

**RUSSIAN
PSYCHOLOGICAL
SOCIETY**



**RUSSIAN
PSYCHOLOGICAL
JOURNAL**

Vol 8 # 5

Moscow



2011



Russian Psychological Journal

Founder – Russian Psychological Society

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Moscow, Russia, 129366
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ISSN 1812–1853

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Editorial board is not responsible for the quality of translation into English.



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OUR CONGRATULATIONS:
P.N. ERMAKOV

The honorary title of the full member (academician) of the Russian academy of education was conferred on the vice-president of Russian psychological society, deputy of the editor in chief of our journal, dean of the South Federal University psychological faculty, Professor Pavel Nikolaevich Ermakov!

Dear Pavel Nikolaevich!

The editors of "Russian psychological journal" and our readers felicitate you on this significant event. Your professional and public activity has been always directed towards the benefit of the national psychological science. Your works – the studies of the hemispheric asymmetry of the brain, psycho physiological mechanisms of superior psychical functions, psycho physiological factors of the optimization of the large and small groups functioning, psychological and pedagogical problems of the education have been making the great contribution to the development of the national psycho physiological science and innovative pedagogics.

Your activity as a member of the expert board of the pedagogics and psychology of the State Commission for Academic Degrees and Titles of Ministry of the RF; the member of Presidium of Education and Methodics Association of the psychological Universities of Russia contributes to the development of the Russian education system.

Your outstanding organizational skills, directed at creation of the scientific and practical projects and programs, holding international and all-Russia conferences, creation of Rostov regional department of Russian psychological society, creation and development of "the South-Russian center of tolerance and violation and extremism prevention" encourage the association of psychologists for solving today's current problems and forming the attitudes of tolerance in the contemporary society.

The editors of "Russian Psychological journal" are grateful for your responsive leadership and would like you to accept our best wishes for health, happiness and success in your scientific and pedagogical activity.



SOCIAL PSYCHOLOGY

Obodkova E.A., Novikov V.V.

Social and psychological management
in the period of globalization

Globalization – a complex social process that has pervasive and alter the whole world. Globalization is a process of company management (group identity), that has ambiguous effect. There is a need of control system revision, including social and psychological, for uniform and efficient distribution of «fruits» of globalization.

Key words: globalization, the effects of globalization, management of society, social and psychological control, psychological control.

Globalization – a complex social process that has pervasive and alter the whole world. We talk about globalization, meaning the change of society, life style of people, intensification of the processes, reducing geographical distances [8].

Recently, the concept of «globalization» has become central in economic, political, sociological, psychological and other aspects of society, hence the study on social and psychological control in globalization caused quite objective reasons:

- 1) globalization – the phenomenon of global significance;
- 2) globalization of social systems (political, ideological, socio-cultural, national, etc.) in ethnic groups, social strata, country, etc.;
- 3) the processes of globalization in small social groups (family, work, research, study groups, etc.);
- 4) personal globalization (values, ways of thinking and so on).

As the experience of culture and especially the last global crisis, global civilization is the nature of the global system consisting of subsystems which are in mutual influence at all levels of globalization.

We believe that globalization is a process of company management (group identity) has ambiguous influence, both positive and negative. We describe the effects of globalization, in our view, significantly affecting the company management (group, individual):

- First, the structuring and ordering management system (ordering the various states, social groups and communities);
- Second, the loss of countries included in the process of globalization, their sovereignty, traditional functions of state management of society and economy;
- Third, the change in the life of national mechanisms of societies;



- Fourth, the formation of a «unipolar» world (more powerful countries define the direction of globalization);
- Fifth, the rule of liberal foundations in culture and social life; Sixth, monopolization of information space and information resources, globalization of criminal relations, the usage of terrorism as a policy tool for globalization.

The importance, urgency of management study, including socio-psychological, and the ambiguity of the process of globalization in general, annotated the Nobel laureate in economics Joseph Stiglitz: «... to the benefits of globalization are more evenly, it is necessary, above all, a radical revision of control system, i. e. managerial and supervisory bodies of international economic institutions...» [9].

Problems of social and psychological control in the period of globalization associated with the process, during which blur the boundaries of social and cultural systems, turning the world into a coherent whole. Globalization opens borders, not only for trade, financial, political, and other flows, enlarging multinational corporations, but also inevitably dictates a fresh look at management processes, including social, psychological, individual, group, society, changing the ways, methods and management techniques.

Of all the relationships that bind the individual company in a single system, we has identified the socio-psychological, namely the social and psychological control for detailed disclosure. The choice of the subject of our analysis due to the fact that social and psychological relations of globalization influence on all characteristics (economic, cultural, political, environmental, etc.) of globalization as a phenomenon of global importance. Social and psychological aspects, ranging from the personal level of globalization and ending with the world, are significant because the relationship between people, communities in today's world like never intensely dense and difficult. To draw attention to the integrity of the world due to the socio-psychological tendencies associated with the development of the individual, society is worthy of scientific attention because it is directly related to the situation in the modern world. The problem of psychological control has attracted the attention of scholars and practitioners all over the world, including scientists from Russia.

In czarist Russia, Soviet Union, the first years of its existence, dominated psychologists of humanistic direction. In particular, much attention they paid to psychological recovery of the Russian people and the scientific organization of labor.

Later, an appeal to psychological aspects of management has been associated with the NOT movement and explosion of public interest in engineering psychology.

One of the modern classics of the national psychology, B.F. Lomov pointed out that the usage of the achievements of psychology «in social practice is essential to increase productivity and improve the quality of work, efficiency in production and management, development, engineering and technology, improve public relations, improve the quality of ideological work, education and training of new people, forming a new man» [2]. It was stressed that the practical, the final form of psychological



research should be the process of change, impact, optimizing specific activity, communication, management, operation of the organization in its broadest sense.

The present stage of psychological control may be called integrative, since it includes a number of different and seemingly mutually contradictory concepts, transforming the art of management in some art, which, however, can and should be learnt.

Domestic economists, philosophers, lawyers, sociologists, psychologists (A.G. Aganbegyan, V.G. Afanasyev, D.M. Gvishiani, A.V. Karpov, A.I. Kitov, Gavriil Popov, V.F. Rubakhin, A. Filippov, and others) have made significant contributions to the theory of control process of society and its economy functioning. They opened the integrative nature of management, including such aspects as political, economic, organizational, technical, administrative, legal, social, psychological, etc.

These aspects are represented in different proportions in all major levels of government, society as a whole branch of industry, region, association, company, and team.

Aspects of management – is a kind of abstractions. Most of the practical problems of management are integrative. In the real management all the features inherent in managing of any organization, are intertwined in various aspects, interact and influence each other.

Selection of aspects is advisable only for in-depth theoretical analysis of the problems. We have considered only one aspect of management – the psychological, which is inevitably linked to social, as control object – a society, organization, group, etc.

Such an integrative approach to psychological control, as the unification of various aspects, methods, techniques, approaches, regulations, etc. to ensure the process of «constructive» movement of psychological knowledge, is associated with its usage in practice is new and relevant to the current state of psychological Russian science.

In our country there were many interesting publications on social and psychological problems of management. Due to the researches of O.I. Zotova, A.L. Zhuravlev, Y.S. Kuzmin, V. Mikheev, A.L. Svetsitsky, A.V. Filippov, and several others was formed the original theory of social control. It is based on three methodological conclusions:

- 1) social control is an important structural element of economic management system;
- 2) a necessary condition for social development and self-organization;
- 3) social control is a specific management activity.

Considering the complexity, integrative, global psychological control, we will review those aspects which are more influenced by the effectiveness of management activities and have a theoretical and practical importance.

Theme of social and psychological relations, in particular social and psychological control in the period of globalization – as a complex socio-psychological phenomenon – is not sufficiently studied by scientific community. In a socialist society theme was not touched at all for ideological reasons, during perestroika and post-perestroika



periods this theme was not revealed because of the immaturity of the scientific potential of the methodological and intellectual resources [7].

Thus, the theme of social and psychological relations, in particular social and psychological control in the period of globalization, attract us for several reasons: 1) a small elaboration in science; 2) huge social significance of the problem; 3) the urgent need to study the social and psychological phenomena, in particular the social and psychological control in a section of the globalization process. The need for a general theory, methodology, and building technology, concrete and practical methods which allow on social and psychological level to manage the process of globalization in the society.

We can responsibly say that, despite the huge abundance of world literature on management, virtually every modern Russian leader of each organization especially in times of globalization is constantly in need of science-based recommendations and advice in the formulation, adoption and implementation of their management decisions.

Global change processes in society suppose getting a large number of empirical materials. We believe that only a scientific basis is only possible in their ordering. Today most depends on social psychology, including its mobility. Quick response to changes in science, in our opinion, is the key to successful development of society as a whole, although the relevance of «products» of social psychology does not comply with this reality.

Psychologist K.K. Platonov wrote that the twenty-first century will be careful client and consumer of psychological services, providing integrative management needs in the areas of economics, politics, law, and, of course, the organization of production. In our view, the period of globalization provides maximum opportunities to scientists and the public for enrichment and innovation.

We believe that the formulation and solution of real problems of social management, group, individual, in terms of the role of human factors and psychology, and timely processing of baggage psychology, can organize and optimize management of the organization during the period of globalization.

At present psychology of management exists all over the world as an authoritative and relatively independent sphere, it is widely carried out scientific researches and special studies in the indicated direction.

In our opinion, up-to-date is the problem of determining the selection of concepts, creating a system of concepts to plan and execute a specific application for real psychological study for managerial tasks, which in the period of globalization are changing rapidly, and sometimes are acute. We believe that «psychological management» which is defined in the recent works of Vladimir Novikov, J.M. Zabrodin, and their colleagues and students, meets the applied nature of psychological research during the period of globalization.

According to J.M. Zabrodina psychological management is the practical embodiment of scientific knowledge in the actions and recommendations of psychologists,



when knowledge and methods are available in fundamental and applied fields of psychology, and are used to generate real effects of management [1]. B.F. Lomov, G.M. Manuilov, V. Novikov and others have perceived psychological control as a new research area in psychology, management, designed to solve practical problems [2, 3, 4].

As noted by many scholars in recent years in almost all civilized countries soared interest for researchers in different fields of science and practice for the so-called economic behavior of people. This complex concept combines a wide spectrum of manifestations of individual and group activity aimed at production of wealth and consumption in specific socio-economic conditions. And it is human behavior which has been the subject of psychology.

For obvious reasons, a special interest in contemporary psychology, Russian, in particular, is that part of the study of economic behavior that is associated with the business.

Market relations have become basic to the country, and Russia turned to a capitalist economy, the market became open to the global economic system. Consequence of which is changing the relationship of people, socio-psychological climate of the entire Russian society, and each of its components.

Open and very active movements in Russia, as enough sovereign and civilized, multilaterally developed country, has put forward to replace the old socio-political and socio-economic stratum of new administrative staff of managers and entrepreneurs. It is up to them now depends on the development of manufacturing and its infrastructure, employment of people and their welfare, and, ultimately, and satisfaction with life itself.

In the period of globalization, entrepreneurs are not simply a reality of a new post-Soviet Russia, but increasingly determine its fate, as they take many crucial economic decisions. Today's entrepreneurs are less conservative than managers of state enterprises, they use other control methods which are primarily based on knowledge of psychology (V. Marchenko, Vladimir Novikov, A.L. Svetsitsky, V.A. Bodrov, A.L. Zhuravlev, A.N. Lebedev, etc).

J. Zabrodin and V. Novikov noted lack of methodical study of forms and methods for usage psychological methods, emphasize the need to bring the methodology to justify such form that would «work» in real life, and, therefore, would cease to be a «psychological» and would become a real social, interpersonal, legal and other relations «[6].

At the same time it should be noted that the importance of psychological management is increasing due to globalization, which carry psycho-social personality changes of groups and society.

Based on the foregoing, it is necessary to analyze and integrate the experience of psychological science in solving practical economic, managerial and other problems of previous years: first, to identify with all the complexity of crisis and current state of society in the global financial crisis, its "request" or unstated in scientific concepts need for development of this psychological problems of management; second, to



identify possibilities of psychological science, which it has at the present stage of the theoretical and the practical formulation of the problem of psychological control and its solution.

This problem is in all its complexity fundamental and specific character, and yet nobody has solved it. But its decision is not possible only through the application of established psychological knowledge and experience to the methods of modern social control. It is necessary to study new economic, political and administrative processes and methods in the form in which they were formed, so at this time to optimize them in a scientific manner.

Real life in recent years of the XXI century has revealed a number of serious difficulties arising from the expansion of market relations in society. Analysis of these difficulties can identify a number of factors and mechanisms such as the administrative, legal, technical, technological, organizational, economic, and socio-psychological nature, which can be accounted for and used in Russia and elsewhere. Thus, the topic of purposeful usage of psychological and socio-psychological mechanisms in order to design new or further developed for existing organizations is not only highly relevant, but also quite productive.

The identification of these factors and mechanisms has served as the basis of the practice of psychological control and, in particular, an integrative organizational labor design and management in some industries [7].

It is important not only practical, but also well conceived and scientific discussion of the problem. The latter becomes clear if we consider that any manufacturing organization can be considered at the same time as the subject of joint activities, such as psycho-social group of a certain level of development, and as a sphere of «self-realization» of the individual.

We are talking about the possibilities of further deepening the theoretical development of a number of important problems of general and social psychology, based on the development direction of psychological control in globalization. Today, at the same time we ask about the place of psychological control in the psychological sciences and the relation to social control.

Modern psychology is not simply included with its recommendations in a real system of governance. Along with the description, explanation, understanding it becomes increasingly important such function such as the psychological science management – that is, the systematic application of psychological knowledge in the development and implementation of real action control, it is necessary to move from analysis of the objects to their synthesis – that is, designing structure and function of socio-economic facilities with regard to psychological patterns, mechanisms, and factors of their genesis, operation and development [5].

Thus, a new direction, «Psychology of Management» is quite different reveals the concept of «management» and its connection with real social control: the latter is based on the administrative function of psychology, which simulates the real objective way to manage on the basis of psychological patterns.



One of the most important features of market relations is an acute need to increase economic growth, which, by itself, does not occur, even in independence and responsibility of manufacturing companies.

The experience gained through interaction with the general theory of psychology and sociology of organizations, based on the positions of the systems approach, has demonstrated the fruitfulness of considering the enterprise as a productive organization, which allowed to set some theoretical topics, identify some patterns and formulate recommendations.

Thus, globalization, being a trend of modern society, turns the mankind into social cohesion, requiring new ways of management, including psychological.

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The psychological-legal problems of improvement of preliminary investigation on the cases considered in jury trial

Статья ретрагирована

In this article the author analyzes the culture of evidence evaluation in the proceeding which is conducted in jury trial.

Key words: jury trial, preliminary investigation, admissibility of evidence, investigation in court.

article retracted

For today jury trial is a unique form of the civil society representatives' participation in administration of justice, and also one of the basic means of transformation of criminal justice in vance.

04.10.2018

In our opinion, speaking about the crimes which are subject to consideration by jury trial and development in this connection of recommendations on a technique of investigation and registration of materials of criminal cases, it is necessary to consider the fact that the Constitution of the Russian Federation without fail warrants the benefit of jury trial only on criminal cases on gravest crimes for which commission as the last sanction of the law it is established death penalty, until its abolition (s. 2 the art. 20). At the same time according to the articles 47 and 123 of the Constitution of the Russian Federation the charged has the right to the jury trial. Thus, the regulation of such cases completely is in the competence of the federal legislator. Thereupon the list of crimes, which cases can be considered by jury trial (except the listed in the article 20 of the Constitutions of the Russian Federation), and the procedure of realization of the granted right demand additional settlement by the criminal procedure law. According to the article 2 s. 2 the article 30 of the Code of Criminal Procedure of the Russian Federation jurisdiction of such court is similar (without any exception) to jurisdiction of courts of the Federation subjects.

Thus, owing to requirements of the law, jury trial has the right to consider cases on 76 corpus delicti.

The only stipulation with which the law connects participation of the jury in consideration of such cases is availability of the corresponding application of the charged. At decision of the question on jurisdiction of criminal cases to courts of the Federation subjects the determining factor was professionalism and experience of their judges. Therefore to jurisdiction of such courts there are attributed not only cases on gravest crimes and acts infringing on important state interests, but also cases on a variety of other crimes which settlement represents special complexity and demands cor-



responding professional knowledge of judges. Such cases can be cognizable to jury trial, if the charged applies for this.

Thus, along with cases on gravest crimes against life there are cases triable at jury trial:

- on crimes of average gravity (13 corpus delicti);
- on crimes of not great gravity (9 corpus delicti);
- on which court should settle a difficult, for the persons with lack of legal training, question on availability of a causal relationship of an act with socially dangerous consequences (for example, on breach of security at building, operation or repair of the main pipelines which have involuntary entailed of two or more persons – s.s. 2 and 3 of the article 267 of the Criminal Code of the Russian Federation);
- on the crimes when objective duty includes difficult legal conceptions (for example, evidence falsification on a criminal case – s.s. 2 and 3 of the article 303, an obviously illegal adjudgement, decision or other judicial act – the article 305 of the Criminal Code of the Russian Federation).

From the cases on crimes of average gravity there are cases cognizable to jury trial:

- on hindrance of realization of Justice and conduct of the preliminary investigation with abuse of the office (the article 94 of the Criminal Code of the Russian Federation);
- on illegal crossing of the frontier of the Russian Federation, made by a group of persons by previous concert or an organized group either with violence or with its threat (s. 2 of the article 322 of the Criminal Code of the Russian Federation), etc.

The charged can also apply for trial by the jury if, for example, he was charged in such crime of not great gravity as disrespect for court, expressed in insult of the participant of proceeding, the judge or other person participating in administration of law (s.s. 1 and 2 of the article 297 of the criminal code of the Russian Federation), slander concerning the judge, the jury member, the public prosecutor, the inspector, the person producing inquiry, the bailiff, the executor (s.s. 1 and 2 of the article 298 of the Criminal Code of the Russian Federation).

All these, unconditionally, raises a level of requirements to quality of preliminary investigation.

In this connection, in our opinion, the persons executing the preliminary investigation, should understand and know right well that the jury institute is an extremely difficult, procedurally inconsistent mechanism. It is necessary to recognize that establishment of the jury trial institute is a stimulating factor of improvement of the quality of preliminary investigation which would improve responsibility and professionalism of both the prosecution, and the defense. Jury trial as the institute of the legal democratic state forces investigation agencies to work better. It is safe to say that modern jury trial demands a new approach to the preliminary investigation from inspectors that sharply puts a problem of their professional development in the field of psychology, sociology.



In a sense the jury trial problem in realities of modern Russia has ceased to be especially legal: efficiency of the given form of legal proceedings in a greater degree is connected with its psychological component.

It follows from practice that in decisions the jury is guided not by a dry letter of the law, but an emotional-estimate relation to the crime, the charged, the prosecution, the defense, the victim and, at last, to the chief judge. The inspector, unconditionally, is interested in that on a concrete case where he has conducted preliminary investigation, there would be returned a guilty verdict. And in this sense the problem of decision-making by jury trial is rather actual for the investigator. Frequently the mechanism of forming of internal belief of the jury is not clear to the investigator. Here it is necessary to improve the investigators' level of knowledge in the field of juridical psychology and personality psychology.

First of all, for the investigator it is necessary to know the following moments right well.

As a rule, jury trial is employed for the charged not according to the law and true, and has found against the wishes of obvious proof of an act. In many respects this results from the fact that the system of proofs extracted during the investigation of a criminal case, would be professionally analyzed by the judge, and nonprofessionally, first of all, emotionally, by the jury.

Thus, the investigator should know that jury trial is conditionally subdivided into two parts: one is constituted by judges-professionals, and another – by non-professionals (jurors). For the purposes of criminal cases the first are competent in law questions (the questions demanding legal knowledge), including on legal qualification of deeds of the charged and a punitive measure and the second – question of fact (on establishment and not establishment of guilt of the charged of a crime). The jury makes the decision on cases independently and irrespective of the professional judge. The judge represents himself as the organizer of proceeding, he explains law positions, essence of a presumption of innocence principle, a difference between the facts and proofs on a case. However disposal of a case is a prerogative of jurors.

This fact is explained, first of all, that there is an enormous difference in perception of the judge as the professional and perception of the juror as the person who doesn't possess special, and frequently elementary legal knowledge. This is one of the first differences explaining various results of professional judicial activity and activity of jurors.

Thus, a different number of acquittals in jury trial and professional court speaks that the first are focused on universal norms of behaviour (justify the person!), and the second – at a standard-legal interpretation (it is impossible to justify a crime).

The following explanation of a different number of acquittals in jury trial and the professional one is various volume and order of information given to them.

The jurors are judges of the fact. At the heart of the jurors' decisions there are actual circumstances of a case recreated during proceeding by the parties. They do not



have information on a previous conviction of the charged; the circumstances characterising the person of the charged are not lead up to their attention. Thus researches of last years have demonstrated that the jury's verdicts act as a display of the "spontaneous" justice which content not always coincides with that value which is put in it by the laws and ascertainments accepted in the Russian society, in particular, positions of the current criminal legislation.

The sentence resolution, application of the criminal and criminal procedure code, determination of a punitive measure to the charged is within the competence of the judge. The proceeding in jury trial is regulated by the section XII of the CPC of the Russian Federation into which there was entered the chapter 42 of the CPC with the title "Proceeding on criminal cases considered by the jury trial". This chapter includes 50 articles (32-85), representing in rather solid institute of the criminal procedure.

Thus, it is obvious that for successful disposition in jury trial it is important but not determining a technique of the investigation of a case and legislation of materials of a criminal case. The basic criterion of success is a body of evidence, both direct, and indirect, completely and uncompromisingly exposing the guilty person in a criminal act. But the basic aspect should be made by the investigator on procedural "sterility" of proofs during their collection and fixing. The slightest deviation from procedural requirements is inadmissible. According to the Criminal procedure legislation of the Russian Federation the proof is understood as any fact on which basis in the order specified by the law the inquiry body, the investigator and court establish the presence or absence of a socially dangerous act, guilt of the person who have made this act, and other circumstances important for right disposition of a case. This data can be received from sources strictly specified by the law: from the evidences of witnesses, victims, the suspected and charged, from the expert opinions, acts of auditions and documentary checks, physical evidences, reports of investigatory and judicial actions, and also from other documents. The legislator also determines the characteristic of the received and further researched proofs. They should be relevant and admissible. Speaking about relevancy of proofs, it is necessary to notice that the facts can become a proof on a case business if they represent the data on facts or subjects which confirm, confute or call into question existence of circumstances important for the case. Otherwise there is no necessity in them.

As a rule, if with determination of the relevancy of proofs investigators, except for rare occurrences, do not have difficulties, the admissibility of evidences is the most important and complicated question. As it was specified earlier, for securing of the reliability of the received data and possibility of their check the legislator establishes, who, when and whence can receive proofs on which basis there are established circumstances of a case. In the law it is underlined the exhaustive list of sources of reception of the data important for a case, and with reference to each source – a reception order (interrogation, survey, etc.) and fixing of the received data in the appropriate procedural form. Importance of the evidence indications, specified in the law,



causes the constitutional rule of the evidentiary activity, consisting in that “at justice realization it is not supposed use of proofs received with infringement of the federal law” (s. 2 the article 50 of the Constitution of the Russian Federation). “The proofs received with infringement of the law are admitted as not having legal force, and cannot found the prosecution, and also be used for the proof of the circumstances listed in the article 73 of the CPC”. Thus, set of the CPC rules fixed, first of all, in the articles 73, 74, 75 of the CPC, and also other rules of the CPC contain permissions and prohibitions by which it is necessary to be guided at collecting of proofs, their representation in court, the court decision of a question on their admissibility or inadmissibility. In other words, the Criminal procedure law of Russia not only establishes rules in collection of proofs, but also fixes that if a proof is received with infringement of these rules, at all its importance it loses the legal force and cannot be used as a guilty proof of the charged. For an illustration of the importance of this principle we should make a rather characteristic example. The investigators should know that questions of relevance and admissibility of proofs are decided by the court as from a preliminary hearing till termination of investigation in court. The preliminary hearing is produced by the judge individually in a closed meeting with obligatory participation of the public prosecutor, the charged who has filed a motion on consideration of a case by the jury trial his defender. Central purpose of the preliminary is explanation to the charged of a charge, his rights in jury trial and consequences of pronouncement of a guilty verdict or a verdict of acquittal. Then the judge gives the charged the right to be specified in the choice of jury trial for the last time. If the charged has not confirmed his application for disposition by jury trial, the judge, having executed some procedural formalities, declares the preliminary hearing ended and further carries out the proceeding by other rules. If the charged has confirmed the application, the judge declares its satisfaction and passes to consideration of applications of the public prosecutor, the victim, the charged and his defender.

At this stage there can be enter make motions of various kinds, for example, on release from custody of the charged, on returning of a case to additional investigation, on subpoena of witnesses, but it is necessary to recognize that basically at the preliminary hearing there are solved questions on admissibility of proofs. By this moment, as a rule, a prosecuting attorney and a defense counsel are indifferently well acquainted with a case and are capable to declare those proofs which, in their opinion, are received with infringement of the law and are excludable from a case proceedings. Frequently the defense declares written well motivated applications which give the chance to the judge and the prosecuting attorney to familiarize with the put forward arguments. The judge permits applications, having listened to opinions of the parties. It is necessary to notice that opinions of the parties turn into basic jurisdictional disputes in which process both the defense, and the prosecution have a possibility to show the knowledge of the procedural law. Here it is necessary to notice that firmness of the argument of the prosecution is based on results of the investigator’s competence, his procedural competence.



The following stage, where to the parties it is given the right to solve a question on the admissibility of proofs, is investigation in court with the participation of jurors.

Here in our opinion, for the investigators it is necessary to know and remember two basic moments.

The first moment. The application for exception from court the examination of the proofs received with infringement of the law, no less than the application for research of either proofs can be declared by the parties at any moment of court investigation regardless of the fact that the judge has earlier passed any decision on them. It means that even if on the preliminary hearing or in the course of court investigation the judge has passed a decision on exception of any proof or refused such exception, does not deprive in parties of the right to raise again the question about the admissibility of this proof, having presented new arguments and reasons of own position. Thus the law speaks nothing about limits of such repeatability of applications, giving a possibility to declare them an infinite quantity of times.

In practice such situation is rather typical. Frequently the proofs, recognized as inadmissible at the preliminary hearing under the prosecution's application, were admitted admissible by the judge in the course of court investigation and on the contrary.

Besides, it is necessary to notice that in jury trials the defense, as a rule, appears in more favorable position, in comparison with the prosecution as it is actually allowed to paint a victim of a crime in black. Lawyers, using a number of nihilistic stereotypes of sense of justice of jurors, representing the charged as a victim of abuse of power of militia or a public prosecutor, quite often achieve justification of the persons who are hardened offenders.

Thus, the jury trial specificity in estimation of proofs and circumstances of a crime, unfortunately, in any way, in our opinion, is not connected with the investigator's knowledge of techniques of investigation of the whole possible (as it is specified above) spectrum of crimes and especially registration of materials of criminal cases. "The fact court", jury trial would be convinced only by a reliable weight of evidence, their logic chain and actual firmness and, unconditionally, procedural "cleanliness". The court practice shows that in jury trial the huge role is played by a psychological component. "Any passers-by", what jurors actually are, should listen and correctly estimate the most complicated system of proofs, at times indirect, and to make legally competent and fair decision. Eloquence, rhetoric, artistic skill at times eclipse a strength of evidence, arguments and legal reasons, what is in no small way used by the defense. Having analyzed in detail the principles of work of jury trial, we have come to a conclusion that for a successful legal investigation in court the investigator should present to the public prosecutor the whole spectrum of proofs so that they would be extremely clear, as far as it possible evident and, the most important thing, logically constructed. Such approach would allow the public prosecutor to construct an order of research of proofs in a session with a view to minimize an



emotional constituting and subjective position of the defense, as much as possible to concentrate jurors on the objective party of what has been done what, in turn, should be supported by a strong evidentiary base.

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Статья ретрагирована
article retracted
04.10.2018



THE GENERAL PSYCHOLOGY

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The natural-system foundations of the psychics organization

In the article it is considered a model of the psychics organization in evolutionary-biological foundations. It is proved the necessity of construction of the natural psychics model, instead of the artificial one. In direct communication with such model there is also a problem of the mental phenomena classification. For the argument it is used the material of neuropsychology, psychophysiology, development psychology, pathopsychology, the physiology of sensory systems, activity physiology etc. It is underlined the methodological value of the natural psychics model's generation.

Key words: *psychics structure, psychics organization, psychics model, mental phenomena classification, artificial systems, natural systems, system approach.*

The problems of organization of the psyche as a natural system

The problem of the psyche organization (i.e. its models) was stated by Aristotle yet. If before him there were specified certain properties of soul, system thinking of Aristotle, who was the founder of the classification of all things in existence, has allowed him to group various psychical "abilities" in the known triad – knowledge, feelings and will, and each block of the triad (a soul subsystem) has own componential structure by a principle of function uniform for this block (knowledge, experience and behaviour). Since then, for two and a half thousand years, this model did not almost change as it was constructed basing on the logical-intuitive discourse of philosophers.

Such a way of cognition is possible, if it was a question of especially artificial system created by the person for decision of his private problems. But even the methodological discussion of philosophers and natural scientist (biologists- digesters) of the XVII-XVIII on criteria and classification principles has generated a concept of artificial, man-made, and natural, created by the nature, classifications. Biologists have successfully shown efficiency of the concept of natural classification in Lamarck-Liney methods of construction of the general classification of animals and plants, reflecting in taxons a degree of species propinquity to each other by a biological criteria (by the community of origin). And even now, answering the questions on possible harm of the genetically modified organisms (GMO), scientists-biologists say that they do not construct new methods of gene combinations, they open them, open that the nature has created, and the nature uses them daily though the philistine do not suspect of that.

Psychologists-system analysts also apply the concept of natural and artificial systems. K.K. Platonov believed that the system is an artificial classification depending



from the learning, for example, the system of psychological sciences. And the structure is a natural model which is not dependent from the learning; it is created by the nature, for example, the mental phenomena [32]. In other words it is necessary to study the psyche structure in its biological determination, and the system of mental concepts is formed artificially by the criteria demanded by a problem.

But here there is a question: is it legitimate to apply the concept of natural classification to psychics, i.e. is it possible the classification, configuration of mental "abilities" in psychics subsystems by natural-system foundations? If psychics is a specially speculative person's construct owing to its intention to transfer all concepts into in a visible image [21], any artificial model would be true by those criteria which were set by an author. If psychics is created by the nature, the model should also be natural and, owing to this, the only true.

Here it is appropriate to consider how the human has considered a spirit – matter parity in the evolution process?

Earlier we have already offered a reconstruction of *the stages of the mental and not mental differentiation* (distinguishing of the ideal, mental world from the material reality) in consciousness of the person [16]. The first stage is the identification of these realities with the psychics materialization ("objectification"). Etymology (soul – spirit – breath), magic practice with body parts (nails, hair) and a person's shade, thin atoms of soul in the before-Socrates atomism testify to this. The second stage is animation of not only the live (the psychics carrier), but also the lifeless. Comprehension of other substantiality of soul starts (it is invisible though it is possible to represent it), but still it is in direct dependence on a body. The same things there also say the phenomena of the consciousnesses ontogenesis discovered by J. Piaget: animism, magic causality, artificialism in thinking of children of the prelogical period. The third stage is the occurrence of opposition of the objective and subjective reality with comprehension of their different substantiality and considerable independence. Objective idealism, the archetype of the World tree with three worlds, the concept of primary and secondary qualities of Democritus, occurrence of monotheistical religions are the displays of such paradigm. And, at last, the fourth stage which practically has become a dominating paradigm during the Modern age is the understanding (or a concept) of relations of the psychics and the body (soma) in their hierarchy – the psychics is a derivative from the matter (a live organism).

In the XIX century all natural scientists, anyhow adjoining to a subject of the nervous (physiological) and the psychical, based their researches on this methodological position. But in psychology such approach has appeared and been realized essentially later. Analyzing the editions devoted to theoretical problems of psychology (text-books and workbooks) for last hundred years, it was possible to trace the historical dynamics of formation of these views. A.N. Gilyarov in 1914 [23] believed that psychics is indivisible (there are no components in it) and incognizable. In modern terminology words it is impossible to construct the psychics model. In 1915 N. Vasiliev [18] considers psychology as a science "additional to natural sciences", attributes the psychics



not only to the human, but also to animals, but thus considers that it is impossible to give definitions to psychics. It is not absolutely clear, whether from such opinion it follows that the psychics organization is absent. G.I. Chelpanov [37] definitely marks the natural-science experimental approach, attributes psychics to the world of animals, since the protozoa (giving reason by the property of irritability). But, besides, there is no conversation about the psychics organization, though in his "Psychology Sketches" there is the evolution of nervous system, CNS anatomy and psychophysiology that indirectly testifies to his intention to derivate the laws of mental life from laws of the nervous system functioning. S.L. Rubinstein [34] directly states that psychics should be studied "in development", offering as an example of such laws a number of principles of the nervous system development. A.Y. Ponomaryov [33] considers the psychics as a special natural system and offers for it not only an informative (reflecting) function, but also a regulative one which was considered as a nervous system prerogative before (the nervism principle – as it is formulated in biology). During the same epoch as its methodological base the Leningrad school of psychology [1] uses the same paradigm, and theoretical developments of L.M. Vekker [21] are devoted to search of both the general laws (for a nervous signal and a mental one), and specification of mental signals of different levels of isomorphism and organizations. Works of A.R. Luriya and his school [30, 36] in a visible and obvious form demonstrate in an explicit form an idea of studying of psychics in its natural-system foundations. V.B. Shvirkov [38] directly declares this thesis. Within the framework of the same problem there is a question on the psychics genesis in an evolutionary aspect. And for a long time psychics is not attributed only to the human, originally it appears among the protozoa [28], or even among the protobionts [26].

From this historical excursus there follows that now the idea of psychics as the matter derivative does not cause doubts among the researchers professing principles of scientific thinking. So, for construction of the natural-system psychics model it is possible and necessary to use principles of organization and functioning of those natural systems which have generated it (mentality).

The problem of classification of the mental phenomena

In direct communication with the problem of the psychics model organization there is a question on classification of the mental phenomena as classification of the psychics components must unite them into groups by affinity (the general genesis and the general function). a classification can be artificial or natural. Artificial classifications can be as much as it is wished depending on private research problems. But the natural classification can be only one – arisen in evolution process.

In any psychology textbook this subject is presented. The mental phenomena classification (mental formations, elements, components, ingredients) on groups is made in different lists: mental processes, functions, properties, statuses; mental images, processes, functions, properties and statuses. Thus usually it is underlined that in view of complexity of the classification objects (the mental phenomena) almost each



phenomenon can appear in two, and even in three groups. For example, attention as a process and as a status; perception as an image and as a process of its construction. But, both in logic, and in natural sciences it is known that one qualitatively original phenomenon cannot be placed within the framework of one classification in different "cells", groups or classes. This is possible only at different classifications on different criteria bases. But in general psychological classification of all components of psychics there is not even specified a criterion of this classification, except, naturally, specifying of some generality of the phenomena of one class by the nature. And in biology this classification would seem as: "All components of an organism are divided into organs, statuses of illness and health, functions and subsystems". Such an evident analogy shows essential logic and methodological trouble in a subject of general psychology "Classification of mental phenomena". At the same time this analogy to the organism structure helps to comprehend and realize by what criteria it would be possible to classify traditionally listed components of psychics.

Each subsystem of the mammal organism (locomotor, nervous, digestive and etc.) includes a number of organs having a general origin and a general function, and this is the general function of the whole subsystem specific only for it. Thus other subsystems carry out other functions in the organism. And till now in general psychology (with rare exception) a reflexion function is attributed to all mental phenomena – cognitions (and it corresponds to a reality), emotions, motility, memory, attention and etc. Such approach is a quite clear logic consequence from the psychics definition as a reflecting (representing) system. But in the organism all its subsystems have their function. Perhaps, in psychics it is necessary to search for a fundamental function for its each subsystem?

Weather such methodological method is possible in general psychology?

At the analysis of a system structure (in this case psychics) the system approach forces to raise the following questions.

1. What are the components (elements, formations, phenomena, ingredients) of psychics?
2. Whether they are classified, whether they are grouped into subsystems after a certain similarity?
3. What is a specific function of each of these subsystems, distinguishing it from others?
4. How do the elements of one subsystem correspond with each other?

It is not the full list of the system approach components, but its very first questions [5, 12, 22, 32].

It is obvious that the list of components is set by a course of general psychology though here there is a number of very essential critical remarks [22]: the list is not established (differs on volume among different authors); the list is not closed (it is an essential defect for classification of the natural system); in the list there co-exist obviously nonhomogeneous components (for example, sensation and personality, thinking and temperament).



At the same time the organism structure sets to us, the general psychologists, a certain paradigm in the form of necessity of distinguishing of any subsystem. In psychics these subsystems are also obviously presented – cognition, emotions and motility. Internal components of the psychics each structural block (“organs” of this block) are also presented (for example, in the cognitive block – sensorics, perception, representation and thinking), and these internal components are united by a general fundamental function: cognitions – the function of reflexion (knowledge), emotions – the function of energy support of psychics, motility – the function of environment transformation.

But outside of these blocks there were such mental phenomena, as attention, memory, speech, consciousness, will. Thus already more than for a century, since W. James and Rubin there arise doubts in the independence of existence of attention. L.M. Vekker [21] transfers attention, memory, speech, imagination and consciousness from the cognitive processes into so-called (in his terminology) “through” ones, V.V. Loskutov [29] describes attention as the integrator of mental activity. Natural scientists-neurophysiologists also come to this conclusion [4]. We have also given numerous natural-scientific arguments in favour of transfer of memory and attention from the cognitive processes category into the category of integrating mechanisms [6].

We have offered a model of the psychics organization [19, 20] in natural-system categories where the psychics structural blocks are cognitions, emotions and a psychomotility, and the integrating mechanisms are attention, memory, speech, consciousness, will. In this model in explicit form it is presented an idea that psychics can be structural and procedural. Continuing the analogy with biology, it would be possible to say that structural components of psychics are “organs” developing in subsystems (blocks), and this is the psychics “anatomy”, and procedural components are “physiological processes” – the psychics “physiology”.

And then, answering the question on criteria of classification of the mental phenomena, it would be possible to respond that the first criterion of division of the mental phenomena on classes is a structural-dynamic characteristic. The mentality phenomena, first of all, are divided into the psychics structural components and the procedure (integrating) mechanisms. And the psychics structural components are divided into the cognitive (informative), emotional (experience-activating) and psychomotor (transforming the environment). And, that is very important for analysis of psychics as the natural system, their (subsystems) fundamental functions are not crossed, differ. The nature does not duplicate the same function in different subsystems.

Classification of the mental phenomena becomes logically consistent and clear.

The natural-system model of the psychics organization

There are already constructed a lot of models of the psychics organization. In our earlier article [12] we have already analyzed these models and those criteria, which their authors have put in the bases. But all these criteria do not take for a basis already found and proved principles of organization, mechanisms and functions of the psychics substratum – the organism in whole and the nervous system in particular.



In our model we apply such conceptual constructions in physiology, neurology, neuropsychology, embryology and other natural sciences [7, 11, 14, 15]. Having entered psychics into a great number of regulator organism systems [14, 15] and having constructed their (the regulator systems) evolutionary hierarchy, we have given a genus-specific definition of psychics: psychics is one of the regulator systems (subsystems) of the organism, carrying out its functions by means of reflexion of properties of external and internal environment and transforming interaction with environment. Each of the regulative systems is specified by a code (the signal form), used by this concrete system and by a material carrier (substratum) of this code. In the psychics these are mental images, and the carrier of this code (signal) are functional systems of a various degree of complexity. In the earlier articles the psychics structure in its natural-system determinants still was based on developments and opinions of the most previous researchers or the traditional model (triad). Working on this question there was composed a definitive model with its biological bases (tab. 1).

Table 1

The natural-system model of the psychics organization
The structural subsystems of psychics (the psychics “anatomy”)

COGNITIVE images and processes	PSYCHOMOTOR processes	EMOTIONAL statuses
Information fundamental function REFLECTION of ENVIRONMENT	Effector fundamental function TRANSFORMING INTERACTION WITH ENVIRONMENT	Energetic fundamental function (TONUS REGULATION)
Thinking and imagination	Social activity	Social feelings
Representation (ideas)	Behaviour (biological programs)	Differentiated emotions
Perception	Actions	Base emotions
Sensorics (sensations)	Movements	Global emotions
Neurophysiological and neuropsychological foundations		
The second block of the functional organization of brain after Luriya INFORMATION (the postcentral division of the cortex)	The third block of the functional organization of brain after Luriya PROGRAMMING BEHAVIOUR (frontal division of the cortex)	The first block of the functional organization of brain after Luriya REGULATION of TONUS (vertical organisation and median deep division of the cortex)
The analyzers of CNS (their list and structure, ways)	The levels of movements' organization after N.A. Bernstein and A.R. Luriya	The circle of Peipez and additions
Primary, secondary and associative (tertiary) fields of the postcentral divisions	The motor fields of the frontal divisions of the cortex	Biochemical systems (the mediators of NS)

The integrating mechanisms of psychics (the psychics “physiology”)

Attention memory speech consciousness will
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It is interesting that if to take only the structural organization of psychics (without the block of integrating mechanisms) it is closest to the traditional triad of Aristotle. But the reason of it is not in the authority of Aristotle. It is the authority of the Nature, and the genius of Aristotle only proves to be true even two and a half thousand years later.

We should consider an organization of each block in its structure and specificity.

The levels – “floors” of the cognitive block have been constructed in such kind in the 70th of the XX century by L.M. Vekker [21]. But till now there are other schemes of a parity of cognitive processes. There are opinions that a mental image is only a percept (an image of perception), and sensory properties grow out of the conscious analysis of a perceptive image structure by the subject [22, 31]. There are positions that only two levels form cognitive processes – perception and thinking. But not only theoretical-methodological constructions of L.M. Vekker, added by our argument [12], prove such four-storey structure of cognitions. The anatomical-functional organization of the postcentral divisions of the cerebral cortex (it is presented in the table) confirms the correctness of theoretical substantiation. Such organization is also supported by the data of the phylogenesis of the psychics representative function – the sensory psychics, the perceptive psychics, intellect (of the complex animals) and consciousness of the person, i.e. a sign-symbolical way of development of the environment mastering [28].

The block of the psychomotor processes is organized by us with the account of that qualitative differences in the subsystem of cognitions should necessarily have qualitative parallels in motoricity. Really, the difference between the action and the movement in the perceptive and sensor psychics were shown by A.N. Leontyev [28] when at preservation of a purpose image in the perceptive psychics there may vary a way of its (purpose) achievement, unlike the sensor psychics where the way to a purpose is unequivocally connected with the sensor image of the purpose. Instinctive or life-generated biological programs of behaviour of an animal as an action acceptor (an image of the near future) have an image-representation (representant in our terminology). This idea was set in 1935 P.K. Anokhin [3] at formation of the concept of functional systems and a principle of advancing reflexion [2]. Social activity of the person is set and regulated by life-sense purposes and a world subjective picture, defined by qualitatively another organization of consciousness – a sign-symbolical activity.

The emotional block, following the same logic, is also hierarchically organized at four levels, each of which has its organizational features and supply mechanisms. The level of global emotions is provided with activity of biochemical mechanisms – catecholaminergics, cholinergics and dopamine systems [39]. Positive emotions provide serotonin, acetylcholine and their derivatives. Negative emotions depend on adrenaline, noradrenaline and their derivatives. The dopamine system is connected both with functioning of cognitive emotions, and with the quality of cognitive activity. As it is revealed in works of the academic N.V. Vesolkin [17], dopamine does not have an excitant or inhibitory effect on the neuron (a matter of argumentation



of biochemists-neurophysiologists). It strengthens the effect of excitant or inhibitory acids (GABA and etc.), already actively functioning in the neuron at a present time. And this mechanism rather successfully explains features of work of cognitive processes in a norm and pathology [8]. The base emotions are provided with subcortical neuronal structures and functional systems (the circle of Peipez and its further additions). The differentiated emotions are provided with activity of the cortex of the right hemisphere [27] and come under influence of lifetime events. Social feelings are the consciousness components.

Now the memory and attention role (attentive-mnemonic processes) as integrating mechanisms (instead of the cognitive processes) is not challenged any more [4, 6, 21]. Other components of the block of integrating mechanisms were never registered as a part of the psychics subsystems, initially they attributed to them a role of integrators of the whole mental activity [10, 21, 25].

Methodological consequences of the natural-system model of the psychics organization

Thus, if to accept such natural-system model of the psychics organization it becomes clear in what points the methodology of its research and the description changes.

First of all, according to the natural psychics organization there will be also organized a training course structure [13, 24]. This methodical mode is known for some centuries as it is applied in medical textbooks. Before works of the outstanding anatomist and physiologist of the XVI century Andreas Vesalius [35] in a human anatomy views, a parity and a role of the body organs there were many disagreements in spite of the fact that the whole organism organization was described since an antiquity epoch (works of the Alexandria library). But for rigorous proof of the organism organization Vesalius has entered not only a criterion of anatomic connectivity of organs, but also a unity of function of organs of this system. Since then a human organism organization (mammals) is considered as a constant in biology. Construction of programs and textbooks on general psychology should follow this general scientific principle.

Construction of the program of experimental-empirical research also appreciably depends on what basic model of the studied phenomenon was chosen by a researcher. In psychological practice such model does not play an essential role (with the exception of an individuality model) as the psychologist needs to reveal and describe the private individual-typological properties of the subject important for a concrete question decision. And in clinical-psychological practice (pathopsychology) diagnostics of the patient starts with description of his psychics, and his personality interests diagnosticians in the second turn [9]. And here a correct representation about the natural psychics organization and a character of mutual relations of its structures appears essential to understanding of mechanisms of etiopathogenesis of a disease [8].

Formation of training programs according to natural laws of organization and development of thinking [11] also is a strategic aim of psychology of development.



Formation of programs of rehabilitation in correctional psychology should necessarily consider natural laws of genesis of mental and psychological abilities.

Thus, generation of the natural-system model of the psychics organization is one of the major problems of theoretical psychology.

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PSYCHOLOGY PREVENT EXTREMISM

Popova L.V.

Counteraction to extremism in the cyberspace

In the article it is raised a problem of youth extremism and the Internet-media influence on formation of the young generation's world outlook. It is described carrying out of the first All-Russia Internet festival of student's, scientific and creative youth on counteraction to the extremism ideology in the Internet "the Internet users against extremism" which passed on the basis of the faculty of psychology of the Southern federal university.

Key words: youth extremism, mass-media, the Internet dependence.

For today there is a sharp problem of the ideology of terrorism and extremism spreading in the territory of the Russian Federation. Growth of terrorist activity and cultural-moral intensity promotes escalating of the potential of extremist groupings influencing key structures of life. The variety of forms of extremist and terrorist activity, aspiration to achieve a public resonance and population intimidation thus becomes perceptible. In some regions of the Southern and North Caucasian federal districts expansion of information, ideological, psychological, resource coherence of extremist communities and groups is observed. In these conditions the rising generation of the south of Russia has appeared the most unprotected category of the population, in cultural sense, which is in original value and spiritual vacuum. The youth part has appeared disorganized, subject to influence of extremism and xenophobia, national cultures and religions of people of the SFD and NCFD blasting traditional values. Here it is expedient the formation of tolerance, understanding of national-cultural features in the environment of student's youth that should allow to generate the young man's personality with the steady civic stand, capable to resist to ideology of xenophobia and various extremist tendencies.

The youth extremism as an adherence to extreme views and actions in modern Russian conditions became a daily reality of our existence. The problem of struggle against youth extremism becomes a nation-wide difficult and multidimensional problem. It is impossible to ignore the complex character of this problem.

The basic sources of youth extremism in Russia are, first of all, sociopolitical factors: crisis of sociopolitical and economic system; socio-cultural deficiency and criminalization of the mass culture; spreading of social manifestations "leaving from life"; absence of alternative forms of carrying out of leisure; crisis of school and family edu-



cation. It allows to assert that the basic circle of problems with which the youth in Russia should deal, lies in the sphere of disputed relations, first of all, in a family and in relations with contemporaries [1].

Now among priority problems within the limits of counteraction to extremism they distinguish information-psychological counteraction to spreading of the ideology of extremism in the youth environment. The necessity of this is defined by that the executors of acts of terrorism are mainly young of 30 years or less. It poses real threat to public safety as far as youth is an active subject of social interaction.

At the same time it is a common feeling that modern terrorism is inseparably linked with activity of the mass media. Thereupon it is urgent rather pressing question on a role of mass-media in formation and development of social representations about terrorism which simultaneously grow out of communications and form its basis, providing parted codes of social interaction and group identity. It is necessary to underline, that in the very interactive processes the representing social representations are raised, modified, exchanged and extend on social groups. And they constitute social groups and define their borders. Accordingly social representations set dispositions of interpretations and expectations of situations of interaction perceived by the individual.

This century the increasing value is got by mass communication which, according to D.V. Olshansky, is medium of formation, spreading and functioning of various samples of perception of thinking and behavior [3]. In the system of mass communications there are included the printing and the Internet-media, one of which base functions is population informing on pressing questions of internal and international life. In a modern information society a special role is played by mass-media as an important component of formation of a civil society.

The phenomenon of mass media became the object of steadfast research of both Russian, and foreign psychologists, political scientists, sociologists, linguists since the 1850s, and has been studied within the limits of the theory of social learning (A. Bandura, G. Rotter, W. Mishel), cultivation theories (G. Gerbner), socialization theories (I. Meiroviz, N. Poustmen, M. Rosenberg), use and satisfaction theories (G. Bloomer, E. Katz, F. Palmgrin, K. Rozengren), theories of imposing of the agenda (D. Shou, M. Maccoms), cognitive theories of mass-media.

Despite difference of approaches to studying of mass-media, all researchers converge in one thing: mass media have huge psychological influence on audience in sphere actually activity in its real realization and in the value-sense sphere of the person, transforming his motives, needs, attitudes, value orientations and forming stereotypes. This process concerning youth as the group subject to the greatest influence due to unformativeness of the mechanisms of counteraction to information influence of mass-media appears the strongest and, thus, mass media practically design the young generation's image of the world. From all mass media they separately and especially distinguish the Internet.



At present the Internet-dependence is not an independent disease and is defined by psychologists as a phenomenon. Clinical psychologist K.Young and psychiatrist I. Goldberg are considered as ancestors of psychological studying of phenomena of dependence on the Internet. For the first time the term "Internet dependence" has been offered by I. Goldberg and he understood it as the disorder of behaviour as a result of use of the Internet and the computer, having fatal influence on household, educational, social, working, family, financial or psychological fields of activity of the person. Now the Internet dependence is understood as compulsive desire to enter into the Internet, being off-line, and impossibility to leave the Internet, being on-line.

For today after the quantity of the Internet users Russia overtakes Australia, Spain, Italy, France, Great Britain and Brazil. During the 2002–2009 period the number of the Internet users in Russia has grown from 8 % (8,7 million persons) to 30 % (34,4 million persons), and the level of daily audience is from 2 % (2,1 million persons) to 16 % (17,7 million persons). The basic Internet users in Russia for today are young men at the age of 18–25 years. Alongside with augmentation of the quantity of the Internet users the level of the Internet dependence steadily increases in the world, that is also connected with the fact that a quarter of the Internet users form dependence already after half a year use.

Against this background carrying out of the first All-Russia Internet festival of student's, scientific and creative youth on counteraction to ideology of extremism in the Internet "Internet users against extremism" which passed on the basis of the faculty of psychology of the Southern federal university became especially actual. The Internet festival has passed on September, 3rd, when in our country they celebrate the Day of solidarity in control of terrorism. It is the day of memory and sorrow at victims of the act of terrorism in Beslan.

The festival passed on the basis of several high schools of the country, students, young scientists and teachers of high schools of several regions of Russia have taken part in its work, among them: the Southern federal university (Rostov-on-Don), Moscow state university, Kuban state university (Krasnodar), Siberian federal university (Krasnoyarsk), Stavropol state university, Tomsk state university, Chechen state university (Grozny), Kabardian –Balkar state university (Nalchik) and other high schools.

The festival was opened by the dean of the faculty of psychology the SFU Ermakov P.N. who welcomed all participants and has sounded the main thesis of the festival: "The ideology of extremism is a real threat of our days, threat to national interests of Russia".

Then with a salutatory word there spoke the chairman of the festival organizing committee, rector of the SFU Zaharevich V.G. He has noted the importance of carrying out of the Internet festival when some regions take part in discussion of the problem simultaneously. The Internet was not such a safe thing as it was possible to present it, he told, in the Internet space there were no restrictions and there was no certain culture. The worldnet is used not only by cultural, competent people, but also by people with very specific understanding of culture, people who put themselves above all the



others and use the Internet for achievement of the purposes. Vladislav Georgievich has complained of small quantity of researches of the Internet which practically don't exist, scientists of all countries only start to study the given space that once again underlines the necessity of carrying out of similar discussions, and has wished successful work for all participants of the festival.

Further there has been shown the short-length film which has been filmed shortly before the Internet festival carrying out, – poll in streets of Rostov-on-Don: how the inhabitants of the Don capital treat the extremism? There has passed the immediately problem discussion, representatives of all high schools told about the necessity of counteraction to the ideology of extremism in the Internet, shared the thoughts and workings out in this area.

Within the frameworks of the festival there have passed some more arrangements.

Competition presentation "What should be a site of counteraction to extremism and terrorism in information space", as the participants there were invited students and pupils of the senior classes, as the curator of the presentation the associate professor A.V. Miroshnichenko has acted. The first place with the project of the site "ANTI-TERROR" was occupied by the undergraduate of the faculty of psychology of the SFU Igor Shingelevich who with his project will go to the Moscow State University on conference.

The round table "The policy of information security: borders of permissibility in counteraction of destructive information influence" which leader was the doctor of Psychological Science, professor, manager of the chair of the general psychology and the psychology of development of I.V. Abakumova. In the work of the round table there have taken part not only young scientists from various regions, but also there have express the ideas the representatives of television and press.

In the Online regime the doctor of Philosoph. Science, professor V.A. Shkuratov has given a *lecture on the War in the Internet: blitzkrieg or not blitzkrieg*.

Following the results of work there have been formulated and discussed references on optimization of counteraction to the ideology of extremism.

1. For higher educational institutions to counteract spreading of the ideology of extremism and speed up the work on information and propaganda ensuring of antiextremist actions in the youth environment, among the Internet users.
2. For higher educational institutions to involve scientific and student's community in working out of theoretical and methodological bases of counteraction to extremism (in all its manifestations) on concrete directions of activity.
3. At the sites of high schools to explain the essence of extremism and its public danger, to form a society's proof aversion of the ideology of violence, and also to get youth to take part in counteraction to terrorism, extremism, nationalism, religious fundamentalism at the Internet resources.
4. On the basis of establishments of high and secondary education to establish a network of the interrelated and constantly operating Internet resources of an antiextremist orientation.



5. To develop the Statement on formation and filling of a substantial part of the Internet resources of higher educational institutions on an antiextremist orientation.
6. To make "The peace to the Caucasus" site <http://mirkavkazu.sfedu.ru> the Zone coordinator for high schools of the SFD and SCFD.

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THE YOUNG SCHOLARS

Alimova E.E.

Value-sense barriers of the teachers-heads in the process of professional development: a problem of interpretation and typology

Training at the PDI should have the innovative, advancing character defining the content of preparation of the audience so that there would change the relation and positions of teachers and heads to professional work and school mission. Educational process at the PDI should be directed on creation of conditions when a subject position would be developed and reflective and creative abilities would be formed among the audience. a special part of the problem is preparation of the teachers-heads who are frequently not ready to operate in conformity with new professional requirements, as sociological and psychodiagnostic researches show. Many managers of the education system have value-sense barriers which impede modernization in real pedagogical practice.

Key words: education modernization, innovations in educational process, teachers-heads, psychological readiness, psychological difficulties, value-sense barriers, sense formation, reflexion.

The state and official internal policy are aligned with problems of education and upbringing of rising generation, declaring education modernization as the priority national project at last. The education system should provide formation of a postindustrial, innovative society, global economy. The president of the country D.A. Medvedev considers that "The possibility of our choice and providing of an innovative way of development of the country depends on readiness, goals of millions Russian school-boys" [1]. Innovative processes are regularities at the secondary and high education development and concern such changes in work of the education system which have essential character, are accompanied by changes in an image of activity and style of thinking of teachers, brings new stable elements into environment of introduction (innovations), causing the system's state transition. Today innovations in education find a unique quality of social mechanism providing development of a resource of development, thereby modeling the future social system shape. Processes occurring in society stimulate teachers and heads of schools to different kinds of innovative activity, but this process should be accompanied by essential changes in the pedagogical theory and practice of educational process.



For real changes in modern education it is necessary to change the content of education and educational purposes into personal-sense ones, i.e. approached to the value world of the learning and their life realities, but the most important thing is necessity to overcome those value attitudes and consciousness stereotypes as which carriers there act direct executors of education modernization – teachers and heads of educational institutions. It is necessary to form creative competence among the teachers as the subjects of modernization, readiness for retraining, skills of continuous education, ability to be trained during the whole life. There is a serious problem connected with that despite the whole evidence of necessity of educational reforms, the teaching staff of educational institutions is on a position of declaring before realization of those changes which are initiated by the state and society in educational sphere. At the level of personal values there is no corresponding transformation – from here there are barriers as individual obstacles which do not allow the modernization potential to be realized to the full.

Over the last decade there is intensively carried out a scientific and pedagogical search in the field of innovative activity in the education system: various aspects of this problem are investigated in works of K. Angelovski, V.Y. Lyaudis, A.A. Orlov, S.D. Polyakov, V.T. Fomenko, S.F. Khlebunova. There are developed questions of renewal of aims and the content of personnel training for the education system (S.P. Averin, V.A. Adolf, V.G. Gargai, A.M. Gendin, K.M. Levitan, L.I. Lutsenko, E.M. Nikitin, A.P. Sitnik, E.P. Tonkonogaya, V.S. Finogenko, V.P. Khudominsky). The modern educational practice set up a claim to organization of management process of the comprehensive school that is reported in works of V.I. Zvereva, V.G. Kutsenko, V.S. Lazarev, A.Y. Nain, M.M. Potashnik, T.I. Shamova, Z.K. Ushakov, E.A. Yamburg. Approaches to formation of new administrative thinking are considered in works of O.S. Anisimov, Y.A. Konarzhevsky, P.K. Shakurov. Last years to the decision of problems of professional development of the pedagogical personnel in the PDI structures it is paid the growing attention. Features of work of the professional development institutes are investigated in works of S.V. Bogdanova, I.P. Glinskaya, T.S. Panina, M.M. Potashnik, P.M. Kudominsky; V.S. Lazarev, N.V. Nemova, P.T. Tretyakov, T.I. Shamova devoted their works to problems of training and retraining of the administrative personnel. Questions of use of active learning in training of the administrative personnel, including the education sphere heads, are heavily emphasized (Y.A. Vasilevsky, A.A. Verbitsky, A.Y. Levin, I.G. Nikitin, E.N. Smirnov, A.M. Smolkin, A.A. Tyukov, P.G. Schedrovitsky).

Meanwhile, a variety of works on administrative training of the pedagogical personnel (A.G. Asmolov, I.V. Abakumova, A.V. Bakulin, M.M. Kashapov, M.S. Komarov, V.S. Lazarev, M.I. Rozhkov, E.F. Zeer) underline the importance and necessity of research of the problem of education modernization at the level of personal value of subjects of educational process. The problem of difficulties, or “barriers” of teachers in educational process as an object of special research was studied in works of I.A. Zimnyaya, Y.V. Kasatkina, A.A. Klimov, N.V. Klyueva, A.A. Kolomensky, E.S. Kuzmina, B.D. Parigin, L.A. Povarnitsina, V.V. Rizhov, E.B. Tsukanova. The cognitive activity barriers as an ob-



stacle in creative search were investigated by B.M. Kedrov. Barriers as determining factors of activity dynamization at its different stages were studied in works R.K. Shakurov and his followers. Thus the special aspect of the problem is connected with revealing of difficulties and barriers which are experienced by heads of educational institutions in view of new conditions of professional work in the education modernization period. However, till now this aspect in psychological-pedagogical researches was considered extremely incidentally.

With a view to reveal psychological readiness the teachers-heads to modernization of the system of secondary education, within 2009–2011 on the basis of the professional development institute there has been conducted a research which has allowed to reveal the following.

The choice of the teacher-manager in the process of introduction of innovations in educational process should be carried out as a value-sense choice on overcoming of stereotypes. The effect of influence of stereotypes as the “stamps” of consciousness developed on the basis of previous professional experience and attributing either descriptive, value and prescriptive estimations becomes the factor impeding an adequate, full and differentiated perception of the modern professional reality of the teacher-manager at the level of personal value.

The contradiction between professional attitudes and new requirements of the teachers-heads can generate specific value-sense barriers of the teachers-heads which are shown in the complicated sense actualization of correlation of an external object of activity with an internal need of the subject, impossibility of subjective transfer of the sense content of previous experience in new professional conditions.

Overcoming of value-sense barriers can become an important factor of pedagogical management of processes of modernization of the modern education system. For this as the basic conditions there are distinguished: necessity of denial of information pressure, authoritative estimations, moralized relation; understanding of real needs and interests of the learning; interpretation of problems of innovations at different viewpoints, positive attitude on disambiguation, information novelty; the manager's right to own estimations.

A specially organized methodical system in the system of professional development, with use of the directed and mediated technologies, on the basis of sense intentions of the teachers-heads (a context similar to real professional situations, characteristic for pedagogical activity of the manager, tasks for disclosing of personal senses of this context, transformation of senses at joint activity, tasks for comprehension of alternatives, sense generative dialogue), to the teacher-head gives the chance to project the professional prospects focused on overcoming of value-sense barriers.

What are the reasons that impede realization of education modernization in the educational process real practice according to the principals (in the questioning they were asked to write three most important reasons)?



Table 1

The major causes impeding realization of education modernization in real practice of educational process

№	The reasons	% from the quantity of the interrogated teachers-heads
1	Bad material maintenance of comprehensive schools	84 %
2	Bad technique of schools	61 %
3	The general low educational and cultural level of the population	34 %
4	Inconsistency at stages of the native education modernization	78 %
5	Professional stereotypes of the majority of teachers	83 %
6	The low status of education in the native system of positioned values	57 %

Note: in the table there are not presented the results of answers which have taken less than 40 %.

The analysis of the questioning results has allowed to define that as the major causes impeding realization of modernization the majority of principals distinguish: bad material maintenance of comprehensive schools, professional stereotypes of the majority of teachers and inconsistency at stages of the native education modernization. It means that as the main initiators in realization of modernization the principals distinguish:

- the state activity (insufficient material maintenance);
- the system of training and retraining of teachers (impossibility to overcome stereotypes);
- activity of the officials in the education system (inconsistency of spent reforms).

Thus only minor part of the interrogated managers distinguishes a level of preparation of the teachers-heads (less than 7 %) as the failure reason. However, questioning of teachers indicates the opposite – the majority of teachers (more than 50 %) consider, that it is the activity of their heads that impede realization of innovative approaches in the modern education system and teachers in their answers specify that carried out reforms are often not added to the system of personal values of managers.

For revealing of personal factors complicating the activity of the teachers-heads which can underlie formation of their value-sense barriers, there has been developed a questionnaire which at the research initial stage has been offered to the teachers-managers. In the research there have taken part principals, deputy directors and representatives of a personnel reserve of comprehensive schools of Rostov-on-Don and the Rostov region in number of 344 persons. An average age of the respondents has made 38 years, the pedagogical experience was not less than 10 years. For research of features of personal sphere of the teachers-heads of various degree of involvement into the educational process modernization, there has been

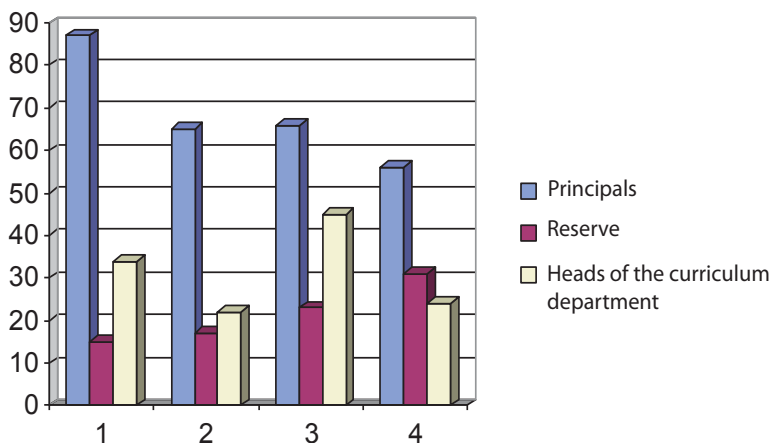


developed a questionnaire of open type directed on revealing of the person's position concerning processes of education modernization, activity and initiative degree, a relation to participation in spent reforms, an estimation of own importance in modernization success. Structurally the questionnaire is presented by the block of biographic information (sex, age, first name, middle initial, last name – was marked at will of the respondent) and the questions assuming open answers. In total in the questionnaire there were 12 questions which can be united in some blocks. The first block of questions is directed on finding-out of the person's position in relation to innovations in education at the present (the Unified State Examination, new educational standards) and plans for the future (whether they plan to realize innovations, whether they want their children to study at the modernized school), motives of participation. The second block of questions is focused on revealing of formative-ness of the conceptual apparatus in the area interesting us (what is the difference between reforms and modernization in education, what are innovative educational technologies). The third block of questions is directed on definition of the person's position in relation to the educational policy of the state and an inclusiveness degree to education modernization of officials and colleagues. Last questions consist of three parts and ask a respondent to describe himself in the remote prospect: in 5, 10 and 20 years and also to answer a question: "How do you see our comprehensive school in 5, 10 and 20 years?" This questions correlate with the question on motivation of participation in education modernization and the prospect of modernization realization in the future. The analysis of the received data was made by a method of the substantial content-analysis.

At the first stage of the questionnaire analysis it has been revealed that the answers of working principals qualitatively differ from the answers of the representatives of the personnel reserve and heads of the curriculum department of schools who were substantially similar to the answers given by teachers (I would like to do it, but I do not have such possibility). Only working principals reflex themselves as subjects of transformations (yes, there is something that depends on me). They recognize that frequently it is their activity that defines in what degree modernization is successfully realized at the level of a concrete educational institution (the diagramme 1).

The received results testify that innovations spent at school to the greatest degree depend on features of activity of a principal, but not on the work of a head of the curriculum department or representatives of a personnel reserve.

As the units of the text analysis at processing of questionnaires there have been chosen the subject and the word. Content-analysis categories have been defined by a sense field of questions of the questionnaire. All of them have been focused on revealing of features of value-sense attitudes of directors concerning their own possibilities of realization of modernization and subjective factors which interfere with complete realization in the given professional space at the level of "personal partiality".

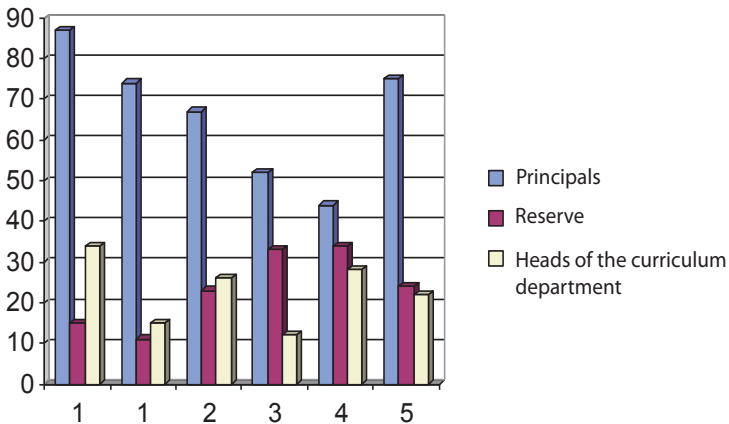


- 1 – success of introduction of various innovations into the educational process practice;
2 – a school's status level (indicators on various ratings and checks);
3 – a school's level of technical equipment;
4 – mutual relations in a pedagogical collective.

Diagramme 1. The expressiveness of opinion that a situation at school where they work depends on their own initiatives

The carried out content-analysis has allowed to reveal the difficulties which to the greatest degree testify to presence of the following value-sense barriers among principals at education modernization period.

1. An initiation barrier – difficulty at formation of the activity's orientational basis of (a problem of the value-sense choice).
2. a reflexion barrier – difficulties in coordination of orientation with other components of subject experience (a problem of extrapolation of the last subject experience in a here and now situation).
3. a personal activation barrier – difficulties at orientation in own possibilities (whether I can better adapt own efforts for decision of significant problems, whether I want to take part in it, etc.).
4. An operationalization barrier – difficulties in association of concrete means of transformation of a situation and own possibilities (how can I do it under these circumstances).
5. A cooperation barrier – disbelief in possibility to work in a team, absence of aspiration to involve employees in problem solving.



1. – The initiation barrier; 2. – the reflexion barrier; 3. – the personal activation barrier; 4 – the operationalization barrier; 5. – the cooperation barrier.

Diagramme 2. Results of the comparative analysis of presence of value-sense barriers among principals, heads of the curriculum department and representatives of a personnel reserve

The data of the comparative research has shown that these kinds of barriers were to the greatest degree peculiar to the principals. Thus there are most often met the initiation barrier, the reflexion barrier and the cooperation barrier.

Among principals at the advanced and final stage of professional development passing with use of the didactic system on overcoming of value-sense barriers there has been revealed a high enough level of development of sense orientation in whole in comparison with results of other managers and those principals who did not take part in an experimental part of the research, however, among principals, who by the experiment final stage have passed the professional development after an experimental system in more obvious degree ($> 0,01$) there was showed an active tendency in the future, an orientation on comprehension of own life sense, on the long-term future aims (reflective introspection and reflexion), thus there was developed a generalized relation to life, there was extended a value-sense space.

At the heart of overcoming of value-sense barriers there is self-disclosing and reflexion as actualization of personal sense in the mastered innovative activity. The manager, overcoming a barrier, starts to be guided by principles of a subject relation, creation of a positive emotional background, psychological comfort, individualization and differentiation, allowing to use personal previous professional experience completely and in a system form.



The didactic system of overcoming of value-sense barriers includes: methods providing self-actualization of subject experience of the teachers-managers (emotional-psychological attitudes and emotional-psychological generalization, emotional-psychological advancing, personal-sense context, transformation of a theoretical material into a figurative one); dialogue methods (external, internal, plural dialogues, dialogues of various professional practices); methods providing self-expression of teachers-managers (a choice situation, personification, tasks for self-reflexion displays); methods of psychological-didactic support of managers (situations of success, a self-differentiation and self-individualization zone, a method of personally significant concrete situations, sense immersing, value orientation); methods of a problem-creative type (creative activity initiations, problem situations, a state of "insight", tasks on life impressions, on self-sentiment expression).

As the technologies of overcoming of value-sense barriers by the teachers-head during professional development there can be used the following didactic technologies: direct sense-technique influence on a structure of alternatives by means of creation of illusion of a choice absence; technologies directed on "retention" of ideas of complicated private world of the pupil and actualization of deep values; technologies of actualization of the professional work value.

At construction of technologies of overcoming of value-sense barriers the teacher of the system of professional development should be guided by following didactic principles: an urgency principle; a principle of a research position; a principle of objectivization of behaviour; a principle of partner communication.

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**Balakina A.A.**

Features of the relation to other of inhabitants of the megacity, largest and small cities

The article analyzes the types and parameters of the relation to another among the inhabitants of metropolis, largest and small cities (Moscow, Rostov-on-Don and Creamsc). This article contains an introduction to the problem of studying the relations within the urban community, the problem of the relationship type of urban space with the content and structure with respect to another, and the presentation of the dissertation conducted study of the factors of spatial relations to other of the residents of the metropolis, the largest and small towns. The results of this study confirm the hypothesis about the presence of the differences in the parameters and types of relations to other residents of the metropolis, the largest and small towns.

Key words: attitude to the other, generalized other, the concrete other, types of relationships, social and psychological needs, unconscious of another.

Man's relationship with other people is a prerequisite for human development, is formed from the moment of his birth and affects the formation of relationships in general [9, 11]. In psychology, decided to allocate four groups of factors that mediate the emergence and dynamics of the relationship between the individual (to himself, to another, to the world) [16]. The first group of factors include the factors that determine the formation and development of human relationships in ontogeny. The second group factors of the formation and development of relations, called in the literature of "personality" factors to which scholars, includes such components of the system of human relations, as the ratio of self and relationship to generalized others [9, 11, 16]. The third type of factors (so-called "group" factors) includes the processes of group dynamics. a fourth group of factors includes the time factor, the factor of spatial proximity, cultural and historical factors and a factor such as "life event". This group of factors in psychology is called as "external determination" that emphasizes that the dynamics of relationships depend of the subject of a number of variables. Recently, researchers have considered that spatial organization of environment is an important factor in the formation of relations (VT Shimko, 2006, EV Saiko, 20001, R. Sennett, 2002, VL Glazychev, 2007, A. Zhelnina, 2005, etc.). The need to study this problem is due to actual changes in the social interaction in modern society, the transformation of social relations of the subject. The mutual dependence of spatial aspects of the social process to date has been reflected in numerous foreign (K. Lynch, R. Sennett, C. Trowbridge, MA Heydmets, G. Feeling, K. Auer, etc.) and domestic-related research studying various aspects of human life in urban space (VL Glazychev, M. Shimko, M. J. Chernoushek, M. Crump, BG Ananiev, A. Florensky, N. Nechaev and others). Recently, more and more scientists are turning to the study of socio-cultural aspects of the processes of social interaction in an ur-



ban environment. Complicated by the content of research aimed at understanding the spatio-temporal parameters of the behavioral aspects of relationships. In the works of N. Shmatko, JL Kachanov, AP Lyusy, AJ Zavalishina, EV Morozova, K. Puning, M. Romashov, IS Samoshkin indicated a close interconnection between social interaction, the characteristics of their social behavior and the phenomenon of territorial identity. In studies of S. Milgram, B. Glazycheva, IV Tuliganova, K. Maslinskogo, EV Kurylenko and others stressed the interdependence and interrelation of image and relations of the individual: to another general, his interpersonal relationships, his relationship to the city [3, 5, 8, 10, 14]. However, despite the variety of available studies to date, territorial and spatial organization of the urban environment as a factor affecting the integrity types and parameters related to others to explore enough. Meanwhile, on the basis of the above works, we can assert that the types and parameters of relation to the other of resident of the city related to the spatial parameters of the urban environment, and suggest that this relationship is mediated by the type of city.

In this paper, we refer to such a geographically-spatial parameters of the urban environment as the scale of the city, population density, zoning, design, the central / peripheral, a set which allows differentiation of different levels [2, 5, 15].

Thus, the purpose of our dissertation research is to: a comparative study and description of the types and parameters relation to other of the residents of the metropolis, the largest and small towns.

This paper presents the results of a comparative analysis of parameters of the relation to the other of the inhabitants of three cities: Moscow, Rostov-on-Don and Krymsk, which have different territorial and spatial parameters. We followed by the definition of relations, VN Myasishchev, J. Sartre, LY Gozman, and studied two types of relation to another: the generalized other and concrete Other. Relevant to the specific and generalized others were studied in the conscious and unconscious levels, at the level of expression of the desired behavior and attitudes of others.

In our study, was attended by 120 residents of Moscow, 100 residents of Rostov-on-Don, and 100 residents Krymsk in age from 21 to 37 years living in various parts of these cities. Methods: «Questionnaire interpersonal relations» W. Schutz, block techniques, diagnose different kinds of relationships with other people (the scale" taking others' Feyya "scale hostility" Cook-Medley, "the scale of good will," Campbell's "scale of confidence," Rosenberg "scale manipulative relationship, "Banta), adapted from Y. Mendzheritskoy; questionnaire interpersonal T. Leary, color test against M. Etkind.

To detect significant differences in the types, parameters of relation to another and the relationship to the city was made a comparative analysis of data using the H – theta by the method of Kruskal and Wallis.

Table number 1 shows the results of comparative analysis of the modalities of relations.



Table 1

Indicators of significant differences in the modalities of the relationship to the generalized other

Nº	Modality	level of significance	average rank 1 group (Moscow)	average rank 2g (Rostov)	average rank of 3 g (Crimea)
1	Acceptance	0,001	158,95	169,99	125,74
2	Goodwill	0,000	184,35	157,65	108,29
3	Trust	0,014	158,76	165,79	131,92
4	Hostile relation	0,000	182,56	111,75	153,67
5	Manipulative attitude	0,007	170,40	132,46	148,46

According to the reported data in its most significant differences of the mentioned types of relationships (see Methods) were obtained on such modalities as acceptance, kindness, trust, hostile relation (cynicism), manipulative attitude.

Kindness, hostility (cynicism) and manipulative attitude is more pronounced among respondents in Moscow. The residents of Rostov-on-Don is dominated by indicators of the level of acceptance and trust.

Table № 2 shows the results of comparative analysis of major social and psychological needs in a relationship, as dealing with the following: the need for love, inclusion and control, each of which was seen at the expression level and the required behavior.

Table 2

Indicators of significant differences in basic interpersonal needs in a relationship

num p / n	parameter	level of significance	average rank 1 group (Moscow)	average rank 2g (Rostov)	average rank of 3 g (Crimea)
C(e)	Consumed in the control	0,044	167,96	136,72	135,89
A(e)	Consumed the in love	0,028	153,00	160,35	130,11
A(w)	Consumed the in love	0,004	130,78	171,70	144,77
I(w)	Consumed in the Including	0,000	162,77	176,24	103,23

According to table number 2 most significant differences were obtained for the following types of social and psychological needs: the need for control (C (e), $p = 0,044$) and the need for love (A (e), $p = 0,028$) (expressed at the level of behavior), needs to love (A (w), $p = 0,004$) and the inclusion (I (w), $p < 0,001$) (at the level required the relations).

Among the respondents, Moscow has been found highest expression of the need to control C (e). The residents, who live in Rostov-on-Don, found the highest representation of the need for love A (e), A (w) (at the expression level and the desired relation-



ship), as well as the need for inclusion of I (w) (at the level of the desired behavior.) Among the respondents Krymsk has been not found the highest rates of expression of the social and psychological needs.

Also as a result of pair-wise comparison of cities with the help of U – the Mann-Whitney test revealed that the increasing disparity in size of cities increases, the number of significant differences in interpersonal requirements.

Table 3

shows the results of comparative analysis of the types of relations to the generalized other.

num p / n	Type of relation	level of significance	average rank 1 group (Moscow)	average rank 2g (Rostov)	average rank of 3 g (Crimea)
1	aggressive - straightforward	0,012	142,45	134,47	169,60
2	humbly-shy	0,000	143,13	112,40	193,94
3	dependence of the docile	0,000	157,74	111,85	176,74
4	collaborating- conventional	0,000	149,09	122,39	176,81
5	responsibly-hearted	0,000	149,91	106,16	191,88

According to the data presented to it the most significant distinctions have been found out on 5 of 8 types of interpersonal relations: is rectilinear-aggressive, humbly – shy, dependent-obedient, collaborating-conventional, responsibly-hearted.

The highest level of the given types of the relation to another is observed among inhabitants of Krymsk, the lowest indicators of their expressiveness characterize Rostov-on-Don. We see that basically the allocated types of relations are concentrated round an axis “friendliness-aggression”.

In the table № 4 we can see the results of the comparative analysis of the extramental relation to generalized are presented other which was studied through the relation to following categories: others, the inhabitant of the city, aboriginals and visitors.

Table 4

Indicators of significant distinctions of extramental relations to generalized to another

№	object	level of significance	average rank 1 group (Moscow)	average rank 2g (Rostov)	average rank 2g (Rostov)
1	others	0,021	143,10	161,13	177,23
2	the inhabitant of the city	0,000	132,36	168,35	182,68
4	aboriginals	0,034	142,79	165,23	173,49
5	visitors	0,000	115,47	154,57	216,38



On the basis of the data presented in it, we can draw a conclusion that with increasing of size of a city and accordingly change of its territorially-spatial parameters intensity of the relation to generalized to other decreases.

In the table № 5 we can see the results of the comparative analysis of the extramental relation to «differentiated generalized» which was studied through such categories as: friends, neighbors, relatives.

Table 5

**Indicators of significant distinctions of extramental relations
to «not differentiated generalized» to other**

№	object	level of significance	average rank 1 group (Moscow)	average rank 2g (Rostov)	average rank 2g (Rostov)
1	friends	0,003	159,86	181,42	137,15
2	neighbors	0,000	139,83	132,30	209,92
3	relatives	0,001	152,34	140,97	186,49

According to the data presented in this table, we can conclude that with increase of size of a city and accordingly change of its spatial organization intensity of the extramental relation to «differentiated generalized» to other to a formal and spatial sign decreases.

The comparative analysis of the data spent by means of H – the test on a method of Kruskala-Uollisa, hasn't revealed significant distinctions in the relation to concrete other of the respondents living in cities of different type.

Thus, the resulted results of dissertational research allow to conclude:

1. level of the spatial organization of a city (city type) determines the distinctions in modalities and types of the relation to generalized to other, in socially-psychological requirements for relations and their hierarchical structure;
2. level of the spatial organization of a city (city type) determines distinctions of the unconscious relation to various types of other: generalized, «differentiated generalized» and to concrete other.

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Belokon I.A.

Psychological particularities of the transformation of the context sphere while getting extra qualification

In the contemporary psychological science there is a well formed scientific direction, which considers personal transformations in the specific professional context and reveals, how professional context influences personal features, not only destroying them but changing them, stimulating the development of the personality value intentions. Particular aspect of the studies is connected with the particularities of the influence upon the personality in the period of getting extra qualification. People of the different professional background in different way perceive and assimilate the information concerning new professional knowledge and skills, there is a particular group of the office workers, who already have high education.

Key words: context sphere, value and context образования, value-context barriers, purpose- in life strategies, positive strategies, crisis strategies, personal transformations.

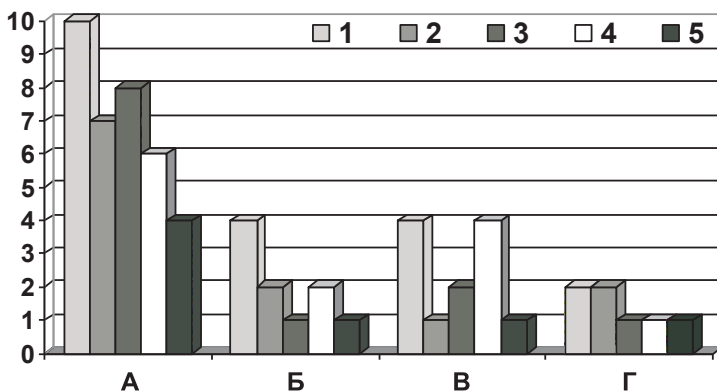
Getting the extra qualification in the conditions of the economic crisis becomes more and more popular. The extra qualification doesn't mean the second high professional education, but in fact it is an analogue for the second high education. In the described research we examined the process of getting qualification when the respondents have already basic high education. The sample consisted of 500 specialists, working in different professional fields, who completed a questionnaire. It allowed to discover what categories of the employees would like to receive most of all the extra qualification: medical workers – 7 %, teachers – 13 %, servicing – 24 %, the bank clerks and employees of insurance companies – 52 %. If in 2007 only 27 % of the bank clerks and employees of insurance companies wanted to get the extra qualification (N.M. Kadiakina), then in the middle of 2011 more than 50 % of specialists having this profile believe, that the extra qualification is absolutely necessary, both for the professional growth, and for deciding their own psychological problems (with communicative interactions, overcoming value and context barriers, decreasing the level of personal anxiety). It is confirmed by other researches. The psychologists speak about the new «disease from work» XXI c., which negatively influences the man's health. The following results are given in static studies: satisfaction from work receive only 16,8 % of the asked bank clerks, however in other spheres (teachers, medical workers) this figure increases to 42,2 %. 74 % of respondents suffer permanently from the depression – office workers, and 53% – outside the working place. The intense work, connected with psychological stresses, more often leads to depression among the office workers – 22,6 %, which twice higher than in other groups of respondents. Besides, the authors of the research (P.N. Ermakov, N.M. Kadiakina) underline that, mental instability and depression lead to different diseases. Many office workers (especially bank employees and those of large insurance companies), being afraid of losing their job during the disease, prefer not



to see the doctor, they take other sleeping draughts, or stimulating physical activity medicines and biologically active additives. Self-treatment is exercised by 45,1 % of the respondents in the bank sphere and only 11,1 % in other sectors. Q-date let us also to reveal, that the women are under stress at work more often than men. We found out some factors, which, in respondents' opinion, hurt them most of all:

- 1) high intensity of work (the rush of the city life);
- 2) high level of responsibility;
- 3) socio-psychological climate and interaction with other employees;
- 4) absence of high hierarchy;
- 5) high requirements for reliability (diagram1).

The factors were analyzed according to 10-pointed scale.



A – bank clerks and employees of insurance companies; B – teachers;
C – doctors; D – employees of Horeca (hotels, restaurants).

Diagram 1. Comparative analysis of hurting factors among employees of different professional groups

The feeling of the uncertainty in their professional future and extremely intensive work, trigger first of all the representatives of the group «A» to get extra qualification. Besides it is possible to distinguish three directions, where the office workers would like to get extra qualification:

- Foreign language studies – 17 %;
- programs of qualification improvement, closely connected with permanent improvement of the professional duties – 37 %;
- programs connected to management psychology and communicative psychology – 56 %.



In this research we carried out the comparative analysis of the transformations of the value and context sphere among bank clerks, workers of insurance agencies, realtors, workers of traveling agencies who completed the course in order to get the extra qualification of «Management psychology and recruitment» (147 respondents); «Interpreter in communication sphere» (34 respondents) and control group, those employees, who don't have any extra qualification (69 respondents).

In the contemporary psychological theory (I.V. Abakoumova, V.I. Bakoulin, S.U. Golovin, D.A. Leontiev, A.N. Soukhova) they outline context-value barriers. The construction material of the world outlook is the personal contexts as the products of the human relation towards it. The context has a systematic ability, the ability to spread its influence upon all the human systems and submit them in some way or another. D.A. Leontiev defines the context sphere of personality as an organized in particular way complex of the context entities (structures) and links between them, providing the context regulation of the whole life-sustaining activity of the subject and all its aspects. Under the term of context regulation he means the system of the psychological mechanisms, which guarantee the congruity of the activity in the subject's intentional sphere. The man's relations with the world are formed through the context links, turning them in the context structures, which organize this world. D.A. Leontiev distinguishes dynamic context system, relatively stable, autonomous, hierarchically organized, including multilevel context structures functioning as a whole. It also determines man's outlook. The context sphere is unhomogeneous and multilevel entity. The compounds of the context sphere have the context forming function, including the context regulation of the life-sustaining activity of the subject. The individual blocks in the context regulation can be defined as the personality value – context barriers.

Transformations of context and value sphere of the personality and dynamic motivational changes, as well as the internal links and relations between multilevel compounds and parameters, determining the level of the personal stability and professional reliability of the employees working in the offices.

The strategies of value and context sphere can be classified as positive, providing high level of professional self-realization, and crisis, leading to the deformations and regressions in the relations with the surrounding people and public (social) structures (A.A. Volkov).

The employees with the positive strategies are oriented in their purpose-in life intentions to self-development, they differ by the structured and consistent actions in the situations of the personal choice. They are creative in finding the intermediary contexts of their actions, the active and pro-social outlook is typical for them.

Crisis strategies are caused by value and context barriers, which appear in the process of the professional activity, preventing personality self-realization in this the most important life context. Value-context barriers, specific to office workers will be different depending on the objective and subjective factors. The objectives (interpersonal factors) are caused by the existing regulations of the professional activity and professional experience in the field.



Among the subjective factors the most significant are: level of the development of the context sphere of the employee, especially his professional motivation, value orientations, and general personality orientations. Besides, we find consistent the goal-oriented influence from the side of the professional environment, forwarded to create the corresponding context attitudes as an important accelerator of the introspective needs and, as a consequence, of those context intentions, which lead the person gradually to the level of self-realization, in the form of needs of self-understanding, reflexion, self-assessment while analyzing success and failure in the process of the professional activity.

More often the value and context barriers are connected with the absence of the reflexion, difficulties in the verbalization of self-attitude and the extrapolation of the personal sense in the situation connected to professional activity. These barriers demonstrate themselves in the difficulties of context actualization and the correlation of the external object of the activity with the internal need, the impossibility of the subjective transfer of the context content of one situation in other professional conditions.

Bearing in mind the qualitative analysis of the gathered diagnostic results, we made the comparative analysis and found that the employees who attended the retraining in «Management psychology and recruitment» have the following configuration of the compounds of the purpose-in life orientation: Aims > PQ-Self > PQ-Life > Result > Process. They aren't satisfied by their life at present and assess as average the efficiency of the spent life, and, however, the goals oriented towards future give the life the full –value context. The orientation to the goals contribute to their representations about themselves as strong personalities, having enough freedom of choice and able to build their life according to their aims and life purposes, contrary to the fact that the man can't always control his life, to make the decisions and make them true.

The employees, who studied according to the program «Interpreter in the communication sphere» have the following configuration of the compounds of the purpose-in life orientations: Aims > Result = PQ-Self > PQ-Life > Process. They appreciate the fact of having purpose in life. They aren't satisfied with their present life. They assess their life span in correspondence with their representations of their personal possibilities and the freedom of the choice, the freedom of choice from the point of view of these employees is limited.

After making diagnostics we can make a conclusion, that the representatives of the 1-st and 2-nd group have the strict orientation towards the changes (100% and 76% correspondingly). The representatives of the 3-rd group (those who didn't get extra qualification) demonstrated the tendency to keep the things in the way which already exists or they admit the minimum changes (correspondingly 47% and 53%).

The representatives of the first group are characterized by high level of transforming and achievement motivation (table 1). Even women (in our research there is a majority of them) judging by many traits are similar to standard characteristics, typical for the men. It means a well –formed orientation to the achievements and a decreased orientation towards the communication.



Table 1

The primary results (the average statistic data by the group, getting extra qualification in «Management psychology and recruitment»)

Motivation:	money		team		profession		Total points, %	
	w	t	w	t	w	t		
transforming;	4	4	5	5	4	1	23	22,4
communicative;	4	1	0	5	5	3	18	13,95
pragmatic;	3	1	2	2	5	1	13	11,2
co-operative;	5	4	4	1	4	2	20	18,71
competitive	5	0	3	3	2	0	13	12,1
achievement	5	1	4	5	4	1	20	22,56

Test results testify that the representatives of this group have an active position in the professional activity in whole (predominance of the result over the process). The co-operative motivation is well formed, which speaks about the orientation towards the society interests in whole, and not only towards the personal interests or the interests of the notary's office where the respondents work. The most important one is the motive of the achievement, which emphasizes the desire to overcome the difficulties, the desire to face the tasks of the high level of the difficulty and decide them, mainly, supporting themselves, counting on their own forces. The certain deformations of the context sphere are observed по ряду стимулов. Thus, for instance, the competitive and transforming motivation is clearly demonstrated towards the words «money» and «team» and less expressed to the words connected to the labor activity. It is necessary to underline, that the most often the representatives of this group believe, that «good work» doesn't give the man the confidence that he will be appreciated, and that he will be successful in colleagues' opinion. Such confidence, from their point of view, is only given by the money, professional status and self-confidence.

The data received as the result of the diagnostic and experimental work, testify:

- among bank clerks, insurance employees, realtors and the workers of the traveling agencies, positive personal changes are initiated by the extra qualification in «Management psychology and recruitment »;
- after attending the program they show a small percent of the value and context barriers, they better analyze the strategies of overcoming the crisis situations, connected to the professional activity, they treat more optimistically their future.

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Pavlova T.A.

Estimation of willingness and ability of conductors for ethical interaction with passengers

A comparative analysis of key documents describing and regulating activity of conductors of passenger wagons in PLC "RZhD" and responsibilities, qualifications, and training programs of conductors of foreign railways (UK, France, Canada, Australia, USA) has showed that interaction with passengers as one of main duties of a conductor and his area of responsibility is not fixed nowhere clearly in OAO "RZD" in contradistinction to foreign railways. So nothing says that an interaction with passengers is a duty and responsibility of a conductor.

Conductors of passenger wagons are not considered as attendants in world practice. They are a face of the company; they interact with passengers in all matters arising in execution of obligations for provision of transport services by the company [1].

Key words: *professional psychological assessment and selection of conductors of passenger wagons, professionally important qualities, service, ethical interaction, "officially polite service," "comfortably polite service."*

There is a strange contradiction in our national practice. On the one hand, conductors is not assigned representative and communicative functions nowhere – to be a face of the company, politely and correctly answer passengers' questions, provide all necessary and useful information on all points connected with a trip on a train. On the other hand, service function – to be support staff (obscure a bed, serve tea, etc.) was assigned to all conductors of passenger wagons gradually, but this function is not written clearly in the regulatory documents of PLC "RZhD".

This inaccuracy, incompleteness and ambiguity of determination of a status, functions and responsibilities of conductors of passenger wagons leads to difficulties in organization of activity of both conductors and managers of passenger complex.

Correct interaction of personnel with clients is an important condition of work of any company providing services. This principle is already used in practice in many Russian companies. These companies have developed standards and rules of interaction with clients.

In addition, mechanisms of monitoring compliance with these rules and forms of rewards and punishments for their degree of compliance are developed and implemented, as well as incentive schemes for staff, orienting to correct work with clients.

A modern company providing services to clients should aim staff at correct work with customers, should standardize a form of interaction of personnel with the clients and should introduce modern standards of service in daily work through a system of training and by motivation. Also an effective mechanism of monitoring this aspect (a quality of customer service) of production and service activities is needed.



Unfortunately, this problem (establishment of a system, which ensures a correct staff interaction with clients strictly) has not yet been solved by one of the largest Russian companies – PLC “RZhD”. This problem, obviously, will be solved in the short term.

At the same time we have to consider that this problem is only one of the tasks in a large goal – to create a modern system of a service delivery in PLC “RZhD” and in affiliates [2].

Behavior of staff, direct communication and interaction with customers is just one component of quality service. When we are building a system of service (provision of quality services) we have to take into account a minimum of ten components of quality service.

1. Impression: a state and design of premises and equipment, an appearance of staff.
2. Security: a provision of all necessary to protect life and health of a client, his property and finances [3].
3. Reliability and accuracy: services are provided in full accordance with the contract and just in time.
4. Competence of personnel.
5. Quick response to customer request.
6. Politeness and courtesy of staff.
7. Trust: honest of the company and its staff.
8. Availability to interact with next level managers in events of misunderstandings with service personnel.
9. Communication and information support of a client: the company interacts with potential customers actively, a customer receives all necessary information to obtain a service and during service use.
10. Accounting of needs of customers: a presence of systems of an accounting and analysis of customer requests in the company, a willingness of staff to understand and take into account specific client requests.

These components can be taken into account in a planning and designing a special program to create a system of quality service in PLC «RZhD».

In our work, we determined singular integral professionally important quality of conductors at specially organized diagnostic procedures of long-distance conductors – a willingness to correct interaction with customers. We assessed:

- 1) professionally necessary communication and behavioral skills and abilities of existing conductors in interaction with passengers (as they do now);
- 2) a potential of assessed conductors in learning of ways of correct interacting with passengers.
- 3) Thus, we assess a current readiness for correct communication and interaction with passengers and a possibility of training these skills and abilities.

Special control exercises on technology of assessment of personnel «Assessment Center» (AC) were developed to assess this important professional quality – correct



interaction with passengers. This technology makes it possible to do a comprehensive assessment of staff to determine a professional and intellectual potential of staff. AC method is the most reliable technology assessment and selection of staff. Foreign experts define the reliability of the method AC – 70–75 % [4].

Group of conductors is observed and assessed by specially trained experts on a basis of numerous exercises, according to the rules exactly, using situations close to real in AC method. Advantages of the method include individual interview with every participant of AC on results of the assessment, which makes it possible to build a program of an individual development and a professional career [5, 6].

Two exercises have been selected to assess a readiness of conductors for high-quality service. Execution of these exercises by every conductor was recorded on video. Then the executions of exercises were analyzed by experts of service and psychology of a communication. The experts responded to two questions: 1) does assessed participant show skills and abilities of correct service of passengers or not, 2) does he have a potential to learn these skills and abilities. Each participant was assessed by criteria of a readiness-unreadiness and an ability-inability for correct interaction with customers.

1st exercise – a conductor is offered to demonstrate how he can greet passengers as a representative and a face of the company by next scheme: a polite greeting – introducing himself to a passenger (including say his name and surname) – telling minimum information about the train, and extra services.

2nd exercise – a conductor is offered to demonstrate how he will interact with a passenger in certain situation in two styles (officially polite, comfortably polite). For example, a passenger is smoking in a wrong place, actions of a conductor.

Each conductor was assessed by experts on criteria:

- 1) the assessed participant demonstrates minimum skills and an ability of correct greeting of passengers – 1 point, does not demonstrates – 0 points;
- 2) the assessed participant demonstrates minimum skills and an ability of correct interaction with passengers as an official representative of the company (a style of «officially polite service») – 1 point, does not demonstrates – 0 points;
- 3) the assessed participant demonstrates minimal skills and an ability of correct interaction with passengers in a service of high comfort (a style of «comfortably polite service») – 1 point, does not demonstrates – 0 points;
- 4) the assessed participant demonstrates minimal skills and an ability to distinguish and switch from one style of interaction with passengers to another – 1 point, does not demonstrates – 0 points.

Preliminary conclusions.

1. Rather high percentage of conductors demonstrate a willingness and an ability for training of interaction with passengers in terms of proper service despite an overall production and technical orientation of collectives of wagon plots.
2. “Inherent” correctness and politeness of certain conductors is a valuable resource for a formation of collectives in a style of «officially polite service».



3. "Inherent" glibness and abruptness of some conductors is a potential source of small conflicts, it requires a special adjustment of behavior. There are uncontrolled elements of aggressive, dominant and defiant behavior in intonations and in a conduct of these conductors, it often leads to conflicts of «psychological» nature. Conductors need to be trained to restrain their emotions and behave correctly.
4. It needs to develop and implement standards of interaction of conductors with passengers, as well as to prepare a training program of behavior under these standards.
5. An ability of an educability of overwhelming majority of conductors is sufficient for learning of appropriate forms of interaction with passengers.

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Denisova I.A.

The frequency-spatial distribution of the cortex bioelectric activity among musicians at musical creative activity

In the work there are presented the results of the research of functional, spatial and structural correlates of musical creative activity with the view to reveal the cerebral mechanisms underlying creativity. There are revealed differences in the specificity of power spectral characteristics and the character of coherent correlations among the examinees at a creative problem decision process for different frequency ranges.

Key words: nonverbal creativity, EEG, spectral power, coherence, frequency range.

For a long time scientists of all epochs have been interested in creativity and it caused desire to frame "the creativity theory". The history numbers a large quantity of attempts to find the universal formula which application would allow to create invaluable artworks, to create masterpieces made to order. How many times they have tried "to measure harmony by algebra"! However there's no telling that scientists could finish the explanation of this phenomenon nature. We can ascertain the increasing interest to the creativity problem, to its social aspects (G. Fisher), analysis of cognitive and emotional components of creativity (T. Lubarta and K. Mushiru), diagnostics of intellectual and creative abilities (A. Froinda and K. Hollinga), the problem of intelligence and creativity correlation (J. Maker), researches of the evolutionary genius in music (P.A. Kulichkin), to psychophysiological aspects of the correlation of creativity and anxiety, psychological protection, the brain zones put into operation (I. Carlsson). For today even more often there is the scientific data describing the results of researches of features of cerebral activity during the creative process, unlike the not creative, at the decision of creative problems depending on the examinees' sex, the problem decision strategy selected by them, the type, character and degree of complexity of problems, motivation level to a decision finding (N.P. Bekhtereva, S.V. Medvedev, S.G. Danko, I. Carlsson, O.M. Razumnikova, N. Weinberg, N. Jausovec, K. Jausovec, Martindale, Molle, H. Petsche). Thus it should be noted that a special value there gets studying of cerebral mechanisms of true, internally motivated creative process. Such a spontaneous creative act is music composing. Revealing of functional, spatial and structural correlates of musical creative activity allows to understand the cerebral mechanisms underlying the creative process, to find, how to control and influence a creative condition. The neurophysiology researches of musical creativity still are fragmentary (R.A. Pavligina, V.I. Davidov, A.V. Sulimov, Y.V. Lyubimova, D.S. Sakharov, T.D. Panyusheva; K.J. Pallsen, E. Brattico, C. Bailey, A. Korvenoja, J. Koivisto, A. Gjedee, N. Ann, L. Gabora, Th. Bever, R. Chiarello) while the scientific interest to this sphere of the cognitive science continues to grow. The research urgency is caused by the contradiction between the constantly growing interest to revealing of patterns of the brain functioning during creative process (in particular during nonverbal forms of creative activity) and the in-



sufficient level of the theoretical and applied base of psychophysiological and neurophysiological researches of the persons who are engaged in nonverbal creativity, first of all, during the very creative process. Special complexity is represented by the experiment organization as much as possible approached to the natural, and absence of unequivocal interpreting and classification of the experiment product of as a truly creative.

The work purpose is to investigate the frequency-spatial distributions of the cortex bioelectric activity at musical creative activity among musicians. Practicing musicians, the professionals having profile music education, became the research object.

We have assumed that at examination of the EEG characteristics among the musicians-composers there may be revealed the regions of cerebral activity involved in the process of music composing, different from those involved in realization of other kinds of musical activity (perception, reproduction). During the research it was supposed to solve the following problems: 1. Studying of the value of powers, and also coherent correlations in various frequency ranges in a background and the used functional tests: perception of a musical fragment, reproduction of the heard musical fragment, composition of own melody relevant to a certain emotional condition caused by the heard fragment. 2. Carrying out of the comparative analysis of the indicators of powers in various ranges at comparison of functional tests. 3. Revealing of the cerebral activation specific zones exclusively inherent in the process of music composing on the basis of comparative analysis of the indicators of powers in various ranges at functional tests. 4. Studying of intra- and interhemispheric correlations (at the results analysis there have been used only authentic coherent correlations of a high order with an indicator above 0,7) at music composing and revealing of the composition specificity on these indicators unlike a background. 5. To spend the data mathematical processing by means of the mathematical statistics methods: T-criterion of Student and MANOVA analysis of variance.

For studying of the functional organization of the brain of examinees during the performance of musical activity the EEG method was used. The EEG registration was carried out by means of the "Entsefalan" electroencephalograph, the "Elite-M" version of the MTB "Medicom" manufacture (Taganrog) under the international standard of the electrodes placing under the 10–20 % scheme. For registration of the brain electric activity there were placed 21 electrodes, the monopolar scheme with lateral aural referents was applied. There also have been placed the polygraphic channels (EOG, EMG, ECG, GSR) with a view to suppress artifacts. There were investigated the following frequency ranges: delta 1 (0,5–2,0 Hz) and delta 2 (2,0–4,0 Hz), theta 1 (4,0–6,0 Hz), theta 2 (6,0–8,0 Hz), alpha 1 (8,0–10,5 Hz), alpha 2 (10,5–13,0 Hz), beta 1 (13,0–24,0 Hz) and beta 2 (24,0–35,0 Hz). For the analysis there were selected the non-artefact EEG intervals of 10 seconds duration. During the experiment the EEG indicators were registered in a quiet condition (a background EEG blindly) and at performance of functional tests (perception, reproduction and composing). In the beginning of each experience during 1 minute there was registered



the EEG when the examinee stayed in a condition of quiet wakefulness blindly in the absence of sound and visual stimulus (test 1). This data was considered as a background. In the following part of the experiment the examinee heard classical music of the fixed power through ear-phones (60 Db) and within 1 minute they registered the EEG (test 2). In the experiment as classical music there was used the fragment from the Strauss's operetta "Bat" characterized by major emotional coloring. Before this the following instruction was offered the examinee: "Listen to the music and try to define the emotions it causes". In the next test (test 3) the examinee should reproduce to himself the heard musical fragment. Then the examinee's task was: "Try to compose own melody so that it would have the same emotional colour, as well as the fragment earlier heard by you; and after the research it will be necessary to reproduce the thought up melody in writing or orally" (test 4). Further another musical fragment from the E. Grig's ballet "Per Gunt" characterized by minor emotional coloring was offered the examinee, it was necessary to do the same procedure with it. For an estimation of qualitative characteristics of the received melodies they were given to experts, pedagogues of Rakhmaninov Rostov conservatory. Further there were analyzed the EEG-data of those examinees whose results of the third test have been estimated as high creative.

As a result of the comparative analysis of the EEG spectral power between the indicators of each functional test (test 2, test 3, test 4) taking into account use of the melody with certain emotional coloring there are revealed cortex regions specific to the process of music composing unlike other kinds of musical activity. Analyzing the research results of we started with modern ideas about delta-range. From the point of view of a number of researchers: L.I. Aftanas, N.V. Reva, A.A. Varlamov, S.V. Pavlov, V.P. Makhiev the delta- oscillations are not only a correlate of the lowered functional condition (dream, pathology), but also a correlate of accompanying components of an active condition [6]. So in emotions generation process the intensification of power in delta-range is observed. In our research the greatest changes of power are in delta-range in frontal divisions and occipital zones.

Various aspects of the musical information processing are connected with activity of numerous cerebral structures some of which provide music perception (for example, temporal lobes are functionally connected with melody understanding), and others mediate development of emotional reactions (subcortical structures and frontal cortex lobes) [12].

In our research we consider the increase of activity and significant coherence of the theta-rhythm in parietooccipital region as a reflexion of the process of activation of access and extraction of emotional information from memory, process of search of new, original decisions.

The alpha-rhythm activity is associated with the current functional condition of the person which is influenced by the character of music (its power, style). At composing the music with minor emotional colouring there has been increased power in frontal and post-temporal zones of the right hemisphere in the alpha-range.



In our research the increase of activity in beta 1 – and beta 2-frequency ranges in the prefrontal region of the right hemisphere and the occipital region of the left hemisphere may be considered as a reflexion of the creative process activation at creation of a musical image of a melody. It is proved by researches where it is revealed that the correct construction of language and musical syntax (the set of rules defining appropriate bond of elements – notes and words, accordingly) is provided by the frontal cortex region, and other regions are responsible for processing of the language and music components connected with it. N.P. Bekhtereva also specifies that at the of creative divergent tasks decision in the right frontal lobe (10, 11, 44, 45, 46, 47), and also in parietooccipital regions at the left (67, 7, 19) local rising of a blood flow was observed [3]. In the research of O.M. Razumnikova a substantial growth of the beta 2 rhythm as a correlate of successful divergent thinking was observed in frontal and parietal zones. Thus it is observed a mosaic character of the neural ensembles organization with the diffusive-presented synchronization in the beta 2-range which represents a correlate of “the differentiated attention”, providing widely distributed at various cortex regions processes of information selection necessary for the open type problems decision – in our case composition creation [7].

In the research of emotional influence of musical chords on the brain it becomes perceptible that the response at perception of minor chords in comparison with major ones was shown in hyperactivity of the tonsil, retrospinal cortex, brainstem and cerebellum. N.P. Bekhtereva also emphasized the importance of the retrospinal region in the emotions providing process [2].

In result of the analysis of coherent correlations between the background indicators and the indicators of “music composing” functional tests it is revealed that during music composing it is observed the increase of intrahemispheric hemisphere coherence values in frontal divisions of the cortex right hemisphere and in frontal divisions of the left hemisphere. And such activation is characteristic for the delta, theta and alpha frequency ranges. Similar synchronization of the theta rythm in cortex frontal regions is often observed in situations with a cognitive effort and memory load [3]. In the beta 2 range it is revealed the increase of intrahemispheric long- distant correlations between frontal and posterior divisions of the right hemisphere. As to the interhemispheric interactions it is most brightly presented in frontal divisions between homologous leads in the delta2 range. Thus, the researches have shown that intrahemispheric coherent correlations during music composing are almost evenly distributed in both hemispheres without significant domination of any hemisphere.

Intensifying of the coherent correlations of the alpha rhythm in temporal and frontal regions among the musicians can matter activation of mental processes of search. There occurs an original scanning (“reading”) of information and close connection with perception and memory mechanisms takes place.

In the beta 1 and beta 2 frequency ranges the dynamics of distribution of coherent correlations is following: it is expressed the integration of frontal and posterior regions in the right hemisphere that means active involving of parietal, occipital and temporal regions into collaboration.



Weakening of functional correlations between hemispheres among the musicians can also specify in more independent work of hemispheres, separate information processing at the stage of a nonverbal creative problem decision. In research of Bekhtereva N.P., Nagornova Z.V. as well as in our research it is revealed an independent and parallel work of hemispheres during the nonverbal creativity process. Authors believe that the reduction of coherent communications in EEG high-frequency ranges between hemispheres at performance of creative tasks specifies in reduction of influence of the left (supervising) hemisphere in the nonverbal creativity process [2]. This assumption confirms the revealed in our research coherence depression of cerebral cortex biological potentials in the left hemisphere.

It should be noticed that the number of significant coherent correlations in the left hemisphere at major melody composing is greater than in the right that reflects a pattern of the EEG-activation, characteristic for experience of positive emotions which are presented at the process of creation of melodies with major emotional coloring.

Thus, as the specificity of musical creative process it is possible to ascertain the independent, but parallel active functioning of hemispheres at musical creative activity. Thus the greatest value there get frontal, temporal and occipital cortex regions, carrying out the integrating functions of organization of the processes of attention, emotional regulation and strategies of the problem decision in whole.

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