

Aspects of the Peculiarities of the Formation of Social and Household Skills in Children with the Disorders of the Autistic Spectrum

Nataliia VASYLIEVA¹,
Lidia DROZD²

¹ Associate Professor of the Department of Physical Therapy and Occupational Therapy, Kherson State University, Ukraine, nataliavasileva85@gmail.com, <https://orcid.org/0000-0002-7104-1737>

² Associate Professor of the Department of Special Education, Kherson State University, Ukraine, drozdlidiya301091@gmail.com, <http://orcid.org/0000-0001-5406-2942>

Abstract: *A particular group among children, who have difficulties in mastering skills of social and everyday orientation, is the category of children with disorders of the autistic spectrum, characterised by their corresponding specifics of mental and social development.*

The article describes the experience on programmes development and implementation of the approaches aimed specifically at the development of social and household skills in children with ASD (autism spectrum disorder). The psychological and pedagogical fundamentals of work on improvement of the formation of social and everyday orientation skills in children with autistic spectrum disorders are considered.

Disorders of the autistic spectrum, a peculiar disorder of the child's mental development, determine the features of mastering the skills of social and household orientation. Such peculiarities of development determine the development of behavioural skills in everyday life and society as the specificity of the functioning of higher mental functions, stereotypy, rigidity of behaviour, limitations of social contacts with adults, problems of the process of consistent activity. The development of social and household orientation in children with autism spectrum disorders requires the implementation of special purposefully organised activities that consider both the structure and peculiarities of this type of disorder and the social situation of the development of a specific child.

Keywords: *social and household orientation; autism; social development; social adaptation.*

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Introduction

At the current stage of development of special psychology more and more attention is paid to the study of socialisation and personality formation in the conditions of dysontogenesis. Therefore, the study of the process of socialisation in the conditions of dysontogenesis acquires particular importance. Autism spectrum disorder (ASD) is a mental disorder resulting from brain damage or the central nervous system, characterised by abnormalities in social interaction, behaviour, disorder of communication skills, minor interests, and repetitive actions. Children with autism spectrum disorder usually have specific problems in forming the socialisation process.

The latest technologies, which are aimed at improving the communication of children with autism spectrum disorders, contribute to the processes of interaction, as well as cognitive and social development. Lima Antão, Jennifer Yohanna Ferreira de et al. (2018) note that new developments/tools are needed to improve the communication process of autistic children. Problems arise due to behavioural disorders, the child's ignoring the environment, impaired ability to be irritated, impaired emotional reactions and acceptance of social models, communication, and impossibility of mutual communication. In this case, a personality abstracted from the surrounding society is formed.

Thomson, K., Walters, K., Martin, G.L., Yu, C. (2011) state that children with autism spectrum disorders have problems while learning adaptive and social skills. The specificity of the development of children in this category is the disorder of contact with the surrounding people and even with close adults. Therefore, it significantly complicates the process of mastering the skills of social and household orientation, since it is commonly known that the formation of self-care skills takes place in close interaction with adults.

The article of Utosov, Y., Utosova, O., Drozd, L., Vasylieva, N., Lavrykova, O., & Butenko, N. (2020) reveals the issues of psychological and pedagogical conditions for the formation of social competence of adolescents with intellectual disabilities through their involvement to extracurricular activities. This method involves taking into account the abilities of each teenager in extracurricular activities at any age, which are especially important for them at the next level of education and socialisation. In further studies, the experience of socialization, construction and implementation of life plans of adolescents with intellectual disabilities was analyzed Drozd, L. V., & Bystrova, Y. O. (2020).

In children with autism spectrum disorders, even the simplest everyday life skills appear quite late and usually with great difficulties. At the same time, a transference of the skills they have acquired to other conditions is significantly impeded. As the children grow older, the autistic features may gradually flatten, but at the same time, the child's inadaptability to everyday life becomes more and more apparent. In children with normo-typical development, motor skills are improved in conjunction with self-care skills (Sezici & Akkaya, 2020). Development of even the simplest skills of social and everyday orientation allows a child to reduce dependence on others, helps to strengthen confidence in one's abilities, affects the advancement of psychomotor development, contributes to the formation of the general structure of activities, creates the essential prerequisites for the formation of other types of activities. Gaining the skills of social and household orientation has a direct impact on the formation of the child's self-esteem, and is also an integral step on the way to the formation of one's autonomy. Teaching the skills of social and everyday orientation directly has influence on the expansion of knowledge, children's understanding of the surrounding material world, the formation of the sensory sphere, the development of higher mental functions, and especially language, the improvement of manual motor skills, hand-eye coordination, the formation of imitative skills, etc.

The research of Al-Khateeb (2021) reveals aspects of the effectiveness of an early intervention programme based on the techniques of applied behaviour analysis for forming self-care skills in people with autism spectrum disorders. Starting from the first stages of a child's life, in the process of mastering the skills of social and everyday orientation, there is not just the assimilation of certain actions, but an extremely important process of mastering social experience, "introduction" to both the objective and the social world of adults.

Burkett, K., Morris, E., Manning-Courtney, P., Anthony, J., & Shambley-Ebron, D. (2015) investigated the influence of family culture on the process of obtaining appropriate medical care for an African-American child with ASD, which affected the timely diagnosis and treatment of autism. Parents play a significant role in the cultivation of social and everyday skills of a child with autism. Matsumura N et al. (2022) found that parent's teaching improved daily living skills in adolescents with ASD. On the other hand, parents need support and moral and psychological help. Ede, M.O., Anyanwu, J.I., Onuigbo, L.N. et al. (2020) note that rational family therapy is quite effective. This approach is useful and has long-lasting therapeutic effects in the improvement of stress management among parents

of children with autism spectrum disorders. The process of adaptation to a child with autism spectrum disorder can affect the professional activities of parents, as noted by Roiz, Roberta Giampá and Figueiredo, Mirela de Oliveira (2023).

Socialisation is a complicated and complex process for a child with an autism spectrum disorder, proceeding from the analysis of theoretical and practice-oriented scientific works. Difficulties in imitation are typical for such children. They develop social and everyday orientation skills quite long and with difficulty; their social and everyday adaptation requires regular and long-term training. In many cases, parents of a pre-schooler with autistic disorders are focused on the work to eliminate disorders of his mental development, try to overcome behavioural problems and are not focused on everyday difficulties. Complaints about household inadaptability, and lack of basic social and household orientation skills are not often even noticed by parents. At the same time, these problems, as a rule, are very serious because the stereotype of relationships formed in preschool childhood, when everything is usually done for the child by one's relatives, can later complicate the development of a child's independence. But without learning household skills, even the most intelligent children remain socially maladjusted.

Independence in everyday life of children with autism spectrum disorders

An actual problem for children with autism spectrum disorder (ASD) is the development of independence and self-care skills.

Social and household skills include skills of a domestic (skills that are necessary for everyday life) and social (self-care skills and cultural and hygienic skills) nature.

The following social and household skills are distinguished:

1. Social and household skills outside the home: orientation in the store, road safety rules, behaviour on the street and in transport.
2. Social and household skills in home conditions: hygiene skills, dressing (undressing) skills, self-service skills at the table, knowledge of safety rules at home, and performance of household duties.

Formation of elementary household skills and self-care skills is one of the most important tasks of raising and teaching children with ASD.

Problems of independence in autistic children are divided into three groups:

1. Problems of planning, organisation and control of activities;
2. Emotional dependence on another person;

3. Lack of motivation.

The following difficulties of teaching social and everyday skills of children with ASD are known:

- Disorder of contact;
- The problem of arbitrary concentration;
- Fears;
- Disorder of fine motor skills;
- Sensory sensitivity;
- negativism;
- Disorder of muscle tone;
- general motor discomfort;
- Dependence on constant instructions from adults;
- the need for hints;
- Behavioural stereotypies;
- very rarely, learning is carried out by imitating another person;
- it is difficult to transfer the formed skill to another environment;
- the failure of an unsuccessful attempt can cause a persistent negative attitude to repeat the action.

It isn't easy for children with autism spectrum disorders to acquire self-care skills. This is because they do not have complete control over their bodies. Regarding the motor development of an autistic child, the following features can be distinguished: violation of the accuracy, the strength of muscle tone and movements, coordination, weak control over body balance, and difficulties in including the whole body in an integrated movement process.

Children with autism spectrum disorders have difficulty in learning social and everyday skills of children. These include:

- originality of communication;
- impairment of specific understanding of speech;
- problems with verbal and logical thinking.

A rather significant problem that arises in the formation of independence skills in children with ASD is overprotection. At the same time, parents perform the action for the child, thereby depriving a child of one's independence. This has a psychological aspect as they fear losing contact or alerting the child to inappropriate behaviour, also saving time and experiencing learning problems. This has a psychological aspect, since they are afraid of losing contact or preventing inappropriate behaviour of the child; they also save time and experience problems with learning.

Let's consider some household problems that occur in everyday life (Table 1).

Table 1 - Skills and possible causes of difficulties in everyday life of children with ASD

Skills	Problems and causes of difficulties in everyday life
Independent eating	complete absence of reaction to the demands of an adult; inability to use cutlery; selectivity in food; the habit of eating in pieces; body motor disturbances, abomination; improperly organized place.
Dressing and undressing independently	escapes from the place of dressing; does not know operations that are necessary for clothes (fasten buttons, zipper, etc.); waits for adult's prompts; there is no permanent place of dressing; the child does not know the order of dressing.
Personal hygiene skills	hypersensitivity to touches; unwillingness to stay in one place; inconvenient location of personal hygiene products; the child does not know how to rinse one's mouth.
Toilet	refusal of the pot; the habit of using only one's own pot. fear to drain water. keen interest in the toilet.
Safety	The child does not feel danger
Dusting	abomination; inability to make efforts arbitrarily and compress the material; swinging the body back and forth;
Sweeping and washing the floor	it is difficult to move the mop from side to side; it is difficult to squat down due to increased tone in the legs and disorder of general coordination of movements.

Source: Author's own conception

The following peculiarities of the formation of social and everyday skills in children with ASD are distinguished:

- peculiarity of the contact;
- oversaturation of an autistic child in contacts with other people;
- overprotection;
- fears, anxiety and hypersensitivity;
- the problem of arbitrary organisation of behaviour;
- disorder of motivation.

The literature analysis allowed us to identify the peculiarities of the formation of social and household skills; problems of teaching self-reliance skills in everyday life. The main issues include: lack of a clear schedule for the child; difficulties in planning, organisation and control over activities; emotional dependence on another person; lack of motivation; disorder of contact; problems of arbitrary concentration; fears; disorder of fine motor skills; sensory sensitivity; negativism; disturbances of muscle tone; general motor discomfort; dependence on constant instructions from adults; the need for hints; behavioural stereotypes and others.

There are computerised programmes for teaching literacy for children with autism spectrum disorder suggested by De Mira Gobbo et al. (2021). The presented methodology encourages learning elementary skills, and promotes learning with independence, autonomy and functionality. Therefore, children with ASD develop independence in everyday life. As this is a specific problem, it is impossible to predict at what speed a particular skill will be formed in a particular child. Children with ASD who have preserved intellectual abilities can be completely helpless in everyday life. Rosenblum, S., Ben Simhon, H.A., & Gal, E. (2016) Unraveling the association of handwriting with social skills in children with autism spectrum disorder (ASD).

Pedagogical peculiarities of the formation of self-care skills in everyday life of children with autism spectrum disorders

The specificity of the development of children of this category primarily consists in the disorder of contact with the surrounding people, and even with close adults, which significantly complicates the process of mastering the skills of social and everyday orientation, since it is well known that the formation of this type of skills occurs in close interaction with adults. Matei, S., Totolan, D. M., & Salceanu, C. (2022) noted that in pedagogical theory and practice, special attention is paid to rethinking conceptual approaches to teaching children with ASD in accordance with the educational profile of the individual. The greatest difficulties of such a child lie not so much in the process of assimilation of knowledge or formation of ideas and mastery of the corresponding skills of social orientation but in the sphere of their practical use.

One of the possible criteria for assessment of the degree of severity of life limitation in a child with autistic spectrum disorders is the level of development of social and everyday orientation skills, which includes the reflection of the share of the child's participation following the norms of age-related development in taking care of oneself and one's health, the

formation of cultural hygiene skills, self-care skills, the ability to perform everyday household activities, for example, cleaning the room, making the bed, using various household appliances, etc.

The problems that create difficulties in mastering social and everyday orientation activities in children with autism spectrum disorders include: disinhibition of such a child, lack of reaction to an adult's request, impaired communication skills, impaired motor skills, and the presence of stereotypical behavioural responses. The research of Huijnen, C.A.G.J., Lexis, M.A.S., Jansens, R. et al (2016) expands knowledge of therapeutic and educational goals for professionals working with children with an autism spectrum disorder. For this, robots are involved in the development of interventions. Robots can potentially be used for a large number of purposes for children with ASD.

The difficulty of its learning is mainly related to social contact disorders, the difficulty of arbitrary concentration on the learning process, and the presence of fears.

A child with an autistic disorder can quite easily learn a complex action unintentionally and independently, but due to imitating another person, it happens extremely rarely. However, even in this case, mastering a skill is inseparably linked to any specific situation. It even turns out to be extremely difficult to transfer it to a new situation for the child. Often, a preschooler with an autistic disorder is prevented from mastering the skills of social and everyday orientation due to existing disorders of manual motility, weakening of muscle tone, and general motor discomfort. The complexities of social behaviour further complicate the organization of the learning situation itself. Such a child may ignore the adult's instructions, not follow them at all, avoid contact with the adult, or doing the opposite.

Later than normal, and with difficulties, the simplest skills of social and everyday orientation are developed, and newly acquired skills are often practically not used in new conditions; in the best case, their transfer can be accompanied by constant encouragement from an adult. Such children are characterised by the inability to use even the knowledge and skills they have independently.

The limitation of the ability of social and household orientation is reflected in the child's ability to participate in all types of everyday activities, on par with one's peers, in the ways that are available to a child with the normal development of this age, gender and culture. All this gradually leads to the social maladjustment of the child. According to Ditterline, J., Oakland, T. (2009), adaptive behaviour is manifested in a person's ability to perform daily life responsibilities and respond to the needs of others.

However, the experience of practicing defectologists shows that even in children with severe autistic forms of disorders, it is possible to form successfully social and household skills, which become progressively more difficult. The success of mastering social and household skills and the possibility of their further independent use is determined by the extent to which this everyday situation has acquired special significance for the child.

With age, the problems of behaviour and interaction become more smoothed out, but at the same time, the child's maladjustment to everyday life becomes more noticeable. Children with difficulties mastering the methods of action do not possess indicative and control actions; therefore, for quite a long time in the development of this type of skills, children do not achieve a good quality result.

The peculiarities of development in autistic disorders require teachers to understand the patterns of this type of disorder and provide corrective assistance to children in the conditions of a special organisation of the educational environment, with special technologies and programmes developed specifically for this category of persons.

Comprehensive psychological and pedagogical assistance for children of this category aims at the fullest possible socialisation. At the same time, one of the primary tasks of a defectologist should be the formation and development of social and everyday orientation skills, as the initial stage of a child's social adaptation to the conditions of the world around.

A child with autistic disorders needs special help in overcoming the difficulties of mastering the skills of social and everyday orientation, which will contribute to improving the quality of his life and the life of the child's loved ones, and will allow them to develop meaningful forms of interaction.

The problems of forming the skills of social and everyday orientation are also related to the peculiarities of family education, where the stereotypes of overprotection are often formed and begin to hinder the child's development. It is necessary to develop forms of corrective intervention that will allow overcoming these typical features of family upbringing.

Insufficient attention has been paid to the issues of primary education of preschool children with autism spectrum disorders, especially to the methods of vital skills for their development, related to self-care, household and social activities, special methods and programmes are limited, pedagogical techniques that contribute to effective work in the declared direction are not considered in detail.

The system of work on the formation of social and everyday orientation skills should be related to the following:

1. Development of the motivational basis of activity in mastering relevant skills.
2. Creating conditions that facilitate the performance of movements and actions.
3. Gradual overcoming of difficulties.
4. Consolidation of formed actions in practical situations.
5. Improvement of new abilities.

Lindy L. Weaver (2015) also notes that there is a lack of intervention studies related to sleep. Therefore, there is a need for additional research in all areas that open up the possibilities of the science-based practice of occupational therapy for people with ASD.

The limited number of programmatic and methodical developments and the actual lack of methods, technologies, techniques and means of development of the skills of social and everyday orientation in preschool children with autistic spectrum disorders induce the search for effective means for its implementation in the conditions of a correctional preschool educational institution.

Conclusions

One of the urgent problems for children with ASD is the problem of independence development. Formation of elementary household skills and self-care skills is one of the most important tasks of raising and teaching children with ASD. Learning self-care skills is a significant step towards independence for people with ASD. Despite the severity of ASD, it is necessary to create conditions developing of the maximum possible degree of independence of children.

Analysing the above approaches to the development of social and everyday orientation skills of children with ASD, it was determined that the main condition for successful learning is a clear structuring of the environment in which the child is, in addition to the division of each skill into separate steps, planning the sequence of actions, multiple repetition and consolidation of the acquired skills and visual spatiotemporal organisation. The complete creation of these conditions for successfully forming of social and household orientation skills is possible only in entire interaction with the family.

An analytical review of the psychological and pedagogical literature devoted to the problem of autistic disorders shows that the majority of theoretical and experimental, and methodological works are mainly devoted to clinical and psychological aspects of autism. In contrast pedagogical and methodological issues are extremely insufficiently developed. It is especially

true for the method of formation and development of social and everyday orientation skills of the considered category of children.

References

- Al- Khateeb, A. A. (2021). The effectiveness of an early intervention program for people with autism spectrum disorder based on applied behavior analysis techniques to equip them with self-care skills. *Ilkogretim Online*, 20(5), 2503–2522. <https://doi.org/10.17051/ilkonline.2021.05.272>
- Burkett, K., Morris, E., Manning-Courtney, P., Anthony, J., & Shambley-Ebron, D. (2015). African American Families on Autism Diagnosis and Treatment: The Influence of Culture. *Journal of Autism and Developmental Disorders*, 45, 3244–3254. <https://doi.org/10.1007/s10803-015-2482-x>
- De Mira Gobbo, M. R., de Barbosa, C. R. S. C., Morandini, M., Mafort, F., & Mioni, J. L. V. M. (2021). ACA game for individuals with Autism Spectrum Disorder. *Entertainment Computing*, 38, 100409. <https://doi.org/10.1016/j.entcom.2021.100409>
- Ditterline, J., & Oakland, T. (2009). Relationships Between Adaptive Behavior and Impairment. In J. Naglieri & S. Goldstein (eds.), *Assessing Impairment* (pp. 31–48). Springer. https://doi.org/10.1007/978-1-387-87542-2_4
- Droz, L. V., & Bystrova, Y. O. (2020). Features of communication of adolescents with intellectual disabilities in the interpersonal relations. *Insight: The Psychological Dimensions of Society*, 3, 123-133. <https://doi.org/10.32999/2663-970X/2020-3-9>
- Ede, M. O., Anyanwu, J. I., Onuigbo, L. N., Ifelunni, C. O., Alabi-Oparaocha, F. C., Okenyi, E. C., Agu, M. A., Ugwuanyi, L. T., Ugwuanyi, C., Eseadi, C., Awoke, N. N., Nweze, T., & Victor-Aigbodion, V. (2020). Rational Emotive Family Health Therapy for Reducing Parenting Stress in Families of Children with Autism Spectrum Disorders: A Group Randomized Control Study. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 38, 243–271. <https://doi.org/10.1007/s10942-020-00342-7>
- Huijnen, C. A. G. J., Lexis, M. A. S., Jansens, R., & de Witte, L. P. (2016). Mapping Robots to Therapy and Educational Objectives for Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 46, 2100–2114. <https://doi.org/10.1007/s10803-016-2740-6>
- Lima Antão, J. Y. F., Oliveira, A. S. B., Almeida Barbosa, R. T., Crocetta, T. B., Guarnieri, R., Arab, C., Massetti, T., Antunes, T. P. C., Silva, A. P. D., Bezerra, L. M. P., Mello Monteiro, C. B., & Abreu, L. C. (2018). Instruments for augmentative and alternative communication for children with autism spectrum disorder: a systematic review. *Clinics*, 73, e497. <https://doi.org/10.6061/clinics/2017/e497>

- Matei, S., Totolan, D. M., & Salceanu, C. (2022). Specific Interventions and the Role of Occupational Therapy on Children With ASD. In C. Syriopoulou-Delli, & R. Folostina (Eds.), *Interventions for Improving Adaptive Behaviors in Children With Autism Spectrum Disorders* (pp. 165-179). IGI Global.
<https://doi.org/10.4018/978-1-7998-8217-6.ch010>
- Matsumura, N., Fujino, H., Yamamoto, T., Tanida, Y., Ishii, A., Tatsumi, A., Nakanishi, M., Tachibana, M., Mohri, I., & Okuno H. (2022). Effectiveness of a Parent Training Programme for Parents of Adolescents with Autism Spectrum Disorders: Aiming to Improve Daily Living Skills. *International Journal of Environmental Research and Public Health*, 19(4), 2363.
<https://doi.org/10.3390/ijerph19042363>
- Roiz, R. G., & Figueiredo, M. O. (2023). O processo de adaptação e desempenho ocupacional de mães de crianças no transtorno do espectro autista. *Cadernos Brasileiros de Terapia Ocupacional*, 31. <https://doi.org/10.1590/2526-8910.ctoAO252633041>
- Rosenblum, S., Ben Simhon, H.A., & Gal, E. (2016). Unique handwriting performance characteristics of children with high-functioning autism spectrum disorder. *Research in Autism Spectrum Disorders*, 23, 235-244, <https://doi.org/10.1016/j.rasd.2015.11.004>
- Sezici E., & Akkaya, D. D. (2020). The effect of preschool children's motor skills on self-care skills. *Early Child Development and Care*, 190(6), 963-970.
<https://doi.org/10.1080/03004430.2020.1737040>
- Thomson, K., Walters, K., Martin, G. L., & Yu, C. (2011). Teaching Adaptive and Social Skills to Individuals with Autism Spectrum Disorders. In J. Matson, & P. Sturmey (eds.), *International Handbook of Autism and Pervasive Developmental Disorders. Autism and Child Psychopathology Series* (pp. 339–354). Springer. https://doi.org/10.1007/978-1-4419-8065-6_21
- Utosov, Y., Utosova, O., Drozd, L., Vasylieva, N., Lavrykova, O., & Butenko, N. (2020). Extracurricular Activities as a Form of Development of Social Competence of Adolescents with Intellectual Disorders. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(2Sup1), 175- 185.
<https://doi.org/10.18662/brain/11.2Sup1/103>
- Weaver, L. L. (2015). Effectiveness of Work, Activities of Daily Living, Education, and Sleep Interventions for People With Autism Spectrum Disorder: A Systematic Review. *The American Journal of Occupational Therapy*, 69(5), 6905180020p1–6905180020p11.
<https://doi.org/10.5014/ajot.2015.017962>