

CLINICAL PSYCHOLOGY

Growing Up with ASD (Autism Spectrum Disorder): Directions and Methods of Psychological Intervention

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Background. Autism spectrum disorder (ASD) is a lifelong pervasive developmental disorder affecting subjects' emotions, will, and cognition, and inhibiting their social adaptation.

Objective. To define directions and methods for psychological assistance to autistic people that would let them achieve higher self-actualization and independence, and avoid social maladaptation.

Design. The following methods were used: analysis of the life histories and catamneses of autistic individuals; participant observation of their behavior; analysis of materials (text summaries) of psychological consulting with families who have autistic members; analysis of materials from remedial sessions with people with autism and developmental disorders.

Research participants were autistic individuals age 12 years or more at the beginning and up to 38–40 years at the end.

Results. The long-term manifestations of autistic development in emotions, will, and cognition are described. These manifestations affect subjects' adaptation and independence negatively, even in cases of remarkable progress.

Two important aspects of psychological assistance are: a) mastering of skills; and b) improving comprehension of social relationships, one's own psychological world, and other people's minds. The author proposes some methods of psychological remedial work and insists that rules for social interaction should not be learned mechanically.

Conclusion. The general principles of psychological assistance to autistic individuals are: (a) encouraging their long-term activity jointly with others; (b) providing a well-organized and thoughtful social environment where the activity takes place. Autistic persons often need special assistance to become successfully engaged in a more active and more complex social environment. The present work may be useful for professionals working with people with special needs.

Keywords:

ASD (autism spectrum disorder); qualitative longitudinal search; social maladaptation; social environment; psychological remediation

Introduction

The number of children with autism spectrum disorder (ASD) has increased significantly in the last two decades in many countries. Epidemiological studies indicated 4–5 cases of autism per 10,000 children in the 1970s (Wing, 1976, 1978); in the 1990s this number had increased to 20 cases (Peeters, 1999), and in the 2000s up to 72 and even 110 cases (Bogdashina, 2016; Fonbonne, 2009; Newschaffer, 2007). Despite the wide clinical diversity of autistic development (Nikolskaya, 2015b), in most cases this kind of dysontogenesis seriously impacts cognitive and social-emotional development; most autistic children will still need some special psychological help and support in their socialization as adults (Bolte, 2011; Howlin, P., Goode, S., Hutton, J., & Rutter, M., 2004; Morozov, 2015).

In Russian and foreign literature, autism is viewed as a biologically determined type of pervasive disorder of mental development — one affecting all mental functions (Appel, 2006; Frith, 1989; Nikolskaya, 2014). Russian authors define it specifically as distorted psychological development (Lebedinsky, 2003; Lebedinskaya & Nikolskaya, 1991; Nikolskaya, 2014, 2016). This distortion is caused by disturbed emotional development, which determines the nature of the cognitive problems and deficits in social development. These cognitive and social deficits are significantly different from the difficulties of people with other developmental problems. For example, cognitive development of children and adults with ASD is characterized by a fragmented and uneven picture of the world, paradoxical relationships of simple and complex tasks, achievements and difficulties, as well as deficits in adaptive cognitive functioning.

Despite the heterogeneity of autistic people and differing severity of their socialization difficulties, support for all of them aims to provide opportunities for both children and adults with autistic disorder to live as independently, meaningfully, and actively as possible. To achieve this goal, “it is necessary to create various forms of integrated support for people with severe developmental disorders from birth to the end of life” (Korobeynikov, 2015); a system of psychological and pedagogical support of people with ASD should be specific to their developmental needs and should help them with social adaptation.

First of all, it is necessary to train specialists who are able to build rapport with these people, determine a hierarchy of intervention targets, and use appropriate techniques. It is also necessary to create and maintain an appropriate environment: psychological support in educational institutions, and a system of supported employment and living, communities that unite families of people with disabilities.

In the absence of specialized psychological care, a high risk of difficulties in socialization and social disadaptation is noted in various developmental disorders. Kislyakov (2017) examines risk factors related to antisocial behavior in adolescents with intellectual disabilities, such characteristics of the social-emotional domain as moral and social immaturity, low capacity to feel empathy and compassion, trustfulness and naiveté, which result in suggestibility and dependence in social interaction. Some of these traits may be observed as well in adolescents and young adults with ASD.

Objective and Methods

Our goal was to identify and substantiate the optimal directions of psychological support, as well as special techniques for helping adolescents and adults with ASD that may help them improve the quality of their lives, achieve the highest possible level of self-realization and independence in society, and reduce the risk of social disadaptation.

The work is based on the methodology of qualitative longitudinal research, which is used often in clinical and special-needs psychology. The research is not aimed at making statistically accurate generalizations; the conclusions here are inductive, based on analysis of long-term observations and of the patients' life histories. We used qualitative methods that allow us to explore the persons with ASD in the context of their everyday lives, in their natural interactions. For this, we used the following research methods:

1. Analysis of *anamnesis vitae* (history of life) and catamneses of autistic children, adolescents, and adults. Particular attention was paid to the following parameters: type of schooling (frontal teaching in a classroom along with other children or individualized education); inclusion in any scheduled group activity after graduating from school (for those who have formally reached the age of adulthood); and the quantity and nature of psychological and pedagogical assistance required for an autistic person and his or her family during different periods of life.

2. Analysis of the text summaries of psychological consultations of families which include an autistic person. Special attention was paid to the parameters mentioned above.

3. The main method was participant observation of the autistic children, adolescents, and adults in a wide range of social interactions. Observation was conducted during special remedial classes as well as the rest of the person's activities. First of all, attention was paid to the following aspects:

- endurance in social contacts — how a subject can initiate and maintain social interaction when in emotionally comfortable situations;
- activity and interest of adolescents and young adults with ASD in social interaction;
- stereotyped (or flexible) and reciprocal in communicative behavior, in particular following conversational cues; level of attention to feedback from dialogue partners and concerning their interest in (or indifference to) a topic of conversation;
- paying attention to information that is known (or unknown) to dialog partners;
- reaction to jokes; ability to understand humor;
- degree to which persons with ASD can talk consistently about their own life events, in particular to unfold a coherent and consistent story, to use words of emotional assessment (not just to report the sequence of events);
- ability to state one's own opinions, make one's own choices;
- following the common rules of courtesy, using expressions of courtesy, appropriate to the situation;
- ability to accept ambiguity and the complicated nature of human relationships, emotional interactions, and the human psychological world.

4. Analysis of materials from individual and group remedial classes for adolescents, youth, and adults with ASD and some other types of developmental disorders (psychological underdevelopment or intellectual disability, deficit in psychological development).

Participants

Participants were 60 adolescents and adults with autism spectrum disorder, who were observed and received professional care (some of them since preschool age) at the Institute of Special Education of the Russian Academy of Education and other organizations. At the beginning of the study, the participants were 12 years old and up; towards the end of the study they were as old as 38–40.

The age distribution of participants and duration of observation are presented in *Table 1* and *Table 2*.

Table 1
Age of Participants

Age when observation began, years	Number of participants
12–14	16
14–17	13
17–20	14
20–25	12
25+	5

Table 2
Duration of Observation

Duration of observation, years	Number of participants
Fewer than 3	20
3–7	14
7–10	8
10+	18

Participants had a clinical diagnosis of F84 (general psychological development disorders), according to the classification of ICD-10: F84.0 — Children’s autism; F84.1 — Atypical autism; F84.5 — Asperger syndrome.

Results

We analyzed the manifestations of autistic dysontogenesis in the social, emotional, and cognitive domains, which are persistent and significantly affect individuals’ adaptive functioning at different ages (Kostin, 2018). To some extent, as shown in

this longitudinal study, the following difficulties may be observed in most cases of ASD, despite otherwise positive dynamics. Many of our results are also to be found in the literature.

1. *Initiating and Maintaining Social Relations*

- Being easily overwhelmed during social interaction, difficulties in maintaining social interaction;
- Lack of initiative, low activity in interaction;
- Repetitiveness and a monologue-like manner of interaction: People with autism interact with others based primarily on their own interests, often repetitively and in a restricted manner; they have difficulties in understanding feedback from the interlocutor (such as whether the partner is interested in the topic of conversation), as well as the other person's emotional state;
- Naiveté in social relationships: It is difficult for an autistic person to understand the “unwritten laws” of interaction and the context of the social situation, to maintain an appropriate psychological distance. While children with autism tend to increase their distance in interaction, teenagers and adults with ASD frequently reduce the distance inappropriately. The combination of reduced distance and frequently inappropriate emotional openness makes people with autism appear socially ingenuous and immature.

2. *Communication: the Means of Interaction with Other People*

- For many people with ASD, full-phrase speech, and especially verbalization of personal experiences or feelings, remains challenging to various extents;
- Even well-developed, elaborated speech of an autistic person has many peculiarities in intonation, grammar, and choice of words; facial expressions, gestures, and gross motor skills also seem strange when interacting with another person.

3. *Cognitive Sphere*

- In a number of cases, so-called “islets of abilities” are observed in people with an autism spectrum disorder (Frith, 1989) — isolated exceptional abilities, in striking contrast to the person's general level of cognitive functioning. In our long-term observations we encountered such islets as absolute literacy, ability to identify the day of any date (“eternal calendar”), ability to draw the outline of animals very expressively. These exceptional abilities (including constructive, musical, and mechanical memory) are generally interpreted by researchers as a symptom of developmental disability rather than as a strength of the cognitive domain (Frith, 1989; Heaton, 2004; Howlin, 2009; Miller, 1999; Mottron, 2008);
- A person with ASD displays deficiency in the active processing of information and applying the acquired knowledge and skills to solve practical tasks. This cognitive difficulty most negatively impacts the adaptive functioning of the individual in society — for example, inhibiting the generalization of skills and knowledge learned at one setting to any other settings — and this deficit has been described in the literature (Nikolskaya, 2014, 2016). The

accumulated knowledge related to restricted special interests or “islets of abilities” may not help a person with ASD to be better adapted to social life, and to self-realize professionally. Much effort is generally needed to help them to use their knowledge and skills in an adaptive way.

- A fragmented picture of the world is typical for people with ASD. The knowledge available to them is often isolated from other areas of knowledge and from personal experience. In order to integrate new experience and knowledge with the existing picture of the world, special psychological and pedagogical support is needed;
- Difficulties in understanding humor and metaphors are common for people with ASD. Their own attempts to joke (usually infrequent) may be seen as not age-appropriate, as primitive, etc.

Our observations show that ASD and intellectual disability are combined in some cases. Prevalence of lower IQ scores in ASD is noted in the literature (Peeters, 1999). At the same time, an ambiguous and complex relationship between autism and intellectual disabilities has been noted: Intellectual difficulties cannot be assessed only on the basis of the WISC or WAIS or any other common psychometric tool (Howlin, 2002; Kostin, 2010; Morozov, 2016).

4. *Social-Emotional Domain*

- Most people with ASD are characterized by low stress tolerance and a lack of self-control and self-regulation of their emotions. Any surprise, an abrupt change in the environment or in their own agenda is not easy for them and may become stressful. Emotional “meltdowns” can be triggered not only by a low anxiety threshold, but also by a negative attitude towards others’ demands upon them. Therefore, the behavior of a teenager or adult with autism in a public place can appear as extremely ill-mannered, like a “spoiled” preschooler.
- The difficulties in decentralization and understanding of another person’s perspective, thoughts, and feelings (*e.g.*, information that may be known to the other person, accurate interpretation of their intentions) may remain characteristic of many people with ASD. These difficulties relate deficits in the Theory of Mind (ToM) in autistic disorder, described by Baron-Cohen (2000), Frith (1989), and Appé (2006). Frith (2004) writes about a deficit in “mentalizing”, which means an inability to infer information about the emotional states of other people. The consequences of this impairment are huge for both emotional and social life: “... if the deficit in mentalizing makes it difficult to predict and understand the behavior of other people, then the social world cannot be a source of pleasure, as it could be in the case of neurotypical people”.
- Many people with autism, including adults, have difficulties in flexible, long-term planning, and in adjusting their lives to constant changes in circumstances, in their own values and interests; they generally need an assistant to help them in life organization, constantly prompting the autistic person to initiate the necessary actions. Most frequently, the role of an external organizer is performed by close relatives of the person with ASD,

who is accustomed to the idea that they are responsible for him and take care of him in his daily routine, while he may “complain” and “report” to them. It becomes customary for a person with autism that decisions about his life are made by other family members (which is good, if at least with his participation). Unfortunately, most people with ASD, without special help, rarely become able to feel responsible for people close to them, which is important for an adult role. At the level of self-awareness, it can be assumed that these traits are related to underdevelopment of the internalized adult role. We even observed an active refusal, a conscious protest of a young man with autism against the adult social role expected of him.

- The inner world of many people with autism generally remains poorly differentiated, poorly understood, and difficult to verbalize. They do not usually have an elaborated “psychological” vocabulary: Words labeling an emotional state or feeling, personal traits, or mood may be unfamiliar or remain in a passive vocabulary, rarely used in spontaneous expressive speech.

Discussion

The severe, persistent, and specific consequences of autistic dysontogenesis in adolescents and adults indicate the importance of creating and applying special psychological techniques to assist an adult with ASD (Kostin, 2018). Moreover, as Nikolskaya (2015c) notes, psychological assistance remains absolutely crucial for a family raising a person with ASD: Parents and other family members often face an emotional crisis when their autistic child becomes a teenager and then an adult.

We suppose that young adults with ASD need to get long-term psychological assistance even more than other mentally handicapped people, because their social skills deficit, lack of flexible adaptation to difficulties in social situations, and naiveté in the understanding of social situations make persons with ASD much more vulnerable in many social interactions than persons with intellectual deficits and some mental illnesses.

The need to continue psychological assistance to young adults with ASD is implied by the significantly increased complexity of the social environment and expectations of appropriate behavior in adolescents and young adults with autism. Appropriate behavior includes such adaptive skills as neatness in clothes and appearance, ability to initiate social interaction and to stop it in a timely manner, ability to consider the situational clues of an interlocutor’s behavior, and to initiate (or maintain) interaction based on different social roles in everyday life. Moreover, emotional self-regulation and an ability to cope with frustration or anger in a socially acceptable way become increasingly important; meltdowns and tantrums are perceived as absolutely unacceptable behavior.

We worked on two areas of psychological intervention that appear very important for individuals with autistic spectrum disorder. These areas complement each; one cannot take the other’s place, and the combination of the two is necessary for a person with ASD to master an adaptive skill and apply acquired skills as appropriately and flexibly as possible. Specific techniques must be developed, taking into account both the common difficulties of people with autistic disorder, and the

individual characteristics of the person with autism, the zones of his or her actual and proximal development.

The first of these intervention areas concerns home living, self-care, and social/ communicative skills, including appropriate behaviors in different situations of social interaction. It is important that specialists work in close contact with the family, define their responsibilities, and consider the wishes and needs of family members. Moreover, due to the difficulties in practical use of the acquired skills and difficulties in generalization of skills, the social skills training of a person with ASD cannot be effective without close cooperation between specialists and family members.

When teaching new skills of generally accepted behavior in various social interactions, it is important to avoid mechanistic and rigid memorization of certain forms of behavior. It might be helpful to form appropriate (that is, socially significant and approved) habits and to develop social roles. Young people with autism should not only be trained to keep an eye on their appearance, but also to get into the habit of looking in the mirror, keeping their clothes tidy, combing their hair, etc., upon arrival in a new place. This relates as well to communication skills: getting into the habit of addressing people by name, apologizing, taking turns in conversations, introducing oneself when meeting a new person, etc.

To help a person with ASD to learn a social role (for example, as a passenger on public transport, a customer in a store, a pedestrian on a crowded street), it is necessary to explain the meaning of social norms accepted in certain social situations and to help the person feel glad about fitting into stereotyped social roles. For example, “We talk on the bus in a low voice”, because we do not want to interfere with other passengers; “We apologize to a stranger on the street whom we accidentally pushed”. While helping a person with ASD to master various social roles, a specialist can also work on concepts that are difficult for people with ASD such as boundaries and psychological distance in interaction, tactfulness, and assertion of rights.

To facilitate the comprehension and mastering of various social roles by people with autism, we have proposed a model of social relations in the form of concentric circles: An individual is in the center of the picture, and all those with whom he is connected and with whom he interacts are situated around him:

- family members;
- friends and acquaintances;
- classmates and colleagues;
- people providing services (*e.g.*, salesmen or bus drivers);
- neighbors in an apartment building;
- finally, just strangers — the most numerous group for any individual.

This concrete and simple visual model takes into account the specific perceptions of people with autistic disorder and allows gradual mastery of a wide range of social roles, from the most distant relationships (such as fellow passengers on a bus, a customer and salesperson in a store, or unfamiliar neighbors in a big house) to the closest personal relationships (friends, relatives, children, and parents). To master the model of social relations circles, we suggest dialogues, group discussion, and role play. It is helpful to use visual clues (pictures, photos, pictograms) illustrating the various rules.

Our experience shows that working with this model can be productive in a small, relatively homogeneous group of participants, but may also be used during individual psychological intervention. Moreover, taking into account the specifics of disturbances of social development in autistic spectrum disorder, we consider it particularly important to work with “distant” circles of relationships, that is, mastering situational social interactions (with strangers in the urban environment, with service personnel, with neighbors, etc.): These circles of relationships are easier to master, especially through role play; distant relationships are more regulated than intimate personal ones; finally, it is easier to change such relationships than the established relationships of a person with disability in the family.

For example, while discussing interactions with strangers on the street or on public transport, it is necessary to emphasize the central aspect of all behavioral rules for dealing with strangers: All the rules are aimed to ensure that strangers do not interfere with each other. It is important to discuss in more detail what kind of requests and questions we can address to people around us and what is not acceptable (conversely, what questions and requests from strangers should alert us, how we should act in these situations).

Another important topic for discussion in this context is the inevitable encounter with people who do not follow the rules: “Unfortunately, not everyone always follows the rules. But if someone does something wrong, do not make comments to a stranger or try to correct him or her”. This position is important not only to increase social competence, but also as a security measure for a person with developmental disorders: Some autistic people attempt to “call to order” those who violate certain rules, in an inflexible and excessively blunt manner, without maintaining distance. Therefore, the concepts of psychological boundaries, maintaining distance from strangers, need to be discussed in different contexts, on different occasions, and at different levels of complexity; another concept is directing the energy of the “struggle for justice” to analyzing one’s own behavior (for example, “You cannot change an adult stranger, so there’s nothing to be done. People are different — unfortunately, some people may be rude or brawlers. There are not many of them, and we do not have to try to re-educate them. It is important for us to try not to violate all these reasonable rules ourselves”).

Analysis of the literature on psychological assistance to autistic children and adolescents demonstrates that a visual model of relationship circles is used by many authors (Dovbnya et al., 2018; Walker-Hirsch, Champagne, 1991).

Helping the person with ASD to master social roles and human relations allows us to assist step-by-step in increasing the individual’s autonomy. The most important step is a possible transition to independent transportation in the urban environment. This task itself may indicate a certain success in adaptation, relatively high achievements of a person with autism disorder: A significant proportion of people with ASD have to be escorted outside their homes for their entire lives. This step may be considered only with the consent of the family and in close contact with them; the respective areas of responsibility of relatives and specialists should be discussed in detail. The final decision about timing (when exactly the young person with developmental challenges may be allowed to go for a trip on his own, for example, from home to a familiar place) also belongs to the person’s relatives.

The specific nature of the distorted mental development is manifested in a hierarchy from the simple to the complex in the adaptive functioning of people with ASD (Nikolskaya, 2010). This may also be observed in their progress towards independence: Memorization of a route, generally speaking, does not present a particular difficulty for them, if the person previously had an experience of movement along this route; a person with ASD generally benefits from a well-developed visual memory. The greatest difficulties for a person with autism are the initiation of social interactions and, of course, maintaining calm behavior and responding appropriately in unexpected circumstances.

While practicing specific social roles, it is possible to teach a person with ASD to shop in stores, pharmacies, or to visit various places in the community. With the emergence of supermarkets, where you can buy things almost without interacting with a salesperson, it has become much easier for people with ASD to shop. Different methods may be used in teaching them to make purchases, such as role play and visual algorithms (in written form, in drawings, or a combination of the two, depending on the individual's capabilities) for a sequence of the customer's actions from entering the store to leaving. Considering the person's difficulties in generalization, it is best to teach shopping skills at different stores.

Making the rules of social interaction meaningful for persons with ASD will help them to learn social adaptive skills most efficiently. Any specialist using varied approaches to people with ASD should be careful to avoid mechanical training of any skills: "Both everyday life and academic skills can be mastered either relying exclusively on a person's memory, or meaningfully. Mechanical memorization is a much less effective method of teaching, although at first it seems easier" (Greenspan & Wieder, 2013). Only a rule or skill that is understood by and meaningful for a person will be truly learned, interiorized by a person with ASD, and can be applied in the appropriate situation (Nikolskaya, 2015). Therefore, the intervention aimed to improve social adaptive skills (the first area of psychological assistance that we indicated earlier) should be combined with help in understanding the world of social relations and an individual's inner world (the second area of psychological intervention). To meet our objectives in the second area, we developed such methods as conversation, a diary, joint study of literature (stories and novels), and movies.

The method of confidential conversation may be characterized by several points.

1. The method of confidential conversation (as well as psychological assistance to an autistic person in general) should be applied over a long period of time: A course of several sessions cannot be sufficient to truly increase the emotional and personal maturity of a person with ASD at any age.

2. Conversations with persons with ASD should be about topics that are important for them, even though they may be restricted and stereotyped. Towards adolescence, people with ASD often need and attempt to comprehend the world around them, but this need is realized in a very peculiar way, related to their stereotyped interests, anxiety, general intolerance in their relationship to the world, and fixation on certain acute affective moments. For example, some interests may be expressed in questions that are repeated over and over — day after day, even year after year, despite the detailed answers received on many occasions. These stereotypical questions should not be, however, interpreted only as negative, because this way an

individual generally attempts to understand himself or herself and the surrounding world better. Elaborating on stereotypical interests and topics, we can help persons with ASD to develop their comprehension of themselves, as well as to expand the range of topics in the conversation.

3. The conversation includes the exchange of personal experiences between the person with the ASD and the specialist. This kind of psychological intervention requires relative openness on the part of the specialist, because a person with autistic disorder needs to encounter the perspective of another person. These “collisions” with others’ perspective may help people with ASD to overcome, to some extent, the underdevelopment of the ToM, and increase their interest in the exchange of experiences, opinions, and feelings with other people.

The method of confidential conversation can be used to discuss a wide range of “psychological” topics that are difficult for a person with autistic disorder to master, such as human feelings and their expression, relationships between people, motivation, and growing up. Recognizing and differentiating among others’ feelings, empathy, age- and context-appropriate expression of one’s own emotions, all present a challenge for a person with ASD; however, our experience demonstrates that with special assistance, people with ASD are able to master these skills. Topics of emotions, attitudes, moods, character traits, and moral choices in different contexts should all be referred to both in individual and in group work.

At the beginning of work of this type, the specialist and the person with ASD generally create a list of emotions, discuss the situations in which a person may experience a specific feeling; differentiate among those emotions that are “positive” or “negative”. Similar to other types of psychological assistance (*e.g.*, Lidars, 2001), it is important to “normalize” different emotions, to demonstrate that everyone can experience anger, fear, jealousy, and other negative feelings.

In the next step, we can talk about appropriate ways of expressing feelings in different situations and within the context of different relationships. People with autism should be given precise verbal examples of how to express a friendly attitude towards different people in an appropriate manner, as well as a clear explanation of the types of physical contact that are acceptable to express feelings towards different people. The discussion of appropriate ways of expressing feelings may be more productive if combined with a discussion of various relationships between people — with family members, friends, colleagues, and a romantic partner. These discussions help to develop clear rules and descriptions of appropriate and inappropriate ways of expressing feelings and maintaining relationships that may be more effectively learned with the use of visual props, such as pictograms with captions. It is important to use neutral language, so as not to trigger an overly agitated response in a person with ASD who tends to focus on hyper-affective experiences.

Another important topic for discussion using the method of confidential conversation refers to socially appropriate ways of expressing negative feelings and coping with negative emotions. It is important to emphasize once again that discussion of personal emotional life should be approached slowly and carefully, as this topic is incredibly difficult for people with autism; the general emotional atmosphere of the discussion should be positive and accepting, but at the same time relatively reserved emotionally, with a calm, business-like manner.

A specialist who works individually or in a group may discuss some culturally appropriate ways that a person can cope with his emotional state; for example, the person may engage in a physical activity, hit a pillow or another suitable object, or eat something tasty. People with “high-functioning autism” may learn simple ways of self-regulation: Close your eyes, breathe deeply, count to yourself, etc. Here it should be stressed for a person with ASD that escalating the conflict is inappropriate, and it is necessary to distance oneself from the source of the conflict, step aside, and focus on one’s own emotional balance, rather than to prove oneself correct, which is difficult for a person with autism. With people who have reached legal adulthood, it is important to discuss their personal responsibility for their own emotional and mental state; when frustrated or angry, a person should attempt to calm down to avoid causing any harm. And probably the most important point that should be demonstrated when working on this topic is the importance of a close, trusting relationship with someone (friend, family member, teacher ...) that makes it possible to discuss unpleasant life situations, negative feelings, and possible ways to cope with them. It is more effective to discover these and other methods of emotional self-regulation during a discussion (or even group brainstorming), rather than from prescriptive exhortations.

It should be reiterated that using the method of confidential conversation to discuss these topics requires the specialist to be quite open and sincere; it is particularly important to show a person with autistic disorder that people whom they look up to can also experience unpleasant feelings and search for their own ways to cope with these feelings.

Our study demonstrates the possibility to discuss a broad range of topics that are important for the psychological and social development of adolescents and young adults with ASD, using the method of confidential conversation, including the topics of adulthood, growing up, the human life cycle in general. People with ASD rarely have fully developed insight into adulthood, even though the image of an adult may be quite attractive for them. Therefore, one of the tasks of psychological intervention is to add content to this attractive image, emphasizing adults’ responsibility for their actions, the need to be patient, and to care for their loved ones.

Relationships between the sexes present another complicated topic of conversations with people with ASD. When the specialist has developed a sufficient level of trust in his or her relationship with a person with ASD, it is possible to discuss and to role-play such situations as introducing oneself, dating, ways of getting closer to a person of the opposite sex. The complexity of this topic is obvious: Intimate relationships, unlike, for example, interaction between a customer and a salesperson, are not regulated and have neither a guaranteed result nor a clearly defined goal. Nevertheless, one of the useful topics for a confidential discussion and role play, which is possible both in individual and group work, may be where and how to get acquainted. It may be helpful to have the group understand that attempts to meet a romantic partner and get acquainted may be more positive at events where people have something in common rather than just “on the street”. A range of comments, questions, and topics that are suitable for dating may be discussed. Different dating situations can be role played in groups; a friendly discussion of each participant’s behavior in the group may also be very helpful after the role-play game. Finally, it is very important to discuss with young adults with ASD the unpredictability

of the outcome of any new encounter: A person who is interested in continuing interaction may face a lack of reciprocity, or refusal to continue the relationship. Relationships may continue and evolve, or may stop. And this is normal; it happens often! On the other hand, as with any other relationship discussed (for example, friendship), it is important to emphasize that excessive persistence or obsession is unacceptable, particularly when there is no reciprocity. The experience of separation or rejection may be discussed as a painful experience, but one familiar to the vast majority of people.

The method of confidential conversation has much in common with the internationally recognized method of “Social Stories” created by Carol Gray (USA). This is a psychological intervention technique used with children, adolescents, and adults with ASD (as well as other populations), to help them learn to maintain their emotional balance, stay calm in unpleasant, difficult situations, and cope with negative experiences (Gray, 2018; Kuleshova, 2017). The “Social Stories” technique became particularly popular in helping people with autistic disorder to self-regulate in circumstances that are new or stressful for them. While using accessible language, Social Stories describe certain situations related to social interaction, a person’s feelings, and their possible difficulties in this situation; they also provide an example of socially appropriate behavior expected from a person in a similar situation. A Social Story also includes others’ positive reaction to the socially appropriate behavior (Morris, 2012).

Keeping a diary as a method of reviewing one’s life experiences makes it possible to systematize and conceptualize one’s memories, to maintain and develop one’s self-identity, and to express one’s inner world verbally. While current or recent events are generally reviewed with younger children, more distant or recent past events may be possible to work through with a teenager or an older person. It should be noted, however, that keeping a diary may easily become formal and stereotyped, and its developmental value can be significantly reduced without the adult’s support. For example, the diary may turn into a monotonous and stereotyped listing of events, deprived of any attempts at reflection or any expression of feelings and attitudes. In order to use the diary as an effective tool, it is important to follow several rules:

1. An autistic person would benefit, at least initially, from keeping a diary along with an adult. It could be the specialist or a family member who has been given the necessary explanations from the specialist.

2. Particular attention should be directed to using emotionally descriptive words, one’s own preferences, comparing the emotional experiences of different people in similar situations, looking at an event from different perspectives. It is also necessary to teach a person with ASD to differentiate among the events of his life and the lives of his relatives from the standpoint of those events’ importance and emotional significance, the degree to which they are either routine or unusual.

3. In some instances, the assistant (specialist or family member) may enter into the diary his own content as well; for example, events of his life, his own emotional assessments and experiences that correspond to the topics of the diary of the autistic person. Comparing the experiences and feelings of two (or more) people can provide the person with ASD with additional opportunities to achieve greater understanding, increase self-consciousness, and develop a ToM. In other instances,

when it is necessary to allow a person with ASD the maximum opportunity to verbalize and develop their own inner world, it is better to avoid adding another person's entries.

4. Previous entries should be periodically re-read. Returning to the old records and making occasional additions may help to reorganize life experience and increase self-awareness.

5. Confidentiality must be maintained: If a specialist (not a family member) has worked with the autistic person on the diary, the jointly created texts may not be shown to anyone, including his/her family members, without the autistic person's permission.

The study of texts (books, movies) has the same therapeutic goals: elaborating the inner world of people with ASD, encouraging their interest in other people, developing their understanding of social relationships, developing a ToM. Moreover, this method helps to improve a few necessary academic skills: the ability to understand cause-effect relations, to remember the sequence of events, to find the necessary information in the text, and most importantly, to actively process and integrate information from the book or movie, and connect it with one's own life experience.

The joint study of texts may become an age-appropriate collaborative activity that will become the basis for rapport with an autistic person and replaces the pretending and role playing or joint drawing used in psychological interventions with preschool and elementary school-age children. So that the book or movie is not reviewed formally but rather impacts the emotional and mental life of autistic persons, elaborating their understanding of social relationships and themselves, a few principles of psychological intervention should be followed:

1. The books should be worked through slowly, and parts of the book should be discussed while reading and after finishing the book. A person with ASD should be reminded in different contexts about books and movies they have read or seen. Without this effort, even a book that has been well studied may disappear from active memory fairly quickly.

2. It is very important to draw connections between events in a book (or movie) and experiences of the person with ASD — for example, to discuss such questions as: "Which of your friends does this character resemble?", "Have you ever been in a similar situation and what would you do?", "If you were to meet this character, could you become friends?" While a school teacher generally focuses on the text's composition and structural analysis, the goals of psychological intervention are directed primarily at psychological and social analysis.

3. When working with people who do not use flexible and spontaneous language, it is helpful to suggest that they recall their own or their relatives' experiences that are similar to situations described in the text. After the session, family members can help the person to recall a similar family experience and write it down together at home.

4. A person with ASD may better understand and emotionally assimilate the text, if, along with verbal discussion, the specialist also suggests drawing illustrations of the text, particularly if the adolescent or adult has some inclination for art and drawing. Dramatic presentations of the texts may also help the personal and social development of a person with ASD. Even the simplest type of perfor-

mance — for example, reading a dialogue by each taking a role — may be difficult for many people with autism disorder and requires significant emotional and mental effort, and often assistance.

5. Working through the text generally presents a challenge for people with autism, such as when a person needs to skim the page without reading it thoroughly, to find the essential information about a character or a specific statement. If the text is relatively long and includes many characters, a person with ASD will likely have difficulty remembering the characters' names, their life stories and relationships. It may help to write down all the characters: their names, their personalities, and their relationships.

6. Generally speaking, writing down impressions and feelings about the book's characters and events is a useful technique for better remembering the text. Another effective technique may be brief responses to questions. Depending on the person's abilities, multiple-choice questions may be used. Using multiple-choice questions during individual work with school-age children may also help them to become better prepared for the final school exams, some of which have a similar format.

7. Due to the restricted and poorly differentiated inner world of people with autistic disorder, using books recommended for younger readers may be more productive: It is more effective to work through a relatively "childish" book, discuss various meanings, and help a person with autism to understand and identify with the characters more profoundly, than to tackle complex Russian classical novels, just because those are "supposed to be read" at a certain age. Moreover, when choosing a book, it is important to remember the person's lack of insight into social relationships and feelings, and their tendency to focus narrowly and "get stuck" on specific details and characters' actions: A single frightening or misinterpreted experience may become one more object for their affective self-stimulation. It is, of course, impossible to predict these situations; however, the specialist should always be ready to help the person process an experience that is too intensely affective.

Conclusion

Our long-term observation allows us to articulate some general principles of psychological intervention and support of adolescents and young adults with autistic disorder, despite their different levels of cognitive, emotional, and personal development and adaptive functioning. These principles are: continuous engagement in activities (*e.g.*, education, leisure, employment) that make their daily lives meaningful, and developing a well-organized social environment where these activities are carried out. The optimal social environment, in our view, should combine the following characteristics:

- certain rules and communication norms that all members of the community follow;
- new (achievable) adaptive goals;
- a friendly atmosphere with respectful interest shown to each individual;
- positive, energetic, and optimistic community spirit.

Our long-term follow-up observations show that if these conditions are not met — for example, if autistic persons have no motivating activity and their social environment is restricted — their general activity level may decline, and passive and stereotyped behavior is likely to increase.

Individual psychological support, using the techniques described above, may often be necessary to help a person with ASD to be successfully integrated into activities and a more complex social environment, particularly at first (Kostin, 2015, 2016). When working with people with autistic disorder, other activities can be used to achieve the goals of the intervention, such as arts and crafts, sports, tourism, history, and, of course, educational and occupational activities. A conversation may be constructed around almost any meaningful joint activity to help persons with autism in creating a more holistic picture of themselves and their lives, the people around them, and the world as a whole. To help an autistic person to better comprehend the social environment and relationships, long-term confidential interactions must be developed regardless of the person's age, and “constantly involve him in meaningful and shared activities, using all the opportunities for this ...” (Nikolskaya, 2015).

We hope that the directions and methods of psychological work described here may be useful for specialists at psychological, educational, and rehabilitation centers for people with special needs, for psychological teams at schools and other educational organizations, for family members, as well as for researchers who are exploring social adaptation, theory of mind, and growth problems in developmental disorders. These are some points deserving of further exploration:

- adaptation and effects of the above-described methods to the development of emotional intellect in autism spectrum disorder, in other types of dysontogenesis, as well in growing up in an environment of deprivation (for example, in an institution);
- more precise adaptation of these methods for work with autistic people of different ages: younger adolescents, primary school age, mature adults;
- relating these methods to methods designed with other remedial approaches, notably applied behavioral analysis (ABA).

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