

**A summary of the PhD thesis entitled**  
**"The comprehension of spoken and written utterances in aphasia"**

Aphasia is a phenomenon described in various scientific disciplines. However, most studies on the symptoms of language disorders acquired as a result of neurological diseases focuses on the description of the process of forming utterances. Patients with aphasia lose their language skills (related to understanding and forming statements) and the ability to perform other activities requiring efficient use of language (such as writing, reading, counting, specifying time and space). Moreover, they have also various types of locomotion and manual problems (related to paralysis or paresis of limbs), sensory disturbances, movement planning, reception and perception of visual and auditory stimuli as well as memory and attention deficits, which are compounded by various mental problems (including depression and apathy, reduced control of their own behaviour, less interest in the environment or increased fatigue). Patients' limitations in access to information, problems with communicating with others, and a number of consequences of neurological disease very often lead to patients' disability and social isolation. However, there is no complete knowledge about specific disorders in understanding spoken and written statements in cases of aphasia in the literature on the subject.

The comprehension of utterances has become a research problem of great importance in speech therapy. It is known that the condition for effective interaction is the understanding of verbal and non-verbal messages, and understanding is impaired in many speech disorders – both in children and adults - not only as a result of aphasia. Therefore, the assessment of understanding becomes one of the basic goals of speech therapy diagnosis, and if disorders of this activity are detected, improving it becomes the first, primary goal of speech therapy. So far, descriptions of individual speech disorder entities have emphasized the state of speaking skills, with a rather superficial assessment of comprehension activities. Thus, there is a need to conduct research on the activity of understanding speech, and, consequently, a detailed description of individual units of speech disorders. There are two common types of aphasia: sensory and motor, which assumes that comprehension and speaking disorders are separate. However, clinical practice proves that difficulties in understanding utterances concern all patients with aphasia, but the scope and depth of these difficulties vary.

The aim of the research is to analyze the understanding of statements in patients with aphasia, which allows determining the specificity of disorders in comprehension

activities at individual levels of organization of this activity, as well as to compare the comprehension disorders in cases of motor and sensory aphasia, taking into account compensatory mechanisms compensating for difficulties in understanding both spoken and written statements.

This thesis presents the usage of an original tool to assess text comprehension in aphasia, and in order to summarize the problem of comprehension disorders, which consist of many mechanisms and factors related not only to the information transmission channel, but also to the semantic complexity of the text and its setting in context, in an analytical way, the conducted research is summarized and conclusions are presented.

The analysis of the empirical material is based on the responses to questions about the texts asked two groups of patients - ten people diagnosed with motor aphasia and ten people diagnosed with sensory aphasia - allows for a positive verification of the research hypotheses, in relation to which specific conclusions are drawn: 1) comprehension disorders occur not only in patients with sensory aphasia, but also in those diagnosed with motor aphasia; 2) respondents achieve higher results when recognizing information contained in literal than metaphorical texts; 3) patients with motor aphasia achieve a higher level of understanding in the case of spoken than written texts, while an inverse relationship is observed in patients with sensory aphasia, who achieve better results in the case of understanding written statements; 4) regardless of the type of aphasia, the highest results in comprehension tests are achieved by patients at the global and selective level while remaining in constant interaction with the interlocutor (therapist).

Due to the fact that the activity of understanding is associated with the action of many factors that determine the final result of its examination, it is necessary to use diverse experimental and clinical tests that take into account various factors related to both the information transmission channel and the semantic complexity of the text and its setting (and lack of setting) in context.

The analysis and interpretation of the research material proves that aphasia is not a breakdown of linguistic competence, but a disorder of access to the word and its auditory-sensory-motor pattern. Using appropriate methods and therapeutic strategies based on interaction, effective communication with a person with aphasia is possible. Assuming that the ability to understand appears in ontogeny before the activity of speaking and is a primary activity that determines it, improving the activity of understanding becomes the primary goal of speech therapy. However, all activities undertaken by a speech therapist should be based on the assumption that, regardless of the nature of the aphasia difficulties that

predominate in the patient, one should always remember that the speech therapist's interest should not be focused on aphasia, but on the person affected by it.

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