

The Process of Individual Decision-Making in Non-Standard Situations: A Theoretical Aspect: Theoretical and Neuropsychological Aspects

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Abstract: *The importance of knowing the processes of choice, decision-making is determined by the objective role that they play in the organization of human activity. An important feature of man is his unique ability to make decisions in the most difficult conditions of activity, which are characterized by high uncertainty, the presence of many inconsistent criteria, lack of time, high responsibility and more. The target effectiveness of the decision can be assessed only after its implementation, but the prediction of potential decisions is possible only if the study of its neuropsychological mechanisms. Cost-effectiveness is characterized by intellectual, physical, neuropsychological and material costs of decision-making. The non-standard situation, as a rule, seeks to reduce cost-effectiveness, because in this case the solutions are achieved by the exertion of intellectual, emotional and physical forces and is determined by the ability of the individual to act in such an environment. The neuropsychological mechanisms of such decisions are of interest to science in terms of ensuring the adequacy and timing of such decisions, which is hypothetically related to the morphological and psychoneurological characteristics of the subjects of action. In the context of our study, it is important to conduct a thorough psychological analysis of different types of unusual situations in the coach and find ways to improve the effectiveness of decisions, which primarily depends on the level of psychological readiness of the individual to perform its.*

Keywords: *selection process; human activity; neurophysiology; neuropsychological factors; high uncertainty; lack of time; high responsibility; the most difficult conditions of activity.*

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Introduction

The analysis of researches of problems of administrative activity of the person gives the chance to state, that its integral component is decision-making in difficult, non-standard situations. The importance of knowledge of selection processes, decision-making is determined by the objective role they play in the organization of human activity and the speed and adequacy of decision-making – the specifics of the neural system under stress. On the other hand, an important feature of a person is his unique ability to make decisions in the most difficult conditions of activity, which are characterized by high uncertainty, the presence of many inconsistent criteria, lack of time, high responsibility and so on. However, it is in the decision-making processes that the specific features of information processing peculiar to the subject are most clearly revealed. These include the unrealisation of rationalist decision-making procedures due to reduced opportunities for rapid processing of information, and limiting the possible consideration of probabilistic characteristics of situations, and the influence of emotional and personal factors, and the deformation of choice under the influence of socio-psychological determinants. Therefore, individual decision-making in complex conditions of activity is associated with both managerial and psychological problems and plays a significant role in the practical activities of man (Gerasymova et al., 2019; Melnyk et al., 2019; Leschko et al., 2003; Nerubasska, & Maksymchuk, 2020; Sheremet et al., 2019).

The author's critical position on the neuroscientific sources analyzed below is to theoretically compare them with the research topic, namely, especially in the context of using them to analyze individual decision-making in non-standard situations. The main criterion is the ability to extrapolate the analyzed provisions in both theoretical or practical aspects to the problem of personal decision-making under the (medical) norm, yet in non-standard situations (stress, choice, solving practical problems in educational or transformational activities, sports and coaching. The latter aspect is the direct object of the research. The author provides comments on the relevance of the main topic in accordance with each of the above-mentioned theories.

In the XXI century, the neuroscientific foundations of mental processes are being actively studied by scientists. In particular, the general philosophical foundations of neuroscience in functional and non-functional aspects were studied by Bagozzi, & Lee (2017). The connection of working memory, thinking and decision-making on the basis of activity (action,

activity) is also analyzed by Baddeley (2017). The neurophysiological foundations of marketing have been studied in terms of the unconscious impact of advertising, decision-making on the prioritization of certain brands and their purchase (Camerer & Yoon, 2015). A wide range of psychological and practical problems one can solve through neurophysiology and neuropsychology suggests the following. One can develop universal recommendations for coaches based on the neurophysiological processes following functional reactions and human acts in coaching. In turn, they involve management, stimulation, active processes (memory, attention, direct act of decision-making).

In the early 2000s, neuroscience experts invented neuropsychological decision-making mechanisms in situations of uncertainty, which facilitated the transition of the subject from psychology to cross-cutting disciplines - neurobiology, neurophysiology and neuropsychology (Kahneman, & Tversky, 2000). One regulates sports and coaching activities in terms of preparation. They are always unpredictable in terms of results, so this aspect remains the most relevant.

The impossibility of adequate and rapid decision-making from a neuropsychological point of view was studied primarily in pathology, and then in the norm. Thus, scientists have established a determinative relationship in the triad of psychopathy - maladaptive behavior - the inability to make adequate decisions. It was noticed that such behavior is recurrent, ie manifests itself in the form of relapses with intervals relative to the normal ability to make standard decisions (Beszterczey et al., 2013). However, even in the case of remission, the observers managed to make environmental decisions in non-stressful ("regular") situations. The results of our study are aimed at solving the problem of decision-making in non-standard sports situations, which brings them closer to psychopathic ones based on the possible reactions.

In the neuropsychological perspective, the study of decision-making mechanisms initially concerned the solution of the most practical socio-economic issues: sensitivity and activity of certain areas of the cerebral cortex in the perception of advertising, political slogans, legal norms and other external stimuli of core-directive nature. Thus, in the 1970s, a praxeological field emerged - neuroeconomics, which operated first with the terms and patterns of management theory, and now with the interdisciplinary categories of *intuition, emotions, decisions, reflections, evaluation*. Management, as a separate and primarily economic science, fully concerns the organization and intensification of work in any sphere of public consciousness, including in sports.

Thus, the neuroscientific approach to the problem of management decisions has spread to all socioic spheres of activity. Thus, in sports, relevant neural connections manifest themselves in activities that unfold under the decisive influence of intersubjective determination. This opens a real opportunity to study the patterns of involvement of both neurophysiological and psychological (communicative) determinants and, in general, the phenomena of communication in the structural and functional organization of all mental processes of the individual.

However, the analysis of the scientific literature on the problem of psychological and neuropsychological readiness of the individual to make decisions in extreme situations of sports coaching shows the lack of special research on this aspect and the high social, theoretical and practical significance of its study.

Still, one of the current problems in the practice and theory of vocational education and training is the formation of their ability to make optimal decisions in difficult conditions. This is an important component of a person's professional training for any activity, and especially for managerial (Maslow, 1999). This is typical for the process of training future teachers-trainers in universities, as their professional activity is also a complex management activity, which includes a number of often unpredictable, complex situations. The latter are solved by the action of established and strengthened new neural connections as a result of learning and repeated consolidation.

Today, there are also challenges in the context of the organization of the system of professional selection - in terms of the ability of the individual to make management decisions as a professionally important feature, as well as the development of tools for its professional diagnosis. Of particular importance is also the problem of designing activities, but in terms of developing such organizational management structures that would ensure the optimal distribution of decision-making functions in hierarchical management systems. When designing decision-making activities for an individual or a particular psychotype of a person, the profile of the lateral asymmetry of the brain should be taken into account, especially if these decisions are accompanied by an immediate transition to actions (reactions). Decision making is a basic component of the system of activity. The study of management decision-making processes involves the study of its structure, organization, features (Lesechko et al., 2003).

According to our research, taking into account and studying the problem of decision-making is an important factor in connection with another fundamental problem - the problem of structural and functional

organization of the system of mental processes of the future teacher-coach. As you know, one of its most difficult questions is the question of the mechanisms and patterns of holistic, systemic functioning of mental processes. In decision-making processes, this integrity of the organization is most clearly manifested, because decision-making itself is the unity of cognitive, emotional, volitional and motivational processes.

Personal determination of decision-making processes in extreme situations

Decision-making by coaches, sports organizers, their subjective choices and personality psychology are closely interrelated through volitional qualities. There is a complex connection: on the one hand, the scientific interest is to clarify the personal neuropsychological determination of decision-making processes in extreme situations, and on the other - the personality is manifested not only through choice but also develops through the organization of optimal choice. Therefore, it significantly complicates the study of the mechanisms of subjective choice in decision-making, because it is both a problem of personal development and socialization.

Currently, neurophysiologists have studied the mechanisms of decision-making due to instinctive, compulsive or other reactive needs. To some extent, a parallel can be drawn between risky behavior and the initial non-standard solution. Ross, Duperrouzel, Vega, & Gonzalez (2016) believe that their neuropsychology of risky sexual behavior (RSB) can be not only the key to understanding the nature of non-standard decisions, but also to prevent the influence of neuropsychological factors on compulsive, addictive or other deviant behavior (Ross et al., 2016). Such investigations can be useful for predicting and modeling non-standard decisions in sports, because in the apical moments of the sports process, the neurohumoral mechanisms of spontaneous and / or non-standard decisions are close to impulsive or affective.

Management decisions, while remaining a deeply personal act of choice, simultaneously unfolds under a certain influence neurohumoral determination of interpersonal determination and is manifested in the process of interpersonal decisions and interactions.

Given that the decision-making process in extreme situations is complex in psychological terms, which is why it should most clearly explore the psychological problems of choice theory, clarifying the psychological "cost of error" in decision-making in individual executive and managerial activities, etc. . In general, this can be an important aspect of ensuring the effective functioning of not only individual entities, but also large organizational and professional structures of people. That is why there is a

need to develop tools for psychological support of management decisions related to the activities of the individual in the extreme conditions of leadership of sports teams.

Management decision-making processes are characterized by great complexity, versatility and multifacetedness. Therefore, an important task, in our opinion, is to establish the characteristics of these processes, which would greatly facilitate their understanding of both the neurophysiological and the actual psychological essence.

Karpov (1993) offers characteristics by which management decision-making processes can be divided into the following groups:

- a) characteristics that are due to the affiliation of management decision-making processes to a special type of management activities;
- b) characteristics that are determined in the analysis of management decisions and belong to individual processes;
- c) characteristics related to interindividual processes;
- d) integral characteristics of management decision-making processes, which are formed as a synthesis of their activity, individual and interpersonal properties (Kravchenko, 1999).

Very often the concept of "management decision-making" is used not only to define management activities, but also to describe the management system in general (organizational systems). For example, the essence of management is to "influence the organization and change its structure in order to make optimal decisions" (Lambert, 2001).

The process of making managerial decisions is considered as one of the manifestations of specific management functions. In this case, it is considered the main and determining factor for management and is one of the main points in the implementation of all other management functions and a kind of "core" of management (Lesechko et al., 2003). In this case, the neuropsychological component in the plan for the action of mirror neurons performs an important function of perception-evaluation of the feedback to the act of management, directive instruction or covert manipulation.

Mechanisms of subjective choice in decision making

Although the basic theoretical principles of managerial decision-making in professional activities are common to all categories of people who are representatives of such activities, there are some specific differences in the professional activities of coaches. For example, Kitov (1974), considering the structure of labor in the management process, identifies the following components: diagnosis, forecasting, decision-making, organization of implementation. Thus in the psychological analysis of decision-making

process, he suggests to allocate such aspects as psychological features of detection of a problem situation, search of variants of its decision, features of display at the same time of personal qualities (Kitov, 1974). In this case, subjective decision-making factors belong to the psychological sphere, and individual, phenotypic - to the neuropsychological. The latter are much slower to adjust, but they are also dynamic and malleable, which can be found in a longer observation.

Today, a number of disparate psychological studies on individual decision-making are carried out on the basis of various theoretical principles. They are weakly bound by general neurophysiological principles, which makes it difficult to summarize the results of these studies and transfer them to the conditions of sports and coaching. Therefore, the analysis of the psychological mechanism of "decision making" requires a close connection with the methodology of the general approach to the study of the problem.

This methodological approach provided the identification of the most essential psychological features of the phenomenon of decision-making at different levels of analysis of the coach. In addition, this approach is close to the personality-activity concept that forms the basis of our study.

The analysis of scientific approaches to the problem revealed that in the context of empirical neuropsychology subjective psychology, the study of the decision-making process was limited to describing the dynamics of subjective states that arise during the act of will. There are four signs of the primary act of will: the feeling of tension that arises in the subject who performs the act of will; a clear understanding of what to do and the experience of the dependence of future actions on the characteristics of the individual; specific human experience, expressed by the formula "I want"; experiencing the desire to perform a certain action. These four features were interpreted as features of the phenomenology of the act of will, or the act of decision-making.

The neuropsychological problem of volitional behavior, and hence the problem of decision-making, is reflected in the theory of behaviorism. Its disclosure is to describe the stimuli that affect the body, improve the technique of registration, finding a certain correlation between the stimulus and the reaction. Such an approach to understanding the neuropsychological activity probably does not have a sufficient explanation when considering our research topic, which is directly related to the non-standard, unique, extreme conditions and content of the activities of coaches.

The problem of volitional behavior, and hence the problem of decision-making in behaviorism is to describe the stimuli that affect the body, improve the technique of registration, finding a correlation between

the stimulus and reaction. This approach to understanding the psychological in the activity, probably, does not have enough explanation when considering our research topic, which is directly related to the non-standard, unique, extreme conditions and content of the activities of coaches.

In the context of the problem under study, one of the systemic-psychological theories of decision-making is the concept of the structure of thinking of Piaget (1969). He points out the importance of studying the structure of decision-making in connection with the problem of mental process management, noting that a person more or less knows what he thinks about a problem or an object. She is relatively confident in her thoughts. But this applies only to the results of her thinking, and the structures that govern her thinking, a person usually does not realize (Piaget, 1969). However, recently accumulated sufficient scientific material on the crucial role of reflexive, essentially determining the consciousness of human actions. To ignore them when studying the psychological features of decision making would be, in our opinion is wrong.

Analysis of the approach to the problem of solution efficiency by representatives of Gestalt psychology showed that the principle of the solution is a holistic formation - Gestalt, which removes the problem of the problem situation, namely the discovery of the principle occurs as a result of sudden restructuring, insight. From the point of view of neuropsychology, the phenomenon of gestalt can be explained by the presence of stable neural connections that persist for a long time due to the need for elaboration, cognition and completeness. After these stages, their function is performed and such a neural connection disappears or is significantly weakened.

Gestaltists believe that the solution of a practical problem "must meet two requirements: first, its implementation (implementation in practice) must result in achieving the desired state, and secondly, it must be such that, based on this state, it could be done by "appropriate action" (Dunker, 1981). Gestalt psychology does not consider the main neuropsychological (functional, object-resulting) aspect of human mental activity. Accordingly, there are no sufficient grounds to accept it as the leading methodological theory in the study of our problem.

Recently, the neuroscientific approach to the problem of decision-making has intensified in connection with the development of cybernetics, when the ideas of cognitive psychology became widespread. At the junction of neuropsychology and cognitive psychology, it is customary to talk about solutions as any choice from a number of alternatives. According to this interpretation, the "decision" is made by abstracting from specific

psychological mechanisms of choice, which can be very different, but which, in our opinion, should be of interest to the psychologist.

The expression "decision making" in the modern scientific literature has a double meaning: traditional and "modern". The first is related only to the level of conscious human activity, and the second - to some principles of functioning common to humans, living organisms and computers. The first is related only to the level of conscious human activity, and the second - to the neuropsychological and neurophysiological principles of functioning, common to humans, living organisms and computers. The differentiation of "information and psychological theories of thinking is a necessary condition for the development of the latter, which should reflect the specifics of creative processes, which usually differ from routine, stereotyped, already formed".

In addition, the problem of decision-making is associated with the study of human volitional activity, and, at the same time, with the methodological categories of determinism of will and the need for human behavior. The emergence of such new problems as, for example, the task of formalizing the decision-making process, the use of mathematical description does not replace a meaningful analysis of the neurophysiological features of the human psyche in the decision-making process.

Unlike traditional cognitivism, metacognitivism, developed by the student Piaget (1969), involves the construction of peripheral functions of thinking, such as planning at the beginning of the decision and control at the end of its search, which is associated with reflection. The latter is a powerful neuropsychological mechanism for maintaining self-identification and subjectivity.

A thorough study of the decision-making process in psychology, in some ways generalizing and staged, is the monograph by Kozeletskiy (1979) "Psychological decision theory". Summing up the results of the development of scientific psychological theory in this direction, he deeply explored the problems of the decision-maker; analysis of tasks that require decision-making; different selection and forecasting strategies; the role of environmental factors in decision making; decision-making process in the group, etc.

The subject of psychological decision theory, according to this author, is "the activity of the decision-maker in the process of performing certain tasks. A psychologist who wants to anticipate and explain this kind of activity must know both the structure of tasks and the essential features of the decision maker (Kozeletskiy, 1979). Among the statements of this

psychological theory of decision-making can be identified aspects that are relevant to the neuropsychological nature of this process:

1. The mechanism of forming an idea (subjective image) of the task of decision-making.

2. Description of the process of subjective value of results, the so-called usefulness.

3. Determining the subjective probability of the circumstances that determine the results (consequences) of the decision.

4. The nature of statements about behavioral strategies.

5. Description of the factors that control the decision-making process (the impact of the environment, the organization of the personality of the decision-maker, the impact of the social environment).

In modern domestic neuropsychology, the study of the decision-making process took place by finding a scientific approach, a way of scientific analysis of those higher forms of human activity, which are called voluntary or arbitrary behavior.

In modern domestic psychology, the development of decision theory took place by finding a scientific approach, a way of scientific analysis of those higher forms of human activity, which are called volitional or arbitrary behavior. The most common "psychological components" of any human activity, including management, in psychology are the processes of anticipation, planning, perception and processing of current information, decision-making and control of results (Lomov, 1984).

It should be noted that the psychological description of the decision-making process often had a formal form and the following structure:

- awareness of the problem (the emergence of the problem, understanding the facts, asking questions);

- problem solving (development of a hypothesis, development of a solution, disclosure of a principle, development of a judgment that fixes a decision);

- verification of the decision.

These structural elements can indeed be used to describe the process of solving a complex cognitive problem.

In our opinion, one of the constructive approaches to the problem of stages and components of thinking in decision making is the concept of Ponomarev (1983), who formulated the so-called principle of SLS (stages, levels, stages), according to which the stages of development of the mental process are transformed at the level of organization of thinking and are the stages that characterize the effectiveness of the decision. The levels of organization of thinking selected by him during the structural analysis

represent from the point of view of the system analysis stages of formation of thought process. According to this conceptual model, the organization of thinking is carried out by alternating such mental stages as logical analysis, intuitive decision, verbalization of intuitive thinking, formalization of verbal decision (Ponomarev, 1983).

Conducting research on a rather narrow range of problems of psychology of effective decision-making, the researcher clarifies the essence of such a concept as "psychological features of decision-making" on the example of officer activity.

However, in our opinion, the solution to the problem of making non-standard decisions cannot be reduced only to such neuropsychological categories as "lateral profile", "psychological factors", "psychological mechanisms", etc., which are widely considered in the psychological literature.

In our opinion, this concept cannot be reduced to such categories as "psychological conditions", "psychological factors", "psychological mechanisms", etc., which are widely considered in the psychological literature.

Psychological training of a specialist teacher of physical culture, coach for real professional activity requires the selection of its subject, the specifics of its content and functioning. Without clarification of the psychological features of management, in particular the decision-making process in extreme situations of its activities, for the implementation of which the specialist is preparing, effectively this training is quite difficult. That is why the analysis of the professional activity of the coach, the decision-making process in extreme situations was the basis for our development of a program for the formation of students' psychological readiness for professionally literate activities in non-standard conditions.

Regarding the category of "decision-making", the remark of Lomov (1984), who noted: "... the concept being clarified ... begins to be considered in various systems of other concepts; its content inevitably changes and enriches. After going through a number of metamorphoses, the concept becomes clearer, more specific, as required by practice. (Lomov, 1984).

The analysis of this concept involves the study of neuropsychological differences of individuals, which gives rise to the phenomena of dissimilarity, differences between certain psychological phenomena, the ratio of existing and projected, and so on.

The analysis of this concept involves the study of differences, dissimilarities, differences between certain psychological phenomena, the ratio of existing and projected, and so on. At the same time, it is important to constantly remember the essence of the psychological, which is to analyze the subjective, personal, internal processes that occur in humans. Only in

this way can we remain within the framework of the so-called "qualification analysis", which examines the psychological aspects in relation to others, without obscuring them, but, on the contrary, clarifying them.

Approaches to determining the psychological features of decision making

During the analysis of the literature we found some approaches to determining the psychological features of decision making. One of them is the approach of Dudarev (1992), who proposes the selection of psychological features in the system "personality-subject-individual". In this range of human features, the psychological component (personality as the highest form of mental development) decreases from left to right and the neurophysiological (individual) increases. In this case, the "neuropsychological" is harmoniously combined with the process of involvement of the subject of action in the social environment, and its activity is considered as an element of the system of social interaction. Indeed, highlighting the psychological features in this way, we have a fairly detailed basis for their correlation with the theory of personality, its activities, etc. However, direct borrowing, apparently, is not correct, because the subject of the study is limited to such concepts as the characteristics of situations in sports and the characteristics of the decision made in them.

Knowledge of the psychology of the decision-making process, of course, cannot fail to take into account the neurophysiological aspects of the subject's actions. However, to consider them as the main, in our opinion, is illegal. This is due to the specifics of the coach, which is always aimed at solving the tasks of the team, and therefore, carries at least some socio-psychological meaning. Moreover, to identify the psychological features of effective solutions can only be in relation to the results that are manifested.

It is also quite common to highlight the neurophysiological features of individual mental processes - sensation, perception, attention, imagination, memory, thinking. However, this method of analysis can give little practice, as some actions are non-specific, even identical. These difficulties can be overcome by establishing the patterns of their organization and integration, which, in turn, requires the study of mechanisms and tools that ensure the organization and integration of mental processes..

Interesting, in our opinion, is the approach of Platonov (1984), who defines the features of a mental phenomenon as its individual property or set of properties that distinguishes this phenomenon from others - similar to it. The hierarchy of properties in this case looks as follows: random, typical features, qualities, attributes of Platonov (1984).

Discussion and Conclusions

Clarified and concretized concept of "neuropsychological and psychological features of decision making" means a set of qualitative and quantitative characteristics, expressiveness, specificity of manifestation and interaction between the psychological components of the subject of coaching during its implementation in specific situations. Our analysis of scientific works (Stsiborovskiy, 2005), the results of their own research have shown that psychological and neurophysiological readiness for decision-making by a coach in extreme situations can be represented at certain levels. Making effective decisions in non-standard situations can be divided into at least two levels – psychological and situational (Stsiborovskiy, 2005). This is a group of psychological features related to external conditions in which the psychological decision-making process unfolds. At this level, the features of the psychological in standard (normal) and non-standard situations are recorded.

Psychological and productive level. This is a group of features of the psychological course in the process of making directly effective decisions in non-standard situations. This is an effective, managerial and productive aspect of the problem. It contained the following components:

- development of a system theoretical model of the psychological decision-making process and its quantification in the system of multilevel indicators;

- conducting a specially designed program, the purpose of which is to form a high psychological readiness of students - future coaches to make effective, productive, generally effective decisions in various situations in the management of sports activities.

It is worth noting that the neurophysiological nature of decision-making based on negative or positive stimuli (values or other reflective or perceived rewards), according to scientific research, has specific areas in the frontal areas of the human brain. At the same time, neurophysiologists and neuropsychologists have proved that damage to these subzones contributes to the dissociativeness of the decision-making process or makes this process impossible. Thus, it has been proven that the ventromedial frontal lobe is responsible for motivating learning activities by positive stimulus (values) (Vaidya, & Fellows, 2017). In general, the role of ventromedial, lateral, and dorsomedial frontal lobes in decision-making has been elucidated. Such neurobiological and neurophysiological data can be used by sports coaches as a fact a priori, for example, the dorsomedial frontal lobe is responsible for

making decisions based on the motivation to expect a positive stimulus, which is a leading factor in sports and coaching.

This methodological approach provided us with the identification of the essential psychological features of decision-making at different levels of analysis of the actual activities of the coach.

We turned to psychological theories of decision-making to highlight the most important, essential psychological features of decision-making on the basis of the system-structural approach tested in domestic psychology.

First. No individual cognition can be explained based only on psychological patterns. Human cognitive activity is a specific activity. Psychology as a science studies only one of the structural levels of its organization. Therefore, if we talk about thinking as a psychological phenomenon, we can not identify it with cognition.

Second. Cognition is generated by a certain need, namely the need to obtain new knowledge. Thinking, on the other hand, is not rigidly tied to any one kind of need. It is involved in various activities and is related to different needs. The stages of cognitive activity do not coincide with the stages of creative thinking. The content of each of the stages of cognitive activity can be a special task of creative thinking. The presence of holistic personal motives - the most important feature of the psychological approach to the study of decision-making processes.

Third. The actual heterogeneity of the result of human action, the presence in this process of direct (conscious) and by-products (unconscious) products. This heterogeneity is a direct consequence of the heterogeneity of the structural organization of the mental.

From the point of view of neuropsychology, the situation of decision-making on the task is first treated discursively, based on consciously organized experience as a network of stable but temporary neural connections. However, this is not enough to solve a creative task. This creates a need for new knowledge. During a specific activity, another experience arises - the unconscious, which sometimes contains the key to solving the problem. This experience is manifested at the moment of insight in the form of an unexpected hint.

The psychological mechanism of decision-making is in the most general form, starting with the deployment of an internal action plan. Elements of the internal plan actively interact with the external, "increasing" their capabilities with ready-made logical programs of action in standard conditions.

The central psychological mechanism of decision-making is the interaction of intuitive and logical in the human psyche. An intuitive solution

always precedes a logical one. This is due to the fact that a logical solution arises only on the basis of intuitive, when the problem is actually solved. The logical solution is motivated by the need to convey intuitively found to another person, to justify, prove, use to solve a more complex problem of the same type. It is here that there is a need to express the decision in speech, to formalize it in speech, and sometimes to formalize, in other words, to design logically.

Thus, the psychological features of the decision-making process identified at the methodological level form its subjective, holistic - individual characteristics. They also contain not only logical but also emotional as well as intuitive components.

Representatives of various sciences addressed the problem of decision-making efficiency in the general scientific sense of the concept. Andryushchenko (1971) speaks about the philosophical meaning of this concept. In pedagogy, special attention to efficiency is paid to scientists working on didactic aspects of science (Blinov, 1976). The effectiveness of social management is studied in the framework of a sociological approach to the problem (Markov, 1982).

The development of neuropsychology and neurophysiology, which began to consider not only primates or other higher mammals, but also humans, immediately faced ethical and deontological barriers. As a result, clinical neuropsychology is significantly limited in its power to intervene in the individual's psyche, especially within the norm (Bush, 2015). In terms of defining mechanisms and influencing non-standard decisions, neuropsychology should first and foremost be preventive and one that "avoids and resolves ethical conflicts" (Bush 2015). This problem has become especially acute recently, when human rights and freedoms of choice are recognized as the greatest value, so neuropsychological practices in the field of judicial, educational, sports activities are now being revised in terms of ethics and law.

Thus the general in understanding of efficiency is: its consideration as a parity of result and the purpose of activity or process, and also definition of a measure of efficiency through fixing of degree of proximity of the received result to planned. At this level the peculiarities of the psychological in the productive aspect are fixed.

In this case, the effectiveness of decision-making is characterized not by any interaction, but only controlled, not any process, but only purposeful. This aspect of the content of the concept of efficiency is very important because it allows us to consider it as a ratio of effect (result) and goals. This type of efficiency is called target (functional) (Ladenko, & Tulchitskiy, 1988).

However, the meaning of this concept expresses not only this relationship. Efficiency also characterizes the achieved positive result in terms of justification of costs to achieve it.

Our analysis of efficiency in terms of the requirements of society, presented in regulations and guidelines, allows us to identify its type as regulatory efficiency, due to the ratio of targets to regulatory. In the most general form, the criteria for the effectiveness of the chosen method of decision in psychology can be the criteria of quality and consent (Azarnov, & Kapustin, 1992). By agreement we mean a positive reaction to the found way to solve the problem, which generates a positive consolidation at the neurophysiological level. By consent we mean a positive reaction to the found way to solve the problem. If the reaction is negative, then, as a rule, the search for another procedure to solve the problem begins. The qualitative side of the chosen method is to choose the best alternative from those contained in the problem situation. And such an alternative that ensures the achievement of goals with optimal consumption of mental and other resources.

Since sports and coaching activities are a part of the forms of public consciousness and intercultural dialogue (international competitions, championships, Olympiads, etc.), it is important to develop diagnostic tests of "intercultural neuropsychology". In this case, neuropsychologists use interpretation tests WAIS-IV, which include six relevant parameters (Duggan et al., 2019). Theoretical generalizations of this study can help improve the diagnosis of effectiveness and implementation of cultural neuropsychological decision-making system.

The target effectiveness of the decision can be assessed only after its implementation. The more precisely this problem is solved, the higher the functional efficiency. Cost-effectiveness is characterized by intellectual, physical and material costs of decision-making. The non-standard situation, as a rule, seeks to reduce cost-effectiveness, because in this case the solutions are achieved by the exertion of intellectual, emotional and physical forces and is determined by the ability of the individual to act in such an environment.

If in the general case this efficiency is defined as the ratio of the achieved result (according to one or another criterion) to the maximum achievable or pre-planned result, then for standard, typical tasks it is their solution on the principle of "incorrect" or determining the degree of approximation to "correct". For non-standard tasks, this approach is unacceptable due to the uncertainty and inconsistency of their content, masking and latency of some aspects of the problem situation, the

multiplicity of possible solutions. In this case, the decision can be meaningfully defined as superficial (minimum score), trivial, far from successful, profitable, partial, close, accurate (highest score).

The results of methodological analysis confirm quite serious differences in the understanding of psychological in the decision-making process in different schools and areas of psychology. However, in domestic psychology, the most important characteristics of the psychological are: consideration of the psychological within a particular activity; as the activities of a particular individual; as a process of interaction of different hierarchical layers of the mental in the subject of management. Identify the same neuropsychological features of effective decision-making in non-standard situations allows the approach that has developed in reflective psychology.

In the context of our study, it is important to conduct a thorough psychological analysis of different types of unusual situations in the activities of the coach and find ways to improve the effectiveness of decisions, which primarily depends on the level of psychological readiness of the individual to perform them.

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