ISSN 1561-6894

NR 19 (150) 2016

Nauka i Studia

Przemyśl
Nauka i studia
2016

TREŚĆ

FILOZOFIA

FILOLOGICZNE NAUKI

PSYCHOLOGIA I SOCJOLOGIA

Nadiia Kogutiak
PhD, Vasyl Stefanyk Precarpathian National University

PROBLEMS OF DIAGNOSIS OF AUTISM SPECTRUM DISORDERS IN THE ERA OF POSTMODERNISM

Abstract: *The paper investigates the changes in the methodology of the study of autism spectrum disorders (ASD). The purpose of this scientific work is phenomenological analysis and psychometric criteria of cognitive deficits that explain the psychological theory of autism. Perspectives in development of postmodern psychodiagnostics from differential to phenomenological are defined.*

Keywords: *autism spectrum disorders, cognitive deficits, phenomenological psychodiagnostics*

Introduction.

The problem of the diagnostics of the autism spectrum disorders (ASD) for the recent decade has been considerably studied not only in Ukraine but in other countries; became the common tendency for the world medical and psychological assessment. It is confirmed by the fact that annually the statistical indices for the amount of diagnosed persons with ASD has been increasing. Thus, In March 2014 the US Centers for Disease Control and Prevention publicized the research data showing that 1 out of 67 children suffers from ASD (1 out of 42 boys and 1 out of 189 girls), while in 2010 these indices were recorded at the level – 1 autistic child out of 88 typical children, and in 2008 1 out of 110. In the UK, 1.8% of men and 0.8% of women were diagnosed with autism spectrum disorders. Other studies are less impressive in quantitative indicators that are ranging from 0,7/10000 до 72,6/10000 [1]. In Ukraine the situation is typical for the post-Soviet space. Until 2006, in our country autism spectrum disorders almost hadn't been diagnosed. Prevalence of disorders from 2008 to 2013 year had increased in 3.5 times: from 13.8 to 48.2 per 100,000 children.

Scientific problem and its meaning.

The attention of the world community of scientists attracts rapid growth of ASD prevalence over the past two decades. These data cannot be the result of statistical error, and there is no reliable evidence on the «autism epidemic», and no confirmations of ASD risk growth from polluted environment, the use of antibiotics or vaccination [1]. The most likely cause is considered to be the change in ASD research methodology, modification of definitions and lowering in child age, when the diagnosis was firstly confirmed. According to the data from the California Health and Human Services Agency (2002), the frequency of ASD diagnosis increased from 5.78 / 10,000 in 1987

to 14.89 / 10,000 cases in 1994, while the number of diagnosed cases of mental retardation decreased from 28.76 to 19.52 / 10,000. A similar situation was detected concerning speech disorders. Scientists suggest that so low awareness of ASD nosology was compensated by other diagnoses. Obviously, taking into account the results of the latest research findings in scientific strategies of as psychologists, psychiatrists, neuropsychologists, etc. so and main professionals (pediatricians, educators, teachers) will help optimize the situation. This is not about the reducing of the amount of ASD diseases, but timely diagnosis of even subclinical manifestations of autism and further early intervention and socialization. **The aim** of the article is to describe the perspectives of postmodern psychodiagnostic development from the differential to the phenomenological.

Results of the research topic.

The growth of public interest and professional capabilities of ASD diagnostics, positive social climate around the problem of «special children» will help to higher the standards of timely detection and adequate intervention.

However, the issue of psychodiagnosis in modern society has its trends and priorities. There is a lot of questions, «How to diagnose?», «When?», «What to include in required diagnostic blocks?» etc. Besides, the risks of possible patient's stigmatization and change of his/her social status, anxiety, and sometimes despair of parents, child's guardians, arising as the result of diagnosis setting, assign to the psychiatrist and psychologist the task to improve the accuracy of diagnostic analysis. Considering that there is a lack of effective rehabilitation state programs for children with ASD, it of one hand, increases the negative experiences of parents, the other – sets dilemma for experts in differentiation of the norm of pathology. World modern practice of setting the ASD diagnosis is based on criteria determined during the clinical interviews.

Thus, the latest version of the manual on diagnostics and statistics of mental disorders DSM-V (2013) of American Psychiatric Association includes the following ASD criteria: sustainable deficit of socio-emotional interaction, nonverbal communication and lack of ability to develop, maintain and understand the relationships and also restricted, repetitive patterns of behavior, interests or activities. In this case, the violation is not due to intellectual total disability or developmental delay [2]. Although ICD-10 and DSM-V define the bound between the subclinical manifestations and clinical diagnosis, there is pluralism in research approaches. It is worth recalling F. Happé belief that cognitive peculiarities of people with autism are not dysfunctions, but make the special style. Such view on autism isn't guided by common statistical approach, but is the part of the postmodern polyvalent interpretation, rethinking of cognitive structures, attempt to unite norm axis and pathology in deep universal mental structure.

Postmodernist discourse has led to the revision of methods of research. First of all, we observe more frequent use of methods of qualitative analysis. The main tasks of the postmodern science is to study the essence of the subject, research the specific qualities of the phenomenon. It is proposed to replace the scientific process by the narrative, phenomenological reflexion. Such modern trend poses risks of empirical methods removal from fundamental science. We agree that clinical method is basic in modern diagnostic practice, however, in our opinion, diagnosis of patients by psychometric

methods is obligatory, that will promote broader study of the phenomena. Psychological diagnostic analysis aims primarily to study the strengths of the child, the likely areas of acceleration or neurotypical development.

Let us review the trends of modern study of autism spectrum disorders more detailed, and also the recommendations based on thorough phenomenological psyhodiagnostics. Today recommended clinical and psychometric methods of ASD diagnostics are not focused on cognitive dysfunction. However, researchers have accumulated a sufficient number of empirical evidence proving that cognitive processes of such children have special features. For the last two decades the perspective of the differentiation of psychological peculiarities of autistic children have been changing from more noticed communicated and affective on cognitive [3]. Locus of the interest of cognitive psychologists who study the ASD peculiarities, is focused around the dysfunction of cognitive processes, problems of flexibility and arbitrary behavior and in building of coherent world view. These problems arise as the result of difficulties with symbolization and aptitude for fragmentation of integral images. Cognitive deficits of different forms and intensity occur in all individuals with ASD even in the group of persons, whose intellectual level is normal. Postmodern vision of this issue leads to pluralism of interpretation of cognitive phenomena.

The features of children's perception encourage the scientists to study cognitive processes in autism. Thus, analyzing the results of psychometric testing of young children, it was found that ones with autism, developing, come through the stages of object constancy understanding in the same way as children, developing normally. It was also revealed that children with ASD typically well cope with «Seguin boards», put together cut to pieces pictures, perform Kohs Block Design Test (Dakin, Frith, 2005; Shan, Frith, 1983, 1993). In such methods still were noticed specifics of visual and motor coordination: while putting together the pieces of the picture autist children less relied on the content of the picture, but oriented towards congruence of the lines (H. Tager-Flusberg, 1981). In this regard, the authors of the study speculate that exactly abnormal fixation on the primary grip of the general contour impression, and also the difficulties of its differentiation and regrouping do not allow children to transform visual gestalts in the integrity of higher level.

Another cognitive dysfunction is observed in organization of autistic child's attention. William James described attention as the channel that connects us with the world, so far as just attention determines the consequent when necessary stimulus is separated from the variety of the external world. Important feature of attention is its constant reorientation. And exactly reorientation, shift of the attention are affected in children with autism. These disorders occur at the end of the 1st year of life as the result of no child's reaction on peripheral stimuli. In particular, the focus of attention on the new stimulus that appears to the left is reducing, the same as the focus on the stimulus of different modalities – audio or visual. This is due to disorders in subcortical structures in the right hemisphere of the brain. This manifests itself as follows: if the child is looking at something on the right side of his visual field and simultaneously appears the object on the left, than he/she would need much more time to notice and process this stimulus than children who are normally developing. Such deficiency is called a neglect syndrome.

Also during the first year of life it is noticed that the child pays less attention to social stimuli, such as unable to share joint visual field with adult relatives; doesn't look into the eyes of adults in the process of interactions; doesn't use a pointing gesture or other appeals to coordinate the attention. Furthermore, some scientists believe that children with ASD do not identify the eyes on the human face as a source of information regarding emotional experiences or states of thinking. Especially indicative for ASD is the lack of «protodeclarative» pointing gesture, that is the gesture that expresses the need for something, or instrumental gesture (S. Baron-Cohen, 1989; S. Leekam et al, 1997).

A characteristic feature of attention in autist children is the ability to perceive and memorize passively, without active attention. This witnesses about the difficulty with arbitrary concentration, caused by excessive keenness to sensory impressions. Such keenness often leads to oversaturation and exhaustion. These children have serious problems with flexibility of attention shift, coordination of actions, feedback tracking [5].

S.Bryson and R. Landry researched the neuropsychological bases of autism, studying the reaction of children on visual stimuli. Further it was revealed that children with ASD, who have got high intelligence level, also couldn't shift their gaze from the first lighted screen. This characteristic to shift visual concentration appears in children aged 3-4 months. Such tasks reveal a child's ability to direct attention to new stimuli. Using this method scientists could much more quickly detect given range of disorders than by traditional clinical methods [6].

Over the last decades, many descriptions have been collected that acknowledge mnemic features. The factor of material comprehension doesn't influence on the memorizing effectiveness of children with ASD, unlike children normally developed. Such opportunities of children with ASD are explained by their dominant orientation on sign systems, avoiding social context. They desire to weave some signals in the system of world building.

An important characteristic of mnemic processes is the deficit of operating memory (nonpermanent, needed to perform current tasks). This kind of memory allows to integrate essential data in particular moment and ignore the situation. It plays a significant role in the organization of cognitive function, adaptive processes, mental plasticity and consciousness. [6]. Closely related with the operating memory are executive functions, which provide planning and plan execution in real situation, adequate changing of reaction choice, depending on the specifications of the situation. Deficit of these functions is related with abnormal work of prefrontal cortex.

The most striking manifestations of deficiency of operational memory and executive processes in people with ASD are cyclically repetitive actions. Researchers (S. Ozonoff, R. Joseph, S. Hala, R. Landa, S. Steele, B. Yerys etc.) suggest that operating memory of patients with ASD is disturbed by verbal and visual-spatial memory. This leads to the following disorders of conduct as the desire to structure the surrounding space and familiar places, impacts of everyday situations.

Specific are and thinking processes. A number of investigators of thinking processes in people with ASD such as S. Baron-Cohen, C. Lord, M. Sigman, D. Bowler, E. Pisula, R. Goodman, L. Colle et al. experimentally proved the delay in development of ability to understand other people's minds, internal mental processes. This peculiarity manifests in single- linearity of social world understanding. Children are likely to use only single-valued sign systems, and almost not able to understand the diversity of

semantic load. An illustration of this can be the absence of irony, poor understanding of metaphor, simple jokes, figurative sense. Such specific thinking may have positive social value, as this children's egocentrism leads to the inability to manipulate others, deceive. F. Happe defines these features as alternative cognitive style characterized by «weak central coordination,» a tendency to local, not global information processing. Children with ASD can perform complex tasks on paper or in the head, but do not know how to manage with money in everyday life. Despite savant abilities, they have the lack of «common sense» which could help them in practical details. In this sense they can be called as social invalids.

Among the important autism symptoms, that make a «diagnostic triad» significant place takes the dysfunction of imagination. Because autist people perceive life literally, that is why the imagination, which can be described as addition of sense meaning to perception is a problem for them. The imagination is necessary to understand the complex emotional states.

A characteristic feature is the absence of symbolic game which requires from the child sufficiently high level of imagination and is a step to the role, social and dramatic games. The mechanical actions with objects are devoid of social meaning, and perform protective function, as an attempt to control volatile and incomprehensible world. Repetitive, stereotyped action is the sign of imagination dysfunction in children with ASD, and also makes so called «brain hiccup», is a spontaneous inclination to check the absence of any changes. Based on such experimental results of researches of cognitive features with autism spectrum disorders, we consider that modern clinical psychology cannot be already imagined without psychometry – the science that studies the methods how to measure phenomena of mental activity. Thus, following post-modern trends, psychometric methods are designed not to replace the clinical diagnosis, but contribute to clarify the diagnosis of mental disorders, determine the effectiveness of psycho-correctional interventions.

Conclusions.

In our point of view, the current clinical psychology and psychiatry declare that the fundamental diagnostic principle is phenomenological approach. The psychometric, experimental study and clinical methods make multi-vector integrity of phenomenological diagnostics. This approach is justified because it allows to notice individual psychological features, which, although are not defined as a disorder, but involve difficulties of interpersonal adaptation.

As an integral feature of postmodern way of thinking is active use of global information technology, it helps to develop intertextuality and nonlinear way of world view. That became the reason for increasing requirements to education and self-education more than ever before. Clear trend towards conscious and subjective attitude of most people under study to their further development is observed. Most vivid expression in this trend is the phrase of famous autistic woman Temple Grandin: «If I could click my fingers and thus get rid of autism, I would not do this, because autism is the part of my personality». At a time when priorities and values have lost their clarity, the main task of man today, therefore, to develop adaptive mechanisms and flexibly fit in changing conditions and situations.

References:

1. Autyzm – epidemiologia, diagnoza i terapia [Autism: epidemiology, diagnosis and therapy] / [pod redakcja T. Pietrasa, A. Witusika i P. Galeckiego]. – Wroclaw: Conlinuo, 2010. – 240 p.
2. Synopsys diagnostychnyh kryteriiv DSM-V ta protokoliv NICE dl'a diagnostyky ta likuvann'a osnovnyh psyhichnyh rozladiv u ditey ta pidlitkiv [Synopsis diagnostic criteria for DSM-V and protocols for the diagnosis and treatment of mental disorders in children and adolescents] / [per. s angl., upor. ta nauk. red. Lesya Pidlesec'ka]; (Seria «Psyhologia. Psyhiatria. Psyhiatria). – L'viv: Vydavnyctvo Ukrainskogo Katolyckogo Universytetu, 2014. – 112 p.
3. Happé F, Frith U. The weak coherence account: detail-focused cognitive style in autism spectrum disorders. J. Autism Dev. Disord. – 2006. – № 36, P. 5–25.
4. Baron-Cohen S. The Autistic Child's Theory of Mind: a Case of Specific Developmental Delay. Journal of Child Psychology and Psychiatry. 1989. – № 30 (2). – P. 285-297.
5. Piters T. Autism: ot teoreticheskogo ponimaniya k pedagogicheskomu vosdeystviu [Autism: from theoretical understanding to pedagogical impact] / Teo Piters. – SPb.: Institut special'noy pedagogiki i psihologii, 1999. – 192 p.
6. Frith U. Autism. Explaining the enigma. Oxford, Basic Blackwell, 1989.
7. Fletcher P.C., Happe F. Other minds in the brain: a functional imaging study of «theory of mind» in story comprehension. Cognition, Volume 57, Issue 2, 1995, P. 109-128