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# Збірник наукових праць

# ''Проблеми сучасної психології''

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  У збірнику наукових праць висвітлено найбільш актуальні проблеми сучасної психології, представлено широкий спектр наукових розробок вітчизняних і закордонних дослідників. Здійснено аналіз проблем, умов і труднощів психічного розвитку, вікових та індивідуальних особливостей становлення особистості й психології навчання.

  Збірник наукових праць адресовано професійним психологам, докторантам і аспірантам, усім тим, хто цікавиться сучасним станом розвитку психологічної науки.

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kpnu_lab_ps@ukr.net

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**Ivashkevych Eduard**
Dr. in Psychology, Professor,
Rivne State University of the Humanities,
Rivne (Ukraine)
ORCID ID: https://orcid.org/0000-0003-0376-4615
Researcher ID: V-8872-2018
Scopus AuthorID: 57216880484
E-mail: ivashkevych.e@gmail.com

**Івашкевич Едуард**
Доктор психологічних наук, професор,
Рівненський державний гуманітарний університет,
м. Рівне (Україна)

**Simko Ruslan**
Ph.D. in Psychology, Assistant Professor,
Senior Lecturer of the Department of General and Applied Psychology,
Kamianets-Podilskyi National Ivan Ohiienko University,
Kamianets-Podilskyi (Ukraine)
ORCID ID: https://orcid.org/0000-0002-9147-9541
Researcher ID: AGG-0436-2022
E-mail: 7kort@ukr.net

# Сімко Руслан

Кандидат психологічних наук, доцент,
старший викладач кафедри загальної та практичної психології,
Кам'янець-Подільський національний університет імені Івана Огієнка,
м. Кам'янець-Подільський (Україна)

**The author's contribution:** Ivashkevych Eduard – 50%, Simko Ruslan – 50%
**Авторський внесок:** Івашкевич Едуард – 50%, Сімко Руслан – 50%

**ABSTRACT**
  **The purpose** of our article is to study the level of the development of tea-chers' social intelligence of teenagers and senior pupils who teach the natural sciences and humanities; to receive and to analyze the results according to Sub-test 3 "Verbal Expressions" (Гилфорд & О'Салливен, 2021), which determine the ability to understand the significance of such verbal reactions of people de-pending on the context of the situation; to study the problem of the influence of Social Intelligence of teachers on the organization of problem-based learning at secondary schools.
  **Methods of the research.** The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical method, structural and functional methods, the methods of the analysis, systematization, modeling and generalization. In our research we used empirical methods, such as statement study and molding experiment. With the aim to diagnose the level of the development of social intelligence of teachers we used the test of J. Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S. Mykhailova (Гилфорд & О'Салливен, 2021).
  **The results of the research.** We diagnose the level of the development of the ability to predict the development of a social situation depending on exter-nal circumstances. There is a slight tendency towards higher indicators of social intelligence of women, but there aren't significant differences in the indicators of social intelligence of men and women at high, medium and low levels, which have been established. We can note that the subjects who performed the tasks of this test equally well, had indicators of a high level of development of so-cial intelligence. We proved, that because respondents with a high level of the development of social intelligence according to this subtest are able to extract the maximum amount of information about people's behavior, they are able to understand the language of non-verbal communication, express quick and accu-rate judgments about other people, successfully predict their reactions in given

*conditions, show farsightedness in the relationships with others, which contributes to their successful social adaptation.*

***Conclusions.*** *So, teachers with a high level of social intelligence are usually successful communicators. They are characterized by contact, openness, tact, benevolence and cordiality. A high level of social intelligence is associated with a great interest in solving social problems, by the need to influence others and it is often combined with a high level of organizational pupils' skills development. All the listed personal qualities characterize teachers of humanitarian professions.*

***Key words:*** *social intelligence, the organization of problem-based learning, successful communicators, verbal reactions, the context of the situation.*

## Introduction

Social intelligence is often identified with wisdom as a form of intellectual talent. In the articles (Гончарук & Онуфрієва, 2018; Heino, Ellison & Gibbs, 2010; Rezaei & Mousanezhad Jeddi, 2020) scientists believe that the results of human acquisition of wisdom are the ways of the formation of mental models, which depend on the specifics of cognition and metacognition of the subject, his/her semiotic system, which preference is given to the specifics of the language and speech, as well as decentralized components of the person's intelligence.

The problem of the formation of social intelligence is also highlighted in the researches on the problems of developing the person's creative abilities. In particular, in the experiments (Lawson & Leck, 2006; Wright & Webb, 2011) on the development of creativity of schoolchildren, it was proved that a statistically significant increase in the results for all indicators of social intelligence occurs under conditions of positive dynamics of individual creativity. The authors (Nowak, Watt & Walther, 2009) note that a creative person, to a greater extent than an uncreative personality, is capable of understanding and accepting others and, therefore, makes the effective communication and adaptability in the social environment.

In the researches of scientists (Ramirez & Wang, 2008) it is emphasized, that the role of social intelligence in successful socially significant activity is high. It is noted that the leading

characteristics of people with a clearly expressed motive for achieving social success are activity and self-confidence, high self-esteem with actualization of their charm, highly developed social intelligence (Arbuthnott & Frank, 2000; Walther, 2011).

In the researches of scientists (Rains & Scott, 2007) it was also proved that higher indicators of social intelligence were often found according to people who had been more successful in the field of professional psychological counseling; at the same time, less successful psychologists-consultants were diagnosed with low values of social intelligence. Scientists (Pimperton, 2010) also studied the relationships between social intelligence and divergent thinking of teenagers in various conditions of multi-faceted activities. Thus, the researchers (Mykhalchuk & Ivashkevych, 2008) proved that social intelligence and divergent thinking functionally created a single cognitive system with the aim of understanding different meanings in general and the meanings of social situations in particular.

Also scientists (Ishkhanyan, Boye & Mogensen, 2019; Nunan, 2003; Stephens & Rains, 2011) studied the social intelligence of students with different psychotypes of their personality. The scientists (Mykhalchuk & Kryshevych, 2019) consider multifaceted activity as a condition for the synthesis of cultural and individual semantics, which ensure the functional relationships of social intelligence and divergent thinking of the subjects of the activity. The atmosphere in the family, the attitude of parents to the school, and the attitude of teachers is of great importance in showing the interest of pupils in learning (Amichai-Hamburger, 2005). Unfortunately, there are cases where parents in the presence of children express unethical agreement of teachers. This fact in a great degree damages the upbringing of pupils to a positive attitude to learning (Benson, 2001; Kim & Dindia, 2011).

Other scientists (Key-DeLyria, Bodner & Altmann, 2019), speaking about different ways to raise the interest of children to study, emphasize, that this can only be achieved under the condition when parents in the presence of children with praise will

respond to teaching and the scholars, from the other side, are praised by the teacher. Thus, the formation of a great interest of schoolchildren in learning is a quite complex phenomenon, which requires a systematic, painstaking, purposeful activity of the school and the family. It is only by their joint effort that it is possible to ignite the thirst for knowledge in the hearts of children, to ensure that this fire does not fade away, but on the contrary, everything shines brighter, encouraging pupils to continuous searches, to creativity.

So, the problem of our article is quite relevant. So, **the purpose** of our article is:

1. To study the level of the development of social intelligence of teachers of teenagers and senior pupils who teach the natural sciences and humanities.

2. To receive and to analyze the results according to Subtest 3 "Verbal Expressions" **(**Гилфорд & О'Салливен, 2021**),** which determine the ability to understand the significance of such verbal reactions of people depending on the context of the situation.

3. To analyze the results of the subtest "Stories with additions", which diagnose the level of the development of the ability to predict the development of a social situation depending on external circumstances.

4. To study the problem of the influence of Social Intelligence of teachers on the organization of problem-based learning at secondary schools.

5. To show social intelligence as a structure, which includes declarative and operational **(**procedural**)** knowledge.

6. To analyze the role of a cognitive aspect of social intelligence.

7. To determine the functional aspect of the microstructure of the cognitive aspect of social intelligence.

## Methods of the research

The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical me-

thod, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. In our research we also used empirical methods, such as statement study and molding experiment. With the aim to diagnose the level of the development of social intelligence of teachers we used the test of J. Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S. Mykhailova (Гилфорд & О'Салливен, 2021).

At this stage of the empirical research 395 teachers of secondary schools of different regions of Ukraine and 8 directors of these schools participated. At the beginning of the research we formulated the hypotheses that the level of the development of social intelligence of the teacher of secondary school will depend on the professional category (which he/she has; the category will show the degree of professionalisms of the teacher), the type of discipline of this teacher (to which cycle of disciplines belongs this or that subject), and (it is the main) from the psychological type of the personality and from the gender characteristics of the person. For the convenience of describing the results of the research (hence the description of those results that have or do not have a statistically significant difference among representatives of different groups), all respondents were distributed by large and small experimental groups. So, when the results of respondents within a single large experimental group had a statistically significant difference, they were described separately, taking into account their formation within small groups; in the case when there was no such difference, the results of all respondents were described in the paradigm of one large specially formed group. In such a way, all 403 respondents were divided into the following groups:

1) S group – 103 teachers of the third and the second categories (professional experience is from 5 to 10 years, the age is up to 30 years). This group includes: 56 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 23 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 24 teachers of secondary schools 45 and 96 of Odessa city. In

turn, all teachers of this group were divided into subgroups, depending on the discipline they teach:
- S1 group includes 34 primary school teachers (of which 4 teachers are men and 30 ones are women);
- S2 group includes 35 teachers of teenagers who teach the natural sciences and humanities (of which 17 teachers are men and 18 ones are women);
- S3 group includes 34 teachers of senior pupils of the physical and mathematical cycle (of which 17 teachers are men and 17 ones are women);

2) N group includes 108 teachers of the I-st category (professional experience is from 10 to 15 years, the age is from 30 to 35 years), among them there are 47 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 30 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 31 teachers of secondary schools 45 and 96 of Odessa city. Teachers of N group were divided into such micro-groups:
- N1 group includes 39 primary school teachers (all of them are women);
- N2 group includes 37 teachers of teenagers who teach the natural sciences and humanities (among them there are 17 men and 20 women);
- N3 group includes 32 teachers of senior pupils of the physical and mathematical cycle (16 of them are men and 16 are women);

3) M group includes 110 teachers of the highest category (professional experience is from 15 years and more, age is from 35 years old and older); among them there are 55 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 22 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 33 teachers of secondary schools 45 and 96 of Odessa city. Teachers of M group were divided into such micro-groups:
- M1 group includes 26 teachers of primary school (all of them are women);

– M2 group includes 42 teachers of teenagers who teach students of physical-mathematical cycle (there are 22 men and 20 women);

4) P group includes 74 teachers-methodologists and eight directors of secondary schools (their professional experience is 35-40 years, age is 40-47 years old), among them there are 32 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 13 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 29 teachers of secondary schools 45 and 96 of Odessa city. This group also includes 8 directors of secondary schools (among them there are directors of schools, noted above, and also the director of Zdolbuniv schools 5 and 7 of Rivne region). Teachers of P group were divided into such micro-groups:

– P1 group includes 13 primary school teachers (all of them are women);
– P2 group includes 30 teachers of teenagers who teach the natural sciences and humanities (among them there are 12 men and 18 women);
– P3 group includes 31 teachers of teenagers and senior pupils of the physical and mathematical cycle (among them there are 15 men and 16 women);
– P4 group includes 8 directors of secondary schools (among them there are 4 men and also 4 women).

The distribution of teachers into groups and micro-groups was carried out using the method of randomization (technology of pair design), which allowed us to equalize the number of men and women in each micro-group (except for micro-groups, which included primary school teachers, because there were no men among this category of teachers). With the aim to diagnose the level of the development of social intelligence of teachers we used the test of J. Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S. Mykhailova (2021).

## Results and their discussion

This stage of the experiment has the aim for studying the level of the development of social intelligence of teachers of teenagers and senior pupils who teach the natural sciences and humanities (S2, N2, M2, P2 groups). We will describe the features in the indicators of social intelligence of teachers of the natural sciences and humanities, which were identified at the stage of empirical research.

Thus, according to Subtest 3 "Verbal Expressions" (Гилфорд & О'Салливен, 2021), which determines the ability to understand the significance of such verbal reactions of people depending on the context of the situation, the rates of women in all groups were slightly higher than the ones of men. Thus, 34.25% of men and 40.96% of women were diagnosed with the high level of "verbal expressions" in S2 group; in N2 group with high results for this subtest were 30.95% men and 41.16% women, in M2 group there were 33.12% of men and 42.68% of women (Table 1).

In P2 group there were 33.44% of men and 45.04% of women. The difference between these results is rather significant at the level of reliability $\rho < 0.05$. Quite a large number of respondents in these groups have average level of development of social intelligence, based on the responses to "Verbal Expressions" subtest: 38.64% of men in S2 group and 33.88% of women; 39.65% of men in group N2 and 34.90% of women; 41.59% of men in M2 group and 37.28% of women; 45.70% of men in group P2 and 35.95% of women. The difference in the results of the middle level of the development of social intelligence is insignificant among the teachers of the natural sciences and humanities, except for P2 group, where there is a great difference in the mean of verbal expression rates between men and women at the level of reliability $\rho < 0.01$. A sufficiently large number of respondents in all groups (up to 30%) have a low level of outcomes for this subtest, which, first of all, will reduce the overall composite assessment of social intelligence of teachers of teenagers and se-

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*"ПРОБЛЕМИ СУЧАСНОЇ ПСИХОЛОГІЇ"*

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nior pupils who teach the natural sciences and humanities, and, secondly, we prove the evidence about the lower level of social intelligence of these teachers compared with primary school teachers, who, as a rule, have a higher than average and the highest level of the development of social intelligence (Table 2).

*Table 1*

**The levels of the development of social intelligence of teachers of groups M1, M2, M3 (in %)**

| The level of social intelligence of teachers by subtests of the test of J.Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S.Mykhailova | Groups | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | M1 | | M2 | | M3 | |
| | men | wo-men | men | wo-men | men | wo-men |
| **I Subtest "Stories with completion"** High level | - | 79.0 | 61.3 | 60.6 | 69.2 | 31.2 |
| Middle level | - | 21.0 | 18.4 | 18.3 | 30.8 | 47.8 |
| Low level | - | 0 | 20.3 | 21.1 | 0 | 21.0 |
| **II Subtest "Groups of expressions"** High level | - | 64.6 | 31.1 | 42.2 | 68.0 | 37.1 |
| Middle level | - | 24.2 | 48.6 | 38.2 | 13.7 | 35.9 |
| Low level | - | 11.2 | 20.3 | 19.6 | 18.3 | 27.0 |
| **III Subtest "Verbal expression"** High level | - | 63.1 | 33.1 | 42.7 | 68.9 | 38.2 |
| Middle level | - | 24.2 | 41.6 | 37.3 | 17.1 | 45.8 |
| Low level | - | 12.7 | 25.3 | 20.0 | 14.0 | 16.0 |
| **IV Subtest "Stories with additions"** High level | - | 77.1 | 44.7 | 32.2 | 71.0 | 35.9 |
| Middle level | - | 22.9 | 38.3 | 42.7 | 29.0 | 40.0 |
| Low level | - | 0 | 17.0 | 25.1 | 0 | 24.1 |

In general, the data obtained indicated that women (teachers of the natural sciences) were more sensitive to the nature and various manifestations of human relationships and they were able to show considerable role of flexibility in the situations that were arisen. This may be explained by the fact that education in the paradigm of "love" (passion) for the natural sciences contributes to the development of women's style aimed at emotional

sensitivity, communicative compatibility. Men, on the contrary, are encouraged to develop the ability to hide and suppress their feelings, that is, emotional restraint, competition, activity, the ability to control the situation are encouraged.

*Table 2*

**The levels of the development of social intelligence of teachers of groups P1, P2, P3, P4 (in %)**

| The level of social intelligence of teachers by subtests of the test of J.Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S.Mykhailova | Groups | | | | | | |
|---|---|---|---|---|---|---|---|
| | P1 | P2 | | P3 | | P4 | |
| | wo-men | men | wo-men | men | wo-men | men | wo-men |
| **I Subtest "Stories with completion"** High level | 68.0 | 65.1 | 60.3 | 72.8 | 35.1 | 71.0 | 40.4 |
| Middle level | 32.0 | 15.9 | 22.1 | 27.2 | 48.3 | 21.0 | 45.6 |
| Low level | 0 | 19.0 | 17.6 | 0 | 16.6 | 0 | 14.0 |
| **II Subtest "Groups of expressions"** High level | 61.0 | 31.5 | 42.1 | 71.1 | 36.5 | 71.0 | 38.0 |
| Middle level | 31.3 | 41.4 | 32.8 | 14.8 | 41.8 | 16.5 | 43.1 |
| Low level | 7.7 | 27.1 | 25.1 | 14.1 | 11.7 | 12.5 | 18.9 |
| **III Subtest "Verbal expression"** High level | 62.1 | 33.4 | 45.0 | 65.1 | 38.0 | 63.9 | 38.4 |
| Middle level | 28.1 | 45.7 | 36.0 | 21.0 | 43.8 | 20.1 | 44.6 |
| Low level | 9.8 | 20.9 | 19.1 | 13.9 | 18.2 | 16.0 | 17.0 |
| **IV Subtest "Stories with additions"** High level | 70.7 | 43.0 | 31.2 | 72.8 | 38.1 | 74.3 | 35.2 |
| Middle level | 29.3 | 38.9 | 47.7 | 27.2 | 40.5 | 25.7 | 44.7 |
| Low level | 0 | 18.1 | 21.1 | 0 | 21.4 | 0 | 20.2 |

*The subtest "Stories with additions"* diagnoses the level of the development of the ability to predict the development of a social situation depending on external circumstances. There is a slight tendency towards higher indicators of social intelligence of women, but there are no significant differences in the indicators of social intelligence of men and women at high, medium and low levels, which have been established. We can note that the subjects who performed the tasks of this test equally well, had

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indicators of a high level of development of social intelligence, such as: 65.14% of men and 63.17% of women of S2 group; 62.49% of men and 64.02% of women – group N2; 61.25% of men and 60.58% of women of M2 group; 65.11% of men and 60.34% of women of P2 group. There is no statistically significant difference in the results of men and women at medium and low levels of the development of social intelligence according to the 1st subtest "Stories with completion" (results at these levels do not exceed 20% for both men and women), which indicates a philological training of teachers of the natural and humanities cycle, because respondents with a high level of the development of social intelligence according to this subtest are able to extract the maximum amount of information about people's behavior, they are able to understand the language of non-verbal communication, express quick and accurate judgments about other people, successfully predict their reactions in given conditions, show farsightedness in the relationships with others, which contributes to their successful social adaptation.

Our research and its results have shown that problem-based learning can be successfully used as a mean of developing independent thinking in the process of the activity with low-achieving pupils. We'd point out that the problem situations in these cases are created mainly on the basis of the experiment, by the demonstration and laboratory setting of cognitive tasks, which correspond to the aspiration of pupils to practical forms of the activity, causes them high increased interest, the results of which are stimulating pupils' educational activity in the whole.

The problem-solving system in all classes can be effectively applied to virtually each section if pupils have certain skills to solve problem questions and tasks. These requirements put forward by schools at the present stage of the development of our society, the issue of verification and assessment of pupils' knowledge and the level of their formation have not been adequately developed yet. We'd also like to note that verification

of knowledge is often carried out by monotonous methods that don't cause the pupils' creative activity.

One of the main drawbacks of traditional knowledge testing is that it promotes the development of memory, rather than the thinking of a pupil, and it does not provide objective information about the depth of awareness, the flexibility of knowledge. Estimation in the traditional verification does not show the mental activity and independence of schoolchildren. As a rule, the system of education at schools in Ukraine examines only the surface layer of knowledge that is already prepared for graduation from the system of the person's thoughts. We have the same situation when we tell about the quality of the pupil's mental activity, his/her success in the development of observation and thinking, and the imagination of such a survey, in the most cases, can not be estimated.

One of the most important conditions for improving the effectiveness of knowledge testing is the development of the variety of qualities for stimulating cognitive activity of pupils at this stage. Along with other means of stimulation, a great deal of the place is solving problem questions and tasks for verifying knowledge of pupils, which contributes improving the quality of education.

Polling becomes not only a mean of checking knowledge, but also a mean of gaining and deepening them, the instrument of the development of the person's thinking. It is particularly important here that problem questions and tasks prompt themselves to find new connections and attitudes of individual phenomena, to cover them from different points of view. The correlation of checking functions varies in such a way: there is an interweaving of control and educational functions, as a result of which testing becomes a special link in the process of knowledge formation.

The use of problem questions and tasks for checking knowledge also creates conditions for ascertaining whether the pupil understands the material having been studied, or consciously have mastered it. The ability to generalize, to apply general laws

and to explain certain facts, freely use knowledge in various situations – one of the main indicators of the independent activity and depth of understanding of educational material.

The significance of the use of problematic questions and tasks is also that they can be solved during doing home tasks with the subsequent verification in the classroom, thus depriving the pupils of one-minute solution according to this or that problem. But the situations themselves are arisen at the lessons when problems are solved in the process of acquiring new knowledge – the lesson is limited and does not allow to stretch the processes of analysis, generalization, and they are not the same for different pupils. Because of this, the part of children constantly remains only witnesses to the problem, rather than being active participants. Problem questions and tasks that are given to pupils for a thorough and comprehensive reflection and decisions with the subsequent verification of the results of independent activities extend the scope of the pupils' creative autonomy and create favorable conditions for this.

The use of problem questions allows the teacher to determine the level of cognitive activity and develop pupils' autonomy, which is very important for the development of these qualities of schoolchildren and for the organization of individual activity with them.

## Conclusions

So, teachers with a high level of social intelligence are usually successful communicators. They are characterized by contact, openness, tact, benevolence and cordiality. A high level of social intelligence is associated with a great interest in solving social problems, by the need to influence others and it is often combined with a high level of organizational pupils' skills of development. All the listed personal qualities characterize teachers of humanitarian professions. This, in our opinion, largely explains the high results obtained by both women and men on the subtest "Stories with additions" of middle and high levels of intelligence of teachers of the science and humanities cycle.

We believe that social intelligence, clearly, includes *declarative and operational (procedural) knowledge* that the individual uses in a real life to interpret events, to create plans and predict both the actions of everyday life and professional situations. These ideas, personal memories and rules of interpretation constitute the cognitive aspect of social intelligence. In turn, the mnemonic aspect fills the experience gained by a person, while the empathic capabilities of the subject have the aim actualizing the mechanisms of anticipation in solving various problems of social life.

Thus, *the cognitive aspect* of social intelligence includes a set of fairly stable knowledge, assessments, rules for interpreting events, people's behavior, their relationships, etc., based on the formed system of interpretations at the microstructural and macrostructural levels. The microstructure of the cognitive aspect of social intelligence is determined by the functions of the latter, such as *the cognitive-evaluative one*, the competent processing and the evaluation of information perceived by the subject are depended on; *prognostic function*, on the basis of which the planning and forecasting of the development of interpersonal interactions are carried out; *communicative functions*, which ensure the effectiveness of the actual communicative process (this function is associated with adequate perception and understanding of the partner in communication); *reflexive function*, which is reflected directly by the person's self-knowledge. In turn, the macrostructure of the cognitive aspect of social intelligence is manifested in the individual's attitude to himself/herself as a value, value-semantic position to interpersonal relationships, as well as by the actualization of motivational and value orientations of the individual, axiological attitude by him/her to professional and other activities.

## Literature

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*Івашкевич Едуард, Сімко Руслан. Проблема впливу соціального інтелекту вчителя на організацію проблемного навчання в сучасних закладах середньої освіти.*

*Метою* нашої статті є дослідження рівня розвитку соціального інтелекту вчителів, які викладають природничі та гуманітарні дисципліни у підлітків і старшокласників; отримати та проаналізувати результати за субтестом № 3 «Вербальні вирази» (Гилфорд & О'Салливен, 2021), які визначають здатність вчителів розуміти значущість таких вербальних реакцій людей залежно від контексту ситуації; дослідити проблему впливу соціального інтелекту вчителя на організацію проблемного навчання в закладах середньої освіти.

*Методи дослідження.* Для розв'язання поставлених завдань використовувалися такі теоретичні методи дослідження: категоріальний,

*структурно-функціональний, аналіз, систематизація, моделювання, узагальнення. Також у своєму дослідженні ми використовували емпіричні методи, такі як констатувальне дослідження та формувальний експеримент. Для діагностики рівня розвитку соціального інтелекту застосовувалась «Методика дослідження соціального інтелекту» Дж. Гілфорда та М.О'Саллівена, адаптована О.С. Михайловою (2021).*

*Результати дослідження. Діагностовано рівень розвитку здібності вчителів до прогнозування розвитку соціальної ситуації залежно від зовнішніх обставин. Простежується незначна тенденція до вищих показників соціального інтелекту у жінок, проте відчутних відмінностей у показниках соціального інтелекту чоловіків і жінок за високим, середнім та низьким рівнем не встановлено. Респонденти однаково добре виконали завдання цього тесту. Також не виявлено статистично значущої різниці в результатах чоловіків та жінок за середнім та низьким рівнями розвитку соціального інтелекту за I субтестом «Історії із завершенням» (результати за цими рівнями не перевищують 20% як у чоловіків, так і у жінок), що свідчить про високий рівень філологічної підготовки вчителів природничо-гуманітарного циклу, адже респонденти із високим рівнем розвитку соціального інтелекту за цим субтестом здатні отримувати максимум інформації про поведінку людей, здатні розуміти мову невербального спілкування, висловлювати швидкі та точні судження про людей, успішно прогнозувати їхні реакції в заданих умовах, виявляти далекозорість у стосунках з іншими, що сприяє їхній успішній соціальній адаптації.*

*Висновки. Доведено, що люди з високим рівнем розвитку соціального інтелекту, як правило, бувають успішними комунікаторами. Їм притаманні контактність, відкритість, тактовність, доброзичливість та сердечність. Високий рівень соціального інтелекту пов'язаний із інтересом до соціальних проблем, наявністю потреби впливати на інших і часто поєднується із високим рівнем розвитку організаторських здібностей. Показано, що всі перераховані особистісні якості характеризують осіб гуманітарних професій.*

*Ключові слова: соціальний інтелект, організація проблемного навчання, успішні комунікатори, вербальні реакції, контекст ситуації.*

# Psycholinguistic Paradigm of Transformational Model of English-Ukrainian Translation

## Психолінгвістична парадигма Трансформаційної Моделі Перекладу з англійської мови на українську

**Ivashkevych Ernest**
Ph.D. in Psychology, Translator,
Rivne State University of the Humanities,
Rivne (Ukraine)
ORCID ID: https://orcid.org/0000-0001-7219-1086
Researcher ID: F-3865-2019
Scopus AuthorID: 57216880485

**Івашкевич Ернест**
Кандидат психологічних наук, перекладач,
Рівненський державний гуманітарний університет,
м. Рівне (Україна)

**ABSTRACT**

*   **The purpose** *of our research is: 1) to show the main psychological cha-racteristics of oral translation activity; 2) to organize the ascertainment study and to analyze the results of it according to the selected criteria, such as: a) the level of students' communicative and speaking activity; b) the level of personal and situational anxiety; c) the language hearing level; 3) to propose Transfor-mational Model of English-Ukrainian Translation, using English phraseological units, and to describe it.*

    ***Methods of the research.*** *The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical method,*

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Address for correspondence, e-mail: kpnu_lab_ps@ukr.net

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*structural and functional methods, the methods of the analysis, systematization, modeling, generalization. The empirical method is ascertaining research.*

**The results of the research.** *We think that the data of psycholinguistic observations are the means of modifying existing models of implementation of translation activities. We propose a universal Transformational Model of English-Ukrainian Translation as the most possible translation model. We believe that this model includes three stages: 1) the analysis, during which the surface structure in language A is reduced to a set of grammatical transformations (the analysis taking into account grammatical relations and meanings of linguistic units); 2) transferring the analyzed material from language A to language B; 3) the reconstruction or final adaptation of the final message taking into account the norms of the language having been used to translate the text.*

**Conclusions.** *We proved that grammatical transformations were one of the methods of semantic analysis of the original text and one of the ways of constructing the final statement. However, reducing the translation to only grammatical transformations somewhat simplifies the real process of translation, since it uses both lexical-syntactic paraphrasing and semantic modifications due to situational-pragmatic factors, etc. As a result, the translation itself is considered by us as a combination of three components: on the one hand, it is a product, on the other one, it is a certain number of technologies, and on the third hand, it is a process of combining (for the translator) a certain set of signs (the original text) and taking into account the effectiveness of semantic perception by the recipient of a set of signs offered to him/her by the translator.*

**Key words:** *Transformational Model, English-Ukrainian Translation, grammatical transformations, communicative activity, speaking activity, the level of personal anxiety, the level of situational anxiety, the language hearing level.*

## Introduction

By its nature oral translation activity is a type of activity that serves to implement oral subject-subject communication. A person learns to express his/her thoughts in a foreign language from early childhood, but the ability to speak and listen by themselves are not yet concomitant factors in the process of mastering the skills of oral translation. That's why in our researches we have the aim to analyze not the mere fact of the presence or absence of communicative skills among students, but what psychological mechanisms (as well as the degree of their formation)

will mostly contribute to the mastery of translation activities at the professional level by future specialists (Онуфрієва, 2020).

According to the nature of the role performed in the communication process, initial and reactive types of oral translation activity are distinguished in scientific literature (Arbuthnott & Frank, 2000). *Speaking* is the initial process of communication that stimulates listening. *Listening*, in turn, is *a reactive process* and, at the same time, *a condition for speaking*.

According to *the direction of speech expressions*, receptive and productive types of oral translation activity are distinguished in scientific literature (Beauvillain, 1994). Thanks to *receptive types of translation activity* (in oral activity we mean *listening*), a person receives and further develops the processes of a speech message. Thanks to *productive types of translation activity* (in oral activity it is *speaking*), *the presentation of a speech message* is carried out. Both *listening* and *speaking* involves different forms of speech. There are two such forms of oral translation activity. They are *external* and *internal* ones (Brédart, 1991).

The next parameter that characterizes the types of translation activity is the nature of external expressiveness. Speaking as a productive activity appears as a process of construction, creation of a certain task for other people. Listening is an externally unexpressed process of the subject's internal activity, which is caused by the need to form and to formulate certain content given from outside (Chen, 2022).

*The types of oral translation activity* are also determined by the nature of the feedback that regulates all the processes, which take place. Thus, during speech activity, muscle (kinesthetic, proprioceptive) feedback is carried out from the articulatory apparatus to the part of the brain, which is responsible for the organization of *human speech activity*. It is this section that performs the function of *internal control*. Along with *muscle "internal" feedback*, speech is also regulated by *"external" communication*. In the process of *listening*, *feedback* is provided through

the channels of making meaningful decisions, the mechanisms of which are not clear enough (Cilibrasi, Stojanovik, Riddell & Saddy, 2019).

So, having outlined the specific features of oral translation activity according to the main parameters, we will consider its main characteristics. *Oral translation activity* is determined by a number of characteristics: a) structural organization; b) subject content; c) psychological mechanisms; d) the unity of the internal and external sides and e) the unity of a form and content (Caramazza, Laudanna & Romani, 1988). Let us explain these five main characteristics of oral translation activity in more detail.

Any activity is characterized by the person's needs, which are the basis of the motive of the activity, that is, what prompts it, for which it is carried out. We plan the activity by formulating its ultimate goal, which appears in the form of a certain awareness of the nearest result, the achievement of which is determined by the implementation of the activity, which is capable of satisfying the subject's needs, defined in its motives (Гончарук & Онуфрієва, 2018).

The activities are implemented using *a set of actions and methods* of their implementation, which are called *operations*. Each activity ends with *a certain result*. In the case of *a positive result the goal of the activity is achieved*. In addition, the activity is characterized by *planning* (the means and conditions of its implementation are determined), *purposefulness* (since all actions are motivated by its motives, but there are those ones, which have the aim of achieving the goal), *structurality* (the presence of actions and operations).

*Translation* is as a result of the fact that people have a need to transmit or to receive *any message* (*verbal or written information*), provided that the codes having been used by the sender and receiver do not match themselves. In translation activity the need has certain specificity. In the process of translation the participants of any communicative act are the recipient of information and the translator. The first one needs to say something to

another person either for the purpose of communication as such a process, or for the purpose of requesting certain information, or for the purpose of exerting a regulatory influence on the partner of communication, since a typical speech expression is one that in one way or another regulates the behavior of another person (Ivashkevych & Koval, 2020).

This subject cannot satisfy the person's need for the whole process of communication due to the presence of communication barriers. The translator does not experience such a problem. In this case, performing the role of a participant in the act of communication, the translator appears as a "translator" of the intention of the author of the message using another, so-called *language code* (Booth, MacWhinney & Harasaki, 2000). His/her task is *to convey a message*. It follows from this context that the translator is to a certain extent regulated by the tactics and strategies of the translation activity, and in the case of two-way translation – by the recipient of the information, who, in turn, sends a message in response. *Professional ethics of the translator* does not allow changing the meaning of the statement, distorting its content, bringing *something new* to the message (Batel, 2020). Based on this, it can be predicted that a need for translation is determined, first of all, by the recipient of the information, while the translation activity itself will be performed by a translator who does not feel a personal need for it. In such a way in the process of translation a person satisfies a need for communication with other people (Максименко, Ткач, Литвинчук & Онуфрієва, 2019). Therefore, a need for translation activity has *a specific nature*.

**The purpose** of our research is:

1. To show the main psychological characteristics of oral translation activity.

2. To organize the ascertainment study and to analyze the results of it according to the selected criteria, such as: a) the level of students' communicative and speaking activity; b) the level of personal and situational anxiety; c) the language hearing level.

3. To propose Transformational Model of English-Ukrainian Translation, using English phraseological units, and to describe it.

## Methods of the research

The following theoretical methods of the research were used to solve the tasks formulated in the article: a categorical method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. The empirical method is ascertaining research. Also as the method of presenting empirical research we've used the test SAMOAL (Self-actualization Scale) (2021). We proposed the author's interview for students to get to know the ways, which motivate the person's choice of choosing the profession.

The experimental research with the purpose to identify the dynamics of the professional development of future translators lasted in December, 2022. In this research 303 students of experimental and control groups of foreign philology departments were participated:

• experimental groups (150 students):

− E1 − 38 students of the 2nd course of Rivne State University of the Humanities;

− E2 − 40 students of the third course of Lviv State University of Life Safety;

− E3 − 35 2nd year students of Lesia Ukrainka Eastern European National University;

− E4 − 37 students of the third course of Kamianets-Podilskyi National University named after Ivan Ohiienko;

• control groups (153 students):

− C1 − 39 students of the 2nd year of studying of Rivne State University of the Humanities;

− C2 − 35 students of the third course of Lviv State University of Life Safety;

− C3 − 41 students of the 2nd year of studying of Lesia Ukrainka Eastern European National University;

– C4 – 38 students of the third course of Kamianets-Podilskyi Ivan Ohiienko National University.

## Results and their discussion

We think, that the main *psychological characteristics of oral translation activity* are: a) the character of communicative process; b) the role of partners of communication; c) the direction of speech expressions; d) the connections of internal or external forms of speech; e) the character of expressions; f) the nature of a feedback.

We will analyze the results we have obtained at this stage of the ascertainment study according to the selected criteria, such as: a) the level of students' communicative and speaking activity; b) the level of personal and situational anxiety; c) the language hearing level.

The most of the students who took part in the ascertainment study had a low and average level of communicative and speech activity during translation activities (see Table 1). In our opinion, this is explained, first of all, by the insufficiently formed translation skills of listening, which implies the ability to perceive, to recognize, to understand and to interpret the message that comes to the ear, with the aim of conveying the original message in the translation language. Thus, students of both the experimental and control groups have the following skills insufficiently having been formed: sound differentiation within a word; word differentiation in the speech stream; word synthesis into elementary syntactic blocks (phrases); recognizing the grammatical scheme of a sentence, etc.The results having been obtained using the methods listed by us, characterizing future translators according to the level of communicative and speech activity criterion, were subjected to the factor analysis procedure. The latter allowed us to single out two basic factors, the first of which highlights dynamic characteristics. The data given in Table 1, as well as the results of the students of the experimental and control groups according to the indicators of verbal

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and logical thinking, indicate an insufficient level of formation of communicative and speech activity of future translators.

*Table 1*

**Verbal and logical thinking of students of experimental and control groups (in %)**

| The level of the development of verbal and logical thinking | E1 group | E1 group | C1 group | C2 group |
|---|---|---|---|---|
| High | 18.32 | 19.18 | 14.02 | 13.32 |
| Average | 54.10 | 55.09 | 42.87 | 51.08 |
| Low | 27.58 | 25.73 | 43.11 | 35.60 |

It is difficult for students to start a conversation with the partner of communication, they are not expressive and diplomatic enough, they do not know how to broadcast information, to initiate communication, to be flexibly navigated in different conditions of communication, etc. This confirms the low result in terms of the factor weight of the dynamic and substantive characteristics of the communication process of students of both experimental and control groups.

To teach students to translate the text from English into Ukrainian we proposed them proverbs and sayings as authentic material. We tell them, that proverbs and sayings are the part of Phraseology. The term "Phraseology" itself comes from Greek "phrasis" – the expression and "logos" means "The Science of Phrases". So, phraseology is a branch of linguistics that studies phraseological units. The term "phraseology" is used in two ways: 1) the quantity of phraseological units in the language; 2) the branch (the subject) studying these units (Oxford Learners Dictionaries, 2023: 137).

However, in English dictionaries the term "Phraseology" is used in more different meaning. To denote such entities, the word "idiom" is mainly used, because the term "idiom" is even more polysemantic one. Native speakers use it to denote a mode of expression to any language, without differentiating between the grammatical and lexical levels. It may also mean a group of

words the meanings of which are difficult or impossible to understand from the knowledge of the words considered separately. Moreover, "idiom" may be synonymous to the words "a language" or "a dialect", denoting a form of expressions, which are peculiar to people, to some country, a district or to one individual".

The Oxford Dictionary provides a very generalized meaning of Phraseology. It is the particular way in which words and phrases are arranged when saying or writing something (Oxford Learners Dictionaries, 2023: 137). In the Merriam-Webster Dictionary this term is explained as a manner of organizing words and phrases into some longer elements (Merriam-Webster Dictionary, 2023).

So, as we can see, in the English-language Editions phraseology is not always considered as a science, a branch of Linguistics (unlike Lexicology). O. Kunin also points out that a small number of researches deals with Phraseology in the Anglo-American Linguistic Literature. So, in this research we use mostly Ukrainian studies, which deal with Phraseology.

In Ukrainian Dictionaries Phraseology is interpreted as a branch of Linguistics that studies the established reversals of any Language and Phraseology (Тлумачний словник української мови, 2023: 650). Most Ukrainian linguists adhere to the broad definition of the term "Phraseology": phraseology is a collection of phraseologisms of a particular language, a section of Linguistics that studies the phraseological composition of the language (Mykhalchuk & Bihunova, 2019).

The first definition of the notion of a phraseological unit was given by scientists (Mykhalchuk & Ivashkevych, 2019). They tell about it as some combinations that are firmly included in the language. They are called phraseological units. Such a definition, however, does not fully reveal the essence of the notion of a phraseological unit, without pointing to its additional characteristics.

So, the main characteristics of phraseologisms are these ones: 1) the presence of at least two words; 2) untranslatability

in other languages; 3) reproducibility; 4) metaphoricity; 5) semantic integrity (Blagovechtchenski, Gnedykh, Kurmakaeva, Mkrtychian, Kostromina & Shtyrov, 2019).

Therefore, analyzing the approaches of different linguists (Alexandrov, Boricheva, Pulvermüller & Shtyrov, 2019) to the concept of "Phraseology", we can see its interpretation in the narrow and broad senses. According to a narrow understanding of Phraseology they usually refer to phraseological units with some instance metaphorical meaning, and supporters of a broad understanding of it deal with the combination of words that are reproduced in a "ready-made form" and denote some concepts. A narrow understanding of phraseology, therefore, implies imagery as a categorical quality of Phraseological units. From our point of view, this position impoverishes the field of Phraseology, so we join the broadest view of phraseological units, which is based on the tradition of foreign scientists (Bates, Maechler, Bolker & Walker, 2014). A broad understanding of Phraseology allows us to enumerate in its paradigm different linguistic units (from Ancient Literature and Mythology, the Bible, fiction, etc.) and constant formations held in memory, from idioms, semantically equivalent words, to adverbs and catch phrases.

Therefore, it seems the most expedient for us to interpret each phraseological unit as the lexical and grammatical unity of two or more distinctly worded components, grammatically organized by a word or sentence model, which is integral and reproduces automatically, by tradition. In our opinion, the basic characteristics of phraseologisms include stability of their composition and structure, integrity of their meaning, reproducibility and, as a rule, impermeability of their structure.

For the first time the systematization and classification of phraseological units was made by scientists (Aleksandrov, Memetova & Stankevich, 2020). Contrasting the field of Phraseology with free combinations of words, scientists (Mykhalchuk & Onufriieva, 2020) established it in two types of verbal comple-

xes − phraseological groups and phraseological units (with six subgroups within one and another subgroup).

According to scientists (Aleksandrov, Memetova & Stankevich, 2020), Phraseology is divided into three groups:

1) ***Phraseological mergers*** are semantically indivisible phraseological units, the meaning of which does not follow from the meaning of their components. Phraseological mergers are also called "idioms", which are understood as phraseologisms with complete loss of inner forms (*to rain cats and dogs; to be all thumbs*). The explanation how the meaning of idioms was formed, it is a complex etymological problem. Also, we have to emphasize that idioms cannot be translated literally into another language.

2) ***Phraseological units*** are semantically indivisible phraseologisms, the integral meaning of which is motivated by the meaning of their components (*to spill the beans; to burn bridges; to throw dust into smb.'s eyes*). The meaning of phraseological unit is arisen from generalized figurative meaning of free combinations of words. It is the result of a metaphorical rethinking of any phrase. Phraseological unit is characterized by two-sidedness. Isolated from the context, such phrases cannot be uniquely determined by their semantics. Also such phrases can be used as free ones in the literal sense and as phraseological units in the figurative meaning. In this sense they are homonymous.

3) ***Phraseological conjunctions*** are phraseologisms in which the distinct meaning of each word is clear, but one of the components has a related meaning (*Sisyphean labor*).

As we can see, this classification more accurately reflects the types of phraseologisms from the structure of this classification. However, it also does not have a single constructive principle. These three groups having been highlighted by scientists show that there is a great difference between phraseological merges and units, on the one hand, and phraseological conjunctions, on the other one, due to the different nature of their stability. Phraseological units of the first two groups are characterized by a de-

gree of motivation. The third group characterizes phraseological units by their structural characteristics. This classification for a long time occupied a dominant position in the paradigm of Phraseology, and it was used most often without any changes to the research of stable compounds.

Classifying the word phrases from the standpoint of their semantics we distinguish two groups: idioms and phraseological units. Idioms are peculiar expressions from certain languages, which are holistic in their use and content. They usually cannot be accurately transmitted in other languages and require a matching stylistic color when translating. The second group contains phraseological units, which are ordinary phrases, having been decomposed in their content, but established in the language as material of widely quoted + Nouns (proverbs, expressions that have become catch phrases).

The basis of teaching Phraseology are Linguodidactic Approaches, patterns, principles that determine the appropriate choice of methods, techniques and teaching aids, provide the appropriate level of mastering the content of the school course of Phraseology and the formation of relevant skills and abilities of students.

In such a way we formulated the laws of learning:
– constant attention to the matter of language, its sound system;
– understanding the semantics of language units;
– the ability to learn the norms of literary language;
– the assessment of the expressive possibilities of the native language;
– the development of language sense, gift of speech;
– advanced development of oral speech;
– the dependence of speech skills on Grammar and Vocabulary.

These general patterns should be designed to study Phraseology, focusing on the following aspects:
– understanding the semantics of Language Units;

- the assessment of the expressive capabilities of the native language;
- the development of language sense, gift of speech.

These laws allow us to consider Phraseology as a holistic unit that has its own meaning. It is stylistically colored and cannot be used in all Styles of Speech.

In our opinion it is important to pay attention to the principles of teaching Phraseology, among which we single out:

- *systematic and consistent learning* (introduction of elements of Phraseology, that involves a systematic order of learning, in which each stage of joint activities of teachers and students is based on previous stages and opens the way to further progress);
- *accessibility* (the information is available to students in terms of their age, physical, mental, intellectual and individual abilities during the use of students their experience of intellectual, moral, physical overload);
- *the connection of learning through the whole life* (teaching Phraseology stimulates students to use acquired knowledge in practice, to analyze and to transform the surrounding reality, to develop their own views, plans and wishes);
- *consciousness in learning* (Phraseology develops a positive, serious and responsible attitude of students to learning, the influence of their understanding the vital importance of Phraseology in the foreign language);
- *actualizing students' learning activities* (Phraseology stimulates students' inner activity in a way of understanding them the essence of a particular problem, when they look for different solutions);
- *clarity* (teaching Phraseology involves the possibility of purposeful involvement of different senses in the perception and processing of educational material), etc.

We believe that in this context, in the process of teaching Phraseology the principle of openness is the most important,

according to which the process of formation of phraseological knowledge, skills and abilities, in particular pedagogical conditions of formation of studied phenomenon, is characterized as an open system. Based principles are the basis of teaching Phraseology, which are implemented into the educational process, they are interconnected and interdependent.

We emphasize that the most important thing is to take into account specific principles, for example:

– the attention to the phraseological richness of the language;
– the selection of high-quality phraseological material;
– the formation of a sense of style, the gift of speech;
– the development of aesthetic feelings, creative abilities;
– the connection of language learning with speech activity;
– the relationships in the study of all sections of the school curriculum;
– the connection of language learning with the development of coherent speech.

We have to note that it is advisable to use principles that are based on comparing the words and the reality denoted by the words, actualizing lexical and grammatical meanings of the word, units of lexical paradigm comparing the words with each other, lexical units and Phraseology in their fields, word history or Phraseology with Lexicology.

It is important to choose the most effective methods and techniques of teaching, among which we mainly use methods of forming phraseological skills in the English language and our speech (grouping them by thematic and semantic features, analyzing of functional characteristics of Phraseology in fiction, providing stylistic experiment, proposing the reproduction of text with Phraseology, the theory of construction the sentences).

One of the most effective is the method of comparison, which is widely used at schools and permeates many types of the activities. It is used for semantic analysis of Phraseology, which

is performed by comparing the meaning of Phraseology with the lexical meaning of words of the same free phrase.

The effectiveness of semantization of phraseological units unknown to students (as well as known). It is also achieved through the method of comparison. For Phraseology a common identifier of the word is chosen, which allows us to compare Phraseology (to contrast some features, characteristics, basic features) and reveal their specifics and features of use into practice.

Since contemporary Humanities Education the ability to see a linguistic fact in a broader context was involved. The most tasks of different researches should be based on textual materials that ensure effective learning of language units and clearly demonstrate their functioning in the language, which are necessary for speech development.

The use of the method of observation and the analysis of language phenomena contributes to the activation of cognitive activity of each student according to the perception and understanding of new theoretical material. In the process of observation, students are also instilled with the ability to find the main characteristics independently, which are as a result of the search formulating concepts, rules, conclusion and justifying practical actions. This method should be used to study systemic relationships between phraseological units in the analysis of their role, functions and paradigm.

Training exercises are an effective method of forming phraseological skills. We distinguish two groups of exercises, which we propose to students to form their abilities:

1) *proper exercises*, actualizing phraseological units (they actualize the meaning of phraseological units, their characteristics, structure; phenomena of polysemy, synonymy, antonymy, etc.);

2) *combined exercises* – phraseological-stylistic, phraseological-grammatical and phraseological-lexical exercises) (phraseological phenomena are recognized on the basis of attitude to the topic of lexical, grammatical or other nature).

Thus, the teacher has to convince students that knowledge of Phraseology is important, because correct and accurate use of phraseological expressions allows us to actualize our mind, abilities to speak with humor and accuracy, to avoid clichés and to choose the most appropriate unit from a series of phraseological units.

Psycholinguistic data on the interaction of primary linguistic consciousness (formed under the influence of the native language) and secondary linguistic consciousness (using the language having been studied) are of great importance for our research. As a result of our scientific psycholinguistic research it was established:

1) a translator who constantly translates from language A to language B often loses the ability to speak competently by use of language A (units of language A create closer associative links with units of language B than with each other in the paradigm of one language);

2) a person who translates from A to B and from B to A has considerable difficulties in formulating a certain statement in both language systems;

3) long-term translation skills lead to the formation of direct associative links between units of language A and units of language B, and this situation negatively affects the stylistic characteristics of the translated version.

We think that the data of psycholinguistic observations are the means of modifying existing models of implementation of translation activities. We propose a universal Transformational Model of English-Ukrainian Translation as the most possible translation model. We believe that this model includes three stages: 1) the analysis, during which the surface structure in language A is reduced to a set of grammatical transformations (the analysis taking into account grammatical relations and meanings of linguistic units); 2) transferring the analyzed material from language A to language B; 3) the reconstruction or final adaptation of the final message taking into account the norms of the language having been used to translate the text.

## Conclusions

We proved that grammatical transformations were one of the methods of semantic analysis of the original text and one of the ways of constructing the final statement. However, reducing the translation to only grammatical transformations somewhat simplifies the real process of translation, since it uses both lexical-syntactic paraphrasing and semantic modifications due to situational-pragmatic factors, etc. As a result, the translation itself is considered by us as a combination of three components: on the one hand, it is a product, on the other one, it is a certain number of technologies, and on the third hand, it is a process of combining (for the translator) a certain set of signs (the original text) and taking into account the effectiveness of semantic perception by the recipient of a set of signs offered to him/her by the translator.

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*Мета дослідження: 1) висвітлити основні психологічні особливості усної перекладацької діяльності; 2) організувати констатувальне дослідження та проаналізувати його результати за обраними критеріями, такими як: а) рівень комунікативно-мовленнєвої активності учнів; б) рівень особистісної та ситуативної тривожності; в) рівень мовленнєвого сприйняття на слух. 3) запропонувати трансформаційну модель англо-українського перекладу з використанням англійських фразеологізмів та описати її.*

*Методи дослідження.* Для розв'язання поставлених завдань використовувалися такі теоретичні методи дослідження: категоріальний, структурно-функціональний, аналіз, систематизація, моделювання, узагальнення. Емпіричним методом є метод констатувального дослідження.

*Результати дослідження.* Вважаємо, що отримані нами дані психолінгвістичних спостережень слугують засобом модифікації існуючих моделей реалізації перекладацької діяльності. Так, ми пропонуємо універсальну Трансформаційну Модель Перекладу. Ми вважаємо, що ця модель вміщує в себе три стадії: 1) аналіз, у ході якого поверхнева структура на мові А зводиться до набору граматичних трансформацій (аналіз з урахуванням граматичних відношень та значень мовних одиниць); 2) перенесення матеріалу, який аналізується, з мови А на мову Б; 3) реконструювання або заключна адаптація кінцевого повідомлення з урахуванням норм мови, якою здійснюється переклад.

*Висновки.* Доведено, що граматичні трансформації постають одним із прийомів семантичного аналізу вихідного тексту та одним із способів побудови кінцевого висловлювання. Однак показано, що зведення перекладу лише до граматичних трансформацій дещо спрощує реальний процес перекладу, оскільки в ньому використовуються і лексико-синтаксичні перефразування, і семантичні модифікації, обумовлені ситуативно-прагматичними факторами та ін. Як наслідок, сам переклад розглядається як поєднання трьох компонентів: з одного боку, це – продукт, з іншого – деяка сума технологій, а з третього боку – процес комбінування (для перекладача) деякого набору знаків (вихідного тексту) та урахування ефективності смислового сприйняття реципієнтом набору знаків, який пропонується йому з боку перекладача.

*Ключові слова:* Трансформаційна Модель, переклад з англійської мови на українську, граматичні трансформації, комунікативна діяльність, мовленнєва діяльність, рівень особистісної тривожності, рівень ситуативної тривожності, рівень мовленнєвого сприйняття на слух.

# Psychological Peculiarities of Examination of Children with a Diagnosis of "Logoneurosis", Complicated with Disorders of Sensory Sphere and Disorders of Perceptions

## Психологічні особливості проведення обстеження дітей з діагнозом «логоневроз», ускладненого розладами відчуттів та сприйняттів

## Kharchenko Yevhen
Dr. in Medicine, Professor,
Professor of the Department of Physical Rehabilitation and Ergo-Therapy,
Rivne Medical Academy,
Rivne (Ukraine)
ORCID ID: https://orcid.org/0000-0002-4340-8503
Researcher ID: AAU-7523-2020
Scopus AuthorID: 57216872875
E-mail: kharchenko.yevh@gmail.com

## Харченко Євген
Доктор медичних наук, професор,
професор кафедри фізичної реабілітації і ерготерапії,
Рівненська медична академія,
м. Рівне (Україна)

## Komarnitska Liudmyla
Ph.D. in Philology, Assistant Professor of the Department of Social Work,
Psychology and Socio-Cultural Activities named after T. Sosnovska,
Educational and Rehabilitation Institution of Higher
Education «Kamianets-Podilskyi State Institute»,
Kamianets-Podilskyi (Ukraine)
ORCID ID: https://orcid.org/0000-0002-6742-8314
E-mail: kob-1974@ukr.net

# Комарніцька Людмила

Кандидат філологічних наук, доцент кафедри соціальної роботи,
психології та соціокультурної діяльності ім. Т. Сосновської,
Навчально-реабілітаційний заклад вищої освіти
«Кам'янець-Подільський державний інститут»,
Кам'янець-Подільський (Україна)

**The contribution of the author:** Kharchenko Yevhen – 50%, Komarnitska Liudmyla – 50%

**Авторський внесок:** Харченко Євген – 50%, Комарніцька Людмила – 50%

**ABSTRACT**

The **purpose** of the research is to show psychological peculiarities of examination of children with a diagnosis of "logoneurosis", complicated with disorders of sensory sphere and disorders of perceptions.

**Research methods.** The research methods were the method of observation and the empirical study of patients. The place of organizing the empirical stage of our research was the psychiatric hospital 1 in Kyiv. With the help of clinical, pathopsychological and anamnestic methods 86 children in the age of 3-12 years old (the average age is 8 ± 0.5 years old) with logoneurosis in anamnesis were diagnosed.

**The results of the research.** We proved, that adverse conditions, which facilitate logoneurosis, are: physically weakened children; age features of brain activity; accelerated development of speech (3-4 years old), when the child's communicative, cognitive and regulatory functions are developed rapidly under the influence of communication with adults; hidden mental imbalance of a child, increased reactivity as a result of not quite normal relationships with others; a conflict between the peculiarities of the environment and the degree of its awareness; lack of positive emotional contacts between adults and children; insufficient development of motility, sense of rhythm, facial expressions and articulatory movements; disorders of sensory sphere of the person and disorders of perceptions.

**Conclusions.** The ability of a child with logoneurosis to present speech freely depends not only on varying degrees of independence, but also on his/her readiness. So, the speech therapist should trace the features of the appearance of speech spasms depending on whether the child utters a complex or simple

*phrases, individual words or sounds. On the material of retelling the texts, it is recorded in which cases speech convulsions take a place: only at the beginning of the story, at the beginning of phrases, by use of individual words or sounds. It is being investigated whether speech convulsions do not depend on the level of speech volume. For this purpose, the examinee is asked to speak quietly, loudly, in a whisper.*

***Key words:*** *logoneurosis, disorders of sensory sphere, disorders of perceptions, age features of brain activity, speech convulsions, speech volume.*

## Introduction

Logoneurosis is a disorder of the tempo and rhythmic organization of speech, caused by a convulsive state of the muscles of the speech apparatus (the synonyms of "logoneurosis" are: Balbuties, Dysphemie, Spasmophemie, Lalonewros). The problem of logoneurosis can be considered one of the oldest in the history of the development of the theory of speech disorders (Chen, Zhou & Dong, 2020). The different understanding of its essence is determined by the level of the development of science and the positions from which the authors study this speech disorder (Edwards, Lee & Esposito, 2019).

In ancient times logoneurosis was mainly seen as a disease associated with the accumulation of moisture in the brain (Hippocrates) or an incorrect ratio of the parts of the articulation apparatus (Aristotle). Galen, Celsus, and Avicenna recognized the possibility of disturbances in the central or peripheral parts of speech apparatus during logoneurosis (Corbitt, Malone, Haas & Mann, 1996).

At the end of the 20th century scientists (Epstein, Blake & González, 2017) tried to explain logoneurosis as a consequence of the imperfection of the peripheral speech apparatus. So, for example, Santorini believed that logoneurosis occurs when there is a hole in the hard palate, through which mucus supposedly seeps into speech and makes communication difficult. Wutzer explained this by an abnormal depression in the lower jaw, in which the tip of the tongue hides during its movement; Hervé de Cheguan explained this by incorrect ratio between the length of

the speech apparatus and the oral cavity or its very tight attachment with a short frenulum (Huang, Oquendo, Friedman, Greenhill, Brodsky, Malone, Khait & Mann, 2003).

Other researchers associated logoneurosis with disorders in the functioning of speech organs: convulsive closure of the glottis (Gorbalenya, Baker & Baric, 2020); excessively fast exhalation (Choi, Chau, Tsang, Tso, Chiu, Tong, Lee, Ng, Wai, Lee, Lam, Wai, Lai & Sik, 2003); spasmodic contraction of the muscles that hold words in the oral cavity (Chan, Ng & Chan, 2003); incoherence of thinking and speech processes (K.P. Becker); imperfection of a person's will, which affects the strength of the muscles of the speech-motor mechanism (Grunebaum, Oquendo, Burke, Ellis, Echavarria, Brodsky, Malone & Mann, 2003).

Some researchers associated logoneurosis with disorders in the course of mental processes. For example, scientists (Kimball, Hatfield, Arons, James, Taylor, Spicer, Bardossy, Oakley, Tanwar & Chisty, 2020) believed that logoneurosis arose from the fact that a person either thought quickly, so that the speech organs did not reach and therefore stumble, or, on the contrary, speech movements preceded the thinking process. And then, due to the intense desire to straighten this mismatch, the muscles of the speech apparatus enter a "convulsive state" (Lin, Chen, Chan & Hsu, 2019).

Despite everything, the problem of physical rehabilitation of patients with a diagnosis of "logoneurosis" remains poorly developed in the scientific literature, so the relevance of the research topic is beyond doubt. So, **the purpose** of our article is to show psychological peculiarities of examination of children with the diagnosis of "logoneurosis", complicated with disorders of sensory sphere and disorders of perceptions.

## Methods of the research

The place of organizing the empirical stage of our research was the psychiatric hospital 1 in Kyiv. With the help of clini-

cal, pathopsychological and anamnestic methods 86 children in the age 3-12 years old (the average age is $8 \pm 0.5$ years old) with logoneurosis in anamnesis were examined. The research method was empirical study of patients.

The examination of children who stutter was carried out comprehensively (a speech therapist, a neurologist, a psychologist) with the involvement of other specialists: a pediatrician, a therapist, a psychiatrist, an ophthalmologist, an otolaryngologist and others.

### Results and their discussion

Considering different points of view on the problem of stuttering, we can conclude that the mechanisms of logoneurosis are heterogeneous. In some cases, stuttering is *a complex neurotic disorder*, which is the result of disorganization of nervous processes in the root of the brain, impaired interaction of the cortical subcortex, a disorder of a single autoregulated rate of speech movements (voice, breathing, articulation). In other cases, *logoneurosis is a complex neurotic disorder* caused by a fixed reflex of incorrect speech, which initially arose due to speech difficulties of various origins. In the third case, *logoneurosis is a complex, mostly functional speech disorder* caused by general and linguistic dysontogenesis and disharmonious of person's development. Fourth, *logoneurosis is a mechanism of stuttering* that can be explained by organic changes in the central nervous system. Other interpretations are also possible. But in any case it is necessary to take into account the violations of physiological and psychological nature, the peculiarities of their combination and so on.

*The reasons of logoneurosis* are:

– *neuropathic burden of parents* (nervous, infectious and somatic diseases that weaken or disrupt the functions of the central nervous system);

– *neuropathic features of a stuttering person* (night terrors, enuresis, irritability, emotional tension);

− *constitutional predisposition* (diseases of the autonomic nervous system and increased susceptibility to higher nervous activity, its special predisposition to mental trauma);

− *hereditary burden* (stuttering developed on the basis of congenital weakness of the speech apparatus, which can be inherited as a recessive trait). The role of exogenous factors must be taken into account when the tendency to stutter is combined with adverse environmental effects;

− *brain damage in different periods of the personal development under the influence of many harmful factors*: intrauterine and birth injuries, asphyxia; postnatal factors, such as: infectious, traumatic and metabolic-trophic disorders in various diseases in the childhood.

When we tell about brain damage in different periods of the personal development, we mean disorders of sensory sphere of the person and disorders of perceptions. These disorders are relevant in our article, that's why we've to show them in detail.

*Sensations and perception* (in general, the sensory sphere, perception) is the initial stage, the first stage of cognitive activity, such as sensory cognition, "living contemplation" of the surrounding reality. Together with ideas, sensations and perceptions form the basis of visual-active and concrete-figurative thinking, and also serve as a source of abstract-logical thinking (Onufriieva, Chaikovska, Kobets, Pavelkiv & Melnychuk, 2020).

According to the anatomical and physiological mechanism of sensations and perceptions, depending on the analyzers, sensations and perceptions are divided into *exteroceptive* (visual, auditory, gustatory, olfactory, skin − tactile, temperature, etc.) and *proprioceptive* and *interoceptive* (from the musculoskeletal side), such as kinesthetic, and from the side of internal organs).

In childhood *feeling and perception* as a mental (conscious) act are formed as a result of individual development under the influence of learning, upbringing and using the experience of predecessors. The process of their assimilation goes from the perception of simple, the brightest signs of surrounding objects

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to the perception of their complex combinations (objects and phenomena, space, time, etc.).

Children's perception is often recorded as sensuously vivid representations (*eidetism* − vivid visual representations). Sensations and perceptions *are characterized by*: sensory vivacity, extra-projection and lack of arbitrary changeability (Onufriieva & Ivashkevych, 2021).

Pathophysiological mechanisms of disorders of sensations and perceptions are *complex* (it is assumed that hallucinations are based on the inertia of the irritating process and phase states in the area of the cortical nucleus of the analyzer) (Lane, Marston & Fauci, 2016).

*Sensation* is a mental process of reflecting of individual characteristics of objects or phenomena in a person's consciousness when they are directly affected by senses. *Perception* is a mental process of reflecting objects or phenomena in the person's consciousness in the aggregate of their personal characteristics, under their direct influence on the sense organs. Perception is a synthesis of a complex of cash sensations with ideas. Perceptions are subjective images of objects and phenomena of the objective world, perceived earlier and which directly affect the sense organs at this time, such as traces of feelings and perceptions.

*Violations of sensations and perceptions (perceptual pathology)* are diverse. In childhood they are usually more elementary, visual disorders are more common than other disorders.

So, the classification of disorders of sensations and perceptions is:

I. Hypoesthesia and anesthesia.

II. Hyperesthesia, synaesthesia and senestopathy.

III. Psychosensory disorders.

1. Visual psychosensory disorders (metamorphopsia):

a) micropsia;

b) macropsia;

c) dysmorphopsia.

2. Intero- and proprioceptive disorders (disruption of the body scheme).

IV. Illusions (according to different analyzers).

1. Physical.

2. Physiological.

3. Mental.

V. Hallucinations.

1. By analyzers – visual, auditory, olfactory, gustatory, tactile, general sense (visceral and proprioceptive).

2. By complexity – simple (photopsias, akoasms, etc.) and complex (having meaning).

3. According to the completeness of the development – true complete and pseudo-hallucinations.

4. Regarding personality – neutral, commenting, imperative.

5. Special types – hypnagogic, extracampal etc.

Let us show syndromes with predominant disorders of sensations and perceptions. They are:

1) verbal hallucinosis syndrome;

2) visual hallucinosis syndrome;

3) tactile hallucinosis syndrome.

*Hyperesthesias* are a decrease in the subjective brightness and intensity of sensations and perceptions, which manifests itself in their loss of sensual concreteness, liveliness and brightness, up to the emergence of a feeling of their alienation (included in the structure of depersonalization and derealization syndromes).

*Anesthesia* is the exclusion of sensations and perceptions due to disturbances in the course of the projection system or damage to the cortical nucleus of the analyzer (optical, auditory, tactile and other agnosias).

*Hyperesthesias* are the aggravation of sensitivity to previously neutral stimuli, accompanied by hyperpathic coloring; in the field of interoception and proprioception, this manifests itself in various senestopathy (burning, pulsation, tightening, and others).

*Senestopathy* is a severe, unpleasant bodily sensation localized on the surface of the body or in internal organs, devoid of objectivity (as it differs from visceral hallucinations), occurring without an objective pathological process in the place of its localization. Senestopathy is a frequent symptom of mental disorders that are included in the structure of hypochondriacal delusions, depressive syndrome, Kandinsky-Clerambault syndrome, and others (Mykhalchuk, Pelekh, Kharchenko, Ivashkevych, Ed., Ivashkevych, Er., Prymachok, Hupavtseva & Zukow, 2020).

*Synaesthesia* is a neurological phenomenon in which stimulation in one sensory or cognitive system leads to an automatic, involuntary response in another sensory system. A person who goes through a similar experience is a synesthete. Another definition of synesthesia is a phenomenon of perception in which the irritation of one sense organ (as a result of the irradiation of a disturbance from the nervous structures of one sensory system to another) along with its specific sensations, also causes sensations corresponding to another sense organ. It should be taken into account that synesthesia has ceased to be a mental disorder. Tactile synesthesia is included in the list of symptoms and clinical signs of the ICD-10 under code R20.8 ("other and unspecified disorders of skin sensitivity").

*Visual psychosensory disorders (metamorphopsia)* are the distortion of the perception of surrounding objects while preserving the understanding of their meaning and essence, as well as the patient's critical attitude towards them (*dysmorphopsia* is the distortion of the shape of objects, *macropsia* is the enlargement of objects, *micropsia* is the reduction of their size). Intero- and proprioceptive psychosensory disorders (disorders of the body scheme) are manifested in the feeling of lengthening, shortening, twisting of the limbs, head, and internal organs. They are usually included in the structure of depersonalization, dysmorphophobia and hypochondriacal syndromes (Khwaja, 2012).

*Illusions* are perverted feelings and perceptions of actually existing objects and phenomena, in which the understanding of

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*ЗБІРНИК НАУКОВИХ ПРАЦЬ*
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the latter (images) always corresponds to reality and may have a different meaning. It is possible to have a critical attitude and the ability to correct (Brodsky, Oquendo, Ellis, Haas, Malone & Mann, 2001).

*Types of illusions* are:

A) *physical illusions* that arise as a result of the peculiarities of the physical properties of objects and things (refraction of objects at the boundary of two environments, mirages, etc.);

B) *physiological illusions* that related to the physiological features of the analyzer's functioning (for example, the feeling of movement of surrounding objects after the train stops);

C) *mental illusions* that arise as a result of an affective change in consciousness, which prevails over perceptions and changes in other mental functions, can be observed in healthy people who are in a state of anxious anticipation or overfatigue, and in patients with delirious, twilight and other changes in consciousness (de Wit, van Doremalen, Falzarano & Munster, 2016).

Depending on the disorder of activity of this or that analyzer, auditory (distorted perception of the meaning of real speech, hearing voices in noise), visual and other illusions are distinguished.

*Illusions of general feeling* (intero- and proprioceptive) include the feeling of compression, pressure, spasm, tension, pulsation in internal organs and other parts of the body, i.e. those diverse and unique sensations, which can be based on real irritations of the corresponding receptors (Chenguang, Zhaoqin, Fang, Yang, Jinxiu, Jing, Fuxiang, Delin, Minghui, Li, Jinli, Haixia, Yan, Jiuxin, Ling, Li, Zhixiang, Ling, Yanjie, Haixia, Feng, Kun, Yujing, Dongjing, Zheng, Yingxia & Lei, 2020).

*Hallucinations* (real full) are imaginary perceptions, perceptions without a real object. According to the mechanism of emergence, these are painfully changed and involuntary ideas that acquire a dominant position and an intensely sensual character, projecting into the real world and receiving their image of objective reality, i.e. all signs of perception (Hayden, Farrar & Peiris, 2014).

*Visual hallucinations* (animals, monsters from fairy tales) are more common in childhood and adolescence, and auditory hallucinations are simple or elementary hallucinations (ringing, noise, gunshots, calling names). *Pseudohallucinations* are incomplete hallucinations or false perceptions that do not have sensory brightness and extra-projection. They are localized above the "objective" and "subjective" space, are seen and heard by the inner sight and hearing. V.K. Kandinsky considered the characteristic feature of pseudo-hallucinations to be the absence of the nature of objective reality, as a result of which they give the impression of artificiality and alienation of consciousness, given the patient's passive attitude towards them (Lane, Marston & Fauci, 2016).

There are *visual* (silhouettes and shadows in the inner vision), auditory (voices in the head, "loud thoughts"), *general feeling* (feeling of a hole in the stomach with a feeling of doneness) *pseudo-hallucinations. Special types of hallucination*s are varieties of the previously listed hallucinations and pseudo-hallucinations observed in special mental states (hypnagogic hallucinations – visual and other hallucinations that occur when falling asleep; extracampal – visual images outside the field of vision, from the side or behind).

Let us describe *Syndromes with predominant disturbance of sensations and perceptions. Verbal hallucinosis syndrome* is characterized mainly by auditory hallucinations such as threats, insults, irritation, dialogues with the patient (in alcoholic hallucinosis), direct appeal to the patient, imperative voices (in schizophrenia). *Auditory hallucinations* are often combined with delirium, sometimes the patient has a critical attitude towards them. *Visual hallucinosis* syndrome is characterized by the predominance in the picture of the disease of mass and moving colorful visual hallucinations that occur instead of a clear consciousness (Villar, Blanco & del Campo, 2015).

*Tactile hallucinosis syndrome* is characterized by the presence of abundant tactile hallucinations (insects, worms) with

clear consciousness, but often in combination with delirium. In order to detect violations of perception (feelings and perception), reports about it both by the patient himself and by his relatives and friends can be used.

However, patients are often reluctant to talk about their painful experiences or try to hide them. In such cases, the so-called objective signs of hallucinations, which are revealed during observation of the patient, are of great importance for diagnosis. These include various measures taken by the patient to protect himself/herself from the "influences" he experiences (plugging his ears during auditory hallucinations, searching for their sources, removing radio receivers from the room), then – an anxious look, horror on his/her face, attempts to hide from someone, accusing others of obscene conversations.

*Visual hallucinatory readiness* of a delirious person (in case of alcoholic delirium) can be detected by pressing on the eyeballs and suggesting a haplucinatory image (Lympamus symptom).

Various *physiological methods* are widely used to study the functions of the analyzers (determination of perception threshold, functions of adaptation).

So, ***adverse conditions***, which facilitate logoneurosis, are:

– *physically weakened children*;

– *age features of brain activity*; large hemispheres of the brain are mainly formed by the 5th year of life, by the same age functional asymmetry is formed in the brain. Language function is ontogenetically the most differentiated, especially fragile. Moreover, its slower maturation in a case of boys compared with girls caused greater instability of their nervous system;

– *accelerated development of speech* (3-4 years old), when the child's communicative, cognitive and regulatory functions are developed rapidly under the influence of communication with adults. Many children during this period are characterized by a repetition of syllables and words (iterations), which has a physiological nature;

– *hidden mental imbalance of a child*, increased reactivity as a result of not quite normal relationships with others;

– *a conflict between the peculiarities of the environment* and the degree of its awareness;

– *lack of positive emotional contacts between adults and children*. There is emotional tension, which is often externally accompanied by stuttering;

– *insufficient development of motility, sense of rhythm, facial expressions and articulatory movements;*

– *disorders of sensory sphere of the person and disorders of perceptions.*

*There are anatomical* and *physiological causes of logoneurosis*. They are: physical diseases with encephalitic consequences; injuries – such as intrauterine, natural, often with asphyxia, concussion; organic disorders of the brain, which can damage the mechanisms of the subcortex, regulatory movements; exhaustion or fatigue of the nervous system as a result of intoxication and other diseases that weaken the central speech apparatus: measles, typhoid, rickets, worms, especially whooping cough, diseases of internal secretion, metabolism; diseases of the nose, pharynx and larynx; imperfection of the sound apparatus in cases of dyslalia, dysarthria and speech delay.

*We distinguish mental* and *social causes of logoneurosis*: short-term, one-time mental trauma (fear, stress); long-term (longitudinal) mental trauma, which means improper upbringing in the family: spoilage, imperative upbringing, unequal upbringing, upbringing of "the exemplary" child; chronic conflict experiences, long-term negative emotions in the form of persistent mental stress or unresolved, constantly fixed conflict situations and situations of cognitive dissonance (internal conflict); acute severe mental trauma, strong, sudden shocks that cause acute reactions of affect: a state of horror, excessive joy; incorrect speech formation in childhood: speech on the breath, rapid speech, speech disorders, rapid nervous speech of parents; overloading young children with language material; age-inappropri-

ate complication of language material and thinking (abstract concepts, complex phrase construction); polyglossia: simultaneous mastery of different languages at the early age, which can cause stuttering, usually in any one language; imitating another stuttering person.

There are two forms of such mental induction: passive one – the child involuntarily begins to stutter; the active form – a child copies the language and stutters; retraining of left-handedness. Constant reminders, requirements can disrupt the higher nervous activity of the child and bring him/her to a neurotic and psychopathic state with the onset of stuttering; wrong attitude to the child from the side of a teacher: excessive severity, inability to adjust the student to a positive perception of themselves. All these may also be a trigger for the emergence of logoneurosis.

The speech therapist should be primarily interested in when stuttering occurs, the first signs of it. How outwardly was it expressed? What are the possible reasons for it? As it developed, what features of the manifestations attracted the attention of parents: whether there are concomitant motor disorders (convulsions, tapping, shaking his head, etc.) or speech defects (extra words, sounds, pronunciation of certain sounds and words on the breath, etc.)? How does the child manifest himself/herself and whether it depends on the situation or the people around the child, on the different types of activities? How does a child speak alone (for example, with his/her toys)? What are the periods of deterioration and improvement of the language? How does the child relate to his/her language deficiency (notices, does not notice, is indifferent, worried, ashamed, hides, afraid to speak, etc.)? Did the parents ask for help: where, when, what was recommended, what were the results?

After clarifying the information about the child, describing the history of the peculiarities of the development of stuttering processes, the examination of non-speech processes that directly affect the child's speech activity, is carried out. The speech therapist organized a research of the child's sociability, motor

skills, impressive and expressive speech, abilities to play, educational, industrial activities, personal characteristics of children. A distinction is made between primary (during the first month of the child's stay in the language environment of a preschool institution or in the first two weeks of staying in a sanatorium for children who stutter, at the school speech therapy center), and providing a dynamic study of persons who stutter in the process of corrective and educational activities.

To study speech of children speech therapist used different pictures, books with poems, fairy tales, which are used, toys, which were selected (dolls, cars, animal figurines, building material).

The specific tasks of the speech examination are to determine:

– a place of occurrence and a form of speech spasms;

– the frequency of their findings and those peculiarities to be stored, speech capabilities;

– concomitant speech disorders, in particular, movement disorders;

– the attitude of the person who stutters towards his/her speech defect;

– the presence of psychological peculiarities.

The place of occurrence of convulsions (respiratory, vocal, articulation, mixed ones) and their forms (clonic, tonic, mixed ones) are determined aurally or visually. The frequency of convulsions of a person who stutters is of a particular interest to a speech therapist. It allows the doctor to judge about those parts of the language that should be preserved, and therefore, it will directly depend on how correctly and successfully the first language lessons with the child will begin. The study of the level of fluency begins with the identification of the dependence of paroxysms of logoneurosis on different degrees of its linguistic independence. In a conversation with the patient, the speech therapist asks about his/her parents, friends, interests, etc. Thus, the peculiarities of the child's speech behavior and speech

convulsions are revealed. The child is invited to write a story or to describe the content of the picture, retell a familiar fairy tale; speech therapist reads a story and offers to retell it, etc. Then a speech therapist tests the state of reflected and connected language by repeating or co-pronouncing simple and complex phrases.

## Conclusions

The ability of a child with logoneurosis to present speech freely depends not only on varying degrees of independence, but also on his/her readiness. So, the speech therapist should trace the features of the appearance of speech spasms depending on whether the child utters a complex or simple phrases, individual words or sounds. On the material of retelling the texts, it is recorded in which cases speech convulsions take kiplace: only at the beginning of the story, at the beginning of phrases, by use of individual words or sounds. It is being investigated whether speech convulsions do not depend on the level of speech volume. For this purpose, the examinee is asked to speak quietly, loudly, in a whisper.

The influence of different degrees of rhythmicity on the speech of a person who stutters can be tested in such a way: a child with a diagnosis of "logoneurosis" tells about details which are drawn on the pictures, conveys the meaning of a fairy tale, which is rhythmic prose, and recites a poem. All these techniques will be studied in detail in further our articles.

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*Харченко Євген, Комарніцька Людмила. Психологічні особливості проведення обстеження дітей з діагнозом «логоневроз», ускладненого розладами відчуттів та сприйняттів.*

*Мета дослідження* – дослідити психологічні особливості обстеження дітей з діагнозом «логоневроз», ускладненого розладами відчуттів та сприйняття.

*Методи дослідження.* Методами дослідження були метод спостереження та метод емпіричного дослідження хворих. Місцем організації емпіричного етапу нашого дослідження стала психіатрична лікарня № 1 м. Києва. За допомогою клініко-патопсихологічних та анамнестичних методів було обстежено 86 дітей віком 3-12 років (середній вік 8 ± 0,5 року) з логоневрозом в анамнезі.

*Результати дослідження.* Доведено, до несприятливих умов, які призводять до логоневрозу, відносяться: фізична ослабленість дітей; вікові особливості діяльності мозку; прискорений розвиток мовлення (3-4

*роки), коли його комунікативна, пізнавальна і регулююча функції швидко розвиваються під впливом спілкування з дорослими; прихована психічна неврівноваженість дитини, підвищена реактивність у результаті не зовсім нормальних відносин з оточуючими; конфлікт між особливостями середовища і ступенем його усвідомлення; недостатність позитивних емоційних контактів між дорослими і дитиною; недостатній розвиток моторики, відчуття ритму, міміко-артикуляторних рухів; розлади відчуттів та сприйняттів.*

*Висновки. Показано, що здатність дитини з логоневрозом до вільної презентації мовлення залежить не тільки від різного ступеня її самостійності, але й від її підготовленості до усного мовлення. Так, логопеду потрібно простежити за особливостями появи мовленнєвих судом залежно від того, чи вимовляє дитина складну або просту фразу, окремі слова або звуки. На матеріалі переказу тексту логопедом фіксується, в яких випадках виникають мовленнєві судоми: тільки на початку розповіді, на початку фраз, в окремих словах або звуках. Також має з'ясуватися, чи не залежать мовленнєві судоми від рівня гучності мови. З цією метою пропонується респондентові говорити тихо, голосно, пошепки.*

*Ключові слова: логоневроз, розлади відчуттів, розлади сприйняття, вікові особливості мозкової діяльності, мовленнєві судоми, гучність мовлення.*

# Facilitative Interaction as a Multi-Level Human Activity

# Фасилітативна взаємодія як багатоступенева активність особистості

## Khupavtseva Nataliia
Dr. in Psychology, Assistant Professor,
Rivne State University of the Humanities,
Rivne (Ukraine)
ORCID ID: https://orcid.org/0000-0002-8883-7686
ResearcherID: AAC-2156-2019
Scopus AuthorID: 57221383831
E-mail: natalahupavceva@gmail.com

## Хупавцева Наталія
Доктор психологічних наук, доцент,
Рівненський державний гуманітарний університет,
м. Рівне (Україна)

## Onufriieva Liana
Dr. in Psychology, Professor,
Head of the Department of General and Applied Psychology,
Kamianets-Podilskyi National Ivan Ohiienko University,
Kamianets-Podilskyi (Ukraine)
Scopus AuthorID: 57214601047
ORCID ID: https://orcid.org/ 0000-0003-2442-4601
Researcher ID: http://www.researcherid.com/rid/R-5598-2018
E-mail: onufriieva@kpnu.edu.ua

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Address for correspondence, e-mail: kpnu_lab_ps@ukr.net

# Онуфрієва Ліана
Доктор психологічних наук, професор,
завідувач кафедри загальної та практичної психології,
Кам'янець-Подільський національний університет імені Івана Огієнка,
м. Кам'янець-Подільський (Україна)

**The author's contribution:** Khupavtseva Nataliia – 50%, Onufriieva Liana – 50%

**Авторський внесок:** Хупавцева Наталія – 50%, Онуфрієва Ліана – 50%

*ABSTRACT*

*The purpose of our research is to show facilitative interaction as a multilevel human activity, to show the significant constructive phenomena of facilitative interaction as a psychological status of the individual.*

*Methods of the research. The following theoretical methods of the research were used to solve the tasks formulated in the article: a categorical method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. Also, in our research we used empirical methods, such as statement experiment.*

*The results of the research. It was shown, that the concept "facilitation" reflects a conscious and purposeful activity as a phenomenon characteristic, first of all, of a teacher. Thus, we singled out the attributes of facilitation: 1) cognitive activity; 2) the subject of the activity; 3) the functions of the subject; 4) the object of the activity; 5) the motives of the activity; 6) the purpose of the activity; 7) functions of the activity; 8) the ways of performing activities; 9) methods of activity implementation (and means relevant for the implementation of these activities); 11) the result of the activity.*

*Conclusions. We showed the characteristics of facilitative interaction. We proved, that the Activity was the basis, means and positive condition for the development of the Personality. The Activity is the expedient transformation of the surrounding reality of people. We call activity "a unit of life", mediated by the process of mental reflection. Also, outside activity there are neither means of the activity, nor signs, nor objects of art; there are no people outside the activity.*

*Therefore, the activity is a purposeful, multi-level human activity. "Purposeful" is because "the subject" appears as its goal. "Multi-level" is because it includes into its structure of actions, secondary motivation, determined by the purpose and the tasks of the activity. And this, in turn, ensures the actualization*

*of the main goal-motive of the activity by the individual. And, finally, the operation of the activity differs from the action in that it is not marked by a goal, but by the conditions of the activity in which this goal is explained. It is very necessary to distinguish the actions from the activities and from operations.*

***Key words:*** *facilitative interaction, a multi-level of human activity, the attributes of facilitation, cognitive activity, the subject of the activity, the functions of the subject.*

## Introduction

In the scientific literature scientists note (Гончарук & Онуфрієва, 2018), that "to facilitate" is the same as to help. The term "facilitation" is used in Psychology to denote the process and phenomenon of facilitation, the optimization of one person (or group, or even micro-group) with the active support and presence of another person (Astle & Scerif, 2011). Facilitation can be accidental, unconscious or intentional, conscious when it is performed by a facilitator (Falé, Costa & Luegi, 2016). The role of facilitator in relation to the child can also be performed by adults (parents, educators, teachers, etc.), who take care of the child and are acceptable to him/her. The phenomenon and the process of facilitation are widely used in Psychological Counseling, Psychotherapy, Organization of training activity with groups, where the facilitator acts as a leader who helps people or group members to be open and creative, to achieve personal insights (de la Garza & Harris, 2017).

Pedagogical facilitation is a process of increasing the productivity of education (teaching, upbringing) and the development of the subjects of the professional pedagogical process due to their special style of communication and personality of the teacher. In the process of pedagogical facilitation, we invite teachers and pupils to do everything together. We also propose to distinguish between a teacher (who educates his/her pupils, "pulling" them to a certain level) and a teacher (who helps pupils in their own learning activities). We'd argue that one should be a teacher, the other person wouldn't be. This actualizes insufficiently important role of the Teacher in a real process of schooling, that

requires great self-esteem, remarkable personal potential, impeccable skills of constructive interaction (Engle, 2002). The teacher as a professional specialist is characterized by special empathy: he/she sees and hears all the troubles, mistakes and failures, is able to help, but only when his/her help is really necessary. A real teacher never shows initiative on his/her own, he/she doesn't even always attract attention, but he/she knows how to do everything in such a way that the pupils themselves are active (Pimperton & Nation, 2010). We speak about this when we criticize "the traditional school" approach to learning by the type of simple transfer of information. We emphasize that the learning process should be done through personal growth. Under this approach, the teacher should be more of a facilitator (a person who greatly facilitates the initiative and personal interaction of pupils with each other) than the actual initiator of personal development; pupils should be supported more than evaluated.

We also believe that mastering the skills of emotional teaching is quite important for a teacher who creates the most positive conditions for the personal growth of his/her students and himself/herself. In addition to the actual teaching of his/her subject, the teacher should actualize emotional manifestations (his/her own and the students') as containing a special meaning. A teacher who is indifferent to the feelings and experiences of students always faces difficulties in the process of teaching academic subjects. The more experienced the teacher is, the more attention he/she pays in the class to the emotional mood in the class as a whole and to each student in particular.

We think that there are three skills of such kind of emotive teaching, which can be called pedagogical facilitation techniques (empathy, respect, sincerity):

– teachers ignore the emotional manifestations of their students, thereby causing their aggression. In such a way teachers' statements, as a rule, do not correspond to the person's feelings, they are not sincere, except of some individual cases when they condemn and blame schoolchildren;

– the teacher reacts not to the real feelings of each student, but to those people whom he/she himself/herself suggests to him/her, in his/her own statements he/she is only sometimes sincere, but he/she tries not to show positive emotions;

– the teacher reacts only to the superficial feelings of the student, but does it quite precisely and often he/she is not afraid to express both positive and negative feelings, but does not confirm it out loud, expresses his/her feelings in a non-verbal way;

– the teacher reacts to the hidden, deep feelings of each student, thereby helping students to realize why the person feels what he/she feels, gives a sincere reaction both at the verbal and non-verbal level, both positive and negative evaluation, while a negative assessment in no way degrades the student's sense of self-worth.

So, we'd like to know that facilitation is a change in the students' performance during a contact with the teacher or other students. Even the passive presence of the teacher in the classroom greatly activates the students, directs their activity in the right direction, stabilizes it outside of purposeful actions on the part of the teacher (Rezaei & Mousanezhad Jeddi, 2020). However, the phenomenon of facilitation has considerable influence only if the teacher is authoritative, referential, recognized. Then, as a result of pedagogical interaction, various psychological new formations of a personal and interpersonal nature are arisen, which are usually called "changes" or "phenomena" (Greco, Canal, Bambini & Moro, 2020).

The phenomenon of the teacher's authority is of great importance in the implementation of pedagogical interaction strategies that he/she uses. Observations of educational activities indicate that a teacher can be quite an authoritative person for students of any age, but the grounds for recognizing his/her authority are different. For younger pupils the teacher is an authority in a view of the authority of his/her role position. With regard to the given age of schoolchildren, we can speak, most likely, about the authority of the role, then the authority of the individual (Conners, 2009). At the same time, the teacher is recognized as ha-

ving the right to make responsible decisions regarding a certain situation, both with a regard to a specific student and the class as a whole, both in educational and other types of the activities (Drigas & Karyotaki, 2017).

For a child at school the role of a teacher alone is not enough. However, in situations that are significant for both the class and the teacher. It is also right to make a responsible decision remains dominant (Івашкевич & Комарніцька, 2020). In situations that are personally significant for the child, especially in extracurricular activities, such trust is advanced to the teacher to a lesser extent. Such compression of the sphere of authoritative influence, recognition of authority in only one or some spheres of educational interaction is called "authority specification" of the teacher (Alahmadi, Shank & Foltz, 2018).

If the child recognizes the teacher's right to make a responsible decision in a personally significant situation, then this state of affairs is a manifestation of the true authority of the teacher's personality (Dale & Duran, 2011). As for high school students, the authority of the teacher is greatly strengthened due to the reduction of role orientation. Teachers often become referents in connection with a full recognition of their personality. At the same time, the teacher's authority is actualized only as a reaction to his/her respectful attitude towards students (Arrington, Kulesz, Francis, Fletcher & Barnes, 2014).

One of the determinants of facilitative interaction is mutual understanding, which is defined as a certain established system of feelings and relationships, which allows to achieve the goal of joint activity or communication in a largely coordinated manner, and maximally contributes to the observance of trust and interests, providing great opportunities for self-disclosure of the abilities of each participant of this process of interaction (Phani Krishna, Arulmozi, Shiva Ram & Mishra, 2020). Facilitative mutual understanding in this way ensures such a level of community when there is no authoritarian dominance, emotional tension, mistrust and lack of interest in everything that

happens in the process between the participants of the pedagogical process (Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh & Shanahan, 2001).

One of the main conditions for the emergence of the phenomenon of mutual understanding is the mutual acceptance of individual psychological characteristics of each other, the ability to put oneself into the place of others, to identify themselves with others (Hecht, Torgesen, Wagner & Rashotte, 2001). Mutual understanding is a consequence of the humanistic orientation of teachers who perceive the success of students and the goals of their educational activities as their own ones (Mykhalchuk & Bihunova, 2019).

In the process of facilitative interaction, the phenomenon of trust is similar in its main characteristics to the phenomenon of mutual understanding. Trust is a feeling of openness to the world of people, phenomena and processes. Trust does not mean accepting something on faith without realizing the deep essence of this phenomenon (Alahmadi & Foltz, 2020). Trust can be intuitive or conscious, direct or indirect. Lack of trust, alienation from the child is one of the main destructive reasons that delays personal development. Children feel an urgent need to be trusted by both authoritative significant peers and adults, also by teachers (Gathercole, Pickering, Ambridge & Wearing, 2004).

In the process of the child's development, his/her basic trust in the whole world is formed. The world shouldn't be dominated by the child's consciousness hanks to certain threatening impulses, but such ones that satisfy the child, bring him/her joyness. We should always pay attention to the child's achievements, so that he/she accumulates a great experience of positive evaluation, learns to reflect his/her feelings. Positive feedback, praise, the acceptance of achievements as personally significant moments significantly increases, develop and support a child's self-esteem (Shiva Ram, Bhardwaj & Phani Krishna, 2017).

From a very early age the child feels the attitude of other people, which acquires great significance for him/her. Therefore, the models of trusting, humane attitude towards other

people are laid from preschool age (Heidari, 2019). A child's personal development is a consequence of caring for him/her and understanding him/her. A child should always feel how adults worry about himself/herself in order to learn to think and care about others. Thus, the personality of the others must become a part of the child's life world. Therefore, the child must learn to see another person as a person. Only under such conditions the child will fully perceive the importance of facilitative interaction (Alyami & Mohsen, 2019).

So, **the purpose** of our research is to show facilitative interaction as a multi-level of human activity, to show the significant constructive phenomena of facilitative interaction as a psychological status of the individual.

## Methods of the research

The following theoretical methods of the research were used to solve the tasks formulated in the article: a categorical method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. Also, in our research we used empirical methods, such as statement experiment.

## Results and their discussion

In our opinion, the phenomenon of reflected subjectivity is revealed in the process of facilitative interaction. In its emergence, the subjective parameters of the teacher's personality, which are understood and necessarily are taken into account by the students, play a significant role. From the psychological image of the teacher, these parameters are explained in the personal sphere of the students. The image of the teacher can be both a real and imaginary one. In some cases, the imaginary image is, at the same time, real in terms of the effectiveness of influence, like, by the way, a real teacher. In such facilitative interaction the teacher's subjectivity is broadcast, namely it is his/her ability to make meaningful transformations in the structure of the students' personality.

So, we proved that one of the significant constructive phenomena of facilitative interaction is a psychological status of the

individual, without the acquisition of which there cannot be a process of active, consistent progressive development and self-development of the individual. Psychological status characterizes play not only the student's real place in the system of interpersonal relationships, but also the position in the class, in a family, peer groups. They also depend on that situation how he/she attributes to himself/herself. The need to build oneself as the individual, to get self-improvement, etc. does not arise spontaneously – it is formed in the process of facilitative interaction. It is the pedagogical influence that allows the student to realize the difference between "Me-real" and "Me-ideal", without which personal development cannot take place. Facilitative interaction performs the function of not only helping and protecting the child from insecurity, fear of failure to complete educational tasks, but also helps to establish the student's status, form his/her role position. Facilitative interaction involves considerable attention given to a person in a situation where he/she is still objectively unsuccessful; this attention may take the form of either direct utterances or implicit frames or scripts. Facilitative interaction also involves the student's implementation of influences on another person. In turn, exerting a facilitative influence on the student, the teacher addresses his/her personality regardless of his/her failures and successes, mistakes and achievements. Thus, for the effective facilitative interaction the unconditional acceptance of the other becomes decisive, and final results of the facilitative interaction, grades from the educational subject, and some more external features are unimportant. Facilitative interaction should be with each child, and for this process it is only necessary to see and actualize attention to his/her strengths constantly.

Models of facilitative interaction are not created by themselves. They have socio-cultural significance, reflect the specifics of a teacher's life path, his/her age, personal characteristics, as well as the level of professional competence and pedagogical creativity. Analyzed phenomena of facilitative interaction

make it necessary to match the peculiarities of the organization of this interaction to the psychological characteristics of the participants of the educational process. To reach this the teacher has to master the techniques of psychological diagnosis, correction and counseling. In this case pedagogical actions will not be exploratory or indicative in nature, but they are balanced and scientifically based.

So, we insisted on the need to take into account the following approaches to create an environment in classes that is the most optimal for solving educational tasks based on the cooperation of the teacher with pupils:

– *interactive ones*, based on the freedom of those people who are studying; in this case feedback in the "Teacher – Pupil" system deals with the organization of productive communication between the teacher and schoolchildren, taking into account the reactions of pupils and optimizing the educational environment in order to increase the effectiveness of the learning process, which is more much important. Interactive learning methods include, in such a way, educational discussions, heuristic conversations, debates and various role-playing and simulation games that simulate situations, which are arisen in the process of solving problems and tasks by schoolchildren;

– *facilitative approach*, which involves creating an environment in classes that is optimal for solving tasks and problems based on the cooperation of the teacher with schoolchildren, the acceptance and constant support of pupils, faith in their abilities, opportunities based on mutual respect and trust. The facilitative approach promotes the development of an active personal position, the most complete satisfaction of cognitive and creative needs, and, therefore, self-realization of pupils.

So, the teacher should help pupils solve not only educational, but also personally significant tasks; in this situation facilitative interaction should come to the rescue. However, in the pedagogical process, the schoolchildrens' success/failure is the main indicator of their failures and achievements during their entire staying

at school. A high level of success is usually associated by parents with the general well-being of the pupil, and low success is perceived as an indicator of considerable difficulties, the schoolchildren's disadvantages. The latter significantly distorts and complicates the pupil's position, because the variety of psychological factors that influence the organization of facilitative interaction, and they are often replaced by one of them. At the same time, such characteristics of a schoolboy as business and collectivist orientation, highly developed abilities, appearance, personal attributes, age, sociability, willingness to help a friend, manners of behavior, which remain unaccounted for or not taken into account.

Thus, the theoretical analysis of the scientific literature convincingly shows that facilitative interaction really greatly facilitates, promotes, stimulates the organization of the educational process in modern secondary schools, activates the personal development of pupils, which is closely related to giving them greater freedom and responsibility within a general paradigm of humanizing interpersonal communication at school.

In a real communicative process, there were distinguish certain types of speech activity, which, as a rule, were integrated, for example, into a conversation, into a process of listening and speaking, and filling out a form, which involves reading and writing. At classes pupils have to do attempts to separate different functions of integrated skills (artificial ones), which appear to be artificial. The audience often leads to speaking. This process happens when the teacher's questions of the understanding and encourages pupils to speak. The introduction and consolidation of new material takes a great place through the process of perception. If, however, the textbook is used to input the material, then it used by means of speaking and reading.

In addition, pupils' skills in listening, speaking, reading and writing are systematically developed with a wide range of realistic types of tasks that provide maximum practical opportunities for using the language having been studied. Consequently, listening is an active thinking process with the aim of perceiving,

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recognizing and understanding every time new speech messages, which involve the creative combination of skills and their active use in accordance with the changed situation.

The material for listening to the communicative educational complexes can consist of conversations, dialogues, songs, children's lyrics and rhymes, interviews and informational texts. In order to help pupils to prepare for the listening and use of these texts, a series of tasks are planned for use in the classroom – a pre-text, a post-text and those one that are performed during the listening session. For example, The Headway Course illustrates the typical sequence of exercises. In the list of exercises pupils are given a theme and specific tasks – to find relevant information during listening, after the stage of listening, pupils complete a variety of tasks – fill in tables, answer the questions, etc.

Also, we've to note that reading is an active analytical and synthetic process, which involves obtaining information from tests based on the perception, comparison and recognition of the visual complexes of a certain value in infinitely new combinations. When we talk about reading as means of learning, we mean the use of texts as visual support and the "content base" of teaching to speak. In this sense the texts are as a paradigm of a written fixation of oral speech. This is perfectly consistent with the principle of integrated training for all types of speech activities. Also reading helps to memorize the material better, to give impetus to the discussion, since each text is the source of some situations.

The purpose of writing, for example, is to develop the ability to record own oral speech for communicative purposes. The ability to write involves progressive interconnected levels of writing and word formation, the addition of sentences and the design of their own and, in the end, independent writing of texts. Often a written task is a part of a sequence of tasks for the development of other skills, and then it is naturally integrated. So, we provide a plan of the lesson, that includes three interconnected stages: the first stage is reading information and checking it

(answering questions), the second one is speaking based on the speech sample and the information having been read, and only the third step is writing.

Most number of creative tasks for writing includes the so-called Project Activity. As the language of pupils enriches, they are offered to write different types of texts in English: dialogues, tips, simple reports, place descriptions, letter-questions, diary entries, announcements, a storyline, the essay, newspaper articles, etc.

Advantages of *the Project Activity* are:

– the Project Activity motivates;

– pupils take active positions;

– pupils are personally oriented;

– pupils have the general educational value, promote the development of initiative, independence, imagination, self-discipline, cooperation with other pupils and useful research skills.

The design method is becoming more common at foreign language classes. The global theme can be completed by the creation of project of pupils, which becomes a stimulus and motivation for learning a foreign language by transferring the center of the learning process from a teacher to a pupil. The project is an opportunity for pupils to express their ideas in a creatively thought-out way for them: making collages, posters, announcements, conducting interviews and researches (with subsequent registration), demonstration of models with the necessary comments, drawing up plans for visiting interesting places with illustrations, cards, etc. A pupil, but not a teacher, determines that it will be the project, in what form and how its presentation will take a place. The main principles of the Project Activity are variability, problem solving, cognitive approach to grammar, curiosity, personal factors, adaptation of tasks.

When composing the "List of Proposed Creative Problems to Protect a Global Theme", it is expedient to use the artistic basis for the teacher, since without the last process of creativity is unthinkable. It is desirable to give short explanations in writing

selected topics. The main requirements for the selection of creative tasks to protect a global theme are:

**1)** *the nature of creative tasks* has to meet the functional needs of pupils. In this case the account should be taken of the tendency of the latter *to solve complex tasks*, their independent compilation; fantasy, imaginative development that can be used to formulate hypotheses and draft projects; *modeling and designing* (manufacturing of operating models, structures, various devices, mechanisms, etc.); *drawings* (associative drawings, tables, "synthesized" paintings, schemes); *artistic words* (artistic descriptions of objects, phenomena, processes, poetic comprehension of them); *collecting* (herbarium, collection of minerals, thematic selections of stamps, etc.);

**2)** it is desirable that these tasks should be close to *a real-life demand*;

**3)** it is desirable that they have *an element of experimental imprinting* – a natural and universal methods of cognition;

**4)** it is necessary that the implementation of the specified tasks requires *the use of knowledge, skills* having been acquired during the study of the global topic.

Democracy in the choice of *creative activity* should not be limited to the mentioned lists of them. It should be left to pupils to offer themselves a creative task that follows from their preference.

It is important that the pupils in the first place form a cult of creativity, in whatever form it does not perform. The efforts should be made to establish, among other things, the last relationship of benevolence, the cultivation of the ability to rejoice in the creative success of others. It is clear that cases of "black envy" must be immediately eradicated or translated into a reasonably healthy competition. In any case each single pupil has to be firmly convinced that his activity will be objectively evaluated not only by the teacher but also by the mates.

It is necessary to introduce a ritual for the protection of creative activities. The important thing here is to create the at-

mosphere of celebration. A certain suggestive role is played by the corresponding attribute. Here it is necessary to observe the measures, but it is worth remembering that in creating an appropriate suggestive atmosphere of success there are no trifles. Not only then it is the nature of creative activity, goodwill and, at the same time, demanding in its perception, but also the psycho-emotional impact of festive clothing of participants, the colors of the interior and special design and even the smell. The most important thing here is the idea of a common interesting business, where everyone is preparing a surprise for others. The situation of success can be continued after protection. And from the best creative forms of the activities, it is expedient, for example, to organize a permanent exhibition. Separate thematic competitions can be carried out not only within the limits of school campus, but also outside it. It is important here to create a pupil's sense of unlimited prospect of growth not only of their own abilities, but also of opportunities to enter their creative activities beyond the limits of school surrounding.

However, it should be remembered that artificially speeding up the creation of a situation of success, and even less worthless. Whatever the nature of the creative activity was not, the teacher should find those "points of touch" topics that make it possible to ascertain the depth of knowledge of the material. The need for an objective assessment of knowledge, skills and abilities is beyond doubt.

One of the methods of activating pupil's speaking is to provoke a statement. This is a welcome encouragement of schoolchildren to their own unprepared expression, thoughts, ideas without direct teacher's assistance. The benefit of this is that pupils quickly get involved into speech activity and admire it: they ponder, express their thoughts, recall the corresponding linguistic forms in order to express themselves. All these factors show to the teacher what volume of the material the schoolchildren really learned and how they could use it in the process of communication.

In the example below, the teacher tries to provoke a noun phrase, a news program, a linguistic unit that pupils know but cannot remember right away.

*T: Last night I was watching TV. I saw something very interesting. What do you think it was?*

*P1: A film?*

*T: No, it wasn't a film. It's on every night.*

*P2: Adverts?*

*T: No, not adverts! More interesting than that!*

*P3: A programme...*

*T: Yes, a programme. What kind of programme?*

*P4: News?*

*T: Yes, good! Put it together. What do we call it in English?*

*P5: A news programme!*

*T: Very good? Right – a news programme.*

In this part of the process of communication between the teacher and the pupils five of them took a direct part, while others had the opportunity to listen, to think, to recall the language units, to prepare for the expression of their own thoughts – they had the need and conditions for using their English language skills.

The teacher can use the following methods of *provocative expression*:

– use of paintings to prompt the content of utterance;

– to make choice of the closest to the correct answer-proposal of one of the pupils and an incentive to correct the choice of the answer by schoolchildren themselves;

– a hint of a keyword using the first letter of the word.

After completing the formal aspects of the activity, it is extremely important to provide pupils with the topic for communication. One of the most effective methods in this situation is the information gap, which can also be called a communicative pass. The bottom line is that one pupil has the information that the other schoolchild needs to complete the task. For example, the first pupil may have a map showing the location to the other one.

He/she would find the questions how to get to a certain place by asking. The first pupil gives directions, the second one finds a place and thus it is a real communication in English between two pupils.

The concept "facilitation" reflects a conscious and purposeful activity as a phenomenon characteristic, first of all, of a teacher. Thus, it is possible to single out *the attributes of facilitation*: 1) Cognitive Activity; 2) the Subject of the Activity; 3) the functions of the Subject; 4) the object of the activity; 5) the motives of the activity; 6) the purpose of the activity; 7) functions of the activity; 8) the ways of performing activities; 9) methods of activity implementation (and means relevant for the implementation of these activities); 11) the result of the activity (Fig. 1).
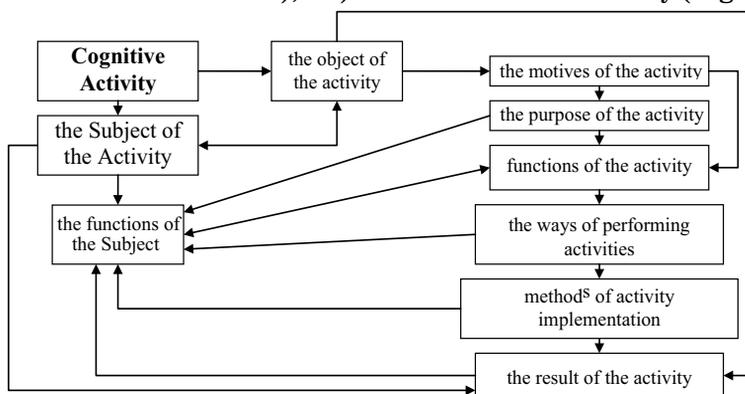


*Fig. 1.1. The structure of Cognitive Activity of schoolchildren at secondary education institutions*

## Conclusions

Let's consider each of the individual components, because all of them are ***characteristics of facilitative interaction***. It is well known that Activity is the basis, means and positive condition for the development of the Person. The Activity is the expedient transformation of the surrounding reality of people. We call activity "a unit of life", mediated by the process of mental reflection. Also, outside activity there are neither means of the activity, nor signs, nor objects of art; there are no people outside the activity.

Therefore, the activity is a purposeful, multi-level human activity. "Purposeful" is because "the subject" appears as its goal. "Multi-level" is because it includes into its structure of actions, secondary motivation, determined by the purpose and the tasks of the activity. And this, in turn, ensures the actualization of the main goal-motive of the activity by the individual. And, finally, the operation of the activity differs from the action in that it is not marked by a goal, but by the conditions of the activity in which this goal is explained. It is very necessary to distinguish the actions from the activities and from operations.

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***Хупавцева Наталія, Онуфрієва Ліана. Фасилітативна взаємодія як багатоступенева активність особистості.***

***Мета дослідження*** *– показати фасилітативну взаємодію як багатоступеневу активність особистості, продемонструвати значущі*

конструктивні явища фасилітативної взаємодії як психологічного статусу особистості.

**Методи дослідження.** Для розв'язання поставлених завдань використовувалися такі теоретичні методи дослідження: категоріальний, структурно-функціональний, аналіз, систематизація, моделювання, узагальнення. Також у своєму дослідженні ми використовували емпіричні методи, такі як пілотне дослідження.

**Результати дослідження.** Показано, що поняття «фасилітація» відображує усвідомлену і цілеспрямовану діяльність як явище, властиве, насамперед, вчителеві. Виокремлено атрибути фасилітації: 1) діяль-ність; 2) суб'єкт діяльності; 3) функції суб'єкта; 4) функції діяльності; 5) мотиви діяльності; 6) мета діяльності; 7) способи виконання діяльності; 8) предмет діяльності; 9) метод реалізації діяльності; 10) засоби, актуальні для реалізації діяльності; 11) результат діяльності.

**Висновки.** Виокремлено компоненти, які є властивими для фасилітативної взаємодії. Показано, що діяльність – це основа, засіб і позитивна умова розвитку особистості. Діяльність – це доцільне перетворення людьми навколишньої дійсності. Доведено, що діяльність є одиницею життя, опосередкованою психічним відображенням. Визначено, що поза діяльності не існує ані засобів діяльності, ані знаків, ані предметів мистецтва; поза діяльністю немає самих людей.

Доведено, що діяльність є цілеспрямованою, багатоступеневою активністю людини. «Цілеспрямована» – оскільки «предмет» постає її метою. «Багатоступенева» – оскільки включає до своєї структури дії, вторинну мотивацію, що визначаються метою та завданнями діяльності як такої. І це, зокрема, забезпечує актуалізацію особистістю основної мети – мотиву виконання діяльності. І, нарешті, операція діяльності відрізняється від дії тим, що вона позначається не метою, а умовами діяльності, в яких ця мета експлікується. Визначено, що потрібно обов'язково відрізняти дії від діяльності та від операцій.

**Ключові слова:** фасилітативна взаємодія, багаторівнева діяльність людини, атрибути фасилітації, когнітивна діяльність, суб'єкт діяльності, функції суб'єкта.

# Psychodiagnostic Research of a Dialogue in Culturally Oriented Surrounding in the Process of School Studying

# Психодіагностичне дослідження діалогу в культурологічно зорієнтованому середовищі в процесі шкільного навчання

## Mykhalchuk Nataliia
Dr. in Psychology, Professor,
Rivne State University of the Humanities,
Rivne (Ukraine)
ORCID ID: https://orcid.org/0000-0003-0492-9450
Researcher ID: http://www.researcherid.com/rid/A-9440-2019
Scopus AuthorID: 57214227898
E-mail: natasha1273@ukr.net

## Михальчук Наталія
Доктор психологічних наук, професор,
Рівненський державний гуманітарний університет,
м. Рівне (Україна)

## Koval Iryna
Ph.D. in Psychology, Assistant Professor,
Assistant Professor of the Department of Foreign Language Education
and Intercultural Communication,
Khmelnytskyi National University,
Khmelnytskyi (Ukraine)
ORCID ID: https://orcid.org/0000-0002-2048-0000
Researcher ID: B-2173-2019
iryna-koval@i.ua

# Коваль Ірина

Кандидат психологічних наук, доцент,
доцент кафедри іншомовної освіти і міжкультурної комунікації,
Хмельницький національний університет,
м. Хмельницький (Україна)

**The author's contribution:** Mykhalchuk Nataliia – 50%, Koval Iryna – 50%
**Авторський внесок:** Михальчук Наталія – 50%, Коваль Ірина – 50%

## ABSTRACT

*The purpose* of our research is to provide psychodiagnostic research of a dialogue in culturally oriented surrounding in the process of school studying.

*Methods of the research.* The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. The experimental method was the method of organizing empirical research.

*The results of the research.* We proved that the reasons of a low level of validity of opinions and judgments by pupils are: 1) unsuccessful organization of the discussion at the English language classes; 2) as a consequence of the first reason – pupils are not familiar with the discussion as a form of educational activity, they do not know how to behave at such a lesson, and most often choose a standard position of a "pupil" who listens carefully to the teacher, answers his/her questions concisely, clearly, regardless of schoolchild's point of view; 3) 68% of pupils do not understand why they need to justify their opinions (because they always express only those opinions that are in their textbooks or that were expressed by the teacher at the previous lesson); 4) 32% of schoolchildren are afraid to substantiate their statement "incorrectly", " not methodically" and to get a bad mark.

*Conclusions.* We distinguish, on the one hand, a dialogue, and on the other one – a simple conversation. A dialogue is understood as a mutual communication that has specific features: thematic focus or a problem solving, getting two-way information, the combination of thematic focus with two-way transmission of information that helps to solve a common problem in any way. Also we distinguish between linguistic and psychological understanding of a dialogue, emphasizing that in the process of psychological studying of a dialogue it is necessary to pay a great attention to both the informative exchange between partners and the features of their relationships, in particular their aspect of role interaction.

***Key words:*** *a dialogue, culturally oriented surrounding, a low level of validity of opinions, a discussion, educational activity.*

## Introduction

The analysis of psychological and pedagogical literature on the problem of communication (Batel, 2020; Максименко, Ткач, Литвинчук & Онуфрієва, 2019) showed that in recent years dialogue has become the subject of psychological and pedagogical analysis with the aim of using it to improve and humanize the system of education, to increase the effectiveness of school education. In this case, it is necessary to emphasize that there are three ways of understanding of a dialogue in psychological literature, which need to be described in this article, because it is the idea of a dialogue between the participants of the discussion at the lessons that will interest us to the greatest extent.

So, we'll analyze *a dialogue* as:

1) exchange of remarks or statements between the participants of communication;

2) the principle of mutual relations;

3) dialogical nature of the very content of thinking and the activity of a modern person.

If we tell about *the first understanding of a dialogue*, as the example we have to note, that school psychologists in Germany pay a great attention to the ability to communicate productively: teachers study the internal mechanisms of mutual influence between the teacher and the student, the means of influencing the emotional and mental development of the student (Blagovechtchenski, Gnedykh, Kurmakaeva, Mkrtychian, Kostromina & Shtyrov, 2019).

Scientists (Dijkgraaf, Hartsuiker & Duyck, 2017) believe that the ability for productive communication between the teacher and pupils and between schoolchildren themselves can be better developed under conditions when: a) the teacher encourages pupils to a dialogical interaction with each other and with the teacher, facilitate them to exchange spiritual values; b) at the lessons the teacher strives to put pupils into the position

of inventors, researchers who independently acquire knowledge, prove proposed them hypotheses; **c)** the teacher builds learning as a holistic creative process in a form that is close to a business game, with elements of competition, theatrical action.

According to *the second understanding of a dialogue*, productive communication in the educational process at school can be understood as communicative interaction (cooperation) in the subsystems "a teacher − a whole class", "a teacher − a pupil", "a schoolchild − a schoolchild", "a pupil − a group of schoolchildren", "a pupil − a whole class". It involves encouraging schoolchildren to share spiritual values and enriching on this basis significant motives for cognitive activity, to the development of children's creativity. Scientists (Ivashkevych Er., Perishko I., Kotsur S. & Chernyshova, 2020) believe that the degree of the development of the ability to productive communication is determined by the formation of the motivational (cognitive interests, focus on cooperation with the teacher and classmates) and instrumental (thinking operations, emotional-volitional sphere) aspects. Based on these points, it is possible to distinguish the psychological and pedagogical conditions for the formation of productive communication:

• a democratic nature of the relationships between the teacher and pupils (Cilibrasi, Stojanovik, Riddell & Saddy, 2019);

• the organization of training with the creation of problem situations at the lessons (Brédart, 1991). New knowledge is not presented by the teacher as ready-made one, but pupils have to master it in the process of active independent activity and communication between themselves and the teacher (Derwing, Munro, Thomson & Rossiter, 2009);

• the development of thinking operations of pupils, such qualities of thinking as independence, depth and flexibility (O'Donnell, MacGregor, Dabrowski, Oestreicher & Romero, 1994);

• the construction of education as a holistic creative process (Murphy, Melandri, Bucci, 2021).

If we take into account the third understanding of a dialogue – "Dialogical nature of the very content of thinking and the activity of a modern person", we characterize the educational dialogue that is the most effective in the classroom in the process of secondary education. We believe that in the educational dialogue there are four dominant functions of communication: communicative, informative, regulatory and emotional, but at different lessons one function plays a major role and others – a secondary one. The topic of the educational dialogue should depend on its subject and clearly correspond to the educational program. At the same time, we believe that the goals of any dialogue are boundless, they have no end, as the processes of learning and cognition itself do (Valis, Slaninova, Prazak, Poulova, Kacetl & Klimova, 2019).

So, the teacher has to form his/her own individual language style, which will correspond to the composition of his/her personality, promote the person's adequate expression and compensate the teacher's negative traits (Ware, Damnee, Djabelkhir, Cristancho, Wu & Benovici, 2017). Speaking about the individual style of speech, we have to note that there is no consensus on how permissible in the teacher's speech there are presented certain violations of stylistic norms, even if it increases the effectiveness of pedagogical influences (Zuniga & Simard, 2019). At the same time, there is a great reason to believe that in order to achieve the greatest expressiveness of speech, to create casual dialogic relationships in the discussion, the teacher can use elements of colloquial speech, heterogeneous vocabulary, stylistic interruptions, etc. In addition, mastering the techniques of creating the individual style of pedagogical speech forms, a teacher's social maturity, it contributes to a more adequate orientation in various situations that are arisen in the classroom during discussions (Crookes, 1989; Ivashkevych, Ed. & Onufriieva, 2021).

If we take into account, that the dialogue ideas of the mutual relations were pointed out by pedagogues and psychologists of a humanistic orientation (such as Carl Rogers (1983)),

we'll name the next, the fourth understanding of a dialogue. In this case the main is the influence of the teacher as a facilitator (according to C. Rogers (1983)), the School of Dialogue of Cultures of G. Ball (1995), which help to build the interaction of the teacher with pupils on the basis of equal relations, to carry out a joint search for worldview positions, and with them – to show ways to spirituality and humanism. We believe that approach of G. Ball (1995) to humane education includes the concepts of "facilitation" (Rogers, 1983) and "cooperation" (Івашкевич Ер. & Комарніцька, 2020), as well as the teacher's desire to enrich the internal child's world (Alahmadi & Foltz, 2020). This reason affirms the pupil's right to be the subject of the educational process, denies any violence against schoolchildren (de Bot, 1992; O'Brien, Segalowitz, Freed & Collentine, 2007).

So, **the purpose** of our research is to provide psychodiagnostic research of a dialogue in culturally oriented surrounding in the process of school studying.

**The tasks** of our research are:

1. To propose the author's understanding of a dialogue as a process of communication of different cultures.

2. To show non-equivalent words are cultural-marked lexical units that serve us to express concepts that are not in another culture and another language.

3. To describe the results of psychological and pedagogical experiment to know the level of reasonableness of opinions expressed by schoolchildren is one of the criteria for the effectiveness of the discussion.

4. To propose the reasons of a low level of validity of opinions and judgments by pupils.

5. To justify exercises to teach pupils to communicate effectively at the English lessons.

## Methods of the research

The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical

method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. The experimental method was the method of organizing empirical research.

## Results and their discussion

We think, that *the fourth understanding of a dialogue* can be understanding of it as **a process of communication of different cultures**. We'll explain our position. We think that any language does not exist out of culture. In such a way it is a socially inherited set of practical skills and ideas, characterizing our way of life. In such a hypostasis one can consider language as a dominant form of preservation of culture and its characteristics.

A language is a form of preservation of any culture. It emphasizes on cultural values of any ethnic group and is a means of their reflection into the future. On the one hand, the language reflects the subconscious intuitions of people – their bearer, surrounding us world. It keeps information about the significant historical events in the life of the ethnic group. From this point of view the language is an instrument of culture that spiritually forms its bearer, imposes on the vision of the world having been embodied in the linguistic forms and defines the image of thoughts and feelings of the user (according to the language). Under the national image of the world we understand the special structure of the relations of elements common to all people, which, if not comprehended by the individual, will necessarily be rejected as something unacceptable. For example, in American culture whistling is an emotional form of the expression of consent, approval, as well as applause. For Polish and Ukrainian cultures, for example, the negative connotations of this act are characteristics of ossification of bad actors, speakers and players, whistling – that there are "telling lies, fooling nonsense", "it is the belief that whistling leads to the lack of money".

As for the problem of the correlation of the language and the culture, we'd express our opinion that a person is forced to live in a culture just as he/she lives in the biosphere. In such a way

the language serves one or another culture, reproduces first of all the images of the user of this culture and the language itself, the image of the ethnic language of the person.

We deny the "general correlation" between the cultural type and the structure of the language. We can determine how one or another cultural trait influenced the basic structure of the language. Nevertheless, if the specifics of the notion of "linguistic structure", referring to certain phonetic, morphological, lexical, syntactic, functional and communicative peculiarities of a particular language, then systemic-language correlations with the national world view, world perception and world understanding as general components of a complex phenomenon of the national mentality will be sufficiently relevant and specific.

Taking into account close relationships between the culture and the language, as well as defining the components of socio-cultural competence, it is important and necessary to take into account the unity of languages with the world and the culture of people speaking these languages. Thus, the effectiveness of communication depends on many factors: the conditions and the culture of communication, rules of etiquette, possession of non-verbal forms of the expression (facial expressions, gestures), the presence of deep background knowledge and much more.

Overcoming the language barrier is not enough to ensure the effectiveness of communication between representatives of different cultures. It is necessary to overcome the cultural barrier. We believe that problems in intercultural communication cause national-specific features of various components of cultures of respondents (peculiarities that make us possible the implementation of these components of ethno-differentiating function). The components of culture, and hence it follows that the components of socio-cultural competence, having been a national specific color, include the following: traditions, customs and ordinances; traditional and everyday culture; national pictures of the world; artistic culture, which reflects the cultural traditions of a particular ethnic group.

So, we'll state that in the process of teaching a foreign language the problem of the interrelation of the language and the culture appears to be particularly relevant and bipolar: the language is recognized through the culture, and due to the language, the transition to the world of another culture takes a place, and therefore we need a country-study approach. We also consider socio-cultural competence as the ability to implement intercultural communication based on the knowledge of lexical units with the national-cultural component of semantics and the skills of their adequate application in intercultural communicative situations, as well as the ability to use background knowledge to achieve mutual understanding in situations of mediated and direct intercultural communication. We also think the linguistic-ethnographic competence as the ability to perceive the language in its cultural-bearing function, with its national and cultural specificity. In such a way linguistic competence includes knowledge of linguistic units, including the national and cultural components of semantics, and the ability to use them in accordance with the social and speech situations. The basis of linguistic competence are the national and cultural components of the foreign language, which is reflected in units of different levels of language, as well as background knowledge of the typical educated representative of a certain lingua-cultural community. This knowledge denotes everything that is characteristic to some culture, everyday life, traditions throughout various historical epochs. They are usually referred to this psycholinguistic context.

*Non-equivalent words are cultural-marked lexical units* that serve us to express concepts that are not in another culture and another language. They do not have equivalents beyond the language to which they belong. Unclaimed vocabulary usually refers to the names of the realities of our life and the life of other people. In the linguistic theory the term "reality" denotes the object (or the phenomenon of culture) and the word that it calls. We consider realities as special referents – the elements of objec-

tive reality, reflected in our consciousness. They are objects of thought, which correspond to this language conformity. From this position, there are three main groups of realities: 1) *universals* – identical in their essential and secondary features in the crop to be compared (the sun, water, air); 2) *quasi-realities* – identical in their essential features, but different from the secondary point of view *(grant – стипендія, Teachers' Training College – педагогічний інститут)*; 3) *actual realities* – those ones, that, by their essential and secondary features, are unique characteristics of only one of the cultures having been compared.

The realities also include (examples are given in English): 1) *toponyms*: the names of the constituent parts of the country (regions, countries, etc.): (East Anglia, Highlands, Suffolk, Yorkshire); *city names*: (Brighton, Cambridge); *names of urban areas*: (Westminster, Kensington, Chelsea); *streets and area names*: (Fleet Street, Kings Road, Downing Street); 2) *anthroponyms*: (King Arthur, Isaac Newton, Charles Dickens, Joshua Reynolds, James Cook, John Lennon, Winston Churchill, Margaret Thatcher, etc.); 3) *ethnographic realities*: food, drinks (fish and chips, haggis, pudding); *rest types of sport, games*: (Boat Race, caber, soccer, snooker, Wembley, cricket, Wimbledon, Highland Games); *customs and traditions, holidays*: (Remembrance Day, Trooping the Color, St. Patrick's Day, the Queen's Silver Jubilee etc); 4) *socio-political realities*: (House of Parliament, the Blues and the Royals, OBE (Order of the British Empire), constitutional monarchy, the Queen, etc.); 5) *the realities of the educational system*: (girl guide, Patrol, summer schools, National Education Act, system of options, career guidance, PTA (Parent-Teacher Association), system of options, etc.); 6) *realities of culture, cultural figures*: (Charlotte Bronte, Robert Burns, David Copperfield, Charles Dickens); *cinema and theater*: (Globe Theater, the Royal Opera House, Barbican Center); *Fine Arts*: (National Gallery, Tate Gallery); *the Media* (the BBS, the Observer, the Times, the Financial Times, Top of the Pops etc).

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*ЗБІРНИК НАУКОВИХ ПРАЦЬ*
*"ПРОБЛЕМИ СУЧАСНОЇ ПСИХОЛОГІЇ"*

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Each language has its own phraseological units with their national and cultural semantics, which is formed under the influence of ethnolinguistic, historical, sociological, cultural and other features of a particular language community. We believe that the phraseological system of any language reflects the cultural and historical experience of people, makes it possible to understand the national Psychology, the national vision of the world, for example: *An Englishman's home is his castle (Мій дім – моя фортеця); Praise is not pudding (Слів густо, а в животі пусто)*. It is obvious that in each of these consistent statements at the lexical level there is a reference to the realities of English culture and lifestyle – "English house", "Pudding", etc.

In order to test the hypothesis that ***the level of reasonableness of opinions*** expressed by schoolchildren is one of the criteria for *the effectiveness of the discussion*, a psychological and pedagogical experiment was organized. In the process of the ascertaining experiment, which involved 79 pupils of the 5th and the 7th forms of secondary schools 15 (Rivne) and 4 (Kamianets-Podilskyi). At this stage of the experiment we used the authors' methodology (Михальчук, Івашкевич, Ед. & Івашкевич, Ер., 2023).

It was established that the level of validity of the opinions expressed by pupils at the lessons of the English language during educational discussions is very low (see Table 1).

So, partners of communication do not always understand the content, the essence of the opinion expressed by the teenager (in 73% of cases). Very often the sentences of schoolchildren are grammatically and stylistically incorrectly constructed (in 68% of cases), pupils do not know how to prove logically their point of view (in 87% of cases). Therefore, the discussion held at the lessons of the English language most often does not go beyond one problem, one unresolved issue; it is more reminiscent of a conversation between a teacher and schoolchildren than a discussion in which all partners of communication occupy equal positions.

*Table 1*

### The level of reasonableness of opinions expressed by schoolchildren as one of the criteria for the effectiveness of the discussion (in %)

| № | The level of reasonableness of opinions | 37 pupils of the 5th form of secondary school 15 (Rivne) | 42 pupils of the 7th form of secondary school 4 (Kamianets-Podilskyi) |
|---|---|---|---|
| 1 | High | 18.7 | 11.2 |
| 2 | Lower than a high level | 13.4 | 15.6 |
| 3 | Middle | 21.2 | 13.4 |
| 4 | Lower than a middle level | 22.8 | 29.1 |
| 5 | Low | 23.9 | 30.7 |

The reasons of a low level of validity of opinions and judgments by pupils are:

1) unsuccessful organization of the discussion at the English language classes;

2) as a consequence of the first reason – pupils are not familiar with the discussion as a form of educational activity, they do not know how to behave at such a lesson, and most often choose a standard position of a "pupil" who listens carefully to the teacher, answers his/her questions concisely, clearly, regardless of schoolchild's point of view;

3) 68% of pupils do not understand why they need to justify their opinions (because they always express only those opinions that are in their textbooks or that were expressed by the teacher at the previous lesson);

4) 32% of schoolchildren are afraid to substantiate their statement "incorrectly", "not methodically" and to get a bad mark.

So, the subject "A foreign language" occupies a special place in the educational process. The pupil not only acquaints himself/herself with the culture of the language having been studied, but also with the common values of mankind, in other words, promotes the education of schoolchildren in the context of "communicative tasks", which is a part of a certain relevant situation.

When creating and forming communicative tasks is the most important point, it is the fact of constructing these tasks using interesting, captivating, educating, teaching material of a reality. Therefore, in our opinion, the Headway Pre-Intermediate textbook is the most effective one, which contains a sufficient number of exercises that involve individual, group, micro-group and even role-playing forms of the activity, which provide great opportunities for the formation of speech and language skills of pupils, which help schoolchildren to communicate.

To teach pupils to communicate effectively we proposed schoolchildren the special tasks, for example, at the lesson at the 7th form the topic was "Family relationships".

*Stage 1. Getting start. Organization of the class. Teaching the subject and explaining the purpose of the lesson to the pupils.*

*Teacher:* Good morning, dear friends! I am very glad to see you! I hope that everybody is in order. Look at the pictures and try to guess the topic of our lesson. Yes, exactly it is "Family relationships". I suppose this topic will be interesting for you, because a family is very important in the life of any person, isn't it? So, today we'll learn more about relationships between children and parents, have a discussion, learn some new vocabulary, do some more exercises to remember them better, read a text. At the end of the lesson you are to make dialogues sharing your ideas according to the text.

*Stage 2. Exercises. Activity with the proverb.*

*Teacher:* Read the proverb and comment upon it!

Don't trouble trouble until trouble troubles you.

*Teacher:* What are your ideas? Do you agree with this proverb?

*Stage 3. Phonetic drills.*

*Teacher:* You remember that pronunciation is very important, isn't it? Let us practice the tongue-twister!

If many men know what many men knew

The life will be better. I think so. Don't you?

*Stage 4. Discussion.*

*Teacher:* Do you get on well with your family members? Why/why not? Do you respect your parents? Why/ why not? Can you rely on your parents? Why/ why not? Can your parents rely on you? Why/ why not?

*Teacher:* Now I have got a surprise for you. This is a presentation. What are your predictions? Share your ideas! Don't forget to use the conversational formula: *I strongly believe that, I am sure, I can't agree with …, I can't but agree …, It wasn't mentioned that …, On the contrary!*

*Step 5. The activity with the thematic text for listening and reading "Teen Terror".*

*a) preparation for listening and reading the text:*

*Teacher:* Now we are going to read a very interesting text. Its title is "Teen Terror". What will it be about? What are your predictions?

*Teacher:* There are some unknown words in the text. Let's "get acquainted" with them to understand the text better: *(adolescent − підліток, assault -− насилувати, blame − звинувачувати, interfere − втручатися, obey − слухатися, коритися, prevent − запобігати).*

*Teacher:* Make up word combinations and sentences with new words! Be original!

*b) listening to the text and doing the task:*

*Teacher:* Now it is high time to listen to the text "Teen Terror". What do you think of its title? What do you predict and wait for? Besides, you have the chance to read the text of exercise 2, pages 75-77! So, listen to it and fulfill the following assignment!

1. A father was …
2. George tried to …
3. Mr. Trimble held his daughter by …
4. The girl told the Police that her dad …
5. Now Susie …

*Teacher:* Listen to the text again and do the following:

*Listen to the text and agree or disagree with the sentences below! Correct the false statements!*

1. George is a responsible businessman.

2. He has got two sons.

3. The man had no problem with his elder daughter.

4. Susie likes dating with homeless people.

5. Susie's American boyfriend is much younger than she is.

6. George was taken to prison.

7. His wife always made sure that her children ate three times a day.

8. George started working at the age of seventeen.

*c ) post-text exercises:*

*Teacher:* What are your impressions? Who is to blame in such a situation? Why? Do many teenagers face such problems?

*Stage 6. Dialogical speech.*

*Teacher:* Now work in pairs. One of you is a reporter, the other is a psychologist. Make up dialogues using the questions of exercise 4, page 77 and the following information!

– Actually, I really feel pity for George.

– This fact is terrible.

– It was a big mistake to jail such a good father.

– If I were Suzy, I wouldn't do a thing like that.

– Suzy is a selfish teenager.

– If I were in George's shoes, I would limit her pocket money.

– Well, he just wanted his daughter to be happy.

– George wanted Suzy to have a good future,

– Suzy wanted to show her power.

Stage 7. Commenting on the homework.

*Teacher:* At home you are to write a brief article to a teen magazine about conflicts between parents and adolescents. Exercise 6, page 78 will be helpful to you.

*Stage 8. Conclusions of the lesson.*

*Conclusions:* this exercise forms, develops moral qualities; develops the culture of communication, etiquette, respect for the family, expands the philological outlook of pupils, develops the ability to plan a linguistic act independently, the ability to express opinions in a foreign language logically and consistently,

improves pupils' pronunciation, practicing pupils in oral speech, in particular, in listening and reading.

## Conclusions

So, we distinguish, on the one hand, a dialogue, and on the other one – a simple conversation. A dialogue is understood by us as a mutual communication that has specific features: thematic focus or a problem solving, getting two-way information, the combination of thematic focus with two-way transmission of information that helps to solve a common problem in any way. Also we distinguish between linguistic and psychological understanding of a dialogue, emphasizing that in the process of psychological studying of a dialogue it is necessary to pay a great attention to both the informative exchange between partners and the features of their relationships, in particular their aspect of role interaction.

In such a way we formulate a number of requirements in accordance with which the psychological study of a dialogue should be built: the main attention should be paid to the process of subject-subject interaction; the greatest interest is the study of the speech form of a dialogue (it is in the characteristics of a single text that arises in the process of a dialogue, it should be considered as the process of subject-subject interaction); such research should focus on identifying interpersonal relationships of partners of communication that are developed in the process of a dialogue. We also define a dialogue not just as the process of interaction of subjects through the speech, but the interaction of different semantic positions that they develop. This argument implies the difference between external dialogue (different opinions are expressed by two subjects) and internal one (different points of view belong to one person).

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*Михальчук Наталія, Коваль Ірина. Психодіагностичне дослідження діалогу в культурологічно зорієнтованому середовищі в процесі шкільного навчання.*

*Мета дослідження* – *здійснити психодіагностичне дослідження діалогу в культурологічно зорієнтованому середовищі в процесі шкільного навчання.*

*Методи дослідження. Для розв'язання поставлених у роботі завдань використовувалися такі теоретичні методи дослідження: категоріальний, структурно-функціональний, аналіз, систематизація, моделювання, узагальнення. Експериментальним методом є метод організації емпіричного дослідження.*

*Результати дослідження. Доведено, що причинами низького рівня обґрунтованості думок та суджень учнями є: 1) невдала організація дискусії на уроках англійської мови в закладах середньої освіти; 2) як наслідок першої причини – учні не знайомі з дискусією як формою навчальної роботи, вони не знають, як себе поводити на такому уроці, і найчастіше обирають стандартну позицію «учня», який уважно слухає вчителя, відповідає на його запитання стисло, чітко, без урахування своєї точки зору; 3) 68% учнів не розуміють, чому потрібно обґрунтовувати свої думки (адже вони завжди висловлюють тільки ті думки, які є в їх підручниках, чи які на попередньому уроці висловив вчитель); 4) 32% школярів бояться обґрунтувати свій вислів «невірно», «неправильно» та отримати погану оцінку.*

**Висновки.** *Потрібно розрізняти, з одного боку, діалог, а з іншого, – просту розмову. Діалог розуміється як взаємна комунікація, що має специфічні риси: тематичну цілеспрямованість чи проблемність, двосторонність інформації, сполученість тематичної цілеспрямованості з двосторонньою передачею інформації, що допомагає рішенню загального завдання. Доведено, що існують лінгвістичне та психологічне розуміння діалогу, тому в процесі психологічного вивчення діалогу необхідно звернути увагу як на інформативний обмін між партнерами, так і на особливості їх взаємовідношень, зокрема на їх рольовий аспект.*

UDC : [159.955+159.956]                    УДК : [159.955+159.956]

# Psychology of the Interaction of Understanding and Forecasting Processes in Creative Mathematical Thinking

# Психологія взаємодії процесів розуміння і прогнозування в творчому математичному мисленні

## Moiseienko Lidiia

Dr. in Psychology, Professor,
Ivano-Frankivsk National Technical University of Oil and Gas,
Ivano-Frankivsk, Ukraine
ORCID ID: http: //orcid.org/0000-0001-9288-7355
Researcher ID:  X-7506-2018
E-mail: Lmoyseyenko@i.ua

## Мойсеєнко Лідія

доктор психологічних наук, професор,
Івано-Франківський національний
технічний університет нафти і газу,
м. Івано-Франківськ, Україна

## Shehda Liubov

Ph.D. in Physics and Mathematics, Assistant Professor,
Ivano-Frankivsk National Technical University of Oil and Gas,
Ivano-Frankivsk, Ukraine
ORCID ID: http: //orcid.org/0000-0003-4721-7832
Researcher ID: Z-2516-2019
E-mail: shegda.luba@gmail.com

# Шегда Любов

кандидат фізико-математичних наук, доцент,
Івано-Франківський національний
технічний університет нафти і газу,
м. Івано-Франківськ, Україна
E-mail: shegda.luba@gmail.com
orcid.org/0000-0003-4721-7832
Researcher ID: Z-2516-2019

**Авторський внесок:** Мойсеєнко Лідія – 60%, Шегда Любов – 40%
**The author's contribution:** Moiseienko Lidiia – 60%, Shehda Liubov – 40%

***ABSTRACT***

*Based on the results of the analysis of research on mathematical thinking, its creative nature has been ascertained.*

*The results of research on creative mathematical thinking were analyzed and the expediency of studying the psychological essence of the interaction of thought processes of understanding and forecasting when solving creative mathematical problems was ascertained.*

***The aim of the article*** *is to find out the psychological essence of the interaction of thought processes of understanding and forecasting in creative mathematical thinking.*

*To study the interaction of the processes of understanding and forecasting in mathematical thinking,* ***the method*** *of analyzing students' search actions during solving creative mathematical problems of different classes was used.*

***The results of the research.*** *It was established that creative mathematical thinking is a complete system of interrelated actions, with the help of which the thinking mathematical result is achieved.*

*It was established that the processes of understanding mathematical problems and predicting thinking results function throughout the entire process of solving mathematical problems.*

*It was found that the content of search actions aimed at understanding the problem and predicting thinking results depend on the stages of solving the problem (study of the condition, search for a solution, verification of the found solution), in which their procedural and dynamic side is not only manifested, but is also being formed. At the same time, the process of understanding a creative mathematical problem and the process of forecasting are complementary.*

*It is established that the understanding of the condition of the problem forms the content of forecasting actions, and the process of forecasting cont-*

ributes to the formation of understanding of the mathematical problem. It was established that in the search mathematical process it is not possible to record such a state of understanding of the problem that would ensure the emergence of a hypothesis regarding the solution.

It has been found that forecasting, which takes place throughout the entire search process, can generate a solution hypothesis at different stages of the solution, with different states of understanding of the mathematical problem.

The hypothesis of solving the problem is an indicator of the state of understanding of the problem, and its approbation contributes to deepening the understanding of the essence of the problem itself.

At the same time, the content of the hypothesis, its approval determines the state of understanding of the problem.

**Conclusion.** The process of the subject's understanding of a creative mathematical problem and the process of prediction take place throughout all stages of the solution process and are mutually complementary.

**Key words:** creative mathematical thinking, understanding of a mathematical problem, prediction of thinking results.

## Introduction

The study of creative thinking process, including mathematical, is an important task of psychology. This creates the basis for the formation of a personality capable of solving creative non-standard tasks. That is, he/she will be able to find a solution in those cases for which there haven't been developed rules of action yet, will be able to turn knowledge into tools for active actions.

Along with this, today mathematics has become not only a tool for quantitative calculations, as it was at its inception, but also a method of research. Mathematics, as a science that does not have direct connections with physics, chemistry, biology, economics, technology, is used with equal success in all these fields of knowledge (Jonsson, Mossegård, Lithner & Wirebring, 2022).

Mathematics reveals nature with the help of its own abstractions: numbers, magnitude, functions, geometric figures, etc. Scientists (Moiseienko, 2003; Firmasari, Sulaiman, Hartono & Noto, 2019) state that mathematical thinking has its speci-

fic manifestations related to: the use of mathematical symbols; dominance of the logical method of proof; the presence of an algorithm for solving many problems; simultaneous functioning of axiomatic and constructive methods of constructing mathematical theories, etc. At the same time, the mathematical result has the property that it can be used not only in the study of a certain phenomenon or process, but can also be used in many others, the physical nature of which is fundamentally different from those previously considered (Wong, 2018). Therefore, *the relevance* of the study of various aspects of creative mathematical thinking is provided by the combination of general features of intellectual creativity with the specifics of mathematical activity.

Researchers of the exploratory thinking process interpret it as a problem-solving process (Moliako, 2007; Mahwah, NJ, 2015; Hidayah, Sa'dijah, Subanji & Sudirman, 2020; Jäder, Lithner, Sidenvall, 2020). They emphasize that solving tasks itself requires the activation of various information, the ability to apply it to create beyond experience (Moreno-Armella, Hegedus & Kaput, 2008). To solve a mathematical problem means to find a certain sequence of general provisions of mathematics (definitions, axioms, theorems, rules, laws, formulas, etc.), applying which to the condition of the problem or to its consequences (intermediate results of the solution), you can get what is required in the task. At the same time, in the process of solving the problem, the sequence of thinking steps is important, and not the determination of the finished result – the answer (even if it is correct) (Tohir, Maswar, Atikurrahman, Saiful & Pradita, 2020). That is why our research on creative mathematical thinking is *based on the analysis of the search for solutions* to creative mathematical problems.

In general terms, the condition of a mathematical problem is a set of mathematical facts and objects that sometimes have no obvious connection with each other. And despite the fact that the set directly presented in the condition of the problem is small,

it can (and sometimes must) be supplemented by certain known statements, mathematical results (axioms, definitions, theorems, etc). The boundaries of such a set of facts are not clear, because it is not known in advance what knowledge will be needed to solve the problem (Francisco, 2013; Mielicki & Wiley, 2016; Syarifuddin, Nusantara, Qohar & Muksar, 2020). To solve the problem, it is necessary to build your set of facts into a certain structure. At the same time, the solution is the construction of such a structure that gives a specific result (Ortiz Enrique, 2016; Adu-Gyamfi, Bossé & Chandler, 2017& Yunita, Maharani & Sulaiman, 2019).

It is obvious that different thinking components function in such a search's space. Scientists single out the process of understanding the problem, the process of forming a hypothesis for its solution, the process of approbation that hypothesis and study their procedural-dynamic and personal aspects of such components (Moliako, 2007; Moiseienko & Shehda, 2021). The process-dynamic aspect acts as a holistic form of synthesis of various mental phenomena of the subject and is a characteristic of creative thinking (and mathematical thinking in particular). It covers all stages of solving a creative problem (studying the condition, finding a solution, checking the solution found). The content of search actions depends on the stages of solving the problem, in which its procedural and dynamic side is not only manifested, but also formed.

It is generally recognized that understanding the condition of the problem is the initial moment of the stage of finding a solution, and the central moment in solving the problem is finding ways (methods, principles) or the main way of solving it. That is, researchers consider that a prerequisite for the success of any thinking process aimed at solving the task is understanding it (Moliako, 2007; Kovalenko, 2015; Moiseienko & Shehda, 2021). On the basis of a certain state of a hypothesis regarding the solution, which is "… an anticipatory synthesis or idea of a possible solution, based on a preliminary analysis of the condition of the

problem" **(Kostiuk, 1989: 228).** At the same time, scientists are unanimous about the process of forming a solution as a process of proposing and testing hypotheses *(forecasting)*.

So, the questions arise: What state of understanding of the problem ensures the emergence of a solution hypothesis? Due to what does this condition deepen? How does the state of understanding of the problem relate to the quality of the hypothesis about the solution? etc. Therefore, in order to develop a holistic idea of the procedural and dynamic nature of the interaction of the processes of understanding and forecasting when solving creative tasks, it is advisable to conduct an end-to-end comparative analysis of both processes.

**The purpose of the article** is to find out the psychological essence between the interaction of the processes of understanding and forecasting in creative mathematical thinking.

**The task of the article** is to analyze the processes of understanding and forecasting as end-to-end processes solving creative mathematical problems; to find out the essence of the interaction of understanding and forecasting in the thinking process.

**Research methods and techniques.** The method of research is the analysis of students' search actions during the solution of creative mathematical problems of different classes. That is, we have developed 30 mathematical problems. All problems have been divided by the nature of the requirement for the problem into 4 classes of problems: problems for finding an unknown quantity, problems for proof, problems for construction and heuristic problems.

We have conducted an experimental study of creative mathematical thinking of students of Ivano-Frankivsk National Technical University of Oil and Gas. 100 students have taken part in the experiment. Each student has solved 10 different math problems from different classes.

The tasks have been performed by each student in the presence of the experimenter. The work has been carried out individually. The student has been given the opportunity to work

independently, there have been no direct instructions on how to solve the problem. The tasks have not been limited in time.

Records, drawings, replicas and questions of students were analyzed.

## Results and discussions

The condition of a mathematical problem is a set of facts and constituent objects that sometimes have no obvious connection with each other. When reading the problem for the first time, students tried to recognize the meaning of words and symbols: they selected from the context of the problem known terms, symbols, numbers that have certain qualitative characteristics ($\sum_{n=1}^{\infty} a_n$ – series; $\dfrac{\partial z}{\partial x}$ – partial derivative). Through recognition, a certain understanding of the problem comes and it becomes clear whether they have encountered similar problems before, or whether the algorithm for its solution is known. The consequence of such thinking actions can be a hypothesis (true or false) about the application of a known solving algorithm. That is, even after the selection of certain structural elements of the problem, without their further study, finding a solution can start.

Understanding of the problem is deepened by recalling known axioms, definitions, theorems, formulas, etc. (Mumford & Gustafson 1988; Francisco, 2013). However, understanding is not reduced to the reproduction of what was previously known, but is a process of further enrichment of knowledge through the discovery of new connections between things. Knowledge, previous experience, subjective systems of meanings and vocabulary ensure accurate recognition of the functional capabilities of its constituent elements. Knowledge is selected, and the task itself is reformulated, or, more precisely, a certain ratio of its conditions and requirements changes based on a single system of concepts.

That is, the first thinking steps aimed at studying the condition of the problem are steps aimed at understanding the problem, and the meaning acquired by the structural elements of the problem is the basis for starting to put forward hypotheses about the solution. At the same time, at the beginning of the thinking activity aimed at the task, the structural element acquires the "shade" that can be useful in the solution. Thinking constructions are built, they connect the new object with the subject's mathematical knowledge.

In the act of understanding the mathematical task, the process of building such thinking structures is quite multifaceted. It can be the joining of several elements that will further function as a single whole (for example, a transition from the equation $4x^4 + 4x^2 + 1 = 0$ to equation. $x^2 + 2t + 1 = 0$ where $(2x)^2 = t$ composition of several elements (for example, functions $y{=}sinx$ i $y = |x|$ consist of $y = |\mathrm{sin}x|$); replacement of several elements (for example, the diameter of a circle is replaced by the hypotenuse of an inscribed right triangle); logical transformation (for example, a whole expression including various functions is taken as a single variable). In such new formations a certain state of understanding of the task is formed. But not only like that, at this stage it is already possible to follow the emergence of hypotheses regarding the future solution.

Further thinking actions are aimed at recoding the problem into "one's own" language. "One's" vision of the condition of the problem consists in providing a familiar mathematical interpretation of a specific situation, in graphic illustrations of the task, or in a textual description of the graphic illustration that is given by condition of the problem.

Experimental tasks were proposed in textual or symbolic form, while some of them were supplemented with graphs and drawings. We observed at the initial stages of thinking activity students' desire to match the text with the available pictures or supplement the tasks with "illustrations". Graphical or schematic interpretation of the text and textual description of graphic

or schematic information is also a translation of the content of the task into "one's own" language, which often plays a key role in understanding the task. Accompanying the text task with "provocative" pictures often led to a misunderstanding of the task, if the discrepancy between the text and the picture was not detected in time.

It should be especially emphasized that such search actions at the same time determine a certain direction of the search for a solution, that is, an active process of predicting the solution of the problem begins.

On the other hand, the meaning of a mathematical problem, and therefore the state of its understanding, is determined by the interpretation of structural elements by using some hypothesis. That is, the understanding of the problem moves to a higher level, which is determined by the content of such a hypothesis. We observed the emergence of many alternative and non-alternative hypotheses, which led to different understandings of the same problem, which, in turn, contributed to the formation of different directions in the search for a solution.

So, in the process of understanding a mathematical problem, the first hypothesis regarding the solution is put forward. Further thinking actions are guided by this hypothesis. Its verification is carried out under the influence of the content of the structural components of the problem. Without meeting the conditions, but having significantly explored the objects specified in the problem, it is rejected and replaced by another one. The verification of the hypothesis, its agreement with the condition of the problem, leads to a new content of the understanding of the problem. That is, the process of understanding the problem continuously transitioned into the process of building a solution project.

All this can be summarized as follows. In the process of understanding a creative mathematical problem, students first identify the structural elements of the problem (numbers, symbols, operations, geometric shapes, etc.) and recognize their

purpose. After that, they find connections between them both by studying and testing a number of hypotheses about these connections (at the stage of studying the condition) and by putting forward hypotheses about ways to solve them (at the stage of forming a solution project). Hypotheses aimed at unifying the disparate elements of the problem condition (in the process of understanding) are gradually intertwined with hypotheses regarding the content of the solution. At the same time, the proposed hypotheses regarding the content of the solution contribute to the process of understanding the problem, because they illuminate certain aspects of the structural objects that contain the creative mathematical problem. That is, the process of understanding the problem runs parallel to the search for its solution. As a result, the subject receives a new vision of the problem as a whole, a new more perfect model of the problem.

In the subsequent search activity, the structural elements of the problem are examined in detail, and a greater number of their properties are revealed. It is about identifying some subjective significance of structural elements and their properties. For mathematics, which operates with symbols and numbers, it is important that the semantic and formal content of the task is reconciled. It is necessary to make a decision about the need for more or less extensive information about those objects that are expressed by certain symbols, or to establish admissible values for symbols. For example, when establishing a set of points described by the inequality $\frac{x}{a} + \frac{y}{b} \leq 1$, it is necessary to know where this set of points is located: on a plane (ellipse) or in space (cylindrical surface). Such information is often not directly specified by the condition of the problem. Then the hypothesis about this information can be tested by an intermediate solution. That is, the understanding of the problem is superimposed on a certain prediction regarding its solution.

In any case, the problem arises in the form of a more or less complete system of mathematical objects − a certain model of

the problem is completed and a certain direction of finding its solution is highlighted. Now, instead of separate structural elements, complexes of mathematical objects with their own mathematical properties begin to operate. In some cases, this happens on the basis of the connection of real quantitative ratios, which will further function with the formed symbolic expressions. However, the task still contains a number of blanks (there are "extra" or "missing" elements). A complete understanding of the task has not come yet, which often resulted in a solution (intermediate or final).

Note that the described actions aimed at understanding a mathematical problem can be attributed both to the stage of finding a solution and to the stage of checking the solution (intermediate or final). So it can be argued that ***the process of understanding is "embedded" in the processes of the forecasting solutions and approvals of thinking results.***

The resulting solution (as a rule, an intermediate one) can be checked by a condition. It was the intermediate solutions that were the clearest indicator of students' understanding of the mathematical problem. After all, if the subject gets the impression that there is a correspondence between the condition of the problem and the found new formation, it is declared the solution of the problem. At the same time, the content of this new formation provides information about a certain state of understanding of the problem.

The ineffectiveness of the intermediate solution was revealed at the stage of its approval. The content of mental actions of the approbation process of creative mathematical thinking in comparing the result with the condition and requirement of the task; in reviewing the chain of thinking steps that led to the result; in its approval in various conditions that do not go beyond the conditions of the task and are allowed by it. Such actions, forming subjective confidence in the correctness (or incorrectness) of the found solution, at the same time, are aimed at deepening the understanding of the essence of the problem itself. On

the other hand, approbation actions confirm or deny the validity of the working hypothesis regarding the search for a solution.

Students often after finding a solution and explaining it to the experimenter refused it, having realized its inconsistency. However, mainly the explanations indicate the level of understanding of the problem, and the quality of the functioning hypothesis of the solution.

## Conclusions

The creative mathematical process is a process that harmoniously combines the general features of intellectual creativity with the specifics of mathematical activity, which is associated with the presence of numerical and symbolic elements, the operation of formalized objects often with the help of spatial imagination, the existence of algorithms for solving certain types of problems.

The content of search actions depends on the stages of solving the problem (study of the condition, search for a solution, verification of the found solution), in which its procedural and dynamic side is not only manifested, but also formed.

The process of the subject's understanding of a creative mathematical problem and the process of prediction take place at all stages of the solution process and are mutually complementary. That is why, in the search mathematical process, it is not possible to record such a state of understanding of the problem, which would ensure the emergence of a hypothesis regarding the solution. The prediction that takes place throughout the search process can generate a solution hypothesis at different stages of the solution. Moreover, it can be argued that it is formed from a barely noticeable preference of the direction of thinking actions to the actual hypothesis of the solution in the course of deepening the understanding of the problem. Moreover, it can be argued that it is formed from a barely noticeable preference of the direction of thinking actions to the actual hypothesis of the solution in the course of deepening the understanding of the

problem. At the same time, the content of the hypothesis, its approval determines the state of understanding of the problem.

**The perspective for further studies on this problem** is the study of the personal aspect of the interaction processes of understanding and forecasting, its influence on the course and mutual coordination of all the component processes of creative mathematical thinking.

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*Мойсеєнко Лідія, Шегда Любов. Психологія взаємодії процесів розуміння і прогнозування в творчому математичному мисленні.*

*За результатами аналізу досліджень математичного мислення констатовано його творчий характер. Наголошено, що результативність пошукових дій досягається завдяки взаємодії числової, символьної та просторової складової математичного мислення.*

*Проаналізовано результати досліджень творчого математичного мислення і констатовано доцільність вивчення психологічної сутності взаємодії мисленнєвих процесів розуміння і прогнозування при розв'язуванні творчих математичних задач.*

*Мета. З'ясувати психологічну сутність взаємодії мисленнєвих процесів розуміння і прогнозування у творчому математичному мисленні.*

*Для вивчення взаємодії процесів розуміння і прогнозування у математичному мисленні було використано метод аналізу пошукових дій студентів упродовж розв'язування творчих математичних задач різних класів.*

*Результати дослідження. Констатовано, що творче математичне мислення – цілісна система взаємопов'язаних дій, за допомагаю яких досягається мисленнєвий математичний результат.*

Встановлено, що процеси розуміння математичних задач та прогнозування мисленнєвих результатів функціонують упродовж усього процесу розв'язування математичних задач.

З'ясовано, що зміст пошукових дій, спрямованих на розуміння задачі та прогнозування мисленнєвих результатів, залежать від етапів розв'язання задачі (вивчення умови, пошук розв'язку, перевірка знайденого розв'язку), в яких їх процесуально-динамічна сторона не лише проявляється, але й формується. При цьому процес розуміння творчої математичної задачі та процес прогнозування є взаємодоповнювальними.

Встановлено, що розуміння умови задачі формує зміст прогнозувальних дій, а процес прогнозування сприяє формуванню розуміння математичної задачі.

Констатовано, що у пошуковому математичному процесі не можна зафіксувати такого стану розуміння задачі, який забезпечив би виникнення гіпотези щодо розв'язку.

З'ясовано, що прогнозування, яке має місце впродовж усього пошукового процесу, може породити гіпотезу розв'язку на різних етапах розв'язування, при різних станах розуміння математичної задачі. Гіпотеза розв'язування задачі є індикатором стану розуміння задачі, а її апробація сприяє поглибленню розуміння сутності самої задачі. При цьому зміст гіпотези, її апробація визначає стан розуміння задачі.

**Висновки.** Процес розуміння суб'єктом творчої математичної задачі та процес прогнозування проходять упродовж усіх етапів процесу розв'язання і є взаємодоповнювальними.

# Conative, Personality-based, Cognitive and Competence Approaches in the Semantic Sphere of the Individual's Creativity

## Діяльнісний, особистісний, когнітивний та компетентнісний підходи в семантичному просторі творчості індивіда

### Nabochuk Alexander

Ph.D. in Psychology,
Hryhorii Skovoroda University in Pereiaslav,
Pereiaslav (Ukraine)
ORCID ID: https://orcid.org/0000-0002-1448-7687
Researcher ID: AAE-4773-2021
Scopus AuthorID: 57221397542
E-mail: nab_ol@ukr.net

### Набочук Олександр

Кандидат психологічних наук,
Університет Григорія Сковороди в Переяславі,
м. Переяслав (Україна)

**ABSTRACT**

**The aim** of our article is to show conative, personality-based, cognitive and competence approaches in the semantic sphere of the individual's creativity, to determine their characteristics, valuable and unique qualities.

**Methods of the research.** The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization.

***The results of the research.*** *We think that leading to the development of the person's creative imagination is metaphorical imagination (personal approach). The latter is able to create new images of objects, ideas, meanings and emotional-sensual experiences, appealing to the imagination of the respondent who perceives. Metaphorical imagination is manifested as a person's ability to independent creative metaphors, creatively interpret complex metaphors, creatively and originally apply existing metaphorical expressions depending on the context of a certain situation. Realizing the connection between the sensual and the rational, the construction of a creative metaphorical image activates the subject's sensory-perceptual and emotional imagination on a creative level, thereby contributing to a new and deeper understanding of their essence.*

***Conclusions.*** *We showed that psychological researches in a great degree emphasized such creative personality traits as productive ones, creative thinking, the implementation of creative characteristics, transformative human activity, the need for self-affirmation, material well-being, the transformation of the surrounding natural and social world, the implementation of doping strategies in the context of life achievements of the individual (a conative approach); intellectual activity, psychological flexibility, creative motivation, multivariate vision of the surrounding world, originality, divergence; personal achievements (integrative approach); mental structures, mental representations, mental experience, intellectual abilities – speed, originality, sensitivity, metaphoricality, formulation and original solution of a problem, actualization of the concept of a creative act (a cognitive approach); motivation to carry out creative activities, motivation to achieve success, situational self-actualization (a motivational approach); a high level of professionalism, professional and creative semantics, creative explication of the situation, professional and creative social perception, creative aspects of communication (competence approach).*

***Key words:*** *creativity of the Individual, a conative approach, a personal approach, an integrative approach, a cognitive approach, a motivational approach, a competence approach.*

## Introduction

In the world science there are some dominant areas of theoretical and empirical researches in the paradigm of Creative Psychology. The first direction concerns the research of the formation of a creative personality due to the formation of a stable motivation to carry out creative activities. So, we called this ap-

proach *a motivational one*. The authors (Astle & Scerif, 2011; Derwing, Munro, Thomson & Rossiter, 2009) studied the creative activity of pedagogically gifted future teachers.

*Pedagogical talent* is considered as a holistic, harmonious structure, that contains special components (pedagogical abilities) (Cilibrasi, Stojanovik, Riddell & Saddy, 2019). *Intellectual component* includes intellectual features of the future teacher's personality, which provide not only uniqueness, but also universality of the possibilities of the cognition process (Barnes, 2009). *A motivational component* determines motivation for success, which orients the individual to the quality and the effectiveness of actions (Brédart, 1991; Mykhalchuk & Onufriieva, 2020).

*Situational self-actualization* reflects the tendency of the individual to realize his/her own ideas, including potential ones (Agrawal, 2020). *A creative component* includes verbal uniqueness, originality (Crookes, 1989). *A spiritual component* reflects moral and valuable qualities of the subject (de Bot, 1992; Onufriieva, 2017). These components are characterized by some peculiar tendencies of manifestation depending on the age of future teachers.

So, **the aim** of our article is to show conative, personality-based, cognitive and competence approaches in a semantic sphere of the individual's creativity, to determine their characteristics, valuable and unique qualities.

## Methods of the research

The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical method, structural and functional methods, the methods of the analysis, systematization, modeling, generalization.

## The results of the research

The conceptual model of psychological representations of the person's choice of creative self-development strategies in the profession as a person's ability to creative self-realization was proposed by O. Horova (Горова, 2014) (*a conative approach*). The

scientist noted that the self-projection of creative life activity reveals the basis of a choice as a solution to value contradictions between creative alternatives. These alternatives are reflected in the structural components of the subject's value-oriented, content-creative activity: **1)** the value of self-realization in the profession is the value of comfortable conditions of creative life in *the motivational component of creative development*; **2)** the value of expanding the boundaries of life activity is the value of simplifying the tasks of creative life activity in the target component of *creative self-development*; **3)** the value of self-realization is the value of creative self-understanding in the instrumental component of creative self-development.

O. Horova **(**Горова, 2014**)** distinguishes the psychological mechanisms of resolving valuable contradictions in the case of the individual's choice of creative self-development of strategies in the profession as a change in the position of the value of professional and creative self-realization in the structure of creatively directed value-orientation activities, determining the status of the ability to be creative in relations to other human values.

The scientist proved that the psychological content of value alternatives in the structure of value-orientational creative activity determines the manifestation of signs of creative self-development strategies in one's own profession. Valuable alternatives are presented in the motivational component. They are responsible for such signs as a desire for creative self-realization in the profession, for finding comfortable conditions for creative life. Valuable alternatives contained in the target component of creative activity cause the emergence of the following characteristics: the desire to expand the boundaries of creative life activity, the desire to simplify the tasks of creative life activity. Valuable alternatives, having been included into the instrumental component, largely determine the existence of the following signs: the desire for creative self-realization as a manifestation of involuntary, mobility in the case of realizing the intention of

creative self-development, the desire for creative understanding of oneself as a manifestation of self-control during the realization of the intention to carry out creative self-development.

O. Horova (Горова, 2014) established that the psychological criterion for identifying the levels of creative self-development in the professional activity was the ratio of value alternatives in the structure of the value-oriented basis of the person's creative activity. The scientist notes the level of creative self-organization is determined by the appearance of values of creative self-realization in the profession and the expansion of the boundaries of creative life activity. At the same time, the level of creative transformation of one's person is explained by the manifestation of a contradictory ratio of different values in the motivational and target components of value-oriented creative activity (Горова, 2014: 8–9).

M. Drygus (Дригус, 2013) (*a conative approach*) also paid a considerable attention to the problems of *creative self-efficacy*. The scientist claims that any activity that periodically returns can and should be better understood, more skillfully performed, enriched by new and unique discoveries, experiments and observations, thus, the person tries to improve his/her personality more and more. M. Drygus (Дригус, 2013) determines the effectiveness of creative activity and its improvement not only in terms of its greatest significance, but also gives a clear description of its features. For creativity, the scientist points out, the problem of personal competence in the professional activity is extremely important. In the researches of M. Drygus (Дригус, 2013: 125) it is emphasized that the teacher should pay attention to the perseverative features of his/her professional activity, to the cyclic nature of the latter, which undoubtedly requires the teacher to constantly develop his/her professional skills. Thus, the teacher's creative activity constantly returns, periodically repeats itself: as soon as the path ends for him/her, it begins again; who will walk the old path again with the same steps that he/she walked before?

T. Tytarenko (Титаренко, 2003) defines creative activity through the harmonization of personal development (*personal approach*). The latter involves the search for optimal correspondence between the inner and outer world, one's own and "Me" of someone. At the same time, T. Tytarenko (Титаренко, 2003) emphasizes that the shift towards the outside world often leads to infantilization, conformal dependence on random influences, to the formation of externality, instability. These qualities in no way contribute to the elaboration and deployment of creative activity. If the inner world becomes dominant, then there are also deviations having been expressed in inflexibility, rigid monolithicity, isolation, and this also does not contribute to the formation of the person's ability to be creative. So, if we consider creativity through the attitude towards oneself, then the dominant function is the attitude towards one's own life and significant others, that is an indicator that integrates the spatio-temporal coordinates of the life world. The dynamics of this attitude, according to T. Tytarenko, starting from the attitude towards one's own gender, which should be considered as a kind of indicator of the appearance of certain potential disharmonies, which, in turn, regulate the subject's creative activity (Титаренко, 2003: 200).

In the scientific researches of V. Klymenko (Клименко, 2013) the scientist singles out qualitative and quantitative characteristics of the development of a child's creative personality (*personal approach*). The scientist notes that learning is a quantitative process that is responsible for the formation of knowledge, creative abilities and skills. At the same time, creative development is a qualitative process that is responsible for the development of creative abilities and it is explained by the formula: aptitudes – abilities – talent. V. Klymenko (Клименко, 2013) emphasizes that creative development is a change in the structure of the individual's soul, which facilitates the emergence of innovations that previously, until now, have existed potentially, but at a certain moment of our existence they "awa-

kened" and began to active, creative "act". In the process of the activity these innovations themselves are radically transformed. And at the same time, the child also changes, which sometimes worries parents and educators to the core. Thus, adults often feel confused when meeting is something like "familiar strangers".

The researches of O. Lukyanova and I. Lukyanov (Лук'янова & Лук'янов, 2011: 287), which focus on *a personal approach* to the problem of the creative Self of a person, showed that students with a low level of empathy development have lower indicators of the level of general creativity than highly empathic students (76.0 points; $\rho=0.006$). The "speed" indicator of low-empathic future teachers is lower ($\rho<0.001$), compared to high-empathic students. That is why, the first students have a significantly reduced ability to generate a greater number of ideas and ways out of difficult situations. In turn, the indicator of "flexibility of thinking" among low-empathic respondents is 8.5 points, and this indicator is significantly lower than that of high-empathic respondents (10.4 points; $\rho=0.008$). That is, a low level of empathy greatly reduces the individual's ability to produce various ideas that belong to different semantic categories.

In the researches of O. Lukyanova and I. Lukyanov (Лук'янова & Лук'янов, 2011: 287) significant differences were also obtained according to the results regarding originality: the value was 32.0 points for highly empathic respondents, and 24.0 points for low-empathic students ($\rho=0.024$). The respondents were diagnosed with a higher ability to formulate non-standard ideas; flexibility in thought, ingenuity, improvisation, insight – these all qualities are inherent to them. Such qualities, scientists note, are professionally important. Therefore, O. Lukyanova and I. Lukyanov (Лук'янова & Лук'янов, 2011: 287) consider pedagogical creativity to be the process of creative solution of pedagogical problems that constantly are arisen due to the fact that during direct interactions with children the teacher requires well-developed creative skills to manage the process

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learning, with their mental states, to quickly evoke a sense of creativity in themselves and in children as participants in their creative activity, to carry out a creative process of pedagogical communication, etc. The scientists note a creative student as a future professional must have highly developed ability to empathize, such as emotional receptivity, sensitivity, psychological vigilance, intuition, concentration and observation.

I. Kukulenko-Lukyanets, as a supporter of *the personal approach*, believes that the creation of a creative personality is an extraordinary discovery of the person's "Me", a manifestation of inner strength and freedom. Researching a woman's creative life path, the scientist notes that it depends on the harmonious combination and complementarity of Anima and Animus, on whether a woman is able to love and to make efforts to solve complex psychological problems that greatly complicate the realization of her fertile femininity. In the case of the productive creation of her own creative space a woman is capable of creating a world and creating a unique, original lifestyle, a personal "creative self" (Кукуленко-Лук'янець, 2014: 344).

Thanks to conducting her own empirical researches, I. Kukulenko-Lukyanets proved that a woman is a leader in scientific and pedagogical activity, and she should have more than just intellectual abilities. A woman should usually have certain strong-willed (masculine) qualities, such as determination, persistence, independence, initiative, endurance, self-control, self-realization. She should always be ready to make difficult willful decisions. Organizational and communicative abilities are also considered by scientists to be the most favorable indicator for the performance of creative managerial activities of a female manager in the education system (Кукуленко-Лук'янець, 2014).

Also, I. Kukulenko-Lukyanets proves that the professional self-awareness of a female teacher is largely determined by her self-concept (self-esteem, self-perception) and the peculiarities of the formation of the creative self of the individual throug-

hout her life. In her empirical researches the scientist focused her attention on women working in the field of scientific and pedagogical activity. Accordingly, I. Kukulenko-Lukyanets claims that all of them have a fairly high intellectual and cultural and spiritual level. They are able to reflect on activities, deep creative thinking, they are distinguished by the desire for self-development, personal growth, professional creative self-realization and creative self-actualization. That is why these women are not always able to focus only on the interests of their family, because this will greatly limit their intellectual, creative and personal potential. However, the scientist also notes that the emphasis only on professional activity is not very productive for a woman's psychological health, as it largely provokes a high level of anxiety, internal conflict, which generates internal disharmony. Therefore, an extremely important factor for maintaining a woman's inner balance and the ability to produce her creative energy is its realization in all three spheres of life (Кукуленко-Лук'янець, 2014: 344).

L. Shragina (Шрагіна, 2017) also claims that metaphorical and poetic varieties of creative verbal imagination are metacognitive processes, which in the context of the functional-systemic approach represent a kind of "metasystems" that perform a managerial function in the case of creating metaphorical and poetic images. The latter exists in the form of a metasystem and only in the process of creative activity, during the performance of their creative function the form of their existence is a metasystemic function as a type of mental functions, which perform control and integrative actions in the processes of metacognition. They are also necessary for the creation of an artificial metacreative system as in the external life-creating environment, as well as inside the subject's inner world.

Also, L. Shragina (Шрагіна, 2017: 32) rightly points out that the emergence of increasingly meaningful forms of creative poetic images in the historical process occurs due to the development of the subject's creative poetic imagination, which is capa-

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ble of performing a metasystemic function. The last is a complex of integrative management actions for evaluating the selection and structuring of elements in the "creative poetic image" system as the realization of the subject's need to create creative aesthetic meanings.

S. Diakov (Дьяков, 2006) sees the formation of a creative potential of a future teacher in the development of his/her subjectivity (*personal approach*). In the definition of subjectivity (through the semantic analysis of the semantic characteristics of this concept), the scientist singled out these volitional qualities of the individual that determine creativity. These qualities emphasize the personally meaningful choice, personal efforts to achieve the goal and the purposefulness of creative activity in relation to the emotional, intellectual and external-objective sides of the personality. S. Diakov notes that volitional qualities have a rather complex, complicated structure, in which individual volitional and moral volitional characteristics can be distinguished. According to this, the subjective sphere of the teacher consists only of certain qualities that facilitate the development of creative abilities, such as volitional, intellectual (functional and motivational levels), moral and aesthetic characteristics of the psychological sphere of the individual, as well as business and creative characteristics of the individual effective sphere of the person (Дьяков, 2006: 11).

Dealing with the problems of the development and the realization of the subject's life potential (*personal approach*), L. Levit (Левіт, 2016) developed a theoretical concept of the intersection of two systems: "Personal Uniqueness" and "Egoism" (or Individualism at the Highest Level of its development). The scientist noted that the theories of Egoism and Individualism are close to it in the scientific thought of the West (Economics, Politics, Biology, Philosophy, Psychology) were successful (including the role of an explanatory principle), only when it comes to the paradigm of creativity, which cannot be compared with any other theoretical model.

L. Levit (Левіт, 2016: 29) points out that individuals cannot avoid their own selfishness, but this does not prevent them from performing creative activities, and they should not do so. However, people are able to learn to make choices in favor of higher forms of creativity associated with *creative self-realization* and *self-improvement*. Human egoism (as well as Individualism as its highest form) represents a multifaceted and underestimated concept in relation to creative potential and its realization, including into the process of professional activity.

Yu. Yakymchuk (Якимчук, 2008) studies the problem of the formation of the individual's ability to creativity through the development of the subject's communicative abilities (*personal approach*). The scientist considers communicative abilities as a stable set of individual and psychological characteristics of the person, which is a part of the structure of intellectual abilities and determines the success of his/her communicative activity. At the same time, Yu. Yakymchuk (Якимчук, 2008) notes that this set of human characteristics in combination with creative abilities constitutes a harmonious whole, distinguished by the individual degree of explication of creative potential, which distinguishes one person from another; refers to the successful performance of creative communicative activity, in which the creative potential of an individual is revealed and with the help of which the formation of an individual towards creativity takes a place. Therefore, Yu. Yakymchuk says that communicative abilities are not limited to communicative knowledge, abilities and skills. The scientist notes that communicative abilities have their own structure, which is different from other types of human abilities, containing the following components: a cognitive, motivational, self-evaluative, emotional, communicative and active ones. All these components can have their own creative explanation in different conditions of the activity (Якимчук, 2008: 14).

In the researches of scientists (Дегтярьова, Козяр, Матійків, Руденко & Шиделко, 2012) they offer *a cognitive approach* to the problem of creativity. The scientist believes that creativity

is explicitly presented only when a person sets before himself and solves the following task in the original way: "Schematically imagine what happens during the creation of a new product". In this process scientists (Дегтярьова, Козяр, Матійків, Руденко & Шиделко, 2012) single out the following *main stages of solving the problem*: 1. The emergence and formulation of the topic. 2. The perception of the topic, the analysis of the situation, the awareness of a certain problem. 3. The activities, which have the aim of solving the problem. 4. The emergence of a productive idea, an image for the subject who solves the problem. 5. The executive, by its very nature, which is a technical stage. All these stages, the scientist notes, characterize both individual and collective creativity.

I. Semenov notes that the considerable novelty and originality in this scheme – as in the entire concept of the creative act – is, among other things, not only V.P. Zinchenko's actualization of the little-studied (compared to the determination of mediative search) problem of finding the components of creative processes, but also the solution of *a creative task*, in particular, in the form of the explanation of the provisions regarding the productive role of "silence" as a kind of "the active rest", that facilitate the emergence of a creative act: "…living, fruitful silence is like a melting pot where internal forms are melted words, images, actions, and new forms are born, which are fed by internal rhythms, the energy of peace and illuminated by the inner light of silence, concentration, inspiration, invisible to others" (Семенов, 2011: 11). "In this crucible, internal forms are melted because of their dynamic nature: … they are called living, energetic, resonant forms, forms of power … creativity is overcoming the elements of consciousness and being, overcoming chaos, but chaos is not original, but fruitful, derived from something before decorated, which is located in some meaningful functional space" (Семенов, 2011: 13). So, …the internal form… is similar to a genome, but not of physical, organic, but of psychological, cultural, spiritual development" (Семенов, 2011: 16).

Yu. Krylova-Grek (Крилова-Грек, 2011: 261), who is a supporter of *a cognitive approach*, uses the term "non-standard", "creative thinking", when the logical apparatus of the rational, which previously "did not give failures", can no longer satisfy the individual. And then she encounters certain limitations, which become possible to overcome only by analyzing a certain problem from a completely different point of view, which the author recognizes as CREATIVITY.

In order to realize the possibility of describing a person's creative attitude to the objects of the surrounding world, O. Lozova (Лозова, 2011: 280) proposed the term "professional world", which includes specific for each profession accents of perception and reflection of creative objects and situations (*competence approach*). The scientist believes that the professional world is a reflection of the surrounding world by those individuals who have completely accepted their profession, their professional world as their way of life. The world of the profession is revealed through *professional-creative semantics*, *professional-creative explanation of the situation*, *professional-creative social perception* and *professional-creative aspects of communication*. The psychological phenomenon of "the professional world" is thus characterized by a fairly high level of meaning-making activity, since the given connections and relationships that form a dynamic meaning system of professional creative consciousness are complex, and they are mediated by many factors. At the same time, the creative image of the world of the profession is defined as a special structured representation of the world of someone's profession, which embodies in its structure the value-creative dominants of the professional, sets the purposeful-creative function of the subject's consciousness and performs an adaptive function in relation to each personality.

S. Yalanska (Яланська, 2012) carried out her research in the paradigm of *a competence approach*. According to S. Yalanska (Яланська, 2012), the development of a creative competence of future teachers should be ensured by psychological and pedagog-

ical means. *Psychological means* are: the development of creative thinking; striving for self-improvement; the development of the teacher's pedagogical communication as a purely creative process; motivation for independent creative processing of the material; the development of creative abilities in activities; the development of professional training, the conceptual creative thinking. S. Yalanska (Яланська, 2012) singles out *pedagogical means*: the organization of educational activities, in the process of which students realize themselves as creative individuals; providing constant constructive feedback, which is distinguished by creative characteristics; the establishment of partner in the process of pedagogical communication; ensuring motivation for creative research activities, the activity and creativity during training sessions; the organization of the educational process taking into account the peculiarities of creative activity, which leads to a deep mastery of the material by students, as well as the development of their creative abilities.

S. Yalanska (Яланська, 2012: 27) formulated and substantiated the criteria for *achieving creative competence*, which includes: *the independence* as a criterion of the personal developmental component (the indicators of which are: value-pedagogical and motivational competence); *the mobility* in the use of innovative means of the activity as a criterion of the activity-development component, *creativity* (indicators of which are: psychological and pedagogical, organizational, methodical competence); *communicativeness* as a criterion of a communicative component of creative competence (indicators of which are: verbal-communicative, verbal-cognitive competence); *effectiveness* as a criterion of the professional component of the formation of the ability to perform creative activity (indicators of which are: didactic, informational competence, creative conceptual thinking); *readiness* for creativity as a criterion for acquiring personal and professional experience (indicators of which are: creative thinking, competence of creative self-improvement).

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With the aim of forming the professional competence of a future foreign language teacher by means of the dialogue of cultures, V. Kalinin (Калінін, 2005) (*competence approach*) singles out independently creative stage, which involves the creation of positive conditions for a thorough, deep and conscious, creative mastery of the subject of teaching profession through the formation on a certain levels of all components of professional competence in basic pedagogical and methodical actions, which directly relate to the use of the means of pedagogical technology as a dialogue of cultures in the form of an independent design process of forming creative sociocultural competence of students. As forms of creative pedagogical technology, a dialogue of cultures V. Kalinin chose video training, thesis defense, scientific and practical conferences, business games (Калінін, 2005: 10).

T. Chemisova has dealt with the problems of developing the creative competence of teachers in the process of their professional training (*competence approach*). The scientist singled out the psychological conditions for the development of a teacher's creative competence: teachers' readiness for creativity, when their activity has the aim of finding the ways to ensure the maximum realization of cognitive, educational and developmental potential; the reflective attitude of the teacher to creative pedagogical activity, thanks to which the subject successfully plans the course of creative activity and manages it, finds the most optimal ways to resolve conflict situations, creatively interprets educational processes; the desire for self-realization, which involves the formation of stable personal qualities of teachers, forms their active position and a creative approach in solving pedagogical problems, tasks; creative pedagogical activity as in a great degree independence in choosing the most optimal ways to achieve the goal having been formulated (Чемісова, 2018: 18).

We think, that leading to the development of the person's creative imagination is metaphorical imagination (*personal approach*). The latter is able to create new images of objects, ideas, meanings and emotional-sensual experiences, appealing to the

imagination of the respondent who perceives. *Metaphorical imagination* is manifested as a person's ability to independent creative metaphors, creatively interpret complex metaphors, creatively and originally apply existing metaphorical expressions depending on the context of a certain situation. Realizing the connection between the sensual and the rational, the construction of a creative metaphorical image activates the subject's sensory-perceptual and emotional imagination on a creative level, thereby contributing to a new and deeper understanding of their essence.

## Conclusions

Summarizing the views of current psychological researches, it can be noted that they in a great degree emphasize such creative personality traits as productive ones, creative thinking, the implementation of creative characteristics, transformative human activity, the need for self-affirmation, material well-being, the transformation of the surrounding natural and social world, the implementation of doping strategies in the context of life achievements of the individual (*a conative approach*); intellectual activity, psychological flexibility, creative motivation, multivariate vision of the surrounding world, originality, divergence; personal achievements (*personal approach*); mental structures, mental representations, mental experience, intellectual abilities – speed, originality, sensitivity, metaphoricality, formulation and original solution of a problem, actualization of the concept of a creative act (*a cognitive approach*); motivation to carry out creative activities, motivation to achieve success, situational self-actualization (*a motivational approach*); a high level of professionalism, professional and creative semantics, creative explication of the situation, professional and creative social perception, creative aspects of communication (*competence approach*).

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**Набочук Олександр. Діяльнісний, особистісний, когнітивний та компетентнісний підходи в семантичному просторі творчості індивіда.**

**Метою** нашої статті є показати роль діяльнісного, особистісного, когнітивного та компетентнісного підходів у семантичному просторі творчості індивіда, визначити характеристики цих підходів, найцінніші та унікальніші характеристики.

**Методи дослідження.** Для розв'язання поставлених завдань використовувалися такі теоретичні методи дослідження: категоріальний, структурно-функціональний, аналіз, систематизація, моделювання, узагальнення.

**Результати дослідження.** Визначено, що провідною для розвитку творчої уяви особистості є метафорична уява (особистісний підхід). Остання здатна створювати нові образи предметів, ідей, смислів і емоційно-чуттєвих переживань, апелюючи до уяви респондента, який сприймає. Метафорична уява виявляється як здатність людини самостійно створювати творчі метафори, творчо інтерпретувати складні метафори, креативно та оригінально застосовувати існуючі метафоричні вирази залежно від контексту певної ситуації. Здійснюючи зв'язок чуттєвого і раціонального, конструкція творчого метафоричного образу активізує у суб'єкта сенсорно-перцептивну й емоційну уяву на творчому рівні, сприяючи тим самим новому і глибшому розумінню їхньої сутності.

**Висновки.** Показано, що у вітчизняній психології акцентується увага на таких креативних рисах особистості, як продуктивне, творче мислення, здійснення творчої, перетворювальної діяльності людини, потреба у самоствердженні, в матеріальному благополуччі, в перетворенні навколишнього природного і соціального світу, реалізація копінг-стратегій у контексті життєвих досягнень особистості (діяльнісний

підхід); глибина і гострота думки, незвичайність формулювання проблеми та оригінальність в її розв'язанні, інтелектуальна ініціатива, естетична чутливість, креативні настановлення, спонтанність, автономність, емпатії, гармонізація особистісного розвитку (особистісний підхід); інтелектуальна активність, психологічна гнучкість, творча мотивація, поліваріативність бачення навколишнього світу, оригінальність, дивергентність (інтегративний підхід); ментальні структури, ментальні репрезентації, ментальний досвід, інтелектуальні здібності – швидкість, оригінальність, чутливість, метафоричність, формулювання та оригінальне розв'язання задачі, актуалізація концепції творчого акту (когнітивний підхід); мотивація до здійснення творчої діяльності, мотивація досягнення успіху, ситуативна самоактуалізація (мотиваційний підхід); високий рівень професіоналізму, професійно-творча семантика, креативна експлікація ситуації, професійно-творча соціальна перцепція, креативні аспекти спілкування (компетентнісний підхід).

# Stress Resistance and Post-Traumatic Syndrome of Children with Hearing Impairment in War Conditions

## Стресовитривалість та постравматичний синдром дітей з порушеннями слуху за умов війни

**Vovchenko Olha**

Dr. in Psychology, Senior Researcher,
Senior Researcher of the Department of Education
for Children with Hearing Impairments,
Mykola Yarmachenko Institute of Special Education and Psychology
of the National Academy of Educational Sciences of Ukraine,
Kyiv (Ukraine)
E-mail: olgawow4enko@gmail.com
ORCID ID : https: // orcid.org/0000-0002-4399-0118
Researcher ID: P-9297-2016

**Вовченко Ольга**

доктор психологічних наук, старший дослідник,
старший науковий співробітник відділу освіти дітей з порушеннями слуху,
Інститут спеціальної педагогіки і психології
імені Миколи Ярмаченка НАПН України,
м. Київ (Україна)

**ABSTRACT**

*The aim of the article. The author's research consisted in psychological diagnosis, the formation of psychological help for families, the creation of protocols for further work with stress and post-traumatic syndrome for psychologists with the category of children with special educational needs, in particular with hearing impairments. The purpose of the study was specified through the*

*series of tasks: first, determination of the main factors and types of traumatic events, their duration under wartime conditions (which were the result of post-traumatic stress disorders) in children with hearing impairment; secondly, ascertainment of the psychological state of children of various ages with hearing impairment under war conditions; thirdly, the development of the basics of psychological assistance under conditions of stress or post-traumatic disorder» for the child through the family» during the war period.*

***Methods.*** *To solve the outlined tasks and ensure the reliability of the provisions and conclusions, specific scientific methods of research were used, including methods of observation, conversation, interview, questionnaire, collection of medical anamneses. The study covered 62 people with hearing impairments of special boarding schools in Kyiv, Zhytomyr, Lviv and Pidkamin. Among the specified number of children, there were also immigrants from other regions of Ukraine. The basis for observation was a pronounced, persistent (≥ 4-6 months) fear or anxiety about one or more social situations in which they may be or have been participants, objects. The situation and fear had to be repeated and cause 4-5 signs characterizing post-traumatic syndrome. Among the main test methods, the «Test for determining the level of anxiety, stress and depression IDR» was used, the «Test-Umbrella» (M. Korchevskyi) and «I and the fence» (O. Lyumarenko) as projective methods.*

***The results of the research.*** *Based on the results of conversations and observations, it was established that post-traumatic syndrome in children with hearing impairment is a complex of children's reactions to trauma. A traumatic event is determined by experiences, negative emotions that cause fear, horror, and helplessness in most children. These are situations when a minor has experienced a threat to his own life, cruelty, loss of relatives, death or injury of another person. According to the results of the study, it was established that in the majority of children, symptoms of stress, which were noticeable in the child's behavior, appeared 3-4 months after the injury. In accordance with the conducted test methods, it was found that most children experience symptoms of re-experiencing a traumatic event. Many children have elevated levels of stress and depression. It is also described in detail that each age category of children with hearing impairment has its own characteristic type of post-traumatic syndrome, depending on age. Each of the types is characterized by a feature of behavioral reactions and affects.*

***Conclusion.*** *Under the conditions of post-traumatic syndrome, a number of emotional-volitional, regulatory, and behavioral disorders occur in children with*

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*hearing impairments, which are often intense in nature and provoked by the family's attitude towards the child, the style of communication, upbringing or separation from the child, etc. During psychological diagnosis and the formation of psychological assistance, the family (parents, guardians) often complicate the child's therapy, changing the normal, adequate perception of events to those that will be convenient for adults, teaching them to incorrectly assess the situation and the ways out of it. Further studies of stress and PTSD are ongoing. The obtained results will influence the types of psychological assistance and the creation of protocols for the work of psychologists with stressful conditions under war conditions.*

***Key words:** child with hearing impairment, special educational needs, traumatic event, stress, post-traumatic stress disorder, stress resistance, psychological help, restress.*

## Introduction

Studies in the field of post-traumatic stress developed independently of studies of stress and situations that occurred in the country and society. But the events of February 2022 significantly changed the attitude of researchers to the category of stress, post-traumatic disorders and stress resistance of humans and minors. Researchers actively began to interpret the H. Selye's scientific works. The central principle of the concept of stress, proposed in 1936 by the scientist (Selie, 1998), were the homeostatic model of self-preservation of the organism and the mobilization of resources to respond to the stressor. He divided all effects on the body into specific and non-specific effects of stress, which are manifested as a general adaptation syndrome. This syndrome goes through three stages in its development: 1) anxiety reaction; 2) stage of resistance; 3) stage of exhaustion. The scientist introduced the concept of adaptive energy, which is mobilized through adaptive restructuring of the body's homeostatic mechanisms. Its depletion is irreversible and leads to aging and death of the organism.

Such mental manifestations of the general adaptation syndrome are designated as "emotional stress" – affective experiences that accompany stress and lead to adverse changes in the

human body (Mubarak, 2022). Such affective experiences began to intensify on the mental and physical levels of Ukrainians since emotions have been the first to be involved in the structure of any purposeful behavioral act.

Emotions were the first to be involved in the bodies of the adult and children's generation of Ukraine, starting from February 24 and until today, it was the emotional system that engaged the stress reaction during the impact of extreme and traumatic events. As a result, functional autonomic systems and their specific endocrine support, which regulates behavioral responses, were activated.

According to modern ideas, emotional stress can be defined as a phenomenon that arises in the comparison with the demands faced by a person with his ability to cope with them. If a person does not have strategies for overcoming a stressful situation ("coping strategies"), a tense state occurs, which, together with primary changes in the internal environment of the body, causes a violation of its homeostasis (Goldsmith, 2018). This reaction, as a response, is an attempt to cope with the source of stress. Such a reaction is characteristic for both an adult and a growing organism (preschool children, junior and senoir schoolchildren, teenagers). Coping with stress includes psychological (cognitive and behavioral strategies) and physiological mechanisms. If attempts to cope with the situation are ineffective, the stress continues and can lead to the appearance of pathological reactions and organic disorders (Dammann, 2019).

Under certain circumstances, instead of mobilizing the body to overcome difficulties, stress can cause severe disorders. Such violations are often characteristic for children with special educational needs, in particular, hearing impairments. Under conditions of repetition or during long-term affective reactions in connection with long-term life difficulties (for example, resettlement, living in a territory with frequent bombing, hiding in bomb shelters, loss of relatives, etc.), emotional arousal can acquire a stable, persistent negative form. In such cases, even

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when the situation is normalized, stagnant emotional arousal does not weaken, but on the contrary, it constantly activates the central formations of the nervous autonomic system. They are responsible for the «search» in the body for weak links that form violations and non-standard reactions of a child with special educational needs (Nagy, 2019).

Primary disorders arising under conditions of emotional stress in various structures of neurophysiological regulation of the brain lead to the change in the normal functioning of the cardiovascular system, gastrointestinal tract, disorder of the immune system, etc. (Tarabryna, 2010). Stressors are usually divided into physiological (pain, hunger, thirst, excessive physical exertion, high and low temperature, etc.) and psychological (danger, threat, loss, insult, information load, etc.).

Stress becomes traumatic for a child when the result of the impact of the stressor is a disturbance in the mental sphere by analogy with physical disturbances. In this case, according to the psychoanalytic concept, the structure of the «self» (Freud, 1998), the cognitive model of the world, the affective sphere, the neurological mechanisms controlling learning processes, the memory system, and the emotional ways of learning are disturbed (Wells, 2017). The fact of experiencing traumatic stress of a child with hearing impairment becomes the cause of the appearance of post-traumatic stress disorder/disorder (PTSD) after a certain period. Parents explain the child's condition as «unusual», «non-standard», «behavior has completely deteriorated», etc. But during communication with a specialist, such a family will be diagnosed with post-traumatic stress disorder.

Today, this is an urgent issue for both scientists and practitioners, since many children injured during the war need the help of specialists. Although the modern understanding of post-traumatic stress disorder/disorder (PTSD) was definitively formed by 1980, information about the impact of traumatic experiences continued to be recorded. Today, it needs updating, clarification and practical recommendations, especially regarding the activi-

ties of psychologists and psychotherapists with such an unprotected category as children with special educational needs.

Disorders that develop as a result of the trauma experienced in war (as opposed to «normal» psychogenic states) have been described and diagnosed before. Thus, as early as 1867, K. Erichsen (Erichsen, 1976) published the work «Railway and other injuries of the nervous system», where mental disorders were described in persons who survived accidents on the railway. In 1888, M. Oppenheim introduced a well-known diagnosis of «traumatic neurosis» into practice, within which he described many symptoms that are now called PTSD (Oppenheim, 1988).

Let us emphasize the works of researcher D. Stierlin in 1909 and 1911, which became the basis for modern disaster psychiatry. Many works describing the human condition after extreme and traumatic events appeared after significant military conflicts. Thus, important studies arose in connection with the First World War (1914–1918). In 1916 E. Kraepelin characterizing a traumatic neurosis, first indicated that after severe mental traumas, permanent retraumatizing effects can remain, intensifying over time. Later, A. Myers in the work «Artillery shock in France 1914-1919» defined the difference between the neurological disorder «contusion from shell explosions» and «shell shock». A contusion caused by a burst shell was considered by scientists as a neurological condition caused by physical trauma, while «shell shock» was considered by A. Myers as a mental condition caused by severe stress (Sahin, 2022).

Thus, responses to combat involvement became the subject of extensive research during World War II. Different authors characterized such conditions in different ways: «military fatigue», «combat exhaustion», «military neurosis», «post-traumatic neurosis».

After the Second World War (1939-1945), Soviet researchers actively worked on this problem: V. Galenko (1946), E. Zalkind (1946, 1947). In 1941, in one of the first systematic studies, A. Kardiner called this phenomenon «chronic military neu-

rosis». Based on the ideas of Z. Freud, the scientist introduced the concept of «central physioneurosis», which, in his opinion, causes the violation of a number of personal functions that ensure successful adaptation to the surrounding world. A. Kardiner believed that neurosis has both physiological and psychological origins (Freud, 1998). The scientist was the first to describe complex symptoms: 1) excitability and irritability; 2) uncontrollable type of response to sudden stimuli; 3) fixation on the circumstances of the traumatic event; 4) avoidance of reality; 5) tendency to uncontrolled aggressive reactions (Barkovets, 2018).

Similar types of violations could be observed in concentration camp prisoners and prisoners of war.

A new stage of interest and interest in this problem arose in domestic psychiatry in connection with military conflicts, natural and man-made disasters that occurred in our country in recent decades. The accident at the Chornobyl NPP (1986) was particularly difficult in terms of consequences.

In the 1980s, PTSD research became even more broad in terms of population. In order to develop and clarify various aspects of PTSD, numerous studies have been carried out in the USA. Among them, it is worth highlighting the works of R. Egendorf and A. Bowlander regarding the state of the military who were in Vietnam (Azeem Mubrarak, 2022; Bovolar, 2017).

The beginning of systematic studies of post-stress states caused by the experience of war, traumatic events related to it and their impact not only on the military population, but primarily on the civilian population, is currently taking place in Ukraine as well. This period intensified after the armed conflict with the neighboring aggressor country. Many studies now reveal the essence of the psychological state of adults who were in the occupied territories (G. Matvienko, K. Rakin, O. Savinov), soldiers, prisoners (I. Valyushko, M. Stepiko), children who experienced traumatic events together with their parents (A. Klymenko, M. Moiseeva, O. Orlov, Ya. Sharuba) (Doroshenko, 2019). Cur-

rently, psychologists and educators are most actively developing technologies for complex diagnostics and support for children with special educational needs (with hearing impairments), survivors of violence, armed conflict, displaced from places of permanent residence, lost relatives (relatives), etc. and, as a result, have such diagnosed as post-traumatic stress disorder/disorder (PTSD). Among domestic scientists, it is worth mentioning such scientists as (A. Dushka, V. Zhuk, V. Zasenko, V. Lytvynova, S. Lytovchenko, O. Taranchenko, V. Shevchenko) and, perhaps, the names of those who have not yet demonstrated the results of their research.

The results of the reviewed numerous studies showed that the condition that develops under the influence of traumatic stress does not fall into any of the classifications available in clinical practice. The consequences of the injury may appear suddenly, after a long time, against the background of the general well-being of the child, and over time, the deterioration of the condition becomes more and more pronounced. Various symptoms of such a change in state were characterized, but for a long time there were no clear criteria for its diagnosis. There was also no single term for the designation.

Therefore, the purpose of the study is to help a child with hearing impairment who experiences post-stress syndrome/disorder during military operations and further support «the child through the family». The main and first thing is to determine the actual state at a certain point in time.

**Research methods and technologies.** The main goal of the study was specified through the following research tasks:

– determination of the main factors and their duration, which act as triggers of anxiety, in particular under the conditions of wartime (as a result cause PTSD) in children with hearing impairment;

– ascertaining the mental state of the main spheres of personality or their changes (emotional, behavioral, cognitive and regulatory-volitional);

– development of psychological assistance "for the child through the family" characterized by PTSD.

In order to solve the outlined tasks and ensure the reliability of the provisions and conclusions, we used specific scientific research methods, in particular methods of observation, conversation, interview, questionnaire, collection of medical anamneses.

The study covered 62 people with hearing impairments: elementary school (12), high school (17), teenagers (24) and youth age (9) from special boarding schools in Kyiv, Zhytomyr, Lviv, Pidkamin. Among the specified number of children, 24 ones were immigrants from other regions of Ukraine. According to the gender criterion, the sample consisted of 27 girls and 35 boys. The study was conducted on the basis of the Communal Institution of the Lviv Regional Council "Pidkamin Special School of I-III Levels with Advanced Professional Training" (children with impaired hearing, mental development, speech disorders); "Zhytomyr Special School No. 2" of Zhytomyr Regional Council (children with impaired hearing, intellectual development, autistic spectrum); Special boarding school of grades I-III No. 9 of Kyiv city (hearing impairment, speech impairment); Special comprehensive school No. 335 of the city of Kyiv (visual impairment, speech impairment, hearing impairment); Terebovlia educational and rehabilitation center (hearing impairment, speech impairment, intellectual development); Compensatory preschool education institution No. 582 of Kyiv (mental development, hearing impairment, behavioral).

The basis for observation was a pronounced, persistent ($\geq 4$-$6$ months) fear or anxiety about one or more social situations in which they may be participants, objects. The situation and fear had to be repeated and cause 4-5 signs characterizing post-traumatic syndrome. Children could have internal (fear of dying suddenly, fear of pain) and external (fear of humiliation by others, embarrassment, rejection) fears. In addition, the following signs must be present: the presence of the same situations that always

cause fear (recalls of repeated events and fear of them, increased anxiety; children had an active desire to avoid such fears, situations; fear or anxiety was disproportionate to the actual threat (taking into account sociocultural norms); fear, anxiety and/or avoidance caused significant discomfort or significantly worsened social activities/situation. In addition, in the anamnesis, the likely cause of fear and anxiety could not be another mental disorder, behavioral disorder (such as schizophrenia, agoraphobia, dysmorphophobia, etc.), in addition to the diagnosis of PTSD, which required verification.

In order to create an individual program of psychological assistance for a family and/or a child, a specialist needs to determine the nature of the traumatic event and the level of its impact. Psychologists distinguish the following five characteristics of trauma that can cause traumatic stress (characteristic depending on the age of the child) (Vona, 2016):

1) the event is realized, that is, the child knows what happened to him and what caused his psychological state to deteriorate;

2) this condition is due to external causes;

3) the experience destroys the usual way of life;

4) the event that took place causes horror and a feeling of helplessness, powerlessness;

5) the child does not realize what has happened, but feels the parents' nervousness and anxiety.

Traumatic stress is an experience of a special nature, the result of a special interaction between the child and the surrounding world. It is a normal reaction to abnormal circumstances, a condition that occurs in a person who has experienced something that is beyond his normal experience.

The psychological reaction studied by psychologists as an impact on trauma included three relatively independent phases, which allowed to characterize it as a process unfolding over time and to choose the appropriate psychological support (Korek, 2017).

*The first phase* – the phase of psychological shock – contains two main components:

**1)** suppression of activity, inertia, change in the child's behavior, disruption of orientation in the environment, disorganization of activity;

**2)** denial of the event (a kind of protective reaction of the psyche). Normally, this phase is quite short-lived.

*The second phase* – impact is characterized by expressed emotional reactions to the event and its consequences. These can be strong fear, horror, anxiety, anger, crying, accusations, aggression - emotions that differ from the child's usual behavior by the immediacy of manifestation and extreme intensity. Gradually, these emotions are replaced by a reaction of self-doubt. The specified phase passes with thoughts "what if…" and is accompanied by the awareness of the irreversibility of the event, the recognition of powerlessness, and often by blaming the parents.

The considered phase is critical, because after it either the recovery process begins ("reaction", acceptance of reality, adaptation to newly created circumstances), that is, the third phase of normal response, or there is a fixation on the trauma and the subsequent transition to a post-stress state in a chronic form (Vovchenko, 2022).

Disturbances that develop in a child after an experienced psychological trauma affect all levels of his functioning (physiological, personal, level of interpersonal and social interaction), lead to permanent personal changes, especially in high school and adolescent children.

Among the main test methods that were used is the Test for determining the level of anxiety, stress and depression IDR, among the projective methods are the test "Me and the umbrella" (according to M. Korchevskyi), test "I and the fence" (O. Lyumarenko).

**Results and discussions.** Based on the results of conversations and observations, we conclude that PTSD is a complex of children's reactions to trauma, where trauma is determined

by experiences, negative emotions that cause fear, horror, and helplessness in most people. These are situations when a minor experienced a threat to his own life, cruelty, loss of relatives, death or injury of another person, especially someone close to him. Note that, according to a survey of parents, 32.1% of children had symptoms immediately after being in a traumatic situation, 39.8% noted that the child began to change after 3-4 months, 28.1% of parents did not notice any changes after the events experienced during the war. They are the indicators that indicate the insidious nature of post-traumatic stress disorder.

There is evidence in the scientific literature that cases in which PTSD symptoms appeared in veterans of the Second World War forty years after the end of hostilities (Bavolar, 2017).

According to the features of the manifestation and course of PTSD in children with hearing impairment, three types of post-traumatic stress disorders could be distinguished:

1. Acute, developing in a period of up to three months (it does not need to be combined with an acute stress disorder that develops within one month after a traumatic event).

2. Chronic PTSD lasting more than three months.

3. Delayed, when the violation occurs six or more months after the traumatic event (but at the moment, parents do not notice any particular changes, explaining, for example, behavioral changes with age crises, general tension in society).

Parents and older children (adolescents, young men) describe their condition as persistent and vivid memories, recurring dreams about an event that struck, frequent experiences with the same emotions as the first time. During the "Me and the umbrella" test, teenagers picture a large umbrella with well-closing edges. This indicates the child's fear, the desire to be protected. Mostly umbrellas have dark colors. Rainbow or bright umbrellas for children up to 8-10 years old. And in adults aged 11-12 years and older, showers can be observed, in younger children there are clouds with droplets, or shading, sticks, like rain. The rain itself is a symbol of the experienced event, pain, trauma, stress

and indicates the level of experience, memory of the experience. The symbol of the umbrella is protection, ways of salvation, persons who protected, etc.

Elementary school students and preschoolers, on the contrary, try to avoid talking about the events that happened. When using the "I and the fence" tests, children can draw only the fence or themselves, but in no case both the fence and themselves. This is explained by avoiding a traumatic event. Also, at the age of 10, drawings are characteristic – a fence on one side, and me on the other, as a denial of what happened.

Teenagers and young adults depict the fence along the entire length of the paper, and themselves in two variations: first, in front of the fence, and second, behind it. Accordingly, for a psychologist, this is an understanding of the fact that a teenager standing in front of a fence begins to cope with his emotions and gets out of a traumatic position. But a teenager who depicted himself behind a fence is a sign that a person needs help.

It is also important to take into account the details with which children fill in their projective drawings: who is depicted in the drawing besides the child, the ratio of sizes, the color palette and, of course, the child's story about what is depicted. Because an adult can see one thing, but a child interprets it differently. It is important to talk with the subject, clarify, for example, the choice of color and attitude towards it, etc.

In the international classification of mental disorders in traumatic stress, three groups of symptoms are distinguished: the symptom of re-experiencing (or the symptom of "intrusion"), the symptom of avoidance, and the symptom of physiological hyperactivation (Rishel, 2023).

According to the results of the study of children with hearing impairment using the IDR method, the following results were obtained: 37.6% of children are characterized by symptoms of avoidance, 39.2% – by symptoms of re-experiencing a traumatic event, and 23.2% by symptoms of physiological and affective hyperactivation. Stress and depression values are elevated.

*The anxiety type of PTSD* was mainly diagnosed in children of a younger age (preschool and junior school age). Diagnostics for this age were mainly projective, as well as conversations with parents and children, observations. The specified type of PTSD is characterized by a high level of somatic and mental unmotivated anxiety on a hypothetic affective background with distress. The frequency is several times a day (no less). Symptoms are involuntary, sometimes obsessive, worrying about what «could be». Irritability and tension are also characteristic of older schoolchildren. Sleep disorders are characterized by difficulties in going to sleep with a predominance of anxious thoughts about various events, fear of horrors. After waking up, children can often describe episodes of fighting, violence, etc. Teenagers, for example, often deliberately delayed the onset of sleep and fell asleep only in the morning.

*The asthenic type of PTSD* characterized adolescence and was characterized by the dominance of feelings of lethargy and weakness. The mood is lowered, indifference to life events, indifference to family and educational problems, future education, profession, etc., was often characteristic. The behavior was characterized by passivity, the experience of losing the sense of enjoyment of life was also characteristic. For example, several episodes of aggressive behavior could be observed during the week. However, in contrast to the disturbing type of PTSD, in these cases, representations of the traumatic event lacked vividness, detail, and emotional color and were defined by the children as «pictures that arose as images and were obsessive, often repeated». Among the sleep disorders, the most characteristic was hypersomnia with the lack of desire to get out of bed, painful sleepiness, sometimes throughout the day. Teenagers did not hide their feelings and openly talked about all their experiences.

*The dysphoric type of PTSD* was characterized by a constant experience of internal dissatisfaction, irritation, up to outbursts of anger, rage, and instead a depressed-gloomy mood. This type of PTSD was also characteristic of teenagers, but to a greater

extent of youth. For example, teenagers were characterized by a high level of aggressiveness, a desire to unleash irritability on others. In the consciousness of the individual during communication, representations of aggressive content dominated in the form of images of punishment of imaginary offenders, fights, disputes with the use of physical force. Most often, teenagers were not able to control themselves and reacted violently to the remarks of others, but with a certain time they regretted it. Outwardly, the children were gloomy, their facial expressions tinged with displeasure and irritability. Avoidance and reticence were typical during communication between specialists.

During communication and diagnosis of children of various ages with hearing impairment, the primary priority was not only testing, but also identifying the leading role of a traumatic event.

It is worth emphasizing that it is too early to draw final conclusions. Since the study was started in April-May 2022 and continues until today.

Specialists collect anamnesis and individually predict the best type of psychological help in the context of not only the child, but also the «child-family». Because it is the parents who can both create emotional stress in the family and minimize it for their child.

## Conclusions

Post-traumatic syndrome in children with special educational traumas, in particular with hearing disorders, is one of the most characteristic psychological conditions during the war in Ukraine. The acute, chronic negative emotional experiences are dominant: anxiety, fear, aggressiveness, irritability and dysphoria. In such states, affects arise that can reach such a level of intensity that it disorganizes the usual state of the child's cognitive, behavioral, self-regulatory, and social personality systems, complicating the process of adaptation to the events taking place. Let us emphasize that intense emotional experiences, such

as stress and post-traumatic stress disorder are characteristic, mainly, for adults raising children whom psychologists worked with.

The family, parents often complicated the psychological therapy of the child, they changed the child's adequate, real perception of reality, did not correctly assess the situation, prevented finding an adequate way out of a stressful situation.

Some stressful situation, especially such as war usually saturated with various emotions, requires psychological support. Adults should help the child adapt to new realities, continue the educational, training and educational process. Parents, raising a young child (preschool age), choose the behavior of detachment from the child, stating, for example, something like "he/she is small – they won't remember", "I don't have time for his/her tears, there are more important problems", etc.

In addition to the mentioned problems, it is worth remembering that the armed conflict that arose in Ukraine was sudden, there are no recipes or psychological reports on how best to act in such situations. There are foreign studies, but they are not adapted to the peculiarities of our mentality, to our archetypes. This is an extremely stressful impact that is not characteristic of the everyday life of the population of Ukraine, and it can also cause unusual behavioral reactions on the part of adults in relation to the child: emotional coldness, indifference, aggressiveness, increased anxiety, anger, etc.

Therefore, taking into account all of the above, the peculiarity of the situation, the insufficiency of research into the psychological state of the most vulnerable category of Ukrainians – children with special educational needs (with hearing impairments), it is planned to continue studying the peculiarities of stress reactions, stress, depressive and anxiety states, create recommendations for parents and educators regarding the possible minimization of the impact of the war on the development of the child's personality, his further formation in the adult world.

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*Вовченко Ольга. **Стресовитривалість та постравматичний синдром дітей з порушеннями слуху за умов війни.***

*Мета.* *Дослідження автора полягало у психологічній діагностиці, формуванні психологічної допомоги родинам, створенні протоколів подальшої роботи зі стресом та посттравматичним синдромом для фахівців-психологів з категорією дітей з особливими освітніми потребами, зокрема з порушеннями слуху. Мета дослідження конкретизувалася через низку завдань: по-перше, визначення основних чинників та типів травмуючих подій, їх тривалості за умов воєнного часу (які були наслідком посттравмівних стресових розладів) у дітей з порушеннями слуху; по-друге, констатація психологічного стану дітей різного віку з порушеннями слуху за умов війни; по-третє, розроблення основ психологічної допомоги за умов стресу чи посттравматичного порушення «дитині через родину» у воєнний період.*

*Методи.* *Для розв'язання окреслених завдань і забезпечення достовірності положень та висновків було використано специфічні наукові методи дослідження, зокрема методи спостереження, бесіди, інтерв'ю, анкетування, збір медичного анамнезу. Дослідженням було охоплено 62 особи з порушеннями слуху спеціальних загальноосвітніх шкіл-інтернатів м. Києва, м. Житомира, м. Львова, м. Підкаміня. З означеної кількості дітей були також переселенці з інших регіонів України. Основою для спостереження був виражений, стійкий (≥ 4-6 місяців) страх або тривога щодо однієї або декількох соціальних ситуацій, в яких вони можуть бути або були учасниками, об'єктами. Ситуація і страх мав бути повторюваним і викликати 4-5 ознак, що характеризують посттравматичний синдром. Серед основних тестових методик було використано «Тест на визначення рівня тривожності, стресу та депресії IDR», серед проективних методик: «Тест Парасоля» (за М. Корчевським), «Я і паркан» (О. Люмаренко).*

*Результати дослідження.* *За результатами бесід та спостережень було встановлено, що посттравматичний синдром у дітей з порушеннями слуху — це є комплекс реакцій дітей на травму. Травмівна подія визначається через переживання, негативні емоції, які у більшості дітей викликають страх, жах, безпорадність. Це ситуації, коли неповнолітня особистість пережила загрозу власному життю, жорстокість, втрату рідних, смерть чи поранення іншої людини. За результатами дослідження було встановлено, що у переважної кількості дітей симптоми стресу,*

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*які було помітно в поведінці дитини, з'явилися через 3-4 місяці після травми. Згідно проведених тестових методик виявлено, що більшість дітей переживає симптоми повторного переживання травмівної події. У багатьох дітей є підвищеними показники значень стресу та депресії. Також детально описано, що кожна вікова категорія дітей з порушеннями слуху має свій характерний тип ПТСР, залежно від віку. Кожен із типів характеризується особливістю поведінкових реакцій та афектів.*

*Висновки. За умов ПТСР у дітей з порушеннями слуху виникає низка емоційно-вольових, регуляційних, поведінкових порушень, які часто мають інтенсивний характер та спровоковані ставленням родини до дитини, стилем спілкування, виховання або відсторонення від дитини тощо. Під час психологічної діагностики та формування психологічної допомоги родина (батьки, опікуни) часто ускладнюють терапію дитини, змінюючи нормальне, адекватне сприйняття подій на такі, як буде зручно дорослим, навчали не вірно оцінювати ситуацію та шляхи виходу із неї. Подальші дослідження стресу та посттравматичного синдрому тривають. Отримані результати впливатимуть на різновиди психологічної допомоги та створення протоколів діяльності психологів зі стресовими станами за умов війни.*

*Ключові слова: дитина з порушеннями слуху, особливі освітні потреби, травмівна подія, стрес, посттравматичний стресовий розлад, стресостійкість, психологічна допомога, рестрес.*