

The System of Modern Social Work with Children with Disabilities in the Context of Neuropedagogy: Traditions and Innovations

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Abstract: *The article deals with the interaction of sociology, in particular the practice of social work, with neuropedagogy and neuropsychology; The main political, legal and pedagogical principles of neuropedagogy of disability are outlined. Taking into account the new inclusive paradigm of disability, modern social, pedagogical and psychological approaches to accompanying children with special needs, the points of intersection of neuropsychology with other socio-humanitarian disciplines. There is also a brief digression into the formation of neuropedagogy as a science, the classical principles that formed its basis and the main achievements in modern times (since the 70's of the twentieth century). The article identifies and compares a set of psychophysiological and social problems of children with disabilities, which can be solved by the integrated use of social support and neuropedagogy. The expediency of development and implementation of scientific results of the newest interdisciplinary field - neurosociology is substantiated. During the research, methods relevant for theoretical works were used - historical excursion, analysis of theoretical material, generalization, comparison, interdisciplinary extrapolation. The discussion revealed that the patterns obtained during the study of traditions and innovations in the system of social work and neuropedagogical support are currently relevant and widely analyzed in scientific discourse: in sociology, pedagogy, psychology, defectology, correction, rehabilitation and medicine. It is established that the prospect of further research is a constructive synthesis of the above disciplines in the field of neurosociology with the development and delineation of a universal categorical apparatus and methodological and diagnostic tools.*

Keywords: *neuropsychology, persons with special needs, inclusive paradigm of disability, neuropedagogical support, neurosociology.*

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Introduction

Against the background of modern globalization, integration and communication processes in society, the main humanistic problem urgently arises - ensuring the rights, freedoms and necessary services of people with limited physical, mental, educational and social capabilities. The rethinking of values after the second half of the twentieth century led to the adoption of a number of international acts and declarations that obliged democratic countries to pay special attention to education, socialization and care for people with disabilities (see Table 1). The very term "disability" has undergone transformations as a segregation and one that stimulates discriminatory stereotypes. The terms "person with a disability" and "person with special needs" are now becoming widespread.

Table 1. *The main legal acts governing the implementation of inclusion (Systematized by the authors)*

Document Title	Who and when adopted
<i>Previous laws and documents that contributed to the development of inclusion:</i> Universal Declaration of Human Rights (1948); Declaration of the Rights of the Child (1959); World Declaration on the Survival, Protection and Development of Children;	UN in 1948; UN, 1959; UN, 2000;
<i>Laws and regulations on inclusive education and social support</i> "Salamanca Declaration on Principles, Policies and Practices for the Education of Persons with Disabilities" (1994); Dakar Framework for Action (2000); UN Convention on the Rights of Persons with Disabilities (2006); Incheon Declaration (2015).	UN, Salamanca, 1994; UN, Dakar, 2000; United Nations, 2006; UNESCO, Incheon, 2015.

It is positive that governments, states, ministries of education and social protection have adopted a new non-medical paradigm of disability, the principles of which are united by the term "inclusion". The main goal of inclusion is to ensure the education, socialization and integration of persons with disabilities into a full-fledged public space without their segregative removal within special institutions, within the family or other institutions that restrict their rights and opportunities.

An essential component of inclusive provision for people with disabilities is psychocorrection and physical rehabilitation. These services may include medical intervention as needed, but the most humane, effective, and non-violating rights of people with special needs are psychological and pedagogical support. The latter should take into account as much as possible the nosology of the underlying disease, the specifics of the associated cognitive and activity capabilities, the peculiarities of the development of the personality of a person with special needs. The most valid in this regard are neurosciences, which comprehensively take into account the psychophysiological parameters and achievements of the humanities.

The purpose of this study is to study the applications of neuropedagogy and neuropsychology in pedagogical, social and psychocorrectional support of persons with disabilities, and especially - in their socialization (social work). In order to generalize traditions and innovations in this area, it is necessary to solve partial problems: to study the historical experience of the formation of neuropsychology in terms of its social and adaptive potential; to generalize modern neuropsychological and neuropedagogical theories and approaches in social work of the leading countries of the world; compare ways of solving psychophysiological and social problems by neuropedagogy and related sciences; to formulate on the basis of the studied recommendations on improvement of such work and to outline the further prospects of researches. The epistemological core of the work is the consideration of the innovative science of neurosociology and its socially adaptive potential in working with children with special needs.

Historical aspects of neuropsychology and social work with people with disabilities

The methods relevant for the theoretical study of socionic issues, problems of the frontier and the intersection of the humanities and natural sciences are used in the work. In particular, the method of analysis and generalization of theoretical sources; method of extrapolation of social work tasks with children with disabilities to neuroscientific theories and practices. The method of establishing intradisciplinary correlations allowed to identify socio-pedagogical problems that can be comprehensively addressed at the junction of psychological, pedagogical and neurobiological sciences.

The material for the study was historical reviews, classical provisions and theoretical works on innovative areas of social work and neuropedagogical support for people with disabilities. The main theoretical

provisions of inclusion as the main paradigm of education, correction and social support of persons with disabilities are also taken into account.

The analysis of the historical aspects of neuropsychology and social work with people with disabilities should begin with a review of the main legislative acts that once provided for the framework principles of integration, socialization and education of people with disabilities (Table 1).

Let us consider in more detail the framework provisions of education and social work in the context of the above documents, which implement a non-medical model of support for people with disabilities. For example, the UN Convention on the Rights of Persons with Disabilities uses the term "inclusion" for the first time (2006). However, in different countries, the terms "inclusion" and "integration" are often used interchangeably, indicating the unity of the principles of education and social integration of persons with disabilities.

If the provisions adopted in the second half of the twentieth century were general and symbolic in terms of inclusion of persons with disabilities in the general social process, then a number of documents of the late twentieth - early XXI century laid down specific provisions of inclusion. Thus, the "Standard Rules for the Equalization of Opportunities for Persons with Disabilities" (United Nations, 1993) outline equality of rights in obtaining all general and professional levels of education for persons with disabilities; detailed optimal conditions for the provision of social services on the principle of integration, even for people with disabilities with severe diseases.

The Salamanca Declaration on the Principles, Policies and Practices for the Education of Persons with Disabilities (1994) for the first time uses the term "inclusion" in a pedagogical sense, which is recognized by almost a hundred governments as key to building national education systems. The document presents framework concepts for governments to adopt relevant laws that provided for the complete transformation of education in order to implement inclusion by 2015.

All documents refer to deontological principles of communication with children with disabilities, as violation of these principles not only reduces the effectiveness of pedagogical efforts, but can also harm the mental and physical health of a child with special educational needs (hereinafter - SEN). The teacher and the social worker are responsible for the chosen goals, objectives, content, methods of teaching a child with SEN, because a child with SEN is more dependent on pedagogical assistance than his peers who do not have SEN.

In Europe, the concept of disability from the very beginning of scientific research has been associated with physical or psychological characteristics that lead to social dysfunction. For example, in Germany, a person with a disability is a person whose physical or psychological functions for more than six months do not allow him to correspond to his social status, age and normal physical well-being and prevent him from participating in public life. Thus, disability in the modern sense is associated not so much with subjective well-being, but with the ability to fully enter society. This gradually reoriented the paramedical and socio-psychological sciences towards socially oriented support.

Consider the above approaches in modern theoretical and methodological discourse. Reviews of literature sources on neuropedagogy and neuropsychology have already been carried out by scientists on certain aspects. Thus, Collins and Rurke (2003) analyzed the literature that examines the correlation of neurophysiological processes and defects and learning difficulties. In most works it is proved that the acquired forms of mental and neurotic disorders, the consequences of psychotraumas are well exposed to neuropsychological influence.

The foundations of neuropsychology and neuropedagogy were laid by Vygotsky (2003) and Luriya (2003), who were the first to apply a psychological approach in didactics. However, already in the early stages of sociology, its connection with (the biology and psychophysiology of human behavior was established. Thus the first sociologists considered biology and sociology to be the basic and complementary sciences of man. In the early twentieth century. Opinions were expressed that socialization is a natural stage of human development that follows directly from the biological and accompanies it. In this case, man was considered a biological species, and society - a natural environment for this species Spencer (1999).

The primary in terms of history and the most general concept of the direction of social work with people with disabilities is the term "integration". The literature identifies two main aspects of integration: the process and result of adaptation to the (social) environment and the balancing of existing defects by the system of components of this environment Cancian (1972, p. 104). German scientists have deepened the sociological content of accompanying people with disabilities. They formulated the philosophical foundations of integration, according to which a person with a disability is a full-fledged, albeit new, element of the environment, after inclusion in which he acquires all the full-fledged properties of this environment (Endruevit, 1989, p. 307).

Researchers of the role of metaphors in human life Lakoff and Johnson (2016), perhaps without realizing it, laid down one aspect of neuropedagogy, in particular behavioral and mental. According to these scholars, metaphor is not just a linguistic formation. It is also a way of thinking and acting, from which one can judge the deep neural nature of metaphor. M. Johnson emphasizes the social role of metaphors and the metaphorical nature of society. Therefore, a person who has not developed unconscious skills and reactions is desocialized and falls out of the usual social foundations.

Developing ideas of the neuropsychological nature of metaphor, scientists propose to use it as a tool of didactics, education and psychocorrection. Thus, Sadik (2018, pp. 21 - 22) argues the use of metaphors in the correction of negative or deviant behavior. The researcher proved on the basis of a pedagogical-psychological experiment that students perceive teachers' directives through metaphors (often negative), and themselves produce their own mostly positive metaphors. This makes the metaphorically modeled educational process better and translates it into the object of neuropedagogy research.

Neurophysiological indicators are currently taken into account in specialized or vocational training (quality improvement, determination of aptitudes and inclinations, neurodidactic support) and reflected in specific educational and rehabilitation programs and manuals for secondary education Kulikova (2014), Potapov (2002), Sirotyuk (2003).

In connection with the penetration of neuropedagogy into the educational practice of high school, Linda Kirby (2006) proposes to create a course for future teachers courses on the laws of brain function. The degree of formation of such competencies should be revealed by interpreting the process and learning outcome of children with different abilities and characteristics of the brain. The main psychodidactic tools in the work of a young teacher-neuropedagogue - increasing positive stimuli, satisfaction and play component in time and quality.

In turn, Franks and Turner (2013, p.3) are forced to recognize that the newly created science of neurosociology, which is ideally designed to take into account the peculiarities of brain development in social entry, still remains a framework approach, not a full-fledged science, because problems and prospects outlined, and diagnostic and shaping tools are still under development. So far, the most developed in this area is the establishment of determinant links between the neuropsychology of the individual and his membership in social groups and organizations.

Thus, a review of the sources revealed the multimodal possibilities of the neuropedagogical approach, which is an important subject of study in the sociological and natural sciences.

Correlations of neuro pedagogy and social work in modern theory and practice

Analysis of neuropedagogical and socio-pedagogical sources revealed the main patterns of modern social support for children with disabilities. The first of them is expedient, but not directive, construction of a complex social project of a child with the involvement of a wide range of specialists. The role of the neuro-educator is to choose a personal trajectory of educational and social cases that can contribute to the gradual social equalization, development of deficient or poorly developed didactic and social abilities. The second of them, according to the European model, is interactive, related to the formation of personal (as far as possible) responsibility of the child for its interaction with society. Provides pedagogical and psycho-correctional stimulation of activity, strengthening of socially significant functions, which are already available at least in its original form. The third, most important, taking into account the cognitive and communicative features of the child, measuring higher nervous and mental functions and building its effective interaction with the environment. First of all, with inclusive, and if possible, with heterogeneous and not always favorable (development of stress resistance). The concrete realization of these directions begins with neuropedagogical modeling of social situations in which the child with a disability is gradually involved. At the same time stress or on the contrary comfort of stay, activity and activity in a microsociety is constantly tested. As the positive psychophysiological dynamics of the situation become more complicated, the child is involved in the interaction of an increasing number of real and formal social groups. The level of meaningfulness of the process of social integration is also subject to constant monitoring. The optimal indicators are the level of satisfaction, acceptance, conformism, the dynamics of movement from the specific (I - Ego) - to the general. This aspect correlates with the actual neuropsychological indicators.

The need for neuropsychological and neuropedagogical correction is caused by congenital or acquired psychosomatic disorders. Especially those related to the destructive effect of disability and incorrect professional behavior (deontology) of specialists who provide support for people with disabilities. These, according to scientific sources, include autopsychic and

acquired disorders (apathy, inferiority complex, hypoprotection (lack of care), hyperprotection (excessive care), restriction and prohibition syndrome (to improve or simplify the life of a person with disabilities), inappropriate expectations. (inhibit or excessively accelerate development).

Thus, the main aspect of neuropsychological correction concerns both subjects - people with disabilities and the environment (parents, professionals), which can harm development with a positive declared goal.

The main means of counteracting destructive neuropsychological influential is the observance of the key goal-principles of inclusion and appropriate correctional and socio-pedagogical support: individual selection of means of influence, continuity, adaptability, voluntariness (on the part of a person with a disability), axiological, naturalness (naturalness (nature), resourcefulness, consistency, involvement the like.

The basis for the valid application of neuropedagogical techniques and practices is the classical provisions of personality-oriented pedagogy of nature-type and nature-doozy (Komensky, 1982), personal ethics and activity spontaneity (Montessori, 1955), the presence in the personality of potential and all the rudiments of its divine development (Plato, 2007). On the basis of these works, the terms of behavior and activity, formation, influence, in order to avoid damage, compensation, personal space and the like came to neuropedagogy.

A study of the incorporation of neuropedagogy and neuropsychology into social work with children with special needs revealed that neurosociology, the science of the biological, anatomical, and psychophysiological determinants of human social development and adaptation, has been slowly but steadily developing since the 1990s. However, most sociologists, and even more so social workers, still consider their own activities to be humanitarian and separate from neuroscience. In parallel, neuroeconomics, neurosociology, and culturological neuroscience have emerged and are developing, which testifies to the paradigmatic nature of the neuro approach to modern anthropology in general. The term "neurosociology" was first used by J. Bogen (Bogen et al., 1972) to study the styles of thinking lateralized in the left hemisphere, and later scientists began to establish determinant links between the lateral profile of a person and his behavior and incorporation into society. The analysis of valid correlations between neuroscience and social and socio-pedagogical work with children with special needs allows to formulate scientific and practical connections that can synergistically solve the problems of adaptation of persons with disabilities to the environment (Table 2).

American scientists have declared the 1990s a "decade of the brain," which has led to the rise of many interdisciplinary sciences. With the delineation of the subject and the development of categories and tools of neurosociology, social work practices began to turn to it: social workers, correctional teachers, speech pathologists, rehabilitation specialists, etc. Currently, the two most developed areas of neurosociology are outlined - affective and cognitive (emphasis is placed on the emotional-volitional and mental-cognitive spheres, respectively).

As a result of studying the common object of study of sociology and neuropedagogy, common and different approaches of these sciences to solve the main socio-pedagogical and psychological problem of children with special needs - their sociologization and environmental self-identification. The results of this analysis are presented in table 2.

Table 2. *Correlations of neuropedagogy and social work in modern theory and practice (Systematized by the authors)*

Socio-pedagogical approach to the problem of accompanying children with disabilities	Neuropedagogical approach to the problem of accompanying children with disabilities	Comments and search for instructions <i>common / excellent</i>
<p>1. Consideration of belonging to a formal and / or real social group (person with a disability, child, student).</p> <p>2. Taking into account personality traits (hobbies, interests, promising areas of activity, the degree of sociologization).</p> <p>3. Organization of support on the way to socialization through the development of self-identification, acceptance of full membership in several</p>	<p>1. Taking into account neuropsychological characteristics: temperament, gender, features of cognitive activity.</p> <p>2. Taking into account the modalities of internal experience, the prevailing modality (sound, visual, retrospective) (past experience), etc.</p> <p>3. Organization of support on the way to socialization through the development of subjectivity,</p>	<p>1. Complementary components. Often neurophysiological indicators are determinants of belonging to a certain group.</p> <p>2. Neuropedagogical approach more deeply determines the causes of the intention of the individual and at an earlier stage of life.</p> <p>3. Common accompanied by a social worker and a neuropedagogue - in the formation and psychosynthesis of "I-</p>

<p>social groups; group project activities, cooperation, consulting.</p> <p>4. Recognition of the value of one's own personality, its activity and creative intention, for the purpose of which self-knowledge and formation of one's own cognitive and activity "niche" are stimulated.</p>	<p>personality-oriented activity (he is the subject and object), the formation of skills of self-responsibility for the development of a unique biosocial nature.</p> <p>4. Recognition of own biological, cognitive and psychosocial needs and learning to implement them</p>	<p>Ego" in different social roles (I - a man, I - a student, I - a son / daughter).</p> <p>4. Both approaches allow to resolve internal contradictions synergistically; to find external (social) and internal (psychophysiological) resources to meet their own needs and the realization of vital interests.</p>
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In order to preserve the often insignificant psychoneurological resources of a child with a disability, it is necessary to consistently implement a quasi-professional pedagogical approach. We mean acting out social situations, the primacy of education and communication over learning, the involvement in the educational and socio-socialization process of outsiders - volunteers, community workers, peers, community activists and more. This approach expands the consciousness of the child with special needs, the changes of which gradually include new productive neural connections in layers. Although in the social pedagogy of working with children with psychophysical disorders it is recommended to exclude the competitive component (in learning and socialization), still the neuropsychological features of the brain of any person are aimed at change. Many works are devoted to acmeological aspects of correction and support of persons with disabilities (achievements in a special niche, Paralympic sports, narrow professional successes). However, the main requirement for the dynamics of cerebral, and therefore mental, motor or activity dynamics should be self-observation and constant background testing in compliance with the medical principle of "do no harm" (Barr, 2003; Tsushima et al., 2018).

Analysis of the application of methods for determining the lateral profile and extrapolation of these data to social work allows us to identify a number of specific psychophysical properties of children with special needs. These properties are of key importance in the sociologization of the child and in its social support. We present the data in the form of a table.

Table 3. *Neuropsychological features of children with disabilities with different neurophysiological orientation (Systematized by the authors)*

Children with disabilities with right hemispheric neurophysiological orientation.	Children with disabilities with left hemispheric neurophysiological orientation.
<ol style="list-style-type: none"> 1. Pay attention to objects and events that are or occur on the left. 2. More prone to social communication. 3. Can solve spontaneous psychosocial problems in a non-standard way. 4. Sensitive to irrational support and praise from others. 5. More prone to independent socialization (with the presence of appropriate support). 6. Prefer group, collective types of transformational or creative activities. 7. Can detect symptom complexes of hyperactivity, overvaluation (Russian supervaluability), hysteria. 8. Typical creative and cognitive activities: role-playing games, brainstorming, group work, empathy, creativity. 	<ol style="list-style-type: none"> 1. Pay attention to objects and events that are or are happening on the right. 2. Prone to distance themselves from group types of communication. 3. Prefer logical solutions to psychosocial problems, need more time. 4. Pay attention to specific facts, objectivity of assessment. 5. It is more difficult to socialize and require significant social support. 6. Prefer independent activity. 7. May show symptoms of hypoactivity, mild autism, perfectionism. 8. Typical creative activity: solving logical problems, working with specific data according to a certain algorithm

The above features are the starting point for the neuropedagogical development of individual strategies of social support and personal social trajectory. This applies to didactic, psychological and social influences and activities on the part of the subjects of the social process.

Discussion ra Conclusion

Currently, the neuropsychological and neurodidactic approach to social work with people with disabilities is still in its infancy and is most applicable to physical disabilities and mild forms of mental dementia, when it can be combined with the actual medical. However, scientists deny the clear effectiveness of neuropedagogical and neuropsychological correction in moderate and severe cerebral and sclerotic disorders (Santiago Rolania et al., 2006). In the early 70's, when the basic laws of neuropedagogy were

established, there were also fluctuations in the choice of object and the main tasks of the study. The focus was on the neuropsychological problems of learning disabilities: whether there is a link between brain disorders and didactic success, whether there are reliable criteria for determining how cerebral disorders and other dysfunctions are associated with psychosocial dysfunctions (Rourke, 1975). Thus, at the very beginning of its formation, neuropsychology and neuropedagogy correlated with social adaptability.

There are also trends in the approximation of neuropedagogy to cybernetics and e-management, which is explained by the common patterns of the brain and electronic neural systems. Klemantovych and Stepanov (2015) directly state in this regard: "Neuropedagogy", in contrast to pedagogy (recognizes the primacy of biological and hereditary in the development of the child) (author's note) does not try to replace the whole science of man. is designed to work closely with various specialists, primarily in the field of neuroscience, based on the totality of their data ".

International experience in the formation of social justice in children tries to resolve controversial issues. Thus, scientists study in terms of cross-cultural trends in ethics, pedagogy and psychology. For example, in the United States, New Zealand, and Ireland (Cochran-Smith et al., 2012) school curricula have been implemented. demographic situation, competence of teachers who form basic neural connections for full-fledged social communication.

A positive aspect of the application of neurosciences in social work with persons with disabilities is that this science takes into account not only individual psychophysical characteristics, but also the usual group characteristics: gender, age, social status that forms the environment, the degree of development or lagging behind certain neuropsychiatric functions, psychotype, and so on. like that. These factors are the initial data for the formation of social status, social self-identification and social behavior, sociologization in general, that is, the achievement of the main goals of social work with persons with disabilities. So, the analysis of the historical and modern experience of the application of neuropedagogy in social work revealed a correlation with the leading problems of the humanities, natural and related neurosciences.

As a result of the analysis of theoretical and methodological sources, the results of neuropedagogical experiments and practices conducted in an inclusive environment among children with disabilities, we can formulate a key conclusion of this study. The most promising area of interaction between neuropedagogy and social work is the focus of sociological observations and research on neurobiological causes and mechanisms of acts

and patterns of social interaction; on neuropsychological laws of entering social groups and occupying in them a certain rank (status); determining the nature of internalized cultural values, observance of traditions, etiquette, rituals, etc .; on the ways of mastering social and institutional rules, experience that determine the role social functions of a child with a disability. In addition, neuropedagogy allows us to identify how the dysfunction of a child with a disability affects his social self-identification, behavior, and so on. The most valid results of these activities can be obtained in the synthetic science - neurosociology.

The individual program of social work with a person with special needs includes a trilateral correctional complex of work: 1. Neuropsychological (clarifies the nosology and the causes of difficulties in entering in the society); 2. Comprehensive (takes into account sociological, pedagogical, medical, psychological and other knowledge about the person, inventories them and outlines ways out); 3. Interdisciplinary (coordinates the activities of specialists of different profiles in the implementation of full-fledged social and correctional work for full entry into the social process). Here there is a combination of individual mental and nosological with the general social image and personal trajectory of a person with a disability as a subject of social activity.

Promising areas of further research are the search for practical interaction of neuroscience with the humanities, the development of a common categorical apparatus, effective tools, changing the educational programs of future teachers and social workers in terms of mandatory study of the practical foundations of neurosociology. Scientists are already predicting innovative and futurological studies of the brain in connection with various types of human disabilities: from learning disabilities to severe disabilities. According to them, in the near future the following neuropedagogical tasks should be solved: elucidation of brain metabolism in children with learning difficulties, identification of subtypes of psychosocial life and their correction, neuropsychiatric consideration of learning and socialization of children with epilepsy and other severe mental disorders .

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