

Review of the book by Janna M. Glozman “Developmental Neuropsychology”

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Janna Glozman's book provides a comprehensive information on both Russian and Western developmental neuropsychology. The reader, especially from the West, may find first hand information on Vygotsky and Luria's collaboration with emphasis put on social aspects of child development. At the same time the reader can learn about principles of Luria's syndromological (qualitative) approach and Vygotsky's zone of proximal development. Two important notions that had a great impact both on the neuropsychological and developmental studies.

The first chapter “The history of developmental neuropsychology” explains the cultural-historical approach to analysis of development and abnormalities in cognitive functions. It stresses the relations between brain, genetics, sociology and personality formulation. And the statement found on page 5 that: “the influence of natural factors on child cognitive decreases with age but influence of cultural factors increases” should be borne in mind of each developmental psychologist. Luria study of 130 pairs of twins is of particular interest there. Pointing out to the possibilities of application of neuropsychology outside the clinical setting is also a valuable feature of this book.

The second chapter devoted to methodology starts with explaining basic terms what is of importance due to diverse terminology used by different authors in accordance with their theoretical approach. Following types of disturbances in the development of the child are distinguished: 1. Underdevelopment, 2. Delayed development, 3. Impaired development, 4. Loss of development, 5. Deviant development, and 6. Disharmonic development. Besides, the author draws our attention to the heterochronic development of the functional (nervous) systems depending to a considerable degree upon the environmental factors. She points to the paradoxical fact that refinement of educational techniques creates greater demands from the children and may lead to appearance of special learning disabilities.

In the third chapter detailed analysis of physiological and psychological features of mental development of the child can be found. It starts with a presentation of most common neuroimaging techniques. Next dwells on plasticity of the young

brain, and often neglected development of cortical-subcortical connections, which have a significant impact upon the child mental development. Naturally, a role of language is also accentuated in accordance with Luria's approach. It is stressed that not only speech but also development of other cognitive processes is strongly influenced by environmental factors along with maturation and hierarchical complication of brain structures.

The fourth chapter is devoted to the neuropsychological assessment of children. It draws upon Luria's approach combined with Vygotsky's idea of a zone of proximal development with focus on the process and not the product itself. The delineation of basic defects underlying problems encountered by a given child provides a powerful tool of rehabilitation. The adaptation done by Glozman includes very ingenious material and takes into account limits of perception and attention of the young preschool child. Moreover, the game form is applied to ensure better cooperation of the child.

Impaired development of cognitive functions in children is discussed in chapter 5. It offers the reader a vast amount of information on such syndromes as speech disorders, dyslexia, dysgraphia, impairment of visual and spatial functions, memory, reasoning and motor disturbances, hyperactivity, attention disorders as well as learning disabilities. Those problems are discussed from neuropsychological and social point of view. Glozman points out that the application of Luria's neuropsychological approach to the assessment of children enables identification of the zone of proximal development, that is not only the weaknesses but also the strengths of a given child. And that makes possible a refinement of the course of therapy.

Chapter six deals with atypical development of the child. It is worthy to point out that not only disorders are discussed but exceptional abilities as well. They are described from neuropsychological point of view and concentrate on such illnesses as autism, stuttering, blindness and deafness (sensory deprivation), and cerebral palsy. Neuropsychological analysis of gifted children is also taken into consideration. It might be of interest that it revealed imbalance of different functional systems of such children. The most significant problems, however, are caused by their increased exhaustibility as well as emotional instability. In addition issues of bilingualism are discussed. It is stressed that acquiring a second language may facilitate the development of a healthy brain but it may cause many troubles in case of some defects. In addition, difficulties encountered by immigrant children are discussed. As in case of above presented topics not only neuropsychological aspects but also social ones are presented.

The real strength of the book under review is that it shows ways of remediating children's development. In accordance with the ideas of Vygotsky and Luria Glozman rightly points out that: "The main task of remediation is to create together with a child the means of compensation and overcoming an underdevelopment of some mental functions, using the 'strong' components of mentality to compensate the weak ones" (p. 149). Those two principles, that is child's own activity and relying on his/her best developed abilities determine efficacy of any therapeutic procedure, and together with combining assessment with rehabilitation provide for the strength of "Russian school of rehabilitation". Each experienced therapist knows that the initial diagnosis often undergoes changes in the course of therapy.

The following principles of neuropsychological rehabilitation are enumerated:

1. Neuropsychological assessment of a given child's problems
2. Complex remediation
3. Systemic remediation — means taking into account the whole child and not disorders
4. Play activity

Another strength of Glozman's book stems from the fact that the discussed issues are illustrated with a number of samples showing the therapist at work. She is right to point out that while working with children we should make them treat the remedial exercises as a play, otherwise they will not cooperate and our efforts will prove fruitless. In addition, various games are recommended as they help to develop the child's social skills. As the author states: "...remediation is not a correction — it is a creation".

To sum up, the reviewed book gives both a deep theoretical knowledge on developmental neuropsychology and the account of practical techniques of the assessment and remediation of various difficulties encountered by children. Therefore, I would recommend it not only to neuropsychologist but to all researchers and clinicians dealing with a child development.

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