The Diagnostic Technique of Activity, Action and Deed Reflection

Maria Kuznetsova

National Research University of Higher School of Economics, Russia

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Definition of reflection as a subject of psychological diagnostics

The problem of defining the category of reflection (from Late Latin *reflexio* - rear-facing) has been an issue with psychologists ever since its inception. This term was borrowed from Philosophy. Its first occurrence dates back to the study of the problems of human consciousness in the Philosophy of Modern Times. This refers to the phenomenon of internal circulation of consciousness onto itself. Later on, the term came to refer to reflection - the study by the subject their own cognitive act. Different systems of Philosophy hold the term *reflection* in their own way and it has always had different content (essence) for different philosophers. "Locke believed it to be the source of unique knowledge when observation is aimed at the internal action of consciousness, while the feeling (sensation) is outwardly-oriented. For Leibniz reflection is nothing but attention to what is going on inside us. According to Jung, ideas -are a reflection of the impressions received from outside. "

In Psychology, over the period of its existence, there also developed several different approaches to the understanding of the reflection processes, the role of reflection in the mental life of man. One of the first substantive definitions of reflection in Psychology was given by W. James. He regarded reflection as an appeal of the knowing "I" to the knowable "I" within structure of consciousness: "My identity is sort of dual - partly knowable and partly knowing, being the object and the subject at the same time, it is necessary to distinguish the two sides in it "[James, 1991, p. 87]. A. Busemann proposed allocating a separate area of psychology: a Psychology of introspection which should study reflexive processes and consciousness. According to Busemann, reflection - is any transfer of emotional experience from the outside world onto oneself. A somewhat different interpretation of the concept of reflection can be found in the works on the problems of mental development of man. Thus, Piaget explored reflection, defining it as a logical process, characterized by the knowledge of the necessary connection between the object and the effect on it, which is then conceptualized into a notion [Piaget, 1969].

Another tradition has developed in Russian psychology. Reflection here acts as an explanatory principle of self-consciousness and psyche in general (S.L. Rubinstein, B.G. Ananiev, Vygotsky, B.V.Zeygarnik etc.). The problem of the concept of reflection, the mechanisms of its manifestations, development, its impact on the formation of consciousness and self-awareness, on the cognitive functions, and processes of activity are raised by many Russian researchers. At the same time the importance of the problem of reflection in Russian psychology leads to the formation of multiple approaches to its interpretation.

In this paper, we aim to outline some of the most significant moments in the context of dealing with our main problem: defining reflection as a subject matter of psychodiagnostics. While acknowledging certain differences in understanding of the general reflection, we can't fail to notice that it characterizes the overall orientation of the subject onto the inner world in its various qualities and dimensions. These can be emotional states and experiences, manifestations of conscience and consciousness deeds. Reflection, aimed at the cognitive activity, is understood as the ability to recognize one's own thinking process, as well as the ability to recognize and restructure one's underlying bases or certain initial notions. It is through reflection

that conscious development of new algorithms for solving problems and patterns of behavior takes place.

It is important to note that the processes of reflection are going on gradually, in parallel with the development of thinking. The transition of any component of activity into the focus of consciousness is when we get hold of new and complex action or when we deliberately analyze the components, which are associated with any uncertainties and errors. "The property" of each component skill to once again become conscious is very important because it provides the flexibility of skill, the possibility of its further improvement or alteration." Realization by man of his or her own actions and mobilization of their personal resources are required, whenever available automaticity does not provide resolution of existing difficulties and obtaining the necessary results. The need for improvement or supplementation is thus accentuated.

That line of reasoning elucidates both the importance of reflection in the processes of consciousness and human psyche development, and the unbreakable bond of reflection with the activities under which influence it is manifested. Reflection is revealed in individual actions, activities and deeds and determines their efficiency in the procedural aspect and ultimate effectiveness. Hence, we believe it is necessary to put forward the question of studying and diagnosing reflection not in isolation, but within the context of certain actions.

Summarizing the analysis of different approaches in this work, we can define reflection as a process of self-knowledge (the process of thinking aimed at the subject, in the totality of its qualities and manifestations: the needs, motives, emotional states, feelings, phenomena of conscience, knowledge, personality traits, actions, activity, behavior, etc.).

Reflexivity, in its turn, will act as a quality of personality which characterizes its tendency to explore itself. Reflexivity will contribute to the successful implementation of any activity, through directing the process of thinking, organizing and managing it. Personality, through its quality of reflexivity, will manage the task of solving a problem as well as that of channeling its thoughts.

Henceforth, the terms reflection and reflexivity can be used interchangeably, with the difference that by reflection, we understand the process, and by reflexivity - personal quality that determines the level of reflection.

The existing diagnostic methods of reflection and reflexivity

In scientific literature, there are a significant number of diagnostic methods for treating reflexive processes. However, all of the existing approaches focus on the local assessment of reflection, regardless of the types of activities in which it appears. Some of the existing methods aim to diagnose certain types and forms of reflection, in line with its objective reference, others - to diagnose the overall level of reflexivity, considered as a unified system property.

It is the aforementioned lack of unified view on the problem of the nature of reflexive processes that gives rise to complications while diagnosing reflection.

The main problem here lies in the discrepancy between the basic views on the possibility of differentiating reflection within those subject areas for which it unfolds. In particular, D. Dubrovsky and S. Rodriguez, while considering reflection a "holistic" phenomenon, reject the very idea of typology of its forms and manifestations. A.V. Karpov, I.M. Skityaeva, V.V. Ponomarev and some others hold similar positions. These authors suggest methods of reflexivity diagnostics as a complex but unified and holistic notion.

However, most of the authors (I.N. Semenov, S.J. Stepanov, A.B. Kholmogorov, V.I. Slobodchikov, etc.) offer various classifications of reflexive processes, differing in the criteria for selection of their types. The most detailed classification of reflexive processes and phenomena that takes into account most of the major approaches to their study, is proposed in the works of I.N. Semenov and S.Y. Stepanov. Trying to overcome the restriction on adoption of the term "reflection", the authors summarized the main psychological interpretations of reflection as they are held by A.V. Petrovsky, L.S. Vygotsky, V.V. Davydov, A.M. Matyushina, O.K. Tikhomirov and other Russian psychologists. Accordingly, for each of the types and processes of reflection these authors suggest applying separate diagnostic procedures. There are some more specific methods of diagnosing and analyzing the reflective processes. In particular, they might include the methods of diagnosing the intellectual component of reflection, such as A.Z. Zack‘s tasks.

With all the variety indicated, the analysis of the existing approaches to the diagnostics of reflection, both in the Western and Russian psychology, suggests that reflection activities are not currently being studied by anybody.

In conclusion, it should be noted that the diagnostic systems for studying reflection in practice often appear to include diagnostic techniques for assessing the ability of a person for self-exploration, research methods of personality constructs where reflection is understood as the capability of a person to understand these constructs, also methodology of determining the locus of control, when reflection is the ability to objectively assess the situation in life, methods for diagnosing creative thinking, that is, the cognitive component of reflection, or the process of thinking, etc. All the outlined techniques are not designed for focused study of reflection and are used for that purpose only because there is no clear-cut definition of the concept of reflection and the limits of its manifestations, as well as proven methods of diagnostics.

The model of reflection on action, activity and deed.

The task of analyzing the mechanisms of reflection manifestation in the activity challenges us with the need to develop our own toolset for research and diagnostics. And, before starting to develop our own diagnostic tools, we need to develop a clear and explicit diagnostic construct or operational model of the subject of diagnostics.

In developing the methodology, we relied on the ideas of the subject-active approach in Russian psychology (S.L. Rubinstein, K.A . Abulkhanova, A.V. Brushlinskii, etc.) and the concept of the systemogenesis (V.D Shadrikov). There appeared a reflection model of action, activity and deed based on the concept of action systemogenesis. In accordance with the developed model, a set of figures was determined for assessing

productivity of reflection in action. The basic idea was to correlate reflexive processes with the major components of a functional system of psychological activities (hereinafter PFSA) proposed by V.D. Shadrikov. Each of the PFSA components reflects certain stages of subject's activity as well as their specific tasks. PFSA describes activities in an aggregated form and is a universal explanatory model for all forms of activity of the subject.

Reflection is present in the formation of each denoted component of the activity system, allowing us to present the process of formation of each component as well as the overall performance. Thus, reflection provides for the process of systemogenesis activities. Psychological functional activity system is formed within systemogenesis activity [10]. In expanded form it is presented in Fig. 1.

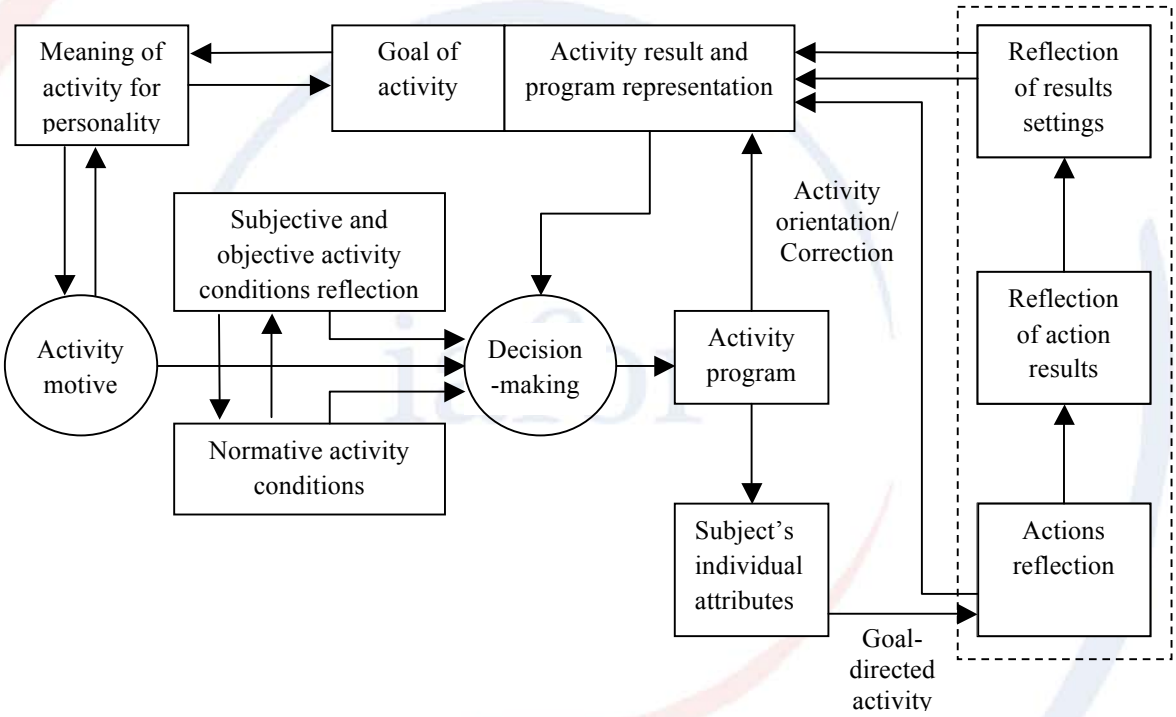

Figure 1. The general architecture of psychological functional activity system (PFAS)

Considering the reflection in each of the components of PFAS, we can present a theoretical model of reflection and reflexivity in the activity (Fig. 2).

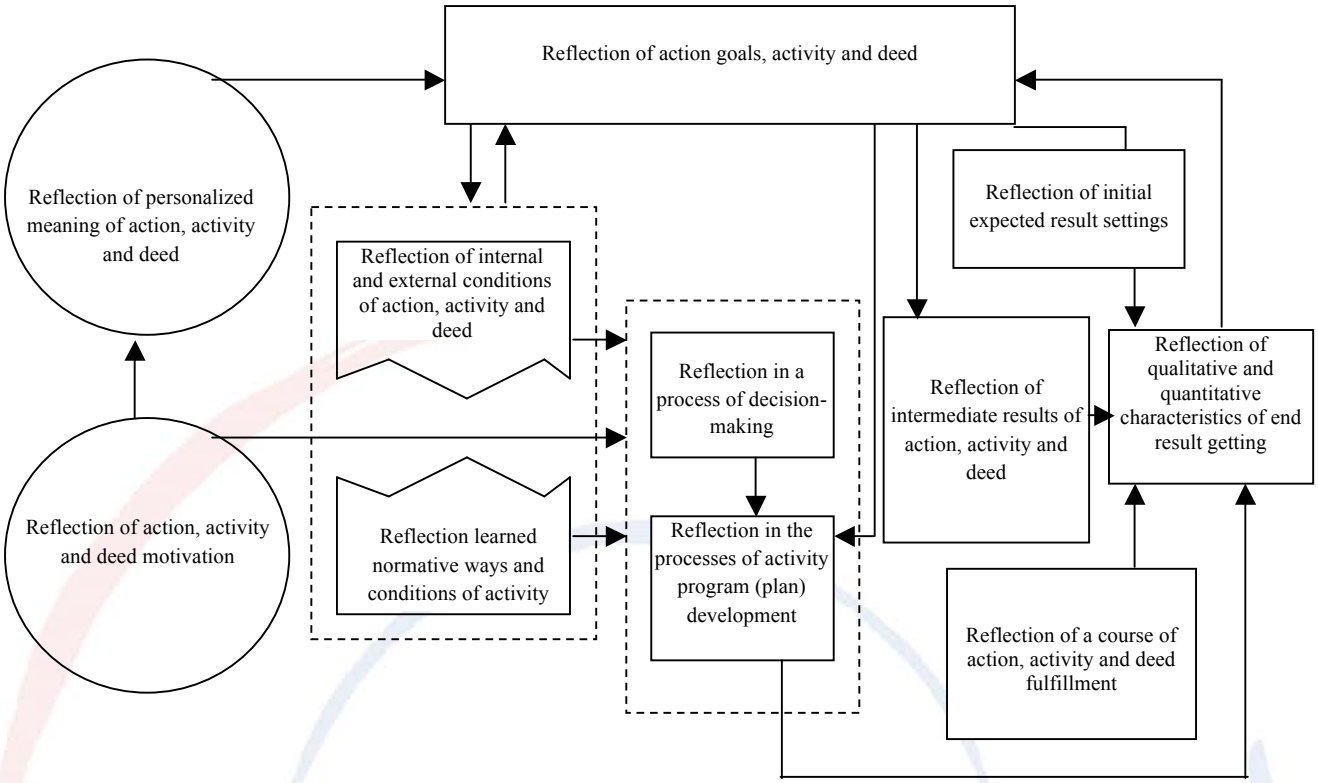

Figure 2. Theoretical model of activity reflection and reflexivity

Reflexivity, being essentially a personal quality of a subject, which determines the subject's capacity for reflection, will be manifested in all the components of a functional system of psychological activity. The level of reflexivity will affect the ability of the subject to assess various parameters of their own activities, to harmonize individual components into an integrated system to get the planned desired result. The specifics of the enacted reflexive mechanisms will determine the solution features of certain types of tasks. Analysis of these specific features will highlight the strengths and weaknesses of the subject's activity, and will help to get a qualitative picture of the unfolding mental processes that either encourage or hinder getting the desired result. Accordingly, it will make the necessary adjustments in the activity of the subject, increasing its efficiency.

In the educational process this model will help to consciously approach the task of developing both cognitive abilities and the personality of a student, the task of ensuring comprehension of the offered material, as well as search for effective solution strategies of learning tasks, etc.

The essential point of our work is to address the category of deed. Deed, in addition to an objective assessment of its effectiveness, involves moral evaluation of its contents (personal, spiritual, moral and ethical aspects). Resorting to this category gives an opportunity to consider not only cognitive and procedural, but also the personality aspect of human behavior. Speaking of deed, we take into consideration the moral and ethical basis for the regulation of behavior and activity of the subject. This approach allows us to integrate various components of mental regulation of behavior and human activities into a single system. In the actual process of activity, reflection will

activate all the components of the inner world of the individual – at the stage of identifying objectives, analyzing conditions, decision-making, developing a program, etc. That is why, as we noted above, reflection provides the process of activity systemogenesis as well as gradual awareness on the part of the subject of his or her place throughout activity.

Deed reflection just as reflection of activity (and separate actions) will be manifested in all the components of the functional system of psychological activity. We can talk about the reflection on the deed motives, objectives and personal meanings, the environment in which it takes place (the moral and ethical aspect), moral evaluation of one's own decisions, actions and results. Thus, each component of the activities can be viewed with regard to the level of reflection on the activity (in terms of parameters of its effectiveness), and the level of deed awareness (in the parameters of moral evaluation of one's actions and manifestations of spirituality). In other words, productivity of reflection mechanisms is examined from the angle of activity and action in the context of achieving the desired results. It is within the deed evidence that the features of moral and ethical regulation as well as evaluation of behavior are subjected to scrutiny.

It is important to note that reflection on the activity and that on the deed, within the same components of the activity, can be represented unevenly. A person can simultaneously display high reflection rates on activity (be clearly aware of what they need to get the desired results) and low reflection rates on an act (not thinking whether their actions would be ethical and how they are consistent with their beliefs and what kind of consequences would ensue for others etc.), and vice versa. Within the structure of activity, the claimed specificity is associated with differently targeted reflective processes denoted above. In the first case, the target component is the desired result, in the second - following one's own convictions, principles and moral norms of behavior. In practice, these targets can not only diverge, but also contradict each other.

All the outlined peculiarities tend to assume particular relevance and urgency in the educational process. They should be conceived of as immediate priority analysis for solving problems of intellectual and personal development of a child.

Summing up the aforementioned, we can move on to the operationalization of the proposed theoretical models of reflection and reflexivity in action. This analysis allows us to identify the following production rates of reflection (the level of reflexivity maturity):

- The degree of awareness of basic needs and motives for the action, activity and deed (awareness of what I really want, what motivates me to be active.)
- Description of the goals set for action, activity, and deed (having a clear image of the desired result, the degree of its compliance with the needs and motives).
- Assessment of internal and external conditions of action, activity and deed, normative ways of activity (identifying one's own resources, capabilities and limitations in the context of relevant activity and imposed requirements on it).
- Decision-making in the implementation of the actions, activities and deeds (awareness of assumptions, causes and consequences of the decisions made by the person, grounds for the disposition of alternatives, making a choice among alternatives, the reasons for the imposed restrictions, etc.).

- Elaborating a program (plan) of action, activity, and deed (the availability of a possible sequence of actions to obtain the desired result, the degree of detail in the data submission, analysis of the necessary conditions, resources, time, costs, etc.).
- Implementation of actions, activities, and deed (evaluation of the various implementation options of action and activity, and related constraints, dynamic characteristics and a correlation with the expected results, etc.).
- Evaluation of the interim results of action, activities and deeds (the presence of fixed milestones, performance data logging in qualitative and quantitative aspects, activity adaptation to the desired final result on the basis of intermediate results, etc.).
- The qualitative and quantitative data of the final result (awareness of the qualitative and quantitative characteristics of the desired end result, parameters to correlate the intended and actual result, awareness of the causes of any differences, ways to correct these discrepancies, etc.).

Development of methodological toolset

The work fulfilled, including the definition of the basic concepts, elaboration of a model for the object of diagnostics and selection of indicators for assessment of reflection productivity , let us move on to developing methodological toolset for the study of reflection and reflexivity in action. The technique elaboration was carried out in several stages. This is a description of each:

1. Elaboration of the test's primary form. This phase included the following procedures:

– Defining the parameters for the subject of diagnostics.
– Selecting the validity sphere within the developed methodological tools.
– Selecting the responses scale.
– Selecting the task types according to the nature of the answer.
– Designing and wording the questionnaire tasks, in accordance with the developed theoretical construct.
– Determining the structure of the questionnaire and the order of tasks placement in the method.
– the Initial testing of the created form on a pilot sample.

2. Psychometric validation of the test. This phase included the following procedures:

– Analysis of test items: to determine how much each of the test questions correlates with the general content of the diagnostic technique.
– Testing the main types of test reliability: to determine how test results are subjected to various extraneous factors.
– Evaluation of the essential types of validity or relevance of the test: determination of how well the created technique fulfills its diagnostic tasks, i.e. diagnoses the construct that underlies it.

3. Calculation of regulatory indicators (standardization). This phase included:

– Building empirical series (distribution) and calculation of its parameters.
– Blunder avoidance.
– Comparison of the empirical distribution against the normal theoretical distribution.
– In the absence of direct differences between the empirical distribution and the theoretical normal distribution, designation of the bar graph level is according to

the parameters of the empirical distribution , namely through the method of sigmal deviations (linear standardization).

– In case of proved differences between the empirical distribution and the theoretical normal distribution, calculation of the characteristics of a normal percentile ranking range and the implementation of the nonlinear normalization procedure are performed.

In the course of testing, expert opinions and reviews of the respondents regarding the wording of individual questions, the type of test forms, user experience with diagnostic tools, etc were also collected. As a result, some questions were excluded from the primary form of the questionnaire, a number of formulations have been amended to ensure a clear understanding of questions by all the respondents.

General characteristics of the diagnostic techniques of reflection on action, activity and deed

The final technique version is in the form of a questionnaire, which consists of two relatively independent units.

The first block is represented by 56 closed questions with suggested answer (each question containing 5 options). This form of technique elucidates a subjective assessment of the respondent obtained as a result of self-observation. It allows you to assess the degree of respondent's awareness of the reflection process at different stages of his or her activity, and to what extent their reflective analysis guides their behavior. The use of closed questions makes this methodology universal, it simplifies the process of filling, processing and interpreting the results. This unit can be regarded as an independent and holistic methodological tool, it is sufficient for diagnostic purposes. The form of the questionnaire allows for measurements in the mode of group work, makes the procedure of diagnosing fairly compact in time and effort on the part of respondents. Processing and interpreting of the results does not require special training. Implementation is conducted in accordance with the attached keys and scales. This approach may be preferable for mass surveys, collecting a large data set (testing of a class, flow, etc.).

The second unit is designed for a more profound analysis of the manifestation mechanisms of reflection and reflexivity in action. It consists of nine open-ended questions. Open-ended questions allow you to check the degree of adequacy of the respondent's self-appraisal. They require of the respondent a detailed answer with a description of the criteria by which he/she is actually guided in evaluating their own actions, activities and behavior. Within the method, this unit at the same time encourages the respondent's development, formation of their skills of reflective analysis. Open-ended questions are not a mandatory part of the procedure and can be used at the request of the researcher, depending on the purpose of assessment procedures. Resorting to the second unit of the questionnaire allows an in-depth, qualitative analysis of the subject's own reflection. It is here that conditions for thinking hard are created, for expressing one's own opinion and judgment. This part can be called the main in the individual work with the subject, should the need to resort to qualitative research methods arise. It should be noted that the open-ended questions also presuppose a more qualified analysis of the responses, which imposes certain requirements on persons engaged in the processing and interpreting of data.

Detailed criteria for evaluating the responses of the subjects to open-ended questions are in the making; it will remove the imposed restrictions and significantly simplify the procedure of data processing.

Using these two questionnaire units allows to rely both on the results of respondents' self-evaluation and self-analysis (their subjective vision), and on the results of the objective assessment of the criteria for the right things, as well as capacity for reflection and formulating one's own thoughts (also at their disposal). This allows the comparison of subjective vision and expertise, permitting to determine the productivity of respondents' reflection, the adequacy of their judgments and perception of themselves.

Questions of both units are structured according to the sequentially solved problems of activity and to the major components of the psychological functional system of activity. Such logic of putting forward issues reflects the typical stages of activity and matches the succession of the solved problems. This allows respondents to carry out a reflective assessment of their own actions and behavior in the same time perspective in which they typically unfold.

Processing of the results is handled in accordance with the key provided. Estimates of the level of reflection on action, activity and deed are calculated separately. Within the structure of both indices, estimates for each PFSA component (activity stage that reflects the type of problem solving) as well as the general final grades are calculated. Procedure for the technique does not involve any time constraints. On average, work with each technique unit takes 15 - 20 minutes.

The method is designed to work with respondents aged 16 and older. For different age groups there should be different regulatory scales for converting test scores into standardized assessments. At the moment, these scales are being developed. Throughout the testing, we were led to believe that the results are practically irrespective of the subjects' sex. This makes the technique equally applicable to both female and male subjects sample.

Testing and psychometric verification techniques

The first testing procedure took place in October - November 2012. The sample included students of various departments of RU HES from first to fourth year undergraduates (aged 17 to 24 years). Total number of the tested participants amounted to 80 students. The testing consisted of two main stages:
– The primary survey (test)
– The secondary survey (retest)

The sample in the first and second stages remained identical, which allowed to check up retesting reliability of the developed instruments.

At the first stage in the validation procedure, questionnaire forms to the first and second units of the technique were distributed among the participants, the time of work was not limited by the method. In addition to the common instructions, participants were asked to mark validation issues that caused them difficulty in understanding or in wording the answers. In the end respondents were asked to write

comments about the features of the methodology, usability of questionnaire forms, the overall comprehensibility of the issues, clarity of the proposed structure, advantages and shortcomings of the techniques. According to the results of testing, feedback from the participants was thoroughly studied and, as a result, a number of issues have been amended.

In the second phase of testing the participants were subjected to the original questionnaire forms again to ensure accurate assessment of retest reliability of the technique. Then they were shown the amended questionnaire forms revisions, they were asked to evaluate these improvements, add some more comments if they had appeared in the course of the second stage.

The time interval between the primary and recurring -diagnosing was on average 4 weeks.

To analyze the results of testing, different methods of statistical data processing were used: analysis of variance, correlation analysis, factor analysis, and analysis of the average figures.

According to the results of testing, primary standardization technique was conducted. Normative scales were designed to test various age groups. Currently, the testing sample has been significantly expanded, it includes a variety of age groups, including younger, middle and high school students. The results of the second wave of testing are currently being processed. Once their treatment is completed, the scales of the normative scores for the other age groups will be submitted.

A comparison of the empirical distribution against the normal theoretical distribution showed a high degree of reliability of the proposed instrument (Figure 3,4).

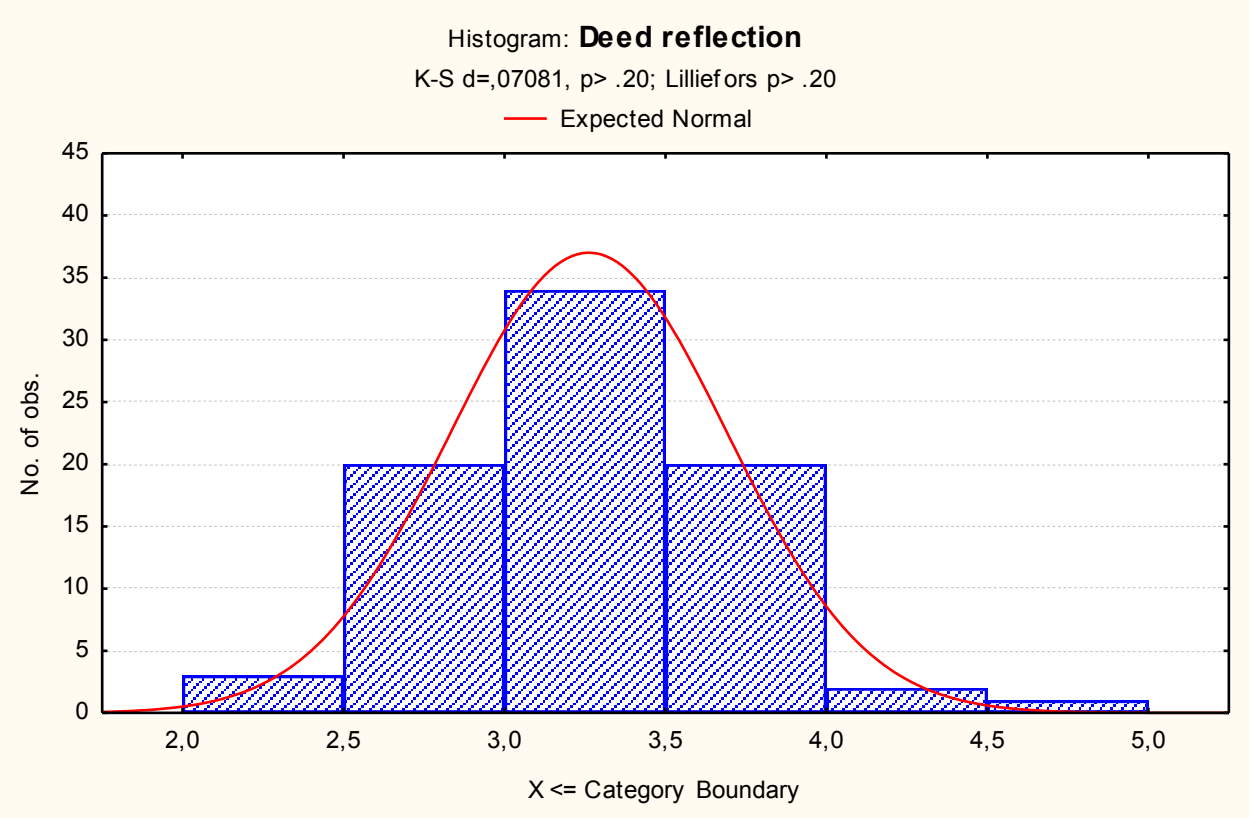

Fig. 3. The results of analysis of variance estimates as to reflection on action (average totals)

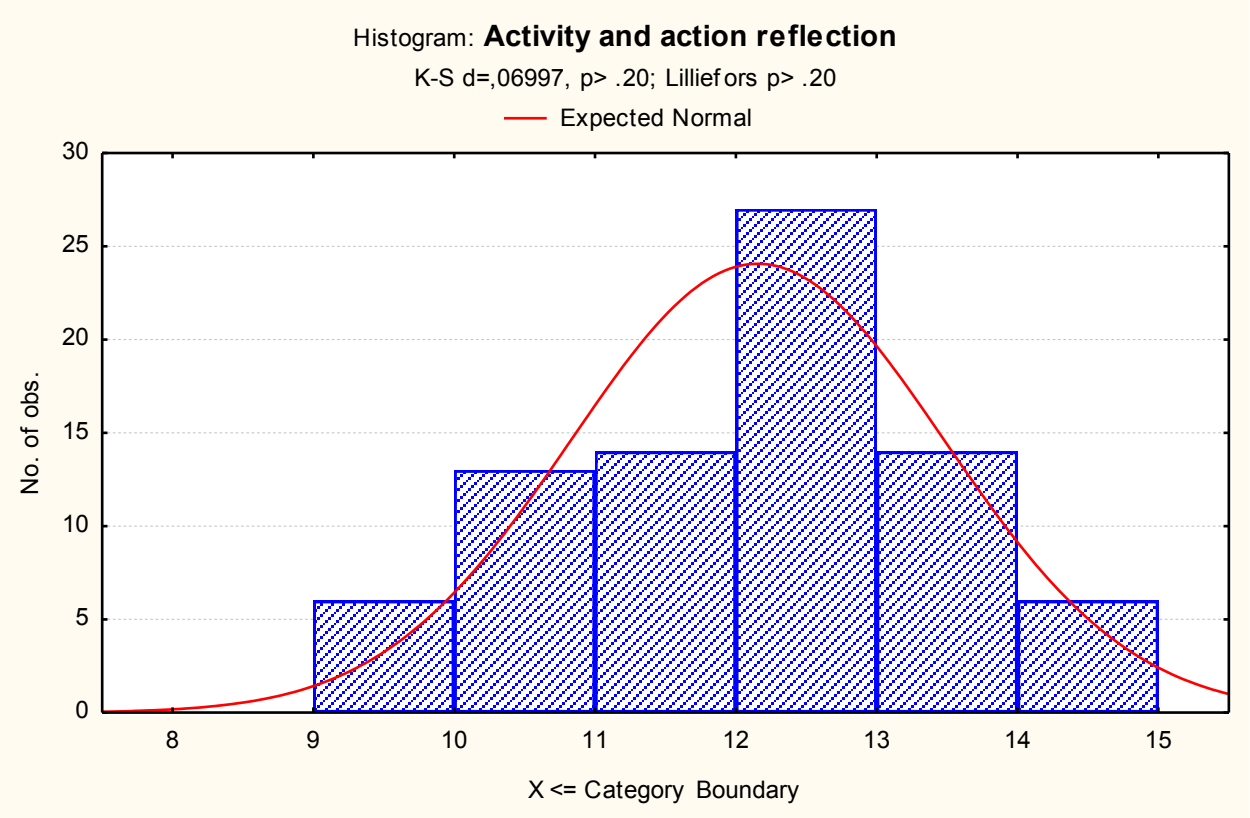

Fig. 4. The results of analysis of variance estimates of reflection on action and activities (average totals)

The next step was to examine the retesting reliability of the technique. On the basis of the obtained diagnostic results during the initial and repeated sessions, intercorrelation matrices on various parameters of the reflection on action, activity and reflection on deed were compiled. The relevant data are presented in tables 1 and 2.

Table 1
Test-retest results of deed reflection

Test / Retest	Need awareness and goal-seeking	Internal and external conditions	Decision-making	Deed program (plan) development	Deed fulfillment	Intermediate results estimation	End results estimation
Need awareness and goal-seeking	**0,660****	0,391	0,026	0,142	-0,004	0,157	-0,121
Internal and external conditions estimation	0,443	**0,729****	0,349	0,149	0,112	0,271	0,085
Decision-making	0,009	0,349	**0,899****	0,389	0,546**	0,712	0,005
Deed program (plan) development	0,085	0,345	0,477**	**0,785****	0,027	0,325	0,003
Deed fulfillment	0,351	0,395	0,393	0,232	**0,822****	0,522**	-0,007
Intermediate results estimation	-0,111	0,210	0,441	0,254	0,501**	**0,702****	0,022
End results estimation	-0,249	-0,143	0,027	-0,205	-0,316	-0,181	**0,666****

** correlation is significant on the level of $p < 0,01$

Table 2
Test-retest results of action and activity reflection

Test / Retest	Need awareness and goal-seeking цели	Internal and external conditions estimation	Decision-making	Action and activity program (plan) development	Action and activity fulfillment	Intermediate results estimation	End results estimation
Need awareness and goal-seeking	**0,603****	0,252	0,290	0,300	0,442	0,408	0,079
Internal and external conditions estimation	0,245	**0,599****	-0,069	0,334	0,143	0,273	0,220
Decision-making	-0,080	-0,021	**0,593****	0,108	0,136	-0,077	-0,147
Action and activity program (plan) development	0,107	0,482**	0,310	**0,724****	0,198	-0,098	0,166
Action and activity fulfillment	0,287	0,467**	0,229	0,321	**0,693****	0,101	0,254
Intermediate results estimation	0,016	0,602**	-0,215	-0,084	0,203	**0,603****	0,363
End results estimation	-0,174	0,316	-0,055	-0,198	0,173	-0,214	**0,686****

** correlation is significant on the level of $p < 0,01$

These data indicate a high test-retest reliability of the developed toolset in assessing the different levels of reflection on action, activity as well as deed awareness. All correlations between primary evaluations and reassessments of individual reflection indicators are correct at the 1% level of significance ($p < 0.01$). In some cases, they are somewhat lower than those accepted for the test-retest reliability coefficient value (0.70), but this may be due to the limited sample size and to the number of techniques defects that have been eliminated as a result of its initial approval.

Ensuring the validity of the proposed toolset was carried out in several ways.

First, there was a thorough theoretical study of the assessed constructs, then clear-cut definitions of reflection and reflexivity within existing approaches were given, a theoretical model of reflection and reflexivity was developed. Finally, operationalization of the proposed theoretical model was carried out within the specific measurable indicators.

Second, each of the proposed questionnaire items was correlated with the proposed theoretical and operational construct. Services of several experts were enlisted for the assessment of each issue in order to bring force their judgment on the compliance or non-compliance of content as well as wording of the questions to the stated theoretical

principles and indicators at which they were aimed. Comprehensibility of issues for the stipulated by the procedure respondents was also assessed.

Third, a detailed analysis of the internal correlations between separate techniques indicators was carried out. The analysis revealed multiple internal correlations within the structure of the developed tools. The structure and nature of the brought to light correlations give evidence of high internal consistency of the method, its conformity to the theoretical and criterion construct and, consequently, point to a high criterion reliability of the proposed toolset.

Fourth, in the course of testing the participants were offered additional methods on similar in content personality constructs. We selected indicators that allow to reveal links with reflection evaluation when using existing techniques. These were:
- indicators of internality level or subjective control;
- indicators of introversion-extraversion;
- indicators of intelligence development level.

Estimates of reflection, obtained using the developed toolset, yielded the expected values of the correlation links with all the considered indicators;

Fifth, data accumulation on different aspects of training activities productivity of the tested participants is underway. This index is highly significant, because we value reflection and reflexivity in activity and its performance is a parameter of the grade. In-school and intra-university ratings, learning grades, subjective assessments of respondents of their own success in education are examples of such data. The main difficulty here is that the relationship between reflection figures and effectiveness of the activity will be highly dependent on the level of motivation, focus and subjective importance to respondents of those activities for which the final results are estimated. If the educational activity is not relevant to the respondent personally, its effectiveness may be low regardless of the level of reflection. Thus, it requires consideration of a number of additional parameters, but that requires more time.

However, even the present volume of performed work allows us to consider the proposed methodology an effective methodological tool for the study of reflection and reflexivity in action.

The method developed can be recommended to specialists, researchers and practical psychologists as a tool for solving a wide range of problems in school, university and professional education during the individual correction and development work in education, career–guidance, advising students and parents.

Knowledge about the peculiarities of reflexive mechanisms manifestation in the learning activity and the level of reflexivity in the context of the various activity tasks can be used for the organization of individual and differentiated approaches to learning activities and vocational training in schools, universities, vocational schools, corporate universities, workplaces, etc. .

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