

# *Differential diagnosis of intellectual and speech disorders*

*Presentation for the discipline "Psychological and pedagogical  
diagnosis of developmental disorders"*

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# *Lecture Questions*

- 1. Criteria for differential diagnosis.*
- 2. The main approaches in the diagnosis of disorders of intelligence and speech in children: medical, psychometric, pathological, neuropsychological.*
- 3. Determination of the structure of the violation.*
- 4. Comparison of the clinical and psychological parameters of the structure with total and local mental underdevelopment.*
- 5. Selection of diagnostic techniques for the differential diagnosis of speech and intellectual disorders.*

# ***Differential Diagnostic Criteria***

## ***Psychological aspects of the mental norm :***

***neuropsychological*** – preservation of brain structures, as indicated by the level of development of motility, attention, memory;

***general psychological*** – safety of the behavioral sphere, adequacy of criticism and self-esteem, learning ability;

***age-psychological*** – compliance with the standards of age development + representation of the leading type of activity for a given age period.

# *The main approaches in the diagnosis of impaired intelligence and speech of children*

## *medical*

- *based on medical nosological diagnosis*

## *psychometric*

- *based on measurements of age-related developmental norms*

## *pathopsychological*

- *based on the adequacy of behavior, criticality, learning*

## *neuropsychological*

- *based on the safety and individual functioning of the brain systems*

## *Diagnostic Methods*

**medical examination + hardware methods + medical history**



**comprehensive testing**



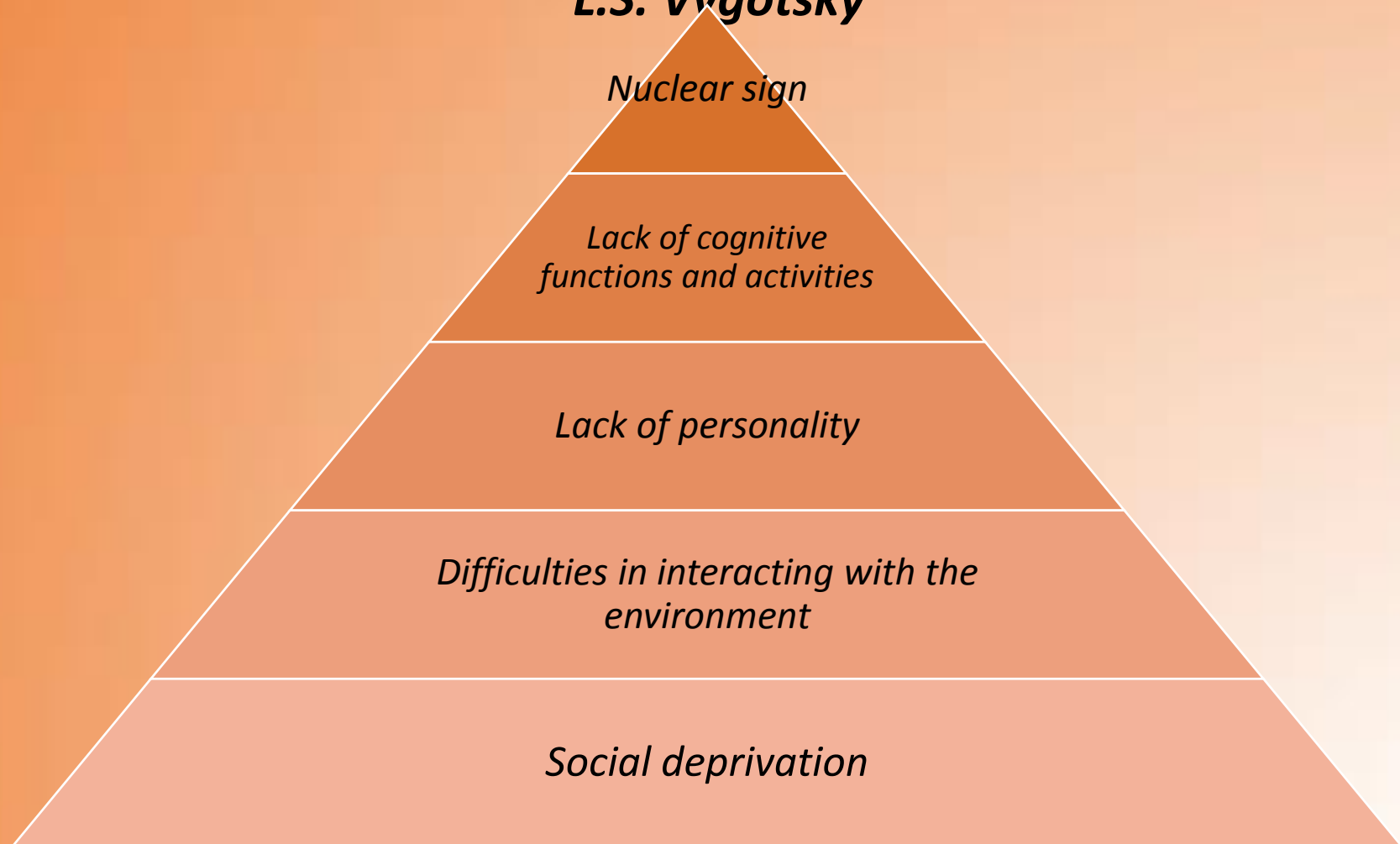
**observation, conversation, experiment**



**functional tests**

# ***Determination of the structure of the violation***

***The general scheme of the structure of violation according to  
L.S. Vygotsky***



# *The phenomenology of children's difficulties*

## *preschoolers*

- *speech development*
- *behavioral problems*
- *lack of lead - games*

## *primary school students*

- *lack of readiness to learn as an activity + school mode*
- *language assimilation*
- *lack of learning motivation*

## *pupils*

- *violation of the structure of activities*
- *failure*
- *lack of interaction and communication*

*Special educational needs*

*Educational route*

*Inclusive environment*

*Customized conditions*

# ***Criteria for differential diagnosis (according to V. I. Lubovsky)***

<b><i>Type of violation</i></b>	<b><i>Level of thinking</i></b>	<b><i>Speech level</i></b>	<b><i>Learning level</i></b>
<b><i>Impaired mental function</i></b>	<i>middle</i>	<i>middle</i>	<i>middle</i>
<b><i>Mental retardation</i></b>	<i>low</i>	<i>middle/low</i>	<i>middle/low</i>
<b><i>Phonetic and phonemic underdevelopment</i></b>	<i>high</i>	<i>middle</i>	<i>high/middle</i>
<b><i>Alalia</i></b>	<i>middle</i>	<i>low</i>	<i>middle/low</i>

# ***Differential diagnosis of intellectual disorders***

<b>Differential signs</b>	<b>Impaired mental function</b>	<b>Mental retardation</b>
<b>Degree of brain damage</b>	Functional disorders of the central nervous system. Local focal lesions of moderate and mild	Diffuse in combination with focal lesions.
<b>Cognitive development</b>	Lack of verbal-logical operations, perception is undifferentiated, attention is unstable, difficulties in processing verbal information	Total mental underdevelopment: underdevelopment of visual forms of thinking, perception is distorted and incomplete, poor development of memory, attention.
<b>Speech Development</b>	Phonetic-phonemic underdevelopment of speech	General speech underdevelopment
<b>The way to perform actions</b>	Trial and error, actions are not always appropriate to the situation	Irrational, unproductive and inadequate methods of manipulation.
<b>Arbitrariness</b>	The lack of arbitrariness in mental functions, but when learning, the child goes to the elements of arbitrariness	Extremely low randomness in any activity
<b>The nature of the assistance provided</b>	Help accepts and uses it when completing tasks. The adult explains the instructions, the rules and in the course of the joint activity shows a sample of work	Extensive adult assistance. Accepts during repeated playback, but does not independently use it when completing tasks.
<b>Ability to carry</b>	Most children have	Extremely difficult
<b>Level of mental activity</b>	Middle	Low



# ***Selection of diagnostic techniques for differential diagnosis of speech and intellectual disorders***

## ***neuropsychological:***

***functional tests of motor skills (N.I. Ozeretsky, A.R. Luria)***

***attention research methods (V. Schulte)***

***memory research techniques (A.N. Leontyev - L.V. Zankov)***

## ***general psychological:***

***preservation of the behavioral sphere (observation and conversation)***

***the adequacy of criticism and self-esteem (T.V. Dembo - S.Ya. Rubinshtein, F. Hoppe)***

***learning ability (training experiment);***

## ***psychological and pedagogical:***

***speech development by age (understanding and reproduction of speech)***

***development of a leading type of activity for a given age period***

## ***Examples of diagnostic methods for the differential diagnosis of speech and intellectual disorders***

- *functional tests of motor skills (N.I. Ozeretsky, A.R. Luria)*  
<https://www.youtube.com/watch?v=rwK2517WrHg>
- *attention research methods (V. Schulte)*  
<https://www.youtube.com/watch?v=PIYUEQP8wW0>
- *memory research techniques (A.N. Leontiev – L.V. Zankov – indirect memorization)*  
<https://www.youtube.com/watch?v=KbRUeo1fhIU>  
<https://www.youtube.com/watch?v=FWtGjLtdd7k>

# ***Educational experiment***

***"Classification of concepts" (subject)***

<https://www.youtube.com/watch?v=UbabuB6jqgg>

***"Classification of geometric shapes according to A.Y. Ivanova***

***"Establishing a sequence of events"***

<https://www.youtube.com/watch?v=-Yoxk-JHLao>

[https://www.youtube.com/watch?v=X\\_x-CBVqw0I](https://www.youtube.com/watch?v=X_x-CBVqw0I)

***"Exclusion of the superfluous" according to B.V. Zeigarnik***

<https://www.youtube.com/watch?v=E8ronzJEeG0>

***"Clipetz"***

<https://www.youtube.com/watch?v=noIW9hK1oF4>

# ***The study of criticality and self-esteem***

*technique T.V. Dembo - S.Y. Rubinstein*

<https://www.youtube.com/watch?v=Q1sP3iAnFp4>

*Methodology F. Hoppe – job choice – level of claims*

# **Diagnostic Results**

## **Children with Speech Disorders**

- *understand and accept the survey situation*
- *understand speaking and instructions*
- *adequately respond to failure and praise*
- *understand their mistakes and seek to correct them*
- *accept help from a teacher - learn how to act*
- *perform logical non-speech tasks better*
- *shy of their violation*

## **Children with intellectual disabilities**

- *don't understand the examination situation*
- *difficulty understanding speech*
- *inadequate reactions to failure and praise*
- *do not understand the essence of the error and find it difficult to correct it on their own*
- *phased and multiple assistance required*
- *difficulty in completing logical tasks*
- *not embarrassed by their limitations and difficulties*

# *Used sources*

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*Thanks for attention!*