek, 2010). Paradoxically, in the case of people with autism the ability of articulating single words or sentences, and even the formulation of statements is not the same as implementing that skill, and speech is not always used for communication purposes, which can be exemplified by the phenomenon of echolalia.

Studies indicate that a range of sentence structures and grammatical morphology in subjects with autism is not reduced. However, regardless of the level of phonological, syntactic and semantic capacity, characteristic abnormalities associated with pragmatic ability, which enables to use language to communicate effectively, can be observed (Frith, 2008). When we address an autistic person with the question: "Do you have a watch?", we will most likely obtain an affirmative or negative answer. However, the aim of the message was not to obtain information about the interlocutor's possessions, but about the current time. A person with autism, due to a deficit of mind, was not able to read the intentions of the interlocutor. Thus, the language skills turned out to be an inadequate tool in the process of effective communication.

From the perspective of the pragmatic aspect of the language, the key ability is to separate the appearances from the reality – presentation of the message "in quotation marks" (Frith, 2008). A word can be deliberately exempt from faithful representation of reality, becoming a lie, a joke, an idiom, or a metaphor. Autistic subjects interpret the language very literally and the concept of covering the original meaning of the word with an additional semantic layer is strange to them. Focusing on the meaning of the words, they fail to grasp the intentions of the speaker.

A very intriguing feature of the language of people with autism is echolalia, understood as repeating (immediate or delayed) of the heard words or sentences (Pisula, 2018). Apparently, echolalia seems to be a nonsensical behavior from the point of view of communication, but a thorough knowledge and understanding of the individual way of functioning of autistic individuals allows to discover the extraordinary effort on the way to communication (Kaczmarek, 2010). Echolalia, however, does not always play a communicative role. Words or phrases may be repeated only because of the attractiveness of their sound, becoming a way of auditory autostimulation (Atwood, 1998).

Characteristic of the speech of autistic people is also incorrect use of pronouns – primarily substitution of the words "I" and "you" and talking about oneself in the third-person form (Frith, 2008). Difficulties in this area are related to the deictic function of pronouns, the use of which is relative. The importance of the designates is assigned in a relative way, which confuses autistic individuals, looking for a regular code to organize reality.

Irregularities in terms of prosody have also been observed. Very characteristic of autism is unusual tonality, volume, speed, and timbre of the voice (Yates, Le Couteur, 2009).

3. Methods of communication with autistic individuals

When considering the irregularities in the area of interpersonal communication of people with autism presented in the previous section, one might get the impression that they should be interpreted rather in terms of a different pattern of functioning than of a disorders. It seems that people with autism have not been provided with a specific communication key, which opens up a world of sociocultural contexts and meanings. Subjects with autism are looking for opportunities to communicate in their own way, however, their struggle to be understood remains all too often unnoticed because of the incompatibility with the commonly accepted convention of interpersonal interactions.

The adoption of such optics allows you to assume the role of a detective, who, by observing carefully the behavior of people with autism, builds a kind of a communication map, identifying the individual strategies for communicating information. Something incomprehensible and nonsensical for the social environment can have a huge communication value and the desire to communicate with another human being. It is crucial to realize that the universality and conventionality of the ways to communicate available to us is not the same as with versatility – in fact, people with autism seek communication which is compatible with their own perception of the world.

Before the discussion of alternative and augmentative communication (AAC), the distinctive range of communication strategies used by people with autism is worth taking a closer look. It should be understood that, in addition to the conventional means of communicating information, there is also a multitude of specific forms of producing messages that remain unnoticed or misinterpreted by the communication partner. As a result of cognitive dysfunction, people with autism are unable to assimilate fully the rules of dialogue, and therefore, based on fragmentary or erroneous knowledge of social interactions, they construct somewhat distorted messages.

Barry M. Prizant, and Tom Fields-Meyer (2017) conclude that echolalia is in most cases a unique way to communicate. It can replace the answer “yes”, or “I don’t know” in a situation of confusion (Jordan, Powell, 1995). It can be interpreted, among others, as a request, declaration, naming, protest, calling and affirmation (Prizant, Dukhan, 1981). Repetition of a word or phrase may also be the only available means of starting dialogue (Prizant, Wetherby, 1985).

The three-year-old Aidan used to start a conversation with the people he met with an unusual question: “Are you a good or a bad witch?”. It turned out that the phrase, apparently nonsensical from the point of view of communication, comes from the boy’s favorite movie “The wizard of Oz”. These are exactly the words with which Glinda, the Good Witch of the North, welcomed Dorothy who had just come to Oz (Prizant, Meyer,

2017). So, the phantasmagorical echolalia proved to be a conscious and deliberate act of communication. Aidan decrypted the sociocommunicative situation, which is greeting, in way specific to him, without noticing, however, the generally adopted convention. This example allows to realize how detailed information about the functioning of a person with autism is necessary to decode his/her attempts to communicate.

On addition, the pre-intentional or semi-intentional forms of communicating used by people with autism in the form of behaviors referred to as difficult should not be forgotten (Schuler, Prizant, 1999). Tantrums, autoaggression, screaming and crying may be a message intended to end a situation unpleasant for the person, to gain, or get rid of, physical contact with, or attention of the communication partner, as well as to initiate the interaction. The intention to communicate has also been attributed to motor agitation stereotypical in character (i.a. swaying, jumping, hitting one's body with the hands, clapping hands), which is the expression of strong emotions such as fear and joy (Markiewicz, 2004).

Working out of the individual communication code of an autistic person, obviously considerably richer and more varied than the aforementioned strategies, does not provide a sufficient basis for effective communication. Forms so far from the conventional methods of transmitting information are usually associated with the lack of developed, or underdeveloped language communication, the level of which is insufficient for this task. In such a situation, a specific prosthesis of the speech and language in the form of augmentative and alternative communication (AAC) methods has been proposed (Cichocka-Segiet, 2017).

Alternative and augmentative communication uses non-verbal communication methods as a supplement, or a substitute, of functionally insufficient speech (Tetzchner, Martinsen, 2002). A rich repertoire of AAC strategies and tools includes both signals coming from the body, and the system of graphic and manual signs. Primarily due to the predominance of visual spatial cognition in autistic subjects, it is recommended to use methods based on graphic symbols – thus, the image becomes a communication tool. The optimal solution, however, is to construct an individual system of multimodal communication, consisting of graphic signs and supporting hand gestures, electronic communication devices, as well as their own forms of communication (speech, vocalization, facial expressions, etc.) (Kaczmarek, 2010).

It should be understood that as far as AAC constitute a prosthesis of language competence, they are not able to replace the communication competence. Therefore, before the construction of the individual dictionary of graphic symbols or manual signs can be started, other key skills must be developed, which is a prerequisite of the process of communication. Among them, there are first of all raising the motivation to make and maintain contact, and so raising the autistic person's awareness of the sense of

communicating, building the common area of attention, intentionality in passing a message and alternation of the relationship needed in dialogue.

Aids for communication include an individualized package of graphic symbols² and take a variety of forms depending on the needs and capabilities of their users. The standard possibility is a so-called communication book in the form of a ring binder filled with graphic signs divided into appropriate categories. Also single signs and choice boards, as well as more and more frequently simple instant messengers and advanced software with a built-in speech synthesizer are used (Cichocka-Segiet, 2017).

The methods of use of the AAC graphic symbols and their level of complexity are primarily dependent on the user's level of functioning in the cognitive area. The simplest form is the asking procedure – a person with autism associates the symbol with the designate and can ask for an item by indicating, or providing the appropriate symbol. The level of advancement is determined by the range of a picture dictionary at the person's disposal and its variation due to the parts of speech. The target phase is to select the symbols and arrange them on the sentence bar to form functional grammar structures such as the answer to a question or a spontaneous comment (Kawa, 2015).

Advanced technologies also use graphic symbols as communication aids, extending, however, the possibility of their use during interactions by generating speech (speech generating devices SGD or voice output communication aid VOCA) (Baxter, Enderby, Evans, Judge, 2012). Technological aids are extremely varied in the nature and scope of the messages corresponding to the individual needs of people with autism. They may be simple devices with one button, which corresponds to one voice message (e.g. "Hello. My name is ...") or complex applications installed on computers, tablets and smartphones with unlimited resources of messages (Kaczmarek, 2015). The essence of the messenger is a kind of transposition of the channel of communication – a person with autism builds a message by selecting the appropriate graphic symbols, which are read in the form of language to the interaction partner, thus increasing its effectiveness and social accessibility.

Conclusion

In the general discourse, individuals with autism are considered to lack the motivation to communicate. However, this paper indicates that this kind of reasoning turns out to be completely wrong. People with autism do not understand the commonly accepted rules and principles of communication and the essential purpose of this kind of interaction. However, by observing carefully the individual pattern of verbal and non-verbal behaviors, we can notice a unique system of communication strategies, although incompatible to the

² The systems of graphic signs most frequently used in Poland include: Picture Communication System PCS, MÓWik, Widgit and others.

commonly adopted system. Alternative and augmentative methods of communication provide a kind of prosthesis for speech and language deficits. AAC helps to build a kind of bridge for dialogue between the microcosms of two human beings - a person with autism and a neurotypical subject outside the disorder spectrum.

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