

Ewa Przygońska

Asperger Syndrome – introduction to the problem

Pedagogika Rodziny 4/2, 41-52

2014

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



Ewa Przygońska

University of Social Sciences

Asperger Syndrome – introduction to the problem

The term “Asperger’s syndrome” was used for the first time in 1981 by Lorna Wing. In her publication, she focused on a group of people whose behaviors were similar to the description given in the thesis by an Austrian pediatrician – Hans Asperger. Asperger defined this group of behaviors as “autistic psychopathy” and classified it in the group of personality disorders. In a similar way, this type of disorders was described by Leo Kanner who called it “early infantile autism”. Both researchers “headed for one purpose, namely to convince colleagues of the existence of new and unidentified unit – objectively distinctive disorder, occurring from early childhood and persisting for many years” [Frith 2005, pp.13]. Since the publication of the fourth edition of the Diagnostic and Statistical Manual (DSM –IV) in 1994, Asperger’s syndrome also called Asperger disorder has belonged to the group of pervasive developmental disorders. The “Asperger’s Syndrome” is defined as “the mildest cases of autism, primarily concerning functional disorders” [Randall, Parker 2010, pp.129].

- According to Agnieszka Rynkiewicz [Rynkiewicz 2009, pp.14], in most cases, the disorder is not homogeneous and coexists together with other disorders, such as:
- ADD,
- ADHD,
- Anxiety,
- Depression,
- Obsessive-compulsive disorder,
- Oppositional defiant disorder,

-
- Social phobia,
 - Eating disorders,
 - Tourette's syndrome (movement and voice tics),
 - Enuresis and encopresis (enuresis and contamination of the inorganic faecal).

Uta Frith [Frith 2005, pp. 8] draws attention to the diversity in the way other authors perceive the Asperger's Syndrome in the literature and the connection between these disorders. In her view, some scholars perceive autism and Asperger syndrome as two separate disorders or classify it as the category of Asperger's autism. Thus, she stresses that "the common feature of Asperger syndrome and autism in general, is a special type of failure in communication and social incapacity (...), the person suffering from Asperger's syndrome differs from other people with autism because they are likely to communicate through more-developed language and have greater chances of successful adaptation" [Frith 2005, pp. 20].

The characteristic features of people with Asperger's Syndrome

The image of a child with Asperger's cannot be treated as a definitely homogeneous image and full, characteristic for all children affected by it. There may be different variations and features. This is particularly true for children under four years of life. At this time, the first symptoms of disorders are often diagnosed as typical of autism.

During the preschool period, the child with Asperger's syndrome may suffer from early delays in the development of language features that disappear often around the age of 5 years. Randall and Parker [Randall, Parker 2010, pp.135] emphasize however, that children may also not suffer from any developmental delays except from certain motor dysfunctions. Children at this stage of development may function very well in a family environment and the problems appear only when they start attending kindergarten where the environment does not always act according to a typical scheme and where there are unexpected situations. Waclaw, Aldenrud and Ilsted [Waclaw, Aldenrud, Ilstedt 2000] and others draw attention to the above-mentioned problem.

Randall and Parker [Randall, Parker 2010, pp.136] also enumerate other characteristics typical of the child with AS in this period:

- Tendency to avoid spontaneous contacts,
- Impaired social interaction capacity,
- Problems with maintaining communication or repetition,
- Rigid adherence to rituals and the consequent difficulty in accepting changes,
- Troubles with controlling of emotional and social reactions (particularly for anger and aggression),
- Hyperactivity,
- Concentration on their own interests (the excessive fixation on objects)
- Well-developed ability to memorize,
- Greater interest in interaction with adults than their peers.

At school level, children with Asperger's syndrome rarely deviate significantly from their peers. This is particularly visible at the level of early childhood education, where, apart from behavior problems (hyperactivity, tantrums, attention deficits) or slowly motor development, the children usually make progress in learning – reading from memory, perform simple mathematical operations. Randall and Parker notice – “problems appearing during primary school are different depending on children, from benign and easy to solve to serious and impossible to eradicate. The severity of these problems depends on many factors, including the level of intelligence of the child, the consequences of the proceedings with him or her at school and at home, temperament and strength of other complicating factors such as hyperactivity, difficulty in concentrating, restlessness, difficulty in learning, the hostile attitude of peers, rejection by the group or support from their peers” [Randall, Parker 2010, pp.137].

In high school the most difficult problems of young people with Asperger's syndrome relate to behavior as well as social contacts. “In this age, many people with Asperger's syndrome attend mainstream schools where their specific developmental problems can be easily overlooked – especially if the kids are smart and do not behave too eccentric” [Randall, Parker 2010, pp.137]. Behavior of young people with this disorder are often misinterpreted by teachers and peers, mainly as a result of emotional problems and disorders, not social interaction. The result of this type of behavior is to exclude young man from a peer group or reject the child “on the margins” of the group. Howlin [Howlin R.,2006, pp.19–21] stresses, however, that some young people with AS may go through puberty period unscathed, building appropriate relationships with peers and not addressing “serious mental disorders.” Researches show, however, that these are rare cases. He lists the following characteristics of Asperger syndrome characteristic of adolescence:

- Poorly developed communication skills,
- A very rich vocabulary,
- Increased interest and activities (usually practiced alone), which may seem obsessive,
- Problems with the organization and efficiency of their operations,
- Explicit preference for activities aimed at their own advantage.

Adults with Asperger's syndrome cope in dealing with problems much better than the classic autistic people. Randall Parker [Randall P., Parker J., 2010, pp. 139] pointed out that this disorder does not destroy completely the potential of leading a normal life. Adults with AS succeeded in a profession related to their interests. It happens, however, that in the environment they are perceived as eccentrics.

Asperger syndrome is a developmental disorder which begins in childhood, but as Tantam points „the greatest disability may appear during adolescence and early adulthood, when successful social relations are a condition of almost all achievements” [Tantam 2005, pp.181].

Budzińska and Wojcik draw attention to the fact that people with Asperger's syndrome do not have any physical characteristics indicative of a disorder, and that „what draws attention of others is represented by unusual social behavior and lack of ability to conduct a conversation” [Budzińska, Wójcik 2010, pp. 19].

Individuals affected by this disorder are likely to suffer from impairments defined by Lorna Wing [Wing 1988] (which are the main criteria for the diagnosis of autism according to DSM – IV and ICD –10 Polish). These are:

- Impairment of relationships,
- Impairment of social communication,
- Impairment of understanding social relationships, and impaired development of imagination.

These elements may appear (selectively or comprehensively, in varying degrees) in the behavior of people affected by Asperger syndrome. Frith [Frith 2005, pp. 28] points out, however, that these basic symptoms in people with Asperger's syndrome are less severe than in those with autism, Although they may affect their social functioning to the similar extent, and influence the ability to adapt. The development of human adaptation is needed to achieve the balance between the individual and the collectivity in which he or she functions at each stage of life. It facilitates and simplifies social functioning. Deficiencies and weaknesses in its scope cause problems with the proper social functioning.

In the case of children and adolescents with Asperger's Gillberg [Budzińska, Wójcik 2010, p.19] defines social maladjustment as:

- Difficulties in establishing relationships with peers,
- Lack of the desire to establish such a relationship,
- Improper reading social cues,
- Inappropriate social behavior and emotional.

The development of social and emotional impropriety is accompanied by a few coexisting elements causing in people with Asperger's syndrome problems of an adaptation. According to Howlin [Howlin 2003, p.19] these are:

- Turbulence associated with the problem of identity (characteristic of all teenagers, but especially difficult in the case of children and adolescents with AS), which affect the ability to function in a variety of social roles,
- Lack of proficiency in interpersonal relations (difficulties with the adjustment of family standards to the standards of the peer group),
- Difficulties in identifying both their own and others' emotional states (which can cause feelings of confusion and deepen the tendency to avoid the company),
- Deficits in the processing of non-verbal social information (whose negative effects are visible in the behavior of individuals affected by PER and their relationships with others).

As pointed out by Howlin “social and psychological difficulties of adolescence can cause ‘secondary symptoms’ in the form of increased psychological discomfort.

The following symptoms are noted at that point:

- Increased isolation from people
- Restlessness and anxiety
- Poor organization and poor performance in school
- Depression,
- Increased stiffness and reduced flexibility and ability to adapt,
- Severe engaged in hobbies, friendly insulation
- Cases of oppositional behavior and outbursts of anger “ [Howlin 2003, pp. 24–25].

People with Asperger’s syndrome are also likely to suffer from disrupting adaptive problems in expressing non-verbal communication signals, as well as problems with the proper interpretation of non-verbal signals from the environment.

The phenomenon was pointed out Budzińska and Wojcik. [Budzińska, Wójcik 2010, p. 25].

In their view, children and young people with AS do not always adequately respond to changes in facial expressions, gestures, facial expressions or body expression of the interlocutors. They have also problems with looking at the interlocutor while listening to his or her speech (which causes disturbances in interpreting the context of the correct speech), as well as keeping eye contact during a conversation.

People who do not know the specifics of this disorder perceive it as the lack of interest in talking or even as disregard of the speaker. Klin and Volkmar in the study conducted by in 2000 compared the way healthy people and those who suffer from autism and AS observe events. Subjects were shown a video during which they were tested on what particular vision they focus on. It turned out that people properly functioning were watching the screen and paying attention to the actors’ faces whereas people with autism and AS were mainly focusing on the lips.

People with Asperger’s syndrome have also impaired the realm of empathic. It happens that they have the lack of empathy, which is reflected in the wrong reading of the importance of the message sent by the other. The lack of empathy has also the direct influence on the difficulty in expressing their feelings and can significantly affect the contacts with their peers. People with AS, on the basis of the previous experiences, begin to avoid such contacts, mainly because they associate them with additional stress. The literature also mentions cases in which children are afraid of any relationships with peers or consider them unnecessary. This type of behavior strengthens the isolation of people with AS.

The self-centeredness also affects the relationship with peers of people with AS. Children and young people choose the people they want to contact, have fun and make friends with (in most cases these are children which are subordinated – rather younger, or people who completely agree on the established rules). It is not rather the socially accepted phenomenon in the peer group, thus it does not affect positively the level of acceptance of people with AS.

Establishing the appropriate relationships with peers is also hampered by the reluctance of children and adolescents with Asperger's syndrome to teamwork. Such work is based on cooperation, which in turn, is associated with the observance of certain rules of society where people with AS have a huge problem. Therefore, they prefer to do the work themselves, because then, they are aware of complete control over it.

The reluctance to cooperate with others is visible not only in situations in which the child is working during lessons, but also in the way the child behaves during a break or team games. Such behavior reflects the fact that people with Asperger's syndrome do not see themselves as a member of the group, and thus, emotions associated with competition and winning are not known to them.

Children and adolescents with Asperger's syndrome have also exaggerated truthfulness and sincerity, that is sometimes perceived as a negative feature by the peers. A group perceives such people as „unreliable” because it is difficult to predict what and when they will react.

Difficulties with interacting with peers may also arise from the specific adult-like speech. Gillberg, while analyzing the child's speech draws attention to its technical nature, particularity to the construction of sentences as well as problems with understanding its full meaning. Such factors influence the perception of people with Asperger's by others.

Activities supporting social adaptation of people with Asperger's Syndrome

In the case of people with Asperger's syndrome, it is important to start early activities supporting the child in shaping correct social attitudes. Their quality will depend largely on a distinguished design a therapeutic program. Budzińska and Wojcik stress that “the nature and degree of difficulty of the tasks must be individually selected for each child, and their selection must be based on carefully conducted analysis of its operation. Determining areas of deficit is carried out on the bases of observation of behavior at home and student peer group, interview with their parents or guardians and standard psychological tests” [Budzińska, Wójcik 2010, pp.33].

Working with a child with Asperger's syndrome should be based on the program developed in the USA TEACCH (Treatment and Education of children with autism and children with conjugated communication disorders – Treatment and Education of Autistic and related Communication– handicapped Children) on the following principles:

- Close cooperation between all educational institutions that can have an influence on child and family,
- The adaptation of education of the child to his or her individual characteristics (under the assumption that each child is unique),

-
- The stated far-reaching objective, which is focused on training the skills needed in adult life,
 - Visualization tasks and commands.

The treatment of children, most of the time, takes place in a family environment and these are parents who later become the main coordinators of the undertaken actions. Therefore, according to Randall, Parker [Randall, Parker 2010, ss.115], it is very important to correct their preparation of their role preceded by the improvement of their psychological well-being especially right after hearing the child's diagnosis.

The role of teachers/educators is to observe the behavior of a child – especially in the peer group, point out areas which should be improved and work with the child during the implementation of educational and therapeutic program. The aim of the work of teachers is „to provide support and help to make it easier for them to understand the world around them and to the environment to learn to understand how these children exist” [Waclaw, Aldenrud, Ilstedt 2000, pp.106].

Budzińska, Wojcik [Budzińska, Wójcik 2010, pp.62–98] while analyzing ways of working and the actions undertaken by parents and teachers pay attention to the following aspects:

- Reinforcing of the desired behavior,
- Strengthening motivation,
- Appropriate reward,
- The use of hints,
- Issuing appropriate commands,
- Creating activity plans,
- Learning social behavior and speech.

The strengthening of the desired behavior should be done in conjunction with the elimination of behavioral deficit. As emphasized Budzińska and Wojcik, the common mistake is to focus on failures and commenting on undesirable behavior.

It is important to construct a proper incentive system during the proper work with a child with AS. „Children with Asperger like talking about the things which they are interested in. It is much more difficult for them to focus on topics which cause difficulties or activities that they do not know how perform well. They especially do not like playing with their peers, graphomotor tasks and exercise. (...) The child asked to perform specific, unattractive for him or her actions, usually finds excuses or demonstrates behaviors such as crying and screaming” [Budzińska, Wójcik 2010, pp. 64]. Therefore, the strengthening should be adjusted individually to the level of functioning of the child, taking into account his or her interests.

Teachers, in cooperation with parents and therapists, should construct such a system that will be simple for the child to understand and attractive (interesting and readily available prizes).

The choice of rewards is important for the effectiveness of the interventions. To adjust the award to the child, Budzińska and Wojcik [Budzińska, Wójcik 2010,

pp. 63–64]. propose to observe the child at play (this gives you the possibility to determine which actions are treated as interesting and are particularly attractive), a conversation with him or her about the favorite playground, testing reinforcements (potential rewards are presented to the child in order to check his or her interests) or the Premack principle (behavior that occurs most often can amplify this which occur less frequently).

The child should receive a reward immediately after the appearance of the expected behavior and it should be appropriate to the effort put into the task. Margaret Dewey draws attention to another aspect associated with rewarding – „correct behaviors are rarely noticed because they are perceived as normal. It is obvious that each situations can be described by some rules and that all people should know them to some extent. The person who is going in the right direction on one-way street does not receive a prize. But if you are aware that he or she often goes in the wrong direction, you should notice it” [Dewey 2005, pp.238].

Tips may be very helpful when the child receive the prize after dealing with the situation which exceeds his or her possibilities. Hints are called „different kinds of help the teacher and the parent used immediately after giving the command to increase the likelihood of desired reaction. It comes in the initial stage of learning, or in a situation in which a child makes mistakes and cannot cope with the task” [Budzińska, Wójcik 2010, pp.72].

The hint may be either verbal (can occur in the form of oral or written), it may be based on the imitation of a parent or teacher actions and may rely on physical assistance in completing the task. The indication of a finger, looking at the object, bringing closer elements that the child is expected to point out can be treated as hints.

It is worth noticing that the right way of issuing commands to the child is also very important. The child who does not understand appropriately the commands or executes them partly (which is one of the characteristics of ZA), is particularly vulnerable to the wrong reception by a group in which he or she is trying to function. Most children with Asperger’s syndrome do not respond to commands addressed to the group. As pointed Budzińska, Wójcik, these are teachers and parents who are responsible for the right reaction in such a situation. The authors enumerate the following rules which you can follow in such situations:

1. The teacher should repeat the command, change its form in such a way that the instruction is sent directly to the student.
2. You cannot raise your voice, tone should be friendly.
3. The task should be adjusted to the child’s level of functioning.
4. If, in spite of individualized command the student does not respond, he or she does not realize the task or realizes them incorrectly, use one of the above-mentioned hints.
5. The teacher while working with a child with AS must remember about using

the individual system of reinforcements and the consequent strengthening of appropriate behavior, such as responding to commands addressed to the group [Budzińska, Wójcik 2010, pp.80].

While working with children and young people with Asperger's syndrome we can also use activity plans. The plan is "a set of pictures or words that are instructions to perform specific sequence of actions. They can occur in many forms, from simple plans, which include a single page presenting a picture or a symbol of a particular act or prizes and finally the more complex writing" [Budzińska, Wójcik 2010, pp. 84].

According Waclaw, Aldenrud and Ilstedta [Waclaw, Aldenrud, Ilstedt 2000, pp.13] such a plan should contain answers to 5 questions:

1. What should I do now?
2. Where should I be?
3. How much should I do?
4. How long should I have it?
5. What will I do then?

Opportunities to find answers to these questions should be related to the level of the development of the child. The most effective, according to various authors is visual information which consists of objects, pictures or written words. Using activity plans (at home – where they are hung in a prominent place established with the child and at school – where a child has to look at them and may at any time refer to them) creates a sense of security and stability.

While working with children and youth with Asperger syndrome we should remember about developing appropriate reactions in social situations. The appropriate action should result in establishing adequate and appropriate relationships with peers. Such actions should be similar to a therapeutic program, preceded by appropriate diagnosis of the strengths and weaknesses of the child. Elements of this analysis should not be general – „have problems in dealing with their peers, but „they should take into account all the variables showing a child how to react in certain situations” [Budzińska, Wójcik 2010, pp. 96].

The comprehensive programs supporting practical learning about the appropriate relationships with peers are becoming more and more popular, for example functioning in the USA Relations Development Program (RDI) created by Steven Gutstein. However, there are only few such programs, none in Poland.

Preparing the child to establish normal social relationships should start from the basic reactions (eg., proper eye contact), and then move to more complex skills. Exercises based on adjusted to the child's motivational system should be carried out at home with their parents, siblings or well-known people as well as at school, in which the proper support from teachers /tutors/teachers help to practice situations specific to that environment. According to Budzińska, Wójcik [Budzińska, Wójcik 2010, pp. 98–100] school support of students with AS should be based on:

- Learning to follow others (child knows that in some situations he or she should act like friends) Imitation may be based on the observation of the behavior of others or on the appropriate tool tips.
- Learning children with AS to seek help not only from teachers, but also from peers

“This skill can be developed by modeling appropriate response, the use of manual and verbal prompts and rewarding when the child returns to the peer. For example, when a child sees the lack of a pencil in a pencil case, he or she can ask for help from a fellow from the bench instead of asking the teacher” [Budzińska, Wójcik 2010, p.99].

As pointed out by Margaret Dewey, people with AS „must realize that knowledge that they lack may be hidden in the minds of other people”[Dewey 2005, p.242].

It is difficult, however, because they frequently assume that their message „without words” is so clear to others that they should know what a person with AS expects from them.

- Supporting by the teacher making friends with (by selecting from the students in the class people who would: be open to cooperation, support their friends or encourage them to join a given activity).
- Supervising a child with Asperger’s syndrome during the break.

Budzińska and Wójcik emphasize that the break is the most difficult moment for the child with AS at school. Noise can make him or her escape, cry or look for isolated places where a child can hide. The teacher should notice the problem, propose the child to participate in forms of activity in which it may participate (usually in a smaller group of children).

- Becoming a model for the child in terms of appropriate behavior.

This is especially true when the child’s non-standard behavior makes all the students focus on the child. At that point, the teacher should not comment on negative behavior of the child, raise the voice and seek solutions on the forum. His or her role is to focus the rest of children on a specific task and to support the child with AS. It is also crucial to encourage the child with AS to cooperate with other students. Moreover, it is important to choose right activities which are perceived by a child as attractive. We must not forget at that point that some activities (especially when these are team games) should be practiced earlier with the child by adults and only if they are properly controlled, the real play can take place among peers. Budzińska and Wójcik [Budzińska, Wójcik 2010, pp. 105–06] are of the opinion that the above-mentioned preparation should include skills, such as:

- Ability to start and end the play (approaching the peers and joining the activities undertaken by them, as well as skills giving them the possibility to “exit” from the relationship that emerged in the course of play).
- Cooperation and sharing with others (acceptance of the rules established by others and the ability to create/impose rules consistent with social norms – this

type of skill enables them to play different social functions as well as the ability to pass from one role to the second).

- Proper behavior in difficult situations (eliminating behaviors based on protest and aggression which are not accepted by their peers).

With the support and adequate preparation received from the family, schools and other institutions, a person with Asperger's syndrome has a chance to function in a society and build appropriate relationships with its members. Uta Frith notes that "remarkably well-suited and efficient people with autism resemble the imaginary creature from a fairy tale by Hans Christian Andersen – siren. Being in love with a human prince, she wanted to take a human form, but it could happen only at the expense of something else. She had to devote her voice to get legs. But when she moved, it was like walking on knives. Since she was not able to communicate to people around her, they did not understand her true nature. This led to the fact that the prince marries another, and she did not found a place in the world" [Frith 2005, p.31].

In most cases, people with Asperger's syndrome are similar to normal people. They can learn the routine behaviors characteristic to a given society (as in the case described earlier mermaid) on condition that they keep working on themselves. Unfortunately, it also happens that the time-consuming labor-intensive activities will be unstable and after some time you will need to go back two steps to make one forward. Taking into the account the ability to function well in the adult life, this risk can always exist, because social integration similar to normal is the goal toward which it is worth pursuing.

The assistance to people with Asperger's syndrome in Poland is still neglected.

I suppose that only few children with this disorder were properly diagnosed and treated. Others operate in kindergarten and schools as „weird kids” who do not receive appropriate help. Their behavior is, in many cases treated as the manifestation of improperly functioning families, other disorders or bad character.

Still too few teachers and educators in Poland know this disorder, its symptoms and the basic methods of working with people with AS. They should be the first ones to recognize abnormalities and then, with the cooperation of parents and professionals, diagnose them and prepare a work plan for such children. They should also support parents in activities and cooperate as much as possible in order to mitigate the symptoms of this disorder and thus prepare the child for adult life, in which he or she will be able to function independently and play different social roles.

Abstract: The image of a child with Asperger's cannot be treated as a definitely homogeneous image and full, characteristic for all children affected by it. Individuals affected by this disorder are likely to suffer from impairments. These are: impairment of relationships, impairment of social communication, impairment of understanding social relationships, and impaired development of the imagination. The role of teachers/educators is to observe the behavior of

a child – especially in the peer group, point out areas which should be improved and work with the child during the implementation of educational and therapeutic program.

Key-words: Asperger Syndrome, adaptation of people with Asperger's Syndrome, work with children with Asperger's Syndrome

Streszczenie: Obraz dziecka z zespołem Aspergera to na pewno nie jest obraz jednorodny i pełny, charakterystyczny dla wszystkich dzieci nim dotkniętych. Mogą pojawić się różne jego odmiany i cechy. U osób dotkniętych tym zaburzeniem pojawiają się elementy triady upośledzeń do których należą: upośledzenie związków międzyludzkich, upośledzenie komunikacji społecznej, upośledzenie rozumienia związków społecznych, oraz zaburzenia rozwoju wyobraźni. Rola nauczycieli/wychowawców polega na obserwacji zachowań dziecka – szczególnie w grupie rówieśniczej, wskazywaniu obszarów funkcjonowania dziecka którymi należy się zająć jak również na pracy z dzieckiem w trakcie realizacji programu edukacyjno-terapeutycznego.

Słowa kluczowe: Zespół Aspergera, adaptacja ludzi z Zespołem Aspergera, Praca z dziećmi z Zespołem Aspergera

Bibliography

- Budzińska A., Wójcik M., *Zespół Aspergera*, Wydawnictwo Harmonia, Gdańsk 2010.
- Dobek-Ostrowska B., *Podstawy komunikowania społecznego*, Astrum, Wrocław 2004.
- Frith U. (red.), *Autyzm i zespół Aspergera*, PZWL, Warszawa 2005.
- Jamrożek B., Sobczak J., *Komunikacja interpersonalna*, Empi2, Poznań 2000.
- Kopra K., *Comparison of Diagnostic Methods for Asperger Syndrome*, Journal of Autism and Developmental Disorders 38/2008.
- Mościcka L. (red.), *Problemy niedostosowania społecznego*, Wrocław 1984.
- Randall P., Parker J., *Autyzm. Jak pomóc rodzinie*, GWP. Sopot 2010.
- Rynkiewicz A., *Zespół Aspergera. Inny mózg, inny umysł*, Wydawnictwo Harmonia, Gdańsk 2009.
- Schopler E., Mesibov G.B. (red.), *Diagnosis and assessment in autism*, Plenum, New York 1988.
- Spionek H., *Zaburzenia psychoruchowego rozwoju dziecka*, PWN, Warszawa 1965.
- Waclaw W., Aldenrud U., Ilstedt S., *Dzieci z autyzmem i zespołem Aspergera*, Wydawnictwo Śląsk, Katowice 2000.
- Willy L.H. (red.), *Zespół Aspergera w okresie dojrzewania*, Warszawa 2003.