

Vol 9 # **4**

Moscow



Russian Psychological Journal

Founder – Russian Psychological Society **Editor in Chief** – 7 inchenko Y.P.

Editorial Committee

Nechaev N.N. Akopov G.V. Allahverdov V.M. Rubtsov V.V. Debolskii M.G. Rean A.A. Ribnikov V.Y. Zabrodin Y.M. Karainy A.G. Feldshtein D.I. Karpov A.V. Chernorizov A.M. Shadrikov V.D. Klimov E.A. Malopheyev M.N. Shkuratov V.A. Marin M.I. Shoigu U.S.

Editorial Board Yermakov P.N. (deputy Editor)

Labunskaya V.A. Abakumova I.V. Asmolov A.G. Leonova A.B. Bahenko V.V. Sergivenko E.A. Basarov T.Y. Tkhostov A.Sh. Tsvetkova L.A. Bezrukikh M.M. Berberian A.S. (Armenia) Bogoyavlenskaya D.B. Vorobiova E.V. Kittler U. (Germany) Derkatch A.A. Menjeritskaya J. (Germany) Dontsov A.I. Velichkovsky B.M. (Germany) Dubrovina I.V. Kronik A.A. (USA) Zhuravlev A.L. Belianin V.P. (Canada) Borokhovski E. (Canada Egorova M.S.

Executive Secretary – O.V. Tel'nova
English Editor – L.Ju. Kruteleva
Managing Editor – L.V. Popova
Page settings – A.P. Tchekha

Address of the Publisher:

Nagibin Av., 13, of. 243, Rostov-on-Don, Russia, 344038 Tel. (863) 243–15-17; fax 243–08-05 E-mail: rpj@psyf.rsu.ru

Founder Address:

Yaroslavskaya str., 13, Moscow, Russia, 129366 Tel./fax (495) 283–55-30 E-mail: rpo@psychology.ru

ISNN 1812-1853

No part of this publication may be reproduced without the prior permission of the copyright owner

Subscription catalogue of Russian Press Agency «Newspapers, Journals».

Subscription code 46723



CONTENTS

| OUR AUTHORS | 4 |
|--|----|
| ANNIVERSARIES | 7 |
| TERRORISM PSYCHOLOGY Ermakov P.N., Abakumova I.V. Youth against terrorism (on the work of the anti-terrorist youth festival) | 9 |
| Popova L.V. Slinko A.E. Public service advertisement as a component of formation of anti-terrorist and anti-extremist values in the youth environment | 14 |
| PSYCHOPHYSIOLOGY | |
| Chistyakova N.V., Sergienko E.A. Genotype-environment interaction: a molecular genetic approach to the study of volitional control during pregnancy | 19 |
| SOCIAL PSYCHOLOGY | |
| Breus E.D. Adults' level of optimism and particularities of their behavior in conflict situation | 30 |
| EDUCATION PSYCHOLOGY | |
| Abakumova I.V., Telnova O.V., Fomenko V.T. Development of pupils in interdisciplinary contexts | 36 |
| Masaeva Z.V., Volkov S.I. Studying of psychological safety in the educational environment of the post-conflict region | 49 |
| THE YOUNG SCHOLARS | |
| Grimsoltanova R.E. Religious possession as a subject of psychological analysis: problem statement | 56 |
| Balakina A.A. Social-psychological characteristics of the attitude of the residents of megalopolis, cities and towns to other people and to the city | 63 |
| | |
| | |
| | |
| | |
| | |

Our authors

Ermakov Pavel Nikolaevitch

Corresponding member of RAE, the dean of the psychological faculty of SFU, the head of the department of psychophysiology and clinical psychology, Doctor of Biological Sciences, Professor Official address: r. 205, b.13 av. M. Naguibina,

Rostov-on-Don, 344038

Telephone: +7 (863) 230-32-07

E-mail: psyf@sfedu.ru

Abakumova Irina Vladimirovna

Corresponding member of SAS of RAE, head of the department of general and developmental psychology of SFU, Doctor of Psychological Sciences, Professor Official address: r. 217, b.13 av. M. Naguibina, Rostov-on-Don, 344038

Telephone: +7 (863) 243-07-11 E-mail: general@psyf.rsu.ru

Popova Larissa Vladimirovna

teacher of the department of social psychology of the psychological faculty of South Federal University

Official address: r. 243, b.13 av. M. Naguibina,

Rostov-on-Don, 344038

Telephone:: +7 (863) 243-15-17; 230-32-37

E-mail: larisa2210@bk.ru

Slinko Anna Evguenievna

assistant professor of the department of socio-cultural service and tourism (SCS&T) of Taganrog affiliate of Russian New University

Official address: b.47 Alexandrovskaya st., Taganrog, 347900 Telephone:+7 (8634) 31–19–79

E-mail: anna.slinko@vahoo.com

Chistiakova Natalia Viktorovna

post graduate student of the department of Institute of Psychology of RAS Official address: b.13/1 Yaroslavskaya street, Moscow, 129366 Telephone:+7 (495) 682-73-29

E-mail: dik_dog@list.ru

Serguienko Elena Alexeevna

the head of the laboratory «Development psychology» of Institute of Psychology of RAS, professor, Doctor of Psychological Sci-

Official address: b.13/1 Yaroslavskaya street,

Moscow, 129366

Telephone: +7 (495) 682-73-29 E-mail: elenas13@mail.ru



Breus Elena Dmitrievna

assistant professor of the department of the social psychology of psychological faculty of SFU, Candidate of Psychological Sciences *Official address*: r. 234, b.13 av. M. Naguibina, Rostov-on-Don, 344038 *Telephone*: +7 (863) 230–32–37

E-mail: rsu-elena@yandex.ru

Telnova Olga Vitalievna

assistant professor of the department of the pedagogics and pedagogical psychology of the psychological faculty of South federal University, Candidate of Pedagogical Sciences

Official address: r. 227, b.13 av. M. Naguibina,

Rostov-on-Don, 344038 Telephone:+7 (863) 243-06-23 E-mail: telnova ov@mail.ru

Fomenko Vladimir Trofimovitch

the head of the department of pedagogics and pedagogical psychology of the psychological faculty of SFU, professor, doctor of pedagogics

Official address: r. 227, b.13 av. M. Naguibina, Rostov-on-Don, 344038

Telephone: +7 (863) 243–06–23

E-mail: fomvt@sfedu.ru

Massaeva Zarema Vahaevna

post graduate student of the department of pedagogics and psychology of Chechenskii State University Official address: b.33 Kievskaya street,

Groznii, 364037

Telephone: +7 (8712) 29–50–19 E-mail: masaeva-2009@mail.ru

Volkov Serguei Igorevich

engineer (system administrator) laboratory of the information computer technologies of the economics faculty of SFU Official address: r.216, b.88 str. M. Gorkii 88, Rostov-on-Don, 344007 Telephone: +7 (863) 240–68–48 E-mail: lol-temp@rambler.ru

Grimsoltanova Razet Elbroussovna

senior teacher of the department of pedagogics and psychology of Chechenskii State University

Official address: b.33 Kievskaya street, Groznii, 364037

Telephone: +7 (8712) 29–50–19 E-mail: razet_grims@mail.ru

Balakina Anna Andreevna

post graduate student of the department of the social psychology of the psychological faculty of SFU

Official address: r. 234, b.13 av. M. Naguibina,

Rostov-on-Don, 344038 *Telephone*: +7 (863) 230–32–37 *E-mail*: anette9@mail.ru



ANNIVERSARIES

Doctor of Psychological Sciences, Professor, member of The Executive Council of RPS, chairman of Moscow department of RPS, Diana Borissovna Bogoyavlenskaya is eighty!

Dear Diana Borissovna!

On behalf of Russian Psychological Society, the editors of "Russian Psychological journal" and our readers we would like to congratulate you on the 80 th anniversary. You are an outstanding scientist who has made the great contribution to the development of the national science. You are the founder of the new scientific direction in the field of the psychology of creativity and talent. The created by you and widely administered during 40 years, the method "Creative field" allows identifying adequately the creative abilities and personality talents.

Your scientific works stimulated fundamental and applied studies of the new generation of the scientists; they contributed to the new comprehension of the methodological and theoretical bases of the personality psychology, talents and creativity. In collaboration with your pupils you have studied the structure and genesis of the creative abilities in the cross-sectional and long term longitudinal (during 30 years) experiments. You have differentiated the creativity phenomenon and distinguished its types. The created approach was put into the basis of the national theory of the creativity.

You've made a considerable contribution into the development of Russian and foreign psychological science. You published monographs, suggesting new point of view upon such phenomena as the talented personality and the creativity. During the years of the brilliant scientific and pedagogical activity you've become the member of the Russian Academy of Natural Sciences, Academy of the management in the education and culture and International academy of the creativity, of the psychological sciences. You are a member of the scientific Council of RAE and MSPU. During many years you are the chairman of Moscow psychological society, the deputy chairman of the Coordination Council of the president's program «Talented children», the leader of the program elaborating the national concept of the aptitude, member of the editing boards of the journals: «Alter – ego», «Psychological review», «Talented child».

The unique combination of the pedagogical talent and aptitude of the scientist were appreciated according to merit and were paid attention by the public and professional society: a silver medal of All-Union Exhibition of Achievements of National Economy, medals of «Outstanding student», «In commemoration of the 850th anniversary of Moscow», named after K.D. Ushinskii. You are the Presidnt's prize winner. You got the status of « Meritorious Scientist of RF».

We highly evaluate your professionalism, goal-orientation, life wisdom, careful attitude towards colleagues, top-notch labor ability and creativity.

Let the seeds of the kindness planted by you in the fruitful field of Russian psychology grow, ripen, and yield fruit in the future.

The editors of "Russian Psychological journal" would like you, Diana Borissovna, to accept our best wishes for health, happiness and further success and creativeness for the benefit of Russian and world-wide science.



TERRORISM PSYCHOLOGY

Ermakov P.N., Abakumova I.V.

Youth against terrorism (on the work of the anti-terrorist youth festival)

The article presents a capsule review of the work of the anti-terrorist festival of student's, scientific and creative youth "Peace to the Caucasus": participants, plenary lectures, work forms, results.

Keywords: terrorism, extremism, youth, anti-terrorist festival.

A traditional anti-terrorist festival of student's, scientific and creative youth "Peace to the Caucasus" took place on the basis of the department of psychology of the Southern Federal University in Rostov-on-Don, on November 12–14, 2012. The tradition of this festival carrying out in our city appeared in 2009, and every year more and more participants take part in the festival work. In 2012 more than two thousand people took part in the festival work. These were representatives of various regions, not only the South of Russia, but also other regions of our country.

Formation of anti-terrorist consciousness tolerance psychology, especially in student's and youth environment becomes a topical problem in modern Russia. It is extremely important for the multinational Southern Federal District. There are various modern forms of manifestation of radicalism, xenophobia, extremism in the south of Russia; these are ethnonationalism, migrantphobia, religious extremism, chauvinism, racism.

The Southern Federal District represents the region including a considerable quantity of ethnic communities, possessing the unique history, culture and religion that allows to mark out it as a special conglomerate for education of tolerant traditions among the youth environment as the future of Russia. Unfortunately, there is a pressing problem of distribution of ideology of terrorism and xenophobia in the territory of the Russian Federation today; it is most brightly expressed in the Southern Federal District. In these conditions the rising generation of Russia turned out the most culturally unprotected category of the population which is in a peculiar value and spiritual vacuum. The youth environment was disorganized, influenced by extremism and xenophobia, destroying traditional values of national cultures and religions of the peoples of the Southern Federal District.

Therefore the purpose of the festival carrying out is formation of tolerance, understanding of national and cultural features of other people that is possible through communication of the students representing various regions of the Southern Federal

District when having met with each other, we would be able to learn better the history and culture of all nations of our Southern Federal District.

The scientific program of the festival had a wide-ranging character and included sections, round tables, master classes, trainings united in the following directions:

- -state policy in the field of prevention of manifestations of extremism and terrorism in the youth environment;
- role of higher educational establishments in formation of anti-terrorist values in the youth environment;
- -role of the Internet technologies in formation of steady anti-terrorist world outlook of students and young specialists;
- -popularization of technologies of the directed and mediated influence on value sense attitudes in the youth environment;
- -sports as a component of formation of civil society values and tolerance attitudes in the youth environment;
- -carrying out of lectures, trainings and master classes.

An interregional festival of martial arts "Golden autumn" have passed within the anti-terrorist festival in the sports and fitness complex "Niva" of the settlement Kamenolomni(Rostov region) on November 9–10, 2012. Slogans of the festival were, "Youth against ideology of terrorism and extremism", "Sports, martial arts are a healthy lifestyle". Within these arrangements there were held mixed martial arts competitions where 212 athletes, representatives of eleven teams took part. In the team event the first place and a cup was won by the team of the Republic of Dagestan; the second place was won by the team of "Legion" sports club of Rostovon-Don; the third place was won by the team of "Dontsy" sports club of Krivyanskayastanitsa.

On October 12 at the plenary meeting P.N. Ermakov, Academician of the Russian Academy of Education, Professor, Dean of the department of psychology of the SFU made a report concerning "Formation of anti-terrorist and anti-extremist values in the youth environment". In the report he deals with main components (subjects) of the system of counteraction to the ideology of terrorism (the SCIT), the main activity areas of the SCIT subjects; terrorism psychological basis, personal features of organizers and performers of terrorist activity, the reasons and conditions promoting involvement of youth in terrorist activity; features of youth socialization, socialization risk factors, personal risk factors, the main directions of formation of anti-terrorist anti-extremist attitudes in the youth environment, and also social and psychological methods of influence on personal values: "technologies of convincing influence have to be focused on a personal aspect of interaction between the carrier of ideology and the one who becomes an object of convincing influence. Any technology of the directed influence is refracted through the translator's personality, his commitment to cultural traditions, defining the specifics of convincing influence. The translator's personality is a basic element of the surrounding sociocultural environment which influences personality during information and



propaganda process". He finished the report by NikolayOstrovsky'squotation: "Life is given to a person only once, and it is necessary to live it so that one wouldn't be painfully ashamed of aimlessyears".

At the plenary meeting there was also the report concerning "Religious and political extremism in the North Caucasus: prevention problems" made by Yakhyaev, Doctor of Philosophy, Professor of the Dagestan State University. There he noted that "the main direction of struggle with religious and political extremism as a social phenomenon should beneutralization of key factors promoting its reproduction and activization. Here we mean economic, social and political reasons, first of all. In the strategy of counteraction to extremism and terrorism a special stress should be transferred on solution of problems on settlement of available, prevention of new conflicts, improvement of the whole social and economic situation in the region. The last measure will act the leading part in counteraction to extremism as it not only will narrow a social base of terrorism, but also promote solution of available contradictions, many of which are provoked by a radical contrast of economic interests of people and social polarization of the North Caucasian societythathas hitherto been unseen".

New forms of workattracted participants'particular interest:

- -the cinema club carrying out, where there was viewing and discussion of the feature film "Unthinkable" of the Australian director Gregor Jordan. The movie is madesternly and naturalistically. Nevertheless, it is not about tortures and law-lessness of American special services. It gets the viewer face to face with an eternal dilemma: whether the end justifies the means? This question became the key in the discussion which took place in the cinema club after movie viewing. As a result of discussion was that participants could agree with each other that, whatever methods are used in the struggle against terrorism, the bestthing is to create measures for its prevention, to warn such phenomena by means of enlightenment and education. The conducted festival is an example of such prevention;
- -demonstration with subsequent discussion of the documentmaterials and public service advertisement, focused on advancement of anti-terrorist values in the youth environment(discussion with involvement of journalistic community representatives). During the event there were shown: a fragment from the movie of the 32 TC (meeting around a fire with diasporas of Rostov;Ossetianstell about the well-known pies, people listen, taste ... and so forth);"Youth Against Terror" TV commercial. As a result of the followed discussion there were drawn conclusions: great victories are composed of small good and kind deeds ("the theory of small affairs"); the events similar to the conducted festivalare very topical and necessary for modern youth (induce to think of problems of extremism and terrorism, to receive more information on this phenomenon, to exchange experiences, to reconsider own views on making a personal contribution to anti-terrorist activity).

On the final day of the festival work there took place a traditional reflexive game "The principles and main directions of joint activity of various groups of society in counteraction to the ideology of terrorism" which purposes were the following:

1) to reveal cultural and mythological stereotypes, social and psychological attitudes, characteristic for the reflexive game participating subjects belonging to various youth organizations, authorities, various groups of society; 2) to reveal cultural and mythological stereotypes, social and psychological attitudes characteristic for the reflexive game participating subjects belonging to various youth organizations, authorities, various groups of society; 3) to develop understanding of other people's behavior in a frustrating situation of involvement inan extremist group or participation in a terrorist act; 4) to expand participants' possibilities in design of social situations and managementof social processes on the basis of the reflected forms of behavior in a frustrating situation of involvement in an extremist group and threat of a terrorist act, in a situation of manifestation of extremist moods among youth.

During the reflexive game there were formed 4 microgroups of the mixed confessional character which carried out game tasks, relying on the principles of tolerance, respect for other opinion, mutual assistance and support. In each group there were defined special responsible persons – time managers, recorders, speakers who had to realize the main game actions. However the whole multinational group defended the projects, supporting other groups by thankful applause. Participants repeatedly noted that this type of preventive activity can become a basis for the project of student's experimental platform, that a tight time frame of carrying out (1,5 hours), increased concentration process on the main game questions.

On the whole, the festival took place in a very benevolent, tolerant situation. It is possible to note positive dynamics of change of youth relation to terrorism and extremism problems during annual carrying out of anti-terrorist festivals (since 2009) that is shown, first, in a high level of reflection of young people, secondly, in a clear tolerant position, thirdly, in a constructive orientation of interpersonal and interethnic interaction.

In conclusion of the festival work there was a final round table where the participants of the festival adopted recommendations.

- 1. Higher educational establishments should actively counteract the ideology of extremism distribution and make more active the work on information and propaganda ensuring anti-extremist actions in the youth environment.
- 2. Higher educational establishments should involve scientific and student's community in development of theoretical and methodological bases of counteraction to extremism (in all its manifestations) on concrete activities.
- 3. On sites of higher educational establishments it is necessary to explain the essence of extremism and its public danger, to form permanent society's rejection of the ideology of violence, and also to get youth involved in counteraction to terrorism, extremism, nationalism, religious fundamentalism on Internet resources.
- 4. A network of the interconnected and constantly operating Internet resources of the anti-extremist orientation should be created on the basis of establishments of the higher and secondary education.



5. "Peace to the Caucasus" site http://mirkavkazu.sfedu.ru should be considered as the zonal coordinator for higher educationalestablishments of the Southern Federal District and the North Caucasus Federal District.

References

- Babiyants K.A. The report on carrying out of the reflexive game "The principles and the main directions of joint activity of various groups of society in counteraction to the ideology of terrorism". URL: http://mirkavkazu.sfedu.ru (accessed 10 December 2012) [in Russian]
- 2. Ermakov P.N. Formation of anti-terrorist and anti-extremist values in the youth environment. The report presentation. URL: http://mirkavkazu.sfedu.ru (accessed 10 December 2012) [in Russian]
- 3. Levshina A.A. The report on carrying out of the cinema club. URL: http://mirkavkazu.sfedu.ru (accessed 10 December 2012) [in Russian]
- 4. Popova L.V., Aparina E.V. The report on the work of demonstration and discussion of the document materials and public service advertisement, focused on advancement of anti-terrorist values in the youth environment (discussion with involvement of journalistic community representatives). URL: http://mirkavkazu.sfedu.ru (accessed 10 December 2012) [in Russian]
- 5. Yakhyaev M.Y. Religious and political extremism in the North Caucasus: prevention problems. URL: http://mirkavkazu.sfedu.ru (accessed 10 December 2012) [in Russian]

Popova L.V., Slinko A.E.

Public service advertisement as a component of formation of anti-terrorist and anti-extremist values in the youth environment

The article deals with the problem of formation of anti-terrorist and anti-extremist values in the youth environment. The emphasis is placed on application of public service advertisement as a component of formation of anti-terrorist and anti-extremist values in the youth environment.

Keywords: anti-terrorist and anti-extremist values, youth, public service advertisement.

On its scales and consequences, destroying force and cruelty terrorism has turned into one of the most terrible problems of mankind today. As First Deputy Head of the National Anti-Terrorist Committee E.P. Ilyin notes, "For the last 15 years the Russian Federation is in a condition of continuous counteraction to terrorist threats. The first years of the XXI century are also marked by major, carefully prepared acts of terrorism in our country's territory. Among them the special place is taken by blastings of passenger planes in the Rostov and Tula regions, explosions of houses in Moscow, Buinaksk and Volgodonsk, taking of the theatrical center on Dubrovka and the school in Beslan, attacks of large armed bands on the cities of Nazran, Grozny, Nalchik, blastings of the fast train no. 166 "Nevsky express" and the electric train "Kislovodsk – Minvody" [3].

Along with the methods of power influence in situations of the act of terrorism, one of the main tasks of struggle against terrorism is elimination of a terrorist threat «from the very beginning». Now they conduct searches of solution of this problem within legal, theological, philosophical, psychological, pedagogical sciences. Programs and lecture courses on the basis of leading higher educational establishments of the country are developed. For example, on the basis of the faculty of psychology of the Southern Federal University in 2010 it was developed the course of lectures for the individual propaganda activity which materials are used for work both among heads of regional authorities, local governments, and in the education system.

Now at the level of statements of heads of the state and power structures they lay stress on problems of power influence on terrorist groups, destruction of leaders and members of terrorist formations. At the same time for a long time many researchers came to the conclusion that at solution of questions in the safety sphere, including national security, it is necessary to take into account a value factor. So, we completely agree with a position of V.L. Manilova who in the mid-nineties of the XX century claimed that when forming and carrying out the policy and strategy of national security it is essentially important to prioritize not protection, but consecutive, firm and effective realization of values and interests in conditions of various dangers and threats [4]. At development of values scrupulous attention should be devoted to work with youth.



In his article A.N. Perendzhiev carries out the analysis of the Russian values in the field of counteraction to terrorism on the basis of the document «Strategies of National Security of the Russian Federation till 2020» where increasing role of values in international processes is noted [8]. «The contradictions between the states became aggravated; these contradictions are connected with unevenness of development in result of globalization processes, deepening of a gap between welfare of the countries, – is told in «Strategies of National Security of the Russian Federation till 2020», – values and models of development became a subject of the global competition» [10].

As A.N. Perendzhiyev marks, political scientists are interest not only and even not so much in intellectual values. As the authors of the brief encyclopedic dictionary note, values in the policy are «significant stereotypes of mass political consciousness which allow to estimate a political situation and to be guided in it. In this dictionary it is recorded that as a component political values are included into integrity of social values and form a basis of judgment of political experience of the country» [12]. Therefore, political values are generally valid at organization of counteraction to terrorist threat.

As the major Russian values in the field of counteraction to terrorism the authors of the electronic dictionary distinguish good, belief, beauty, truth, solidarity, collegiality, patriotism, morality, mercy, compassion etc. [on 8]. In the massage of Russian Federation President to the Federal Assembly of several last years the important sociopolitical role of such values, as safety, freedom, welfare, statehood, legality, humanity, civility, dignity, patriotism, morality, equality, justice is emphasized. According to the author, this complex of national values has to become a life guideline of Russians, their modern outlook [5]. Thus we will note that in anti-terrorist policy the author defines a value factor as an influence of the system of values, offered by the power to society, on the nature of development of terrorism. Therefore development and determination of values which will promote decrease in terrorist threat is one of key problems of anti-terrorist policy of the modern Russian state. But, it is very difficult to state fundamental national values in laws and acts. Law on its properties is a social phenomenon which is caused by the necessity to bring in social life standard principles, organization and order based on the principles of social freedom, activity, responsibility [9]. A.N. Perendzhiyev has described distinction of law and moral (spiritual) values:

- rules of law are established by the state / moral values are formed in consciousness of people;
- -rules of law regulate those relations which need legal regulation / values regulate behavior which can have a moral assessment;
- -rules of law are fixed in special state acts / moral values live in consciousness of people;
- -the right is provided with the compulsory force of the state / the value is based on the power of public opinion [8].

From these distinctions we can see that unlike the rules of law, values, including anti-terrorist and anti-extremist, can be imposed or offered to society not in acts, but in the course of information and psychological influence of the power on citizens.

Youth is the most socially unprotected national group in Russia. Owing to this fact the representatives of youth are the most active participants of the conflicts and different destructive organizations, including of extremist and terrorist kind. As I.V. Abakumova marks, the tendency to extremism and terrorism of modern young generation of Russia is real and therefore demands scrupulous attention and studying. Modern youth faces great changes, great vagueness and uncertainty that in turn increases its anxiety about the future and gives rise to desire to relieve of this anxiety, not always in constructive ways unfortunately [1]. Therefore, in our opinion, according to one of major directions in public policy the problem of work with young generation of our country should be directed on counteraction to extremism and terrorism.

P.N. Ermakov notes that along with political, social and economic, legal, organizational, cultural and educational activities of subjects of the system on counteraction to ideology of terrorism and extremism in the youth environment the great value has the information and propaganda directions – «these are information and analytical activity (preparation and release of various instructions, brochures, books, addresses, posters, public service advertisement, press publication on activity of law enforcement agencies and the anti-terrorist commissions, creation of thematic documentaries and videos, etc.); propaganda activities; ideological activity (formation of religious and international tolerance, patriotism, healthy way of living, priorities of universal values, etc.); organizational activity (assistance to activity of public and religious associations of a constructive anti-terrorist orientation; interaction with mass media, carrying out of competitions on the best materials of an anti-terrorist orientation, conferences, meetings, «round tables», etc.); development of the system of public service advertisement on promotion of anti-terrorist values; creation of the system of training of specialists in the field of counteraction to ideology of terrorism» [2, p. 72].

Among all information and propaganda directions we would like to distinguish public service advertisement as one of powerful tools by means of which the state creates not only an image of a social problem, but also an image of the state participation in this field. The characteristic and definition of public service advertisement is reflected in the article 3 of the Federal Law «On advertizing» from 13.03.2006 N 38-FZ «public service advertisement is information spread in any way, in any form and with use of any means, addressed to an indefinite people and directed on achievement of charitable and other socially useful purposes, and also ensuring of interests of the state» [11]. Public service advertisement promotes receiving of practical results important for society; the mission of public service advertisement consists on the change of people's relation to existing problems, and in long-term prospect - in the offer of new social values demanded by society. Public service advertisement carries information presented in a succinct, artistically expressed form. It is capable to make clear for people's awareness and attention the most important facts and data on the problems existing in society. It is turned to everyone. The possibilities of such advertisement are wide, and the results of advertizing activity can be beneficial. Therefore public service advertisement can be used as a tool for formation of anti-terrorist and anti-extremist



values in the youth environment. After all the ideology of terrorism and extremism assumes influence on certain social groups, active formation of such groups. Mass communications are used for this purpose.

A.V. Ovrutsky and A.I. Tascheva classified the extremist media texts presented on open access on the following groups.

- Articulation of one or another social problem as international, interracial, interreligious and demanding radical, humanistically focused, reasonable actions clear for everyone (for example, on a pre-election reel of the «Rodina» party «Let's clean our city from garbage»).
- 2. Justification, legitimization and glorification of extremist and/or terrorist practices (for example, a reel on T. Mutsuraeva's song «The memory gallery shahids on Judgment Day»).
- 3. Formation of negative attitudes concerning one or another national, racial, religious or other social group (for example, reels on tragic events in Kondopoga).
- 4. Formation of loyalty to certain extremist actions (organization of financial and other support to extremist movements, formation of the need for obtaining of additional information). The promoted extremist sites, advertising are rated as such type.
- 5. Attribution of either of social events within extremist ideology.
- 6. Formation of groups and increase of their unity (for example, advertisement on advancement of the subculture of skinheads).
- 7. The advertisement reminding and intensifying extremist actions (for example, the advertisement initiating people to take part in «Russian march») [6].

The same authors note that "the advertisement of our country presented in the Internet network today and directed on counteraction to the ideology of extremism and terrorism is not numerous and is generally directed on tolerance formation in international relations. There are no advertising messages forming the general anti-terrorist and anti-extremist ideology" [6, p. 189]. After all the Internet is the main source of information acquisition and entertainment of modern youth.

Thus, public service advertisement can be considered as an undoubtedly actual and claimed way of counteraction to the terrorist and extremist ideology in the youth environment. The genre of public service advertisement is more accessible and interesting to young generation. It is necessary to organize system work with a view to form of anti-terrorist and anti-extremist values among young generation.

References

- 1. Abakumova I.V. Psikhologicheskie tekhnologii formirovaniia antiterroristicheskikh tsennostei v molodezhnoi srede [Psychological technologies of formation of antiterrorist values in the youth environment]. Rossiiskii psikhologicheskii zhurnal Russian psychological journal, 2010, V. 7, no. 5-6. pp. 23-26. [in Russian].
- Ermakov P.N., Brizhak Z.I. Vysshee obrazovanie i sistema protivodeistviia ideologii terrorizma [Higher education and the system of counteraction to the ideology of

- terrorism]. Rossiiskii psikhologicheskii zhurnal Russian psychological journal, 2010, V. 7, no. 5-6. pp. 68-75. [in Russian].
- 3. Ilyin E.P. Aktual'nye problemy protivodeistviia vovlecheniiu molodezhi v terroristicheskuiu deiatel'nost' [Actual problems of counteraction to youth involvement in terrorist activity]. Materialy nauchno-prakticheskoi konferentsii «Protivodeistvie ideologii ekstremizma i terrorizma v ramkakh realizatsii gosudarstvennoi molodezhnoi politiki», Rostov-na-Donu, 12–14 oktiabria 2009 g [Proc. Scientific and Practical Conference «Counteraction to the ideology of extremism and terrorism within realization of the public youth policy», Rostov-on-Don, October 12-14, 2009. Moscow, 2009. pp. 13-22. [in Russian].
- 4. Manilova V.L. Natsional'naia bezopasnost': tsennosti, interesy, tseli [National security: values, interests, purposes]. Voennaia mysl' Military thought, 1995, no 6. pp. 40. [in Russian].
- 5. Natsional'nye tsennosti, interesy i tseli Rossii: sushchnost' i soderzhanie (National values, interests and purposes of Russia: essence and content) Available at: http://www.plan-konspekt.ru/ogp/ogp111001.htm [in Russian]
- 6. Ovrutsky A.V. and Tascheva A.I. Sotsial'naia reklama kak sposob protivodeistviia ideologii terrorizma i ekstremizma [Public service advertisement as a way of counteraction to the ideology of terrorism and extremism]. Materialy nauchno-prakticheskoi konferentsii «Protivodeistvie ideologii ekstremizma i terrorizma v ramkakh realizatsii gosudarstvennoi molodezhnoi politiki», Rostov-na-Donu, 12–14 oktiabria 2009 g [Proc. Scientific and Practical Conference «Counteraction to the ideology of extremism and terrorism within realization of the public youth policy», Rostov-on-Don, October 12-14, 2009. Moscow, 2009. pp. 188-190. [in Russian].
- 7. Perendzhiev A.N. Antiterroristicheskaia politika sovremennogo Rossiiskogo gosudarstva. Diss. dokt. polit. nauk [The anti-terrorist policy of the modern Russian state. Dr. polit. sci. diss.]. Moscow, 2007. 24 p. [in Russian].
- 8. Perendzhiev A.N. Tsennostnyi faktor v antiterroristicheskoi politike Rossii do 2020 goda: postanovka problemy (Value factor in the anti-terrorist policy of Russia till 2020: the problem statement) Available at: http://www.lawinrussia.ru/ [in Russian]
- Pravo kak tsennost' (Right as a value) Available at: http://www.e-ng.ru/pravo/ pravo_kak_cennost.html [in Russian]
- 10. Strategiia natsional'noi bezopasnosti Rossiiskoi federatsii do 2020 goda (The strategy of national security of the Russian Federation till 2020) Available at: http://www.scrf.gov.ru/documents/99.html [in Russian]
- 11. Federal'nyi zakon No 38-FZ «O reklame» ot 13 marta 2006 goda (The federal law no 38-FL «On advertising» from March 13, 2006) Available at: http://www.consultant.ru/popular/advert/ [in Russian]
- 12. Chelovek i obshchestvo: kratkii entsiklopedicheskii slovar'-spravochnik (politologiia) [The person and society: brief encyclopedic dictionary and reference book (political science)]. Rostov-on-Don, Phenix Publ., 1997. 556 p. [in Russian].



PSYCHOPHYSIOLOGY

Chistyakova N.V., Sergienko E.A.

Genotype-environment interaction: a molecular genetic approach to the study of volitional control during pregnancy*

The adaptive ability of organism to be changed environmentally throughout the lifespan requires the plasticity of link between a genotype and a phenotype. The genotype/environment dyad determines an adaptive profile of a phenotype and functional potential of its plasticity. By the regulation of gene expression, the environment influences the genotype and determines phenotypic variability, which is adaptive by nature. Therefore, the need for the integrative study of genotype-environment interaction and its prospects becomes clear in order to obtain objective and comprehensive data about the true nature of individual differences in psychological features. Using this approach, heterogeneous etiology of volitional control differences among women in the third trimester of gestation was assessed. Identification of pregnancy-specific molecular and genetic predictors of the volitional control allows defining its role in the psychological readiness of women for childbirth.

Keywords: genotype, phenotype, genotype-environment interaction, volitional control.

There is a tight relation between the genotype and the environment in the mechanism of phenotype regulation, in which the genotype and the environment are codependent to each other. At the same time, they act as determinants of individual differences in psychological features.

In psychogenetics (behavioral genetics) the additive model of development is widely used, in which the phenotype is a cumulative product of the genotype-environment interaction. Taking into account recent achievements in modern science, the need in the interdisciplinary study of phenotype regulation mechanisms at the interface of molecular genetics, psychophysiology, and developmental psychology is obviously required to holistically understand genotype-environment relation, which explain individual differences in psychological features.

In recent years, the integrity of basic and social science becomes even more essential to achieve a complete knowledge about a human being [1, 6]. The level of

^{*} The work is supported by a research grant no. 11–06-00015-a from the Russian Foundation for Basic Research.

modern science is high enough to study specific genetic mechanisms of mentality in dissecting genotype-environmental relationships in human development and to involve genetic data and approaches for solution of psychological tasks. The entire picture of functional relations between the genotype and environment (that determine the phenotype) cannot be disclosed only by applying additive models for analysis of individual differences in psychological traits as complex phenotypic systems independently on the consideration of their mechanisms influencing all levels of the mental organization.

In behavioral genetics, two basic approaches are commonly used to describe the relation between the genotype and phenotype. The first strategy involves searching associations and correlations between nucleotide sequences and a phenotype of interest. Certainly, it is a rational approach in evaluating a potential role for a specific genetic variant [15]. However, the search for genotype-phenotype associations does not define the underlying cause-effect mechanisms. In addition, a specific genotype may be associated with a certain phenotype, but not underline this phenotype. This is in agreement with an established scientific point of view that there are no genes, which regulate this or that kind of behavior, but there are genes that involved in the control of behavioral regulators such as mediator systems in the body [4].

The genotype influences the development and function of neurotransmitter systems that regulate pro- or antisocial behaviors through specific metabolic pathways. The genotype could also indirectly influence behavioral regulators. In this regard, it is necessary to determine a functional significance of a specific genotype taking into consideration the environment under which the ratio between a specific genotype and a relevant phenotype becomes apparent [15]. Indeed, the main obstacle that limits a suitability of this approach for analysis of genotype-phenotype relationships is the misinterpretation of observed correlations and cause-effect mechanisms.

A second approach, which also implies statistical analysis, has evoked greater debates. Behavioral geneticists (psychogeneticists) do not consider the ratio between the genotype and phenotype at the level of specific genotypic variants (so-called genetic polymorphisms'), but just characterize the link between a phenotype variable outlined by the set of specific traits and genetic or environmental effects [14]. These studies evaluate the genotype effects on the formation of a specific phenotype considering neither the genotype itself nor the variations at the genotype level. Behavioral geneticists are focused on studying how these or those traits could be inherited assuming the genotype effect on the basis of obtained data.

The twin study is a traditional approach in psychogenetics (behavioral genetics). Twin studies involve determination of the similarity level between specific traits

^{*} Polymorphism in biology (from Ancient Greek, Πολύμορφος – variable) is the capacity of some organisms to exist in states with different internal structure or different external forms. The external (and internal such as biochemical) polymorphism may be due to intraspecies genetic differences. On the other hand, it may be a polymorphism, in which organisms with almost identical genome, depending on the environmental conditions, acquire different forms of phenotype.



in mono- and dizygotic twins in order to estimate heritability (h²) of those traits. The results showing a high heritability for a specific phenotype lead to the question of whether genotype variation at the level of DNA sequence might serve as the mechanism for transmission of individual phenotypic differences from parents to offspring.

However, the estimate of heritability cannot be the direct equivalent of the genotype influence. Otherwise, such an estimate ignores the functional significance of the genotype-environment interaction and, in addition, the mechanisms of inheritance act not only on the genetic level, but also on the neurophysiological (biochemical) level. There are so-called epigenetic imprintings* [11], protein heredity (e.g., prion proteins)** [18] and other examples, which can and do influence the phenotype. Thus, it is incorrect to solely equate the heritability to genotype effects.

To determine the development trend and severity of phenotype traits, twin studies do not reveal the cause-effect mechanisms of genotype-environment interactions, by focusing on the assessment of a relative contribution of a genotype and environmental conditions to the variability of these features [14]. Thus, until recently, the genotype and the environment in these studies were considered as independent variables.

The problem of individual development should be considered in the context of the permanent interaction between the genotype and environment [12]. Unraveling principles of how the genotype works and gene sequence analysis can help in objective understanding of the nature of individual differences in psychological features. Multiple processes acting at the cellular level lie between the genotype and the phenotype. The genotype effect on the phenotype can be assessed only taking into account the individual environmental (internal and external) conditions. The genotype and environment are the sources of variations in the phenotype [2].

The relation between the genotype and phenotype is not straightforward. The genotype effects (e.g., consequences of changes in a genetic sequence) on the phenotype depend on the environment. The genotype correlates with the phenotype only in the degree to which the gene operates and functions at the cellular level. The degree, to which the genotype influences the phenotype, depends on the environmental conditions. In this case, the inherited genome variation determines the functional capacity of genes only in the degree within which the environment effect

^{*} Epigenetic imprinting assumes various DNA epigenetic modifications. An offspring receives one set of chromosomes containing father's imprinted genes, and other – from mother's imprinting. When offspring's germ cells are generated, the former "imprinting" is erased, and the genes are marked according to the individual sex. Epigenetic modifications of DNA that determine genomic imprinting are located on specific chromosomal regions called imprinting control regions. The essence of genomic imprinting is that genes passed from both parents to offspring have specific "imprints" of the parent sex. Thus, father's and mother's genes are differently imprinted.

^{**} Prion proteins might translate the information on their 3-D structure from one protein to another.

on the phenotype is mediated by changes in the genetic sequence. Thus, it is possible to speculate about so-called environmental modeling of the relation between the genotype and phenotype.

The environmental effect on the individual development must be considered in regards to its genotype. It is truthful to talk about the nature of the bilateral relation between the genotype and environment, which is based on the mechanisms regulating gene expression at the cellular level*. The mechanisms provide a link between the biological and psychological levels of the genotype-environment interaction analysis.

The genotype-environment dyad determines the adaptive phenotype profile, its potential plasticity [8, 13]. The main estimate of the adaptive phenotype feature is its functional role in a particular environment to achieve the adaptation. Functional capacity of any phenotypic profile depends on the individual environmental conditions. Thus, it is possible to conclude that the universal, single, "ideal" phenotype does not exist. Ideal environmental conditions do not exist too. From this point of view, the development can be considered as an active adaptive process to the environment, which is under the permanent influence of the genotype-environment interaction.

We suggest studying molecular genetic predictors of the volitional control in pregnancy as an example of the genotype-environment interaction in the phenotype regulation.

In pregnancy, the volitional control, which is mediated by the genotype-environment interaction, supports the regulation of the adequate development of readiness to childbirth as a behavioral phenotype, whose core is represented by psychological component of the gestational dominant.

In this study, volitional control is considered accordingly to the Sergienko's concept of the behavior control. The arbitrariness in the organization of own behavior, freedom of choice and action (free will) are the integral part of our own behavior control. The system of volitional regulation of behavior displayed as an action control is based on the individual resources of a subject updated in the difficult situation such as pregnancy [5].

As a natural physiological process, pregnancy presents a practical interest to study the relationships between genetic and psychological mechanisms of behavioral regulation, within which the genotype-environment interaction plays a role of a distinctive buffer between the regulatory and compensatory-adaptive mechanisms of the subject adaptation to both pregnancy and childbirth.

By assuming that the volitional control in pregnancy is heterogeneous in its nature and may be caused by the complex interaction between genetic and environmental factors, the allocation of psychophysiological features (biomarkers) of the volitional control is crucial for determining genetic predisposition to a risk of the low volitional control.

^{*} Gene expression is the mechanism by which the inherited information is translated from the gene (DNA sequence) into the functional product (e.g., RNA or protein).



In pregnant women, hormonal, immune, and homeostatic changes should be considered as a critical endogenously induced stress challenge. These intra-organismic transformations are regulated by the changes in the hypothalamic-pituitary-adrenal (HPA) axis, a key system of neuro-humoral regulation and the fundamental unit of adaptive systems of organism responsible for the individual mechanisms of self-regulation [7]. Stress hormones of the HPA axis are important for normal pregnancy and childbirth [9; 10]. There is a relationship between the neuroendocrine functions of organism and characteristics of the volitional regulation of the subject behavior in stressful conditions [16].

Hence, it is legitimate to consider the HPA axis as a psychophysiological basis of behavior control in pregnancy. Thus, the psychophysiological level plays a mediatory role of bilateral relations between the genotype and individual psychological features in pregnant women.

Assuming association between genetic polymorphism and a number of features that are expressed at the different mental levels including behavioral regulatory processes, polymorphic genetic variants encoding HPA axis hormone receptors, might be responsible for molecular genetic mechanisms of volitional control in pregnancy.

Corticoid receptors play the major role in the HPA axis regulation. Glucocorticoid receptor (GR) encoded by the NR3C1 gene mediates biological effects of glucocorticoid hormones, cortisol and dihydrocortisol, while the mineralocorticoid receptor (MR, a product of the NR3C2 gene) mediates effects of mineralocorticoids, aldosterone and deoxycorticosterone [17]. Marker rs6195, which causes the substitution of asparagine to serine (Asn363Ser) in the molecule of the mineralocorticoid receptor, is functionally active [19].

Thus, on the basis of the above mentioned data about the functional significance of these polymorphic markers and their effect on the HPA axis activity, these markers have been selected for genetic analysis of respondents' DNA.

The aim of this study is to identify molecular-genetic predictors of volitional control of women in the last trimester of gestation, using the genetic association analysis.

Materials and methods

The research was performed in the Moscow Centre of Protection of the Mother and Child Health of the Russian Academy of Medical Sciences, among women in the last trimester of gestation who underwent medical genetic counseling during 2011–2012 years. The respondents were selected by analysis of clinical and anamnestic data and through the interviewing procedure.

The study population involved 59 pregnant women 37 of whom were normally pregnant (the control group), while the remaining 22 subjects have adverse anamnesis (the experimental or "case" group). In the case group, the average age of respondents was 26 ± 4 years, whereas the age in the control group was 24 ± 3 years. Gestational duration ranged from 25 to 34 (29 ± 3) weeks.

The analysis of clinical and anamnestic data was performed to assess the individual psychosomatic women state in terms of predicting the complications during

childbirth and to define the type of psychological component of gestational dominant (PCGD) with help of the questionnaire entitled "Evaluation of prenatal risk factors", by O.G. Frolova and E.I. Nikolaeva, and I.V. Dobryakov's questionnaire entitled "Test of relation to pregnancy".

The Russian version of the J. Kuhl's questionnaire "Action Control Scale" (HAKEMP-90; adapted by S.A. Shapkin) was used to define the indicators of volitional control.

For genetic analysis of respondents, total DNA was isolated from whole-blood samples. Genotyping of individual DNA samples for loci of candidate-genes predisposing to a risk of reduced volitional control was conducted at the Department of Molecular Diagnostics in the State Research Institute for Genetics and Selection of Industrial Microorganisms using a Tagman SNP genotyping.

Statistical analysis was performed using the Fisher's exact test and chi-square test with Yates' correction to evaluate whether differences between the two samples are statistically significant. To reveal whether genotypes and alleles of the studied genetic markers are protective or predisposing, Odds Ratio (OR) was calculated with help of 2x2 contingency tables.

As the observed distribution of these values was different from the normal distribution, the Spearman's rank correlation coefficient, a non-parametric analogue of the classical Pearson's correlation coefficient, was applied to assess the correlation.

Results

The control group included apparently healthy pregnant women who filled themselves psychologically comfortable and had a dominant or predominantly optimal type of PCGD (9 points and 7–8 points in the column "O", respectively). Among the women studied, 37 subjects had an optimal type of PCGD (63.46% of a total sample) and a physiologically normal pregnancy.

The case group consisted of 22 pregnant women (36.54% of a total sample) with burdened anamnesis and destructive types of PCGD including the mixed type (mean scores on the scales, 6 subjects), ignoring type (7–9 points in the column "I", 0 subjects), euphoric type (7–9 points in the column "E", 2 subjects), anxiety type (7–9 points in the column "A", 13 subjects), and depressive type of PCGD (7–9 points in the column "D", 1 subject).

Among respondents, women in officially registered marriage were prevailed, 22 and 15 subjects (37% and 25% of a total sample, respectively) had registered marriage or de facto marriage, respectively. Among pregnant women with destructive types of PCGD, 11 subjects had registered marriage (19% of a total sample), 8 had de facto marriage (14%), and 3 were divorced (5%).

The distribution of pregnant women in both groups was significantly different at the educational level (Shi-square Pearson=6, df =2, p=0.05), and by the factor of pregnancy planning (Shi-square Pearson = 4.51, df =1, p=0.03). Thus, the respondents with the optimal type of PCGD and planned pregnancy were shared by 60%, and the share among subjects with other types PCGD and planned pregnancy was 45%. Among patients with unplanned pregnancy, the percentage of those who had the optimal type



and other types of PCGD was 40% and 55%, respectively. Indeed, planning pregnancy with the normal development of the gestational dominant is involved not only in setting goals that are adequate to own capacities, but also in achieving those goals. In our case, planning pregnancy could mean the psychological readiness to childbirth.

In the controls with the optimal type of PCGD, the percentage of first-time mothers was 54%. In the cases with other types of PCGD, the percentage of first-time mothers was 68%, whereas the percentage women with two and more pregnancies was 46% in the control group and 32% in the case group (Shi-square Pearson=4.12, df=1, p=0.04).

The friction angle φ was used to assess differences in the frequency of pregnancy-related complications in the case and control groups. The results are shown in Table 1.

Table 1
Frequency of pregnancy-related complications
in two groups of respondents

| Indicators | Case group | | Control group | | Fisher's test φ*emp. |
|--|------------|----|---------------|----|----------------------|
| a.cators | n | % | n | % | p<0.01 |
| Toxicosis at the first half of pregnancy | 3 | 14 | 5 | 14 | 0 |
| Gestosis | 9 | 41 | 0 | 0 | _ |
| Threat of inter- ruption (the uteral hypertonus) | 6 | 27 | 6 | 16 | 1.909 |
| Abortion | 7 | 32 | 5 | 14 | 3.083* |
| Spontaneous abortion | 2 | 9 | 4 | 11 | 0.474 |
| Anemia | 3 | 14 | 3 | 8 | 1.365 |
| Oligoamnios | 2 | 9 | 0 | 0 | _ |
| Hydramnion | 3 | 14 | 1 | 3 | 2.963* |

^{*} Significant differences in friction angle φ are shown in bold.

The presence of gestosis (late toxicosis), a serious prenatal risk factor, was documented in 9 cases (41%) with destructive types of PCGD, while gestosis was not found in pregnant women with the optimal type of PCGD.

Compared to hydramnion, oligoamnios is less frequent in the case group. Oligoamnios indicates the presence of abnormalities in the female organism, which may be harmful for fetal health. Another significant risk factor is the abortion history in the anamnesis of studied women.

Among cases with destructive types of PCGD, various forms of somatic diseases were detected, and their pathogenesis was complicated by current physiological changes in the female body at the third trimester of gestation.

Statistical indicators of the volitional control on the subscale level greatly varied. This suggests for the presence of different levels of the volitional regulation system of behavior in the compared groups. The analysis shows (see Table 2) that the action control for failure (CF) is emphasized on the state (e.g., on the state-oriented disposition, SO) in 55% of cases. Indeed, these individuals are primarily focused on their own emotional reactions and states, they pay too much attention to their own failures and unable to concentrate on any action. When faced with the failure, the volitional control in these subjects is directed to their emotional state regulation, not for search for effective ways to overcome this setback.

Only in 13% of cases, the action CF has the action-oriented type (e.g., AO-disposition). They do not tend to carefully analyze their failures, have a tendency to forget those, and, consequently, can repeat them. In failure, those people prefer to act and not lost themselves.

Table 2

The diagnostic results of the dominant type of volitional regulation on action control (AC) subscales in two groups

| Indicators | Low level of AC SO- disposition n (%) | | wean level of AC n (%) | | test φ*emp. <0.01 | of A | | test φ*emp. <0.01 | |
|-------------------------------------|---|------------------|------------------------|-------------------|----------------------|-------------|---------------|----------------------|-------------------|
| | Case group | Control group | Fisher's t p< | Case group | Control group | Fisher's to | Case group | Control group | Fisher's to p< |
| Action control for failure (CF) | 12 (55) | 13 (35) | 2.864* | 7 (32) | 21 (57) | 3.592* | 3 (13) | 3 (8) | 1.16 |
| Action control for planning (CP) | 7 (32) | 8 (22) | 1,605 | 11 (50) | 23 (62) | 1.711 | 4 (18) | 6 (16) | 0.375 |
| Action control for realization (CR) | 3 (13) | 16 (43) | 4.89* | 14 (64) | 15 (41) | 3.288* | 5 (23) | 6 (16) | 1.252 |

^{*} Significant differences in friction angle φ are shown in bold.

The low values on the subscale of the action control for realization (CR) observed in cases may suggest for a more severe dysfunction of the volitional regulation compared to the low values of other scales. At the same time, 23% of pregnant women with burdened anamnesis have a high level of CR. Performing an action, they are focused on the action itself and prefer to not respond to irritant stimuli and to interrupt the action.

In general, most destructive types of PCGD, which are more frequent among pregnant women with severe somatic diseases, are associated with the SO-disposition of the volitional behavior control. In the case group, pregnant women with burdened anamnesis have a tendency to self-immersion, leaving in their own, fear of failure, and strong tendency to be self-controlled.



In this study, the following putative molecular genetic predictors of the volitional behavioral regulation were analyzed in 59 respondents:

- 1) the mineralocorticoid receptor NR3C2 (polymorphism c.-2 G>C; rs2070951), in which a guanine (G) and cytosine (C) nucleotides are linked to DNA and RNA;
- 2) the glucocorticoid receptor NR3C1 (polymorphism Asn136Ser; rs6195), in which an asparagine (Asn) and serine (Ser) amino acid residues are involved in the protein synthesis and reflect the flexibility of genetic relations (see Table 3).

Table 3
Frequencies of markers alleles rs2070951 and rs6195 gene NR3C2 gene NR3C1 in two groups

| | Geno- | | iency %) | OR | P (two-tailed |
|----------------------------------|-----------------|-------------------------|----------------------------|---------------------|-------------------|
| Gene (marker) | type/ Allele | Case group (n=22) | Control group (n=37) | (95% CI)* | Fisher's test) |
| Mineralocorticoid receptor NR3C2 | GG | 8 (36) | 19 (52) | 0.52 (0.29–0.91) | 0.032 |
| (c2 G>C; rs2070951) | GC | 5 (23) | 9 (24) | 0.95 (0.49–1.82) | 1 |
| | CC | 9 (41) | 9 (24) | 2,2 (1.2–4.04) | 0,02 |
| | Allele G | 10 (45) | 23 (62) | 0,5 (0.29–0.88) | 0.023 |
| | Allele C | 12 (55) | 14 (38) | 2 (1.13–3.51) | 0.023 |
| Glucocorticoid receptor NR3C1 | Asn/Asp | 17 (77) | 30 (81) | 0,79 (0.4–1.55) | 0.6 |
| (Asn136Ser; rs6195) | Asn/Ser | 5 (23) | 7 (19) | 1,27 (0,64–2,52) | 0.6 |
| | Ser/Ser | 0 | 0 | _ | _ |
| | Allele Asn | 19 (86) | 33 (89) | 0,76 (0.33–1.76) | 0.67 |
| | Allele Ser | 3 (14) | 4 (11) | 1,32 (0.57–3.06) | 0.67 |

^{*}OR - odds ratio; 95%CI -95% confidence interval

Statistically significant differences are observed in cases homozygous for the genotype CC. This may be associated with increased stress-induced activation of the HPA axis in the third trimester of gestation due to the severe somatic diseases and provoke alterations in the PCGD development. The assessment of the polymorphic marker Asp363Ser (rs6195) revealed no statistically significant differences in the compared groups.

When subscales of the volitional control were compared with genetic data, a significant inverse correlation between CR and frequency of the mineralocorticoid recep-

tor gene NR3C2 variants in the control group (r=-0.58; p<0.01). The lower the action control for realization of pregnant women with the optimal PCGD type the higher the frequency of the homozygous genotype CC.

In the case group, we also observed significant inverse correlations between the volitional control subscales such as CF and CR and genetic variants of the mineralocorticoid receptor NR3C2 (respectively, r=-0.571, r=-0.66, p<0.01). This finding suggests that cases homozygous for CC tend to have the SO-disposition of volitional control and the destructive type of PCGD whereas homozygotes GG are trended to have the AO-disposition of volitional control.

Conclusions

The destructive types of PCGD are more frequently observed in pregnant women with severe somatic diseases and are associated with the SO-disposition of the volitional control of behavior mediated by the functional links of the HPA axis. The corticoid receptors play a key role in the HPA axis regulation. Functional effects of these genes are complex and reflect the multi-level character of the individual self-control. Pregnant women with burdened anamnesis have the tendency to self-immersion, leaving their own, fear of failure and excessive self-control in the presence of the homozygous genotype CC of the mineralocorticoid receptor NR3C2 (c.-2 G>C; rs2070951).

The results obtained in this study may be of great prognostic value for women preparing themselves to childbirth since they help to detect women with destructive types of PCGD who carry the homozygous genotype CC of the mineralocorticoid receptor NR3C2 (c.-2 G>C; rs2070951) predisposing to the low level of volitional control. Dysfunction of the volitional behavioral regulation during pregnancy contributes to the childbirth dysadaptation [3].

The use of genetic information in combination with psychological data sheds light on the genetic and psychological mechanisms of behavioral regulation and contributes to the accuracy of diagnosis, prognosis, and monitoring of women's adaptation problems to pregnancy in order to provide them a timely individual psychological care during the antenatal period.

References

- 1. Batuev, A. S., Sokolova, L. V. (1994). About relation between biological and social aspects of the human nature. Voprosy psihologii, (1), pp. 81–92. [Article in Russian].
- 2. Maryutina, T. M. (1998). Individualization of the development: a psychogenetic approach. Mir psihologii, (1), pp. 11–20. [Article in Russian].
- 3. Kovaleva, Yu. V., Sergienko E. A. (2007). Control of behavior in different pregnancy courses. Psihologicheskij zhurnal, 22 (1), pp. 70–82. [Article in Russian].
- 4. Popova, N. K. From gene to aggressive behavior: the role of brain serotonin. (2007). Rossijskij fiziologicheskij zhurnal, Institut citologii i genetiki SO RAN, (6), pp. 569–575. [Article in Russian].



- 5. Sergienko, E. A., Vilenskaya, G. A., Kovaleva, Yu. V. (2010). Control of behavior as subject control. Institut psihologii RAN, M. [Book in Russian].
- 6. Khomskaya, E. D. (2005). Neuropsychology. Piter, SPb. [Book in Russian].
- 7. Chistiakova, N. V., Savost'ianov, K. V. (2011). The hypothalamic-pituitary-adrenal axis and genetic variants affecting its reactivity. Genetika, 47 (8), pp. 1013–1025. [Article in Russian].
- 8. Agrawal, A. A. (2001). Phenotypic plasticity in the interactions and evolution of species. Science, 294, pp. 321–326.
- 9. Berkowitz, G. S., Lapinski, R. H., Lockwood, C. J., Florio, P., Blackmore-Prince, C., Petraglia, F. (1996). Corticotropin-releasing factor and its binding protein: maternal serum levels in term and preterm deliveries. American Journal of Obstetrics and Gynecology, 174, pp. 1477–1483.
- 10. Challis, J. R. (1995). CRH, a placental clock and preterm labour. Nature Medicine, (1), pp. 401–416.
- 11. Chong, S., Whitelaw, E. (2004). Epigenetic germline inheritance. Current Opinion in Genetics and Development, 14, pp. 692–696.
- 12. Gottlieb, G. (1997). Synthesizing nature–nurture. Mahwah, N.J.
- 13. Mousseau, T. A., Fox, C. W. (1998). The adaptive significance of maternal effects. Trends in Ecology and Evolution, 13, pp. 403–407.
- 14. Plomin, R., DeFries, J. C., McClearn, G. E. (1990). Behavioral genetics. A primer (2nd ed.). New York: W. H. Freeman and Company.
- 15. Plomin, R., Rutter, M. (1998). Child development, molecular genetics, and what to do with genes once they are found. Child Development, 69, pp. 1223–1242.
- 16. Quirin, M., Koole, S. L., Baumann, N., Kazén, M., Kuhl, J. (2009). You can't always remember what you want: the role of cortisol in self-ascription of assigned goals. Journal of Research in Personality, 43, pp. 1026–1032.
- 17. Reul, J. M., de Kloet, E. R. (1985). Two receptor systems for corticosterone in the rat brain: microdistribution and differential occupation. Endocrinology, 117, pp. 2505–2511.
- 18. Shorter, J., Lindquist, S. (2005). Prions as adaptive conduits of memory and inheritance. Nature Reviews Genetics, (6), pp. 435–450.
- Van Winsen, L. L., Hooper-van, V. T., van Rossum, E. F. et al. (2005). The impact of glucocorticoid receptor gene polymorphisms on glucocorticoid sensitivity is outweighted in patients with multiple sclerosis. Journal of Neuroimmunology, 167, pp. 150–156.

SOCIAL PSYCHOLOGY

Breus E.D.

Adults' level of optimism and particularities of their behavior in conflict situation

The article is dedicated to the particularities of the personality behavior in the conflict in connection with the subjective perception of the «conflict» situation. This work outlines the differences in the choice and reaction orientation in the conflict, and also the interrelation of the perception indices of the conflict degree in the assessed situations among people with different level of the optimism.

Keywords: conflict, conflict situation, orientation and type of the reaction in the conflict, the level of the optimism.

The society shift towards the democracy in the different spheres of its existence leads towards the increase of the conflict interaction and tension in the spheres of the social interrelations. Hereafter, it is clear why the strong interest towards the conflict behavior provokes many-sided research of the particularities of the conflict interaction in the different spheres of the scientific knowledge. Socio-psychological subject-matter occupies the leading place among the studies of the interpersonal conflicts.

As it is known, in the social psychology, before the conflict there is always the subjective reflection of the characteristics of the social interactions. These are the perception of the situation as the conflict, and the level of the degree of the proneness to conflict which determine the choice of the corresponding strategies of the conflict interaction and its subsequent development [3, 5, 8, 10].

In the view of A.V. Grishina, every person who takes part in the conflict has its own visualization of this situation, made in the zone of the disagreements. These visualization don't coincide. The sides of the conflict see the situation in different ways—this creates the ground for the clash of the interests. The conflict appears just, when, at least, one of the sides perceives the situation as the display of the unfriendliness, aggression or incorrect, illegitimate way of thinking of the other side of the interaction [5]. The subjective perception of the conflict situation obtains the particular significance in case when the adverse parties disguise their real goals.

According to some authors, the perception of the conflict situation can be of the three types: concept about himself/ herself; perception of the other conflict participants; the environment concepts, where the conflict develops [1, 2, 3, 5, 6, 10]. These images, are «...ideal pictures of the conflict situation, but not the subjective reality itself, they are the ingenuous bases of adverse parties' behavior» [10, c. 79]. The con-



cepts of the conflict situation, among the participants determine the range of the possible actions undertaken by the sides involved.

The subjective perception of the situation as the conflict one is connected with age and sex characteristics. Besides, the level of the perception of the situation as the conflict one, can be influenced by the different psychological factors. Thus, O.V. Naconechnaya, G.A. Shevchuk, A.S. Shevchuk [9] distinguish three types of the psychological determinants of the conflict:

- -determinants, connected towards psycho physiological particularities of the development (endured brain injuries and infections, hereditary diseases, lagging behind, particularities of the nervous system, particularly, the processes of excitement and inhibition);
- -actual psychological determinants personality particularities (age and sex particularities, situation of the family development, level of the self-esteem, accentuation of the personality traits);
- -social determinants factors micro and macro environment. As we see they distinguish a group of the factors, connected to the social and psychological particularities.

In our work we are going to consider the level of the optimism as one of sociopsychological determinants of the situation perception as the conflict one and the degree of conflict development.

A lot of philosophers were concerned about the problem of the optimism and pessimism. The optimism is determined by many authors as the world view, value side of the world view, persuasion, ability, faith, system of the views and relations. The optimism let us predict psychological and physical health, connected to the indices of the happiness, with guarding well being under the stress. The majority of the empirical studies, described in the literature, belongs to foreign scientists, such as: M. Seligman [7], M. Shier and S. Karver [13].

In the national science the great attention was paid to the optimism by the famous biologist I.I. Mechnikov in his works «Essays about man's nature» and «Essays about optimism». For the contemporary national psychology this field of the research is relatively new and isn't enough studied. The few researches only partially touch the optimism issue. So, the data about the different aspects of the optimism can be found in the works of N.E. Vodopianova [11], A.A. Gorbatkova [4], N.V. Samoukina [12]. The data received speak about the fact that the optimists better adapt to the important life changes, they endure fewer stresses, and such a way of the overcoming difficult circumstances as avoidance is not typical for them, they are hardly ever hospitalized twice. The optimists are joyful, they remember just the best experience from the past, and they treat other people better. They are more energetic, they have with more initiative, they rarely have depressions, they are less exposed to the psychological burning out; they are characterized by the high adaptability to the new situations, high sociability.

A.A. Gorbatkov [4] thinks, that the role of the pessimism increases in the difficult situations, connected to the threat of the lost of the important compounds of the peo-

ple's life. The optimism plays the important role, when such a threat passes and there is a possibility of thinking of success and comfort. According to N. E. Vodopianova [11], in difficult life situations the optimists use more often constructive transforming models of the behavior. Pessimists hardly adapt to new socio-economic conditions, they are more aggressive and inclined to accuse of his misfortunes the destiny and other people, for example, their subordinates. In the stressful situations the pessimists often use the destructive models of the coping behavior and management, characterized by lower stress resistance in comparison with the optimists.

Thus, from the above said, we can make a conclusion that in many cases the level of the optimism can be a factor, which has a great impact upon the perception of the conflict situation, and also determines the choice of the behavior model in the conflict situation. We suggest, based on the assumption, that this type and reaction orientation in the conflict situation among the people with different level of the optimism can be distinguished. Besides, we think, that the perception of the "conflict" in the frustrating situation can be connected with the level of the optimism.

The issues of the influence of the personality traits, socio-psychological characteristics of behavior in the conflict in the different periods of the time, as it was underlined, were examined by a number of the researchers. However the interrelation of the optimism and particularities of the reaction in the conflict situation is not enough studied and is a subject of the crucial interest.

The empirical research was carried out in collaboration with the sixth year student of the correspondence department of SFU Semikina E.S. in the frame of her graduation work. 80 respondents took part in the study from the age of 25 up to 40. In order to achieve the designed goal, the following methods were used: life orientation test by M. Scheier and S. Carver (1985), and Rosenzweig picture frustration test with the modified stimulus material. The respondents were suggested to assess each picture according to its proneness to conflict using 10-points scale: 1 point – situation is not difficult; 10 points – obviously conflict situation, subjectively it is very difficult, hardly possible to avoid conflict.

After the analysis of the received data, all the respondents were divided in dependence of the level of the optimism into the three groups: optimists (31 respondents), realists (35 respondents) and pessimists (14 respondents). The discovered types of the orientations and types of the conflict situations are represented in tables 1 and 2.

Table 1

The average indices of the reaction orientation towards the frustrating situations in groups with different level of the optimism

| Level of the | Reaction orientation by Rosenzweig | | | | | |
|--------------|------------------------------------|-------------------------|---------------------------|--|--|--|
| optimism | Extrapunitive reactions | Intropunitive reactions | Impunitive reac- tions | | | |
| Optimists | 7.7 | 7.2 | 9.1 | | | |
| Realists | 10.3 | 6.8 | 6.9 | | | |
| Pessimists | 11.9 | 7.2 | 4.9 | | | |



As we see, there is a certain objective regularity in the use of different orientations in the conflict situations among the people with the different level of the optimism. Thus, the indices of the extrapunitive reactions grow from the least meanings among optimists (7.7) up to the biggest meanings among the pessimists (11.9). And, on the contrary, the indices of the impunitive reactions decrease from the highest scores among the optimists (9.1) up to lowest meanings among the pessimists (4.9). The discovered differences are statistically meaningful using Mann Whitney's U-criterion regarding about extrapunitive (Z = -3.9, Asymp. Sig. (2-tailed = 0,000) and impunitive (Z = -3.1, Asymp. Sig. (2-tailed) reaction orientations between groups of the optimists and pessimist, and in regarding about extra punitive (Z = -2.3, Asymp. Sig. (2-tailed) = 0,023) and impunitive (Z = -4.7, Asymp. Sig. (2-tailed) = 0,000) reaction orientation between groups of the optimists and realists.

The results of the comparison testify that people with the maximum level of the optimism are inclined to treat the conflict situation as unimportant, assuming no someone's guilt or something that can be improved. The rise of the indices of the extra-punitive reaction orientation among the pessimists expresses itself in the form of overestimating the frustration and blaming the extra causes of this frustration.

Table 2

Average indices of the reaction types in the frustrating situations in the groups with different level of the optimism

| Level of the | Reaction type acco | Reaction type according to Rosenzweig picture frustration | | | | |
|--------------|-------------------------|---|------------------|--|--|--|
| optimism | Obstacle - dominance | Ego-defence | Need persistance | | | |
| Optimists | 9.2 | 7.4 | 7.3 | | | |
| Realists | 8.9 | 10.2 | 4.9 | | | |
| Pessimists | 7.9 | 11.2 | 4.9 | | | |

From the tables we can conclude that the differences in the indices of the obstacle-dominant type of the reaction among the optimists, realists and pessimists are not considerable (9,2; 8,9; 7,9). The greatest degree is shown by the ego-defence type of the reaction, moreover, in the groups of the pessimist (11,2) and realists (10,2). The optimists have the highly expressed need persistence style (7,3), comparing with realists (4,9) and pessimists (4,9). The significant differences by the indices of the optimists' reactions, realists and pessimists were found with help of U-criterion of Mann Whitney.

The significant differences were found according to all the types of the reaction: obstacle-dominant type of the reaction (Z = -2.0, Asymp. Sig. (2-tailed = 0.052), ego-defense type (Z = -3.9, Asymp. Sig. (2-tailed = 0.000), need persistant type of the reaction (Z = -2.4, Asymp. Sig. (2-tailed = 0.018). When we compared the groups of the realists and pessimists we couldn't find any meaningful differences. Comparing the results of the group of the optimists and realists we got meaning-

ful differences according to ego-defence type of the reaction (Z = -4,4, Asymp. Sig. (2-tailed = 0,00) and need-persistence type of the reaction (Z = -3,5, Asymp. Sig. (2-tailed = 0,001).

The results prove that with the decrease of the optimism level, the indices of obstacle–dominance and need–persistence type of reaction also decrease, the indices of the ego-defense increase. Thus, according to the carried out research, pessimists actively start to blame someone, they deny their own guilt, they try to avoid a reproach, they show the tendency to defend their «Self». So the received data testify that the orientation and reaction type in the conflict situation depends upon the level of the optimism.

Degree of the proneness to conflict in groups with different level of the optimism

Table 3

| | The number of the respondents in percents % | | | | |
|-------------------|--|---|---|--|--|
| Level of optimism | Perception of the situation as having no conflict ground | Perception of the situation having average level of the conflict | Perception of the situation as a conflict | | |
| Optimists | 68 | 23 | 9 | | |
| Realists | 54 | 29 | 17 | | |
| Pessimists | 36 | 35 | 29 | | |

As may be seen, the greatest number of the optimists (68 %) in comparison with realists (54 %) and pessimists (36 %) evaluate the situation as having no ground for the conflict. While assessing the situation, only 9% of optimists considered them as the conflict, whereas realists –only 17 % and pessimists 29 %. As level of the optimism was decreasing, the indices of the «proneness to conflict» in the situation were decreasing.

Table 4

Mean of the perception of the proneness to conflict in the situation (in points)

| Mean "proneness to conflict" in the situation in points | | | | |
|---|----------|------------|--|--|
| Optimists | Realists | Pessimists | | |
| 2,98 | 3,95 | 4,92 | | |

The meaningful differences in the subjective assessment of the «proneness to conflict» in situation were obtained by administrating Mann _Whitney's U-criterion while comparing groups of the optimists and pessimists (Z = -2.5, Asymp. Sig. (2-tailed = 0,014); comparing groups of the optimists and pessimists (Z = -3.8, Asymp. Sig. (2-tailed = 0,000); comparing the groups of realists and pessimists (Z = -2.0, Asymp. Sig. (2-tailed = 0,042). The results of the comparison testify that the high level of the optimism allows evaluating fewer situations as the "conflict ones".



The pessimists are inclined to assess subjectively a great number of the situations as the "conflict situations".

Thus, we can admit that the perception of the conflict situation and the choice of the orientation and the type of the reaction in the conflict situation are connected to the level of the optimism.

References

- 1. Antsupov A.Ya., Malishev A.A. Introduction into conflictology. Moscow, MAUP Publ., 1996. 551 p. [in Russian]
- 2. Bogdanov E.N., Zazikin V.G. Psychology personality in the conflict. Saint-Petersbourg. Piter Publ., 2004. 224 p. [in Russian]
- 3. Vishnevskaya A.V. The course of the lectures "Conflictology". Site of humanities education. Available at: http://www.humanities.edu.rumck html. (accessed 10 December 2012) [in Russian]
- 4. Gorbatkov A.A. The optimism and pessimism utility. Applied psychology, 2001, vol.3. [in Russian]
- 5. Grishina N.V. Conflict psychology. Saint-Petersburg, Piter Publ., 2003. 464 p. [in Russian]
- 6. Eguides A.P. Psychological correction of the conflict communication. Psychological journal. 1984, vol.5. pp. 52–62. [in Russian]
- 7. Zeligman M. How to assimilate optimism attitudes. Moscow, AST Publ., 1997. [in Russian]
- 8. Lebedeva M.M. Particularities of the conflict perception in the conflict situation and the crisis. Collected works of the conflictology. Antsupov A.Ya., Leonov N.I. and others. Moscow, 2004. pp. 94–99. [in Russian]
- 9. Nakonechnaya O.V., Shevchuk G.A., Shevchuk A.C. Psychological determinants of the adults' conflicts. Pedagogical Bulletin, 2002, vol. 2. Available at: tect.yspu.yar. ru/vestnik/namber/ 14 (accessed 10 December 2012) [in Russian]
- 10. Petrovskaya L.A. About conceptual scheme of socio-psychological conflict analysis. Collected works of conflictology. Antsupov A.Ya., Leonov N.I. and others. Moscow, 2004. pp. 43–50. [in Russian]
- 11. Psychological reader of management and professional activity: textbook/ edited by G.S. Nikifirova, M.A. Dmitrieva, V.M. Snetkova. Saint-Petersbourg. Publishing house of Saint-Petersburg University, 2003. pp. 291–293. [in Russian]
- 12. 11.Samoukina N.V. Psychology of the optimism. Moscow, Publishing house of the Psychotherapy Institute, 2001. [in Russian]
- 13. Schier M.F., Carver C.S., Bridges M.W. Distinguishing optimism from neuroticism (and trait anxiety, Self-mastery, and Self-esteem): a reevaluating of the life oriental test. Journal of personality and social psychology, 1994. Vol. 67. no. 6, pp. 1063–1078.

EDUCATION PSYCHOLOGY

Abakumova I.V., Telnova O.V., Fomenko V.T.Development of pupils in interdisciplinary contexts

It is generally recognized by teachers and psychologists that the global purpose of modern education is development of a person. In psychology development is defined as new mental formations. In this connection an activity is considered as a source for development, and leading kinds of activity are distinguished in its structure. The authors of the present article show that a considerable developing resource for education can be taken from non-psychological theories. Semiotics, synergy, content-genetic logic, the theory of structures, axiology, existential theories, philosophy are among them. In each of the named spheres of knowledge development is defined taking into account its specificity and it differs. In these interdisciplinary contexts in comparison with psychological one development appears more system and enriched, as an ambiguous, heterogeneous, and, at the same time, an integral phenomenon.

Keywords: personal development, interdisciplinary contexts, psychology, semiotics, content-genetic logic, the theory of structures, axiology, existential theories, philosophy.

The psychological concept of development is defined as a transition of a person to a new quality. This concept is a starting position for the modern didactics as the theory of educational knowledge. The global purpose of education, in particular, is more and more interpreted as a development – first of all, a development of a person [2]. It is such a «detail» which noticeably affects the main component of the educational process – its content. The latter is not so much qualified as «a subject» which is to be assimilated, but as «a subject» which «feeds» the development of pupils if it is really defined as its main strategic prospect. The content is like the soil feeding development, growth of plants. We consider the given analogy to be appropriate from the point of view that it infers questions of components forming the soil, of components of the content of education which «work» for development of pupils. In the same way development as a purposeful attitude of the educational process affects training technologies «serving», as is known, the content. If the content is a substance feeding development, educational technologies are mechanisms switching on, starting development. Really, we can quote the well-known words of a classical author, the purpose as a way determines by itself a character of activity. If we use the terminology of the same classical author, the basis (the content) and the superstructure (technologies) are subject to influence.

Nevertheless, why is development a purpose, a strategy, and a prospect of education? It is so, because development is a condition of human life. When he/she feels



that he/she has stopped in one's development, the given circumstance, undoubtedly, reduces quality of one's life, and, first of all, deforms its psychological component [4]. By analogy with it, when a teacher poorly understanding people says to parents that their child is behind the development, this statement of the teacher often has a tragic influence on them. If they do not realise it up to the end, but, at least, they feel the difficulty of the situation for themselves and for their child.

On the grounds of the fact that the idea of development of a person is connected with the problem of life, it is appropriate to recollect the understanding of the beautiful by great philosopher Gegel and, in dialogue with him, by outstanding Russian thinkers. Gegel considered that "everything is beautiful in its own way". Hence, for example, the brighter a spider is and the more exact symmetry it has, the more beautiful it is, whereas in this case it becomes more awful. The frog in a similar situation gets more and more definite features of the ugly. Our domestic philosophers convincingly respond to Gegel's maxim of "everything is beautiful in its own way": no, it is not; only those things which promote life are its sources, are beautiful, the very life is beautiful. While a spider, a frog is called for life destruction, a dawn, a meadow, flowers are its unconditional carriers. Thus, the development taken as a strategic line of educational process and defined as a condition of life is a sphere of the beautiful, an area of perfection, harmony.

We have approached the development of pupils in structure of educational process from the direction of the general idea of development, its importance. It is also possible to approach it from the direction of education itself, «having forgotten» for a while about development as meta-knowledge, epistemic (problem, essential) knowledge.

Development of pupils is already felt in the very definition of education, in that of its variants which sounds as a process providing entering of a person into "Self-image", "Ego-image", and into the process of finding of oneself. At once the question is raised: Who am 'I' in the triad "person – person – I"? In the context of our concept among its numerous characteristics one is emphasized: 'I' am what I want to be seen by "others" (i.e. "I" is a social phenomenon). From this point of view the definition of education just stated can be developed: education is a process providing entering of a person into "Self-image", "Ego-image" by means of socializing of the person, and also (we state it without explaining) interiorization, identifying, and adapting. Socialization, interiorization, etc., which took place of the purposes of education in classical didactics, is shifted towards its means, methods, techniques in our approach. It is a symptomatic fact: here education is aimed directly at a person-pupil, the "Self".

It is nessesary to give even more "extended" definition of education sounding not only as a process of entering of a person into "Self-image", "Ego-image". It is referred to going out of the limits of the own actual "Self" of a person within the limits of the basic potential "Self". It is clear that entering of pupils into the "Self-image", "Ego-image", as well as going out of the limits is nothing but development stated above as as a condition of a life.

Development of pupils is a psychological category. In terms of psychology it means new mental formations. If a pupil had concrete-creative thinking and now he/she has clearly evident abstract thinking, we have a right to state an act of his/her intellectual development. Within the limits of aforesaid the well-known idea of a long-range transfer of knowledge and ways of activity is the highest indicator of the abstractive ability of a person, and the known idea of the orientation basis of actions of a high level of generalisations is already an indicator of general intellectual development of pupils. Among new mental formations there are ascending levels of perception, memory, attention, reflexion, intuition, emotions.

Psychology considers activity as a primary source of development: its subject, thinking activity, activity of consciousness, emotional experience activity. Psychologists emphasize active, internal, subject character of activity. Sigmund Freud wrote that development is an activity directed against the external reality [4]. It is possible to say that transforming the reality a person transforms himself/herself. In the aspect of development leading activities are distinguished and analysed: game during the preschool period, education during the school period, educational-professional activity during the university period, professional activity during the post-graduate period. There is a search for periods in a stage-by-stage human life, including an old age, for social and creative activity as its leading kinds.

Psychologists also underline the dominant importance of zones of development in development of a person. In order to realize an act of development of pupils, a teacher and pupils in their joint activity have to enter into the zone of proximal development of pupils. This zone means a collision of known and unknown in the intellectual sphere of children; a mismatch between the information which they have and the information which they get from the teacher; a contradiction between a figurative content set by the teacher and the necessity of its transformation by pupils into a discursive, conceptual, theoretical content, and conversely. The zone of proximal development is represented in such logic constructs as «unstable balance», «uncertainty and its removal», «friction of thoughts in a dialogue», «problem situation», «overcoming of strength of a material», «stress zone». The zone of proximal development opposes the zone of actual development characterised by coincidence of the level of preparedness of pupils and actions of the teacher and by absence of all those characteristics of the zone of proximal development which are specified above. The zone of actual development can precede the zone of proximal development, be its specific precondition. On the other hand, in the course of expansion of educational process the zone of proximal development runs low and is inclined to turn into the zone of actual development. This zone requires continuous support until pupils turn into the zone of self-development on coming out of educational process.

As is well known, L.S. Vygotsky was one of the originators of the zone of proximal development as a scientific category. The interpretation of his approach by American scientists Craig G. and Bokum D. is be of interest [4]. They define the zone of proximal



development as «a distance between what a child can do independently and what ite/she can do with the help of others». «Others» in our context are teachers, educational specialists.

We have characterised development as a psychological phenomenon in the most general terms. It is desirable to go beyond psychology and to look at it from nonpsychological point of view, having included interparadigmatic mechanisms of understanding of a developmental component of education in the context of the principle of complementarity. It is possible to see a reference to nonpsychological knowledge for interpretation of foundations of development even in the previous text, in the context of the principle of complementarity. Now we give a special consideration to this problem.

So, in the context of semiotics – the theory of signs – development means transition of a person from one sign system to another [1]. If a pupil knew the arithmetic system of signs and now knows the algebraic one, i.e. the pupil has comprehended the different way of knowledge which opens to them new horizons of reality, we have a right to state an act of his/her development. The algebraic system in its turn can be transformed by the pupil into the geometrical one and, consequently, is turned into texts of another kind. It can indicate a progressing development of the pupil. Moreover, if the pupil can do a reverse transformation – geometrical structures into algebraic ones, as they say, there is direct evidence of development here. We do not speak any more about the facts of transformation by pupils of a literary text of any volume literary work into the mathematical system of coordinates. The volume of five hundred pages turns to be got into one page, with its quite difficult sinusoids.

It is possible to notice a certain coincidence of development in terms of psychology and semiotics, for example, a transition of a pupil from concrete-creative thinking to abstract-logical one and his/her transition from the arithmetic system of signs to the algebraic system. Such structural parallelisms between psychological and semeiotic approaches to the phenomenon of development are frequent. However, in such cases and especially in situations of discrepancy, development of pupils has different, dissimilar foundations. Semiotics transformations can cause new mental formations of pupils, having become an organic structure of their mentality. But they can be realized only in the sphere of content of consciousness of a person, deepening and extending cognitive and semantic spheres of pupils, making them dynamic, and enriching the inner, subjective life of pupils.

New cognitive schemes of thinking, semantic matrixes of consciousness, ways of orientation within texts of culture and situations of objective reality can be the product of the specified semeiotic activity of pupils. But there can be nothing of these if educational process is directed only at the zone of actual development of pupils presented by the level of their ability of transition of one sign system to another which they have already known. There will be a «decrease», «ossifying» of the specified ability. Its transformation into a skill is an indicator of the necessity of transition of the educational process from the zone of actual development of pupils into the zone of their proximal development with its higher level of intellectual difficulties. Having

placed into the specified zone from the outside, the content becomes subjective, internalised, and transformed into the content of consciousness of pupils, transferred into its new quality.

Let us express disputable thought that the zone of proximal development of pupils, presented in our case by their transition of a teaching material from one sign system into another, is to a certain extent the zone of proximal development in relation to the teacher too. Variants of transitions under consideration are plural. And the choice of their optimal variants can turn to be uneasy even for the teacher. The problem which pupils solve is almost always a «minor» problem of the teacher and plays a developing role in relation to him/her.

Development in the context of synergetics [1] – the theory of chaos and systems self-forming from it – represents a transition of pupils from unordered set of elements of the content learnt by them, from chaos of their impressions, unclear cognitive images, sense-images to a system, a structure, an order. The book by I.R. Prigozhin, one of the founders of synergetrics, is called: «Order from chaos». The opinion of Charles R. Darwin about himself in his «Autobiography» can be an illustration for such understanding of development. Having said that he was likely to be of average abilities from birth, Darwin noticed that when a person since the childhood or the early youth aimed at something, impressions penetrated into the consciousness began to group around the given aim, time passed and it was possible to see regularity. The author said that he had no choice but to see this regularity and to describe it (the fragment of «Autobiography» is reproduced from memory). If we agree to it, the person of «average» abilities made a discovery which is equal to the highest level of general and intellectual development. The synergetic essence of development – from chaos to order – is seen here clearly enough. Any point of space, including, of course, individual space of habitation and life activity of a person, can become a development point. When there is a mutual gravitation (synergy) between two and more such points, development is accelerates and gets deeper repeatedly.

A huge number of events of educational process can be used exactly as synergetic facts providing development of pupils. The need of children for impressions during preschool years, for example, leads to accumulation in their consciousness of a considerable amount of the disordered and diversified information. In conditions of the organised educational process it gets a structural definiteness. By analogy with it – from chaos to order – the cognitive process of children can be built in school years. The precondition of development of logic structures of consciousness of pupils, the forerunner of forming cognitive schemes of thinking are «smeared» images of studied phenomena, information and sense saturated substance feeding development. Underestimation of the given part of educational process will not only complicate forming logos of pupils, but also will deprive it of abstraction, similarly to one of the cases, stated above.

Now it is suitable to go beyond the educational process, nevertheless remaining within the field of education to illustrate another significant thesis of synergetrics



which directly or indirectly connected to development of pupils. The given thesis says that anything in a chaotic, disordered, «turbulent» state cannot exist arbitrarily long in time. It will become organised in something under the synergetrics laws. Keeping the given context in mind, we will take into consideration that the environment, which a pupil is usually immersed into, can be organised (family, school) and unorganized (street, court). Strength of the organised environment is in that fact that it takes effect directively, unorganized, that there is a lot of it and it operates spontaneously. The risk concealing in the unorganized environment consists in that fact that it obligatory becomes organised in something. And if we do not take it over the pedagogical control, it could be that it will become organised in a criminal structure, and development of a child will have a dangerous for him/her and for the society direction. The urgency of the known problem of making the environment more educational (pedagogical) – to «force» it to operate in the same direction as education and upbringing (youth centres, creative clubs, playgrounds) – follows from what has been said above.

Thus, synergetrics like semiotics exceeds the bounds of development as new mental formations in a person, but its interaction with psychology in the course of understanding of content and structures of development requires a special research.

Development in the context of content-genetic logic (G.P. Schedrovitsky) – the theory of movement of thinking in process of ontogenesis of a person from its initial state to the highest, categorial levels – means the specified movement consisting, if we define concretely, in an «embryonic coming-to-be of the truth» (M.N. Skatkin who has carried out an extrapolation of the cited words of A. Herzen to didactics). In contrast to the formal logic dealing with thinking in its operational expansion and studying its unit (concepts estranged from the real life of a person), the content-genetic logic is logic of a reflexing thinking. Here strain of material, social, inner world by means of special logical procedures takes a form of strain of thought and experiences. Development can be defined as a movement to the deep sense of the problem.

Among special procedures taken by the teacher in educational process for transformation of the specified strains into the inner activity of pupils are:

- -orienting pupils toward «a bifurcation of a single whole» (light has properties of a particle and a wave simultaneously); concentrating their attention on contrasts and absence of indications of their unity. The dialectic contradiction of reality turns into a formal-logical contradiction, into a state of a distorted balance. In attempts to leave it the peripheral zones of consciousness of a person are shaded and the content in the form of the unknown moves to the centre of clear consciousness; everything concentrates around this unknown. Under conditions of a situation of a similar divergent type expressing a diverse orientation of the process, we face a case of a fixed point of consciousness;
- -stating by the teacher several points of view concerning one and the same question in such a manner that all of them are represented as correct and true, whereas correct and true point of view is actually only one. In such a situation the thought of pupils «jumps» from one extreme to another. The dual process of

activity of the teacher and pupils takes a form of «a restless state of spirit», «feeling of closeness of truth», enters, speaking now in terms of psychology, into the zone of proximal development. In the framework of traditional approaches the understanding is a core of education. From the positions of modern non-traditional approaches misunderstanding is a core of education, misunderstanding as a moment of movement to understanding.

We have specified the source found out in content-genetic logic which stimulates pupils to a vigorous activity and initiates development. However, content-genetic logic attributes it a further expansion towards integration of units of the content of consciousness as reference points of development of pupils, in particular, their ability to see something common among processes and phenomena having outwardly different characteristic features. It is a question of simultaneous thinking – an ability of pupils to find out that common thing, which, for example, is inherent in a sea wave, a wave of fire going across the field, a flu wave; in a root of words in linguistics, a root of plants in biology, a root in mathematics; in a full stop (a point) in linguistics, a point in geography, a point in mathematics. Content-genetic logic focuses on education which forms at pupils this sort of essential, epistemological knowledge, meta-knowledge, saying differently, develops at them a simultaneous ability.

Development in the context of the theory of structures [8], according to which the structure is the main thing in any subject, phenomenon, process, with reference to pupils can be defined as a fluoroscopic ability of thinking – their vision of «granularity» of the learning content, of such its «particles» which possess properties of the whole, of «cells» which are able to develop in more difficult structural formations and to achieve the level of the whole itself.

The intelligence as an indicator of development displays especially distinctly in situations of isomorphic, structural conformities between various fragments of the content of the educational process. The thinking achieving isomorphism of facts, events, concepts, opinions is worthy of being the most highly estimated. It is one of the mechanisms of simultaneous thinking which is said above, appears as a way of closing of synergetic links, as a means of integration of the educational content into larger blocks.

In his time I.Ya. Lerner [6], the well-known didactics-scientist, revealed a structural parallelism between the components of the general culture and the components of the content of education. Having arrived at a conclusion that knowledge, ways of activity, experience of creative discernments, motivation are culture components, the researcher discovered the same components in the content of the educational process provided by teachers-innovators. The theory of the content of education developed by the author proved to be convincing as, on the one hand, it was directed to innovative practice and, on the other hand, it was directed to the culture as a general methodology; the methodology and the practice proved to be structurally correlated.

I.Ya. Lerner showed a rational ability of structurization of events and facts comprehended by thinking, as well as logos coming from similarity of structures of the



investigated material. Didactics-scientists outrun him. They develop a complex, multidimensional structure of education. It includes some didactic models which are structurally adequate to the components of culture distinguished by I.Ya. Lerner:

- -a knowledge model, in which the unit of the content of education is knowledge,
 which is isomorphic to knowledge as a culture component;
- -an activity model, in which the unit of the content of education is a way of activity which is isomorphic to a way of activity as another component of culture;
- a problem-creative model, in which the unit of the content of education is a problem, which is isomorphic to the experience of creative activity of a person as a component of culture;
- -a sense-personal model, in which the unit of the content of education is a personal sense (personal meaning), which is isomorphic to the motivational component of culture.

The whole structure of education appears to be isomorphic to the structure of culture. In its turn, the level structure of intellectual development of pupils is isomorphic to the complex structure of education, to its complex model as it can be indicated.

Isomorphisms can be found in the most various, occasionally unexpected parts of education. Structurally-defined process, for example, corresponds with a controllable activity of pupils; structurally-undefined process corresponds to a self-controllable one. In isomorphic correlation there are rather significant and increasing their significance due to isomorphism didactic regularities. The transition of structural definiteness of educational process into structural undefiniteness corresponds with the transition of a controllable activity of pupils into to a self-controllable one. There are a lot of similar isomorphisms which demonstrate non-unsuccessfulness of pedagogical searches.

As to pupils, the theory and the practice of education have accumulated a number of creative tasks which come from relations of isomorphism existing in teaching materials. The tasks are:

- -to transform a figurative material into theoretical one if between them there is a structural identity which allows pupils to do the specified transformation;
- -to unite several structurally coincident rules in one, which is more data-intensive; these tasks are aimed at development of thinking using larger concepts and statements;
- -to close the process of education «onto oneself», for example, to connect by means of proper tasks the completion stage of a lesson to its initial one, if the initial stage (let it be an event material) and the completion stage (for example, an analytical material) are in structural conformity;
- -to «untwine» the content into its complete structure in the «centre» of the lesson, there again under the conditions of isomorphism of the «centre» and the «periphery». In the «centre» of the lesson, in particular, it is possible to put a picture, a visual pattern and to construct the whole lesson round the given pattern,

directing the activity of pupils into the depth of the picture by means of special tasks and helping them to elicit from it the very logos about which has already discussed.

The developing resource of isomorphism can be increased if we transform the latter into a «reverse» variant (a linguistic analysis of the text called «Morning on the Don» made by the teacher together with a next following mini-composition «Evening on the Don» made by the pupils).

It goes without saying that the educational tasks, based on isomorphism as a psychological-didactic mechanism of integrating of gaining knowledge, its transforming into large blocks, forming at pupils a long-range transfer of knowledge, system thinking, bases for an integrative activity and, finally, their intellectual development as a whole, can also be extensively used at the higher school. As an example we can cite one of interdisciplinary cognitive problems taken from our own experience of courses in psychology and didactics read by us at the Southern Federal University.

As a problem situation there are two isomorphically correlated groups of concepts (Table 1).

Isomorphically correlated groups of concepts

Table 1

| isomorphically correlated groups of concepts | |
|--|---|
| The didactic concepts, expressing the basic parts of education and their interrelation | Psychological concepts, based on the activity approach |
| Teaching | Teaching activity |
| Learning | Cognitive activity |
| Education | Educational activity |

The task is that students, future teachers, have to correlate the concepts of the right column with the concepts of the left column. They easily correlate 'Teaching activity' with 'Teaching', 'Cognitive activity' – with 'Learning'. The «difficulty» of the task consists in correlating 'Educational activity' with the same three didactic concepts. The caused difficulties motive students to thinking, reflection. It is found out that 'Educational activity' simultaneously corresponds both with 'Teaching', and with 'Learning', and it means that it corresponds with 'Education'. Thus, 'Educational activity' is a dual activity and as a dual activity it corresponds with 'Education' as a dual process. The given conclusion, in turn, means that the didactics in its own didactic terms – in the narrow sense of the word – sounds as the theory of education, and in some more psychological form it can be qualified as the theory of educational activity.

It is possible to draw a conclusion that in addition to the specified above developing resources, isomorphism has also got one more. It is a possibility of creation of problem situations initiating development at the meeting-point of an isomorphic, but a various material.

Development in the context of axiology – the theory of values – can be defined as forming a system of values in a person, in our case, they are values of pupils. Values are



crystallized, objectified, objective senses of human life; human attitudes to the world around and to themselves are captured in them. If in psychology, in an appropriate «Table of Ranks» abstract thinking takes a more significant, higher level in comparison with concrete thinking, but in axiology, on the contrary, concrete thinking can get a higher estimation if earlier it was a weak point of the pupil who, for example, is going to be a painter in future. In psychology deep thinking is considered more valuable in comparison with rapid one; in axiology, for example, in a situation of flight control, the speed of thinking of a person, the degree of his/her reaction for a situation can be more significant and urgent because the life of people is connected with it.

As a culture represents a system of values [7], and the content of education, its basic components got from the culture, gains a valuable context, the education constructed on such basis does not originate from abstract knowledge, ways of activity, experience of a creative activity, its motivation, but from the importance of each of the named components of the content of educational process, its personal value. Here the structure of the content, required to feed the development of pupils, is not defined according to the gnoseological and cognitive parametres (subject-object), but on the ontologic basis (person-world) and, hence, it is focused accordingly.

It goes without saying there are not two values alike: for an ancient Indian scalping of a white person was the highest value. Even now some peoples consider revenge as a significant category. In our text the matter concerns humanistic values, among which:

- -individual values (positions, life principles, favourite books and heroes, communication with a friend, games, fishing, one's own poetry);
- -values of the native house, the native hearth (mother, father, rerlatives, close people, customs, traditions of a family);
- -values of the native land, the small homeland (nature, people, features of the language, culture, game);
- -values of the big Homeland, general native values (the native language, mentality of the people, culture archetypes, religious values, love for the Homeland, historical and civil values);
- universal values (beauty, kindness, conscience, truth, duty, honour, responsibility, «luxury of human communication», «emotional awakening of mind»).

It is easy to notice that axiology extremely approaches educational process to a person. Here the content is presented according to the existing maxim «from a culture of utility (read here: from a pedagogics of utility) to a culture of dignity (read here: pedagogics of dignity). Unfortunately, stated above value as units of the content of education and a source of intellectual development of pupils are presented poorly in a real practice of the modern education. But after all, except the content of education, which renovation axiology focuses on, the other components of education are also required in reconsideration on the valuable basis. For example, it can be interpreted as a communicaion characterised as a value exchange (pupils do the task conscientiously, and the teacher smiles at them – they exchange values. What is the equivalent of the exchange?).

In the context of existentialism – the theory of life, existence of a person – development is understood as his/her entering into "Self-image", "Ego-image" and at the same time as going out of the limits of the own "Self", own "Ego". We paid attention to the given circumstance at the beginning of our text and approached close to it when we characterised development in the context of axiology. There is a question: who is this "I"? At first sight, "I" is the one who realises his/her existence, and also what I want to be seen by others: "I" is a social phenomenon. In fact, "I" is much deeper. Existentialist J.-P. Sartre wrote: Person is not the given and fore-set from life, on the contrary, he/ she does not have nature, in this sense he/she is «nothing and must make himself/ herself... anything of himself/herself»; «Person is never equal to himself/herself, always he/she «is not what he/she is, he/she is what he/she is not» [7]. From the stated words it is possible to conclude that "I" in a person is not only the one who realises his/ her existence, and not only what "I" want to be seen by others. "I" is a subjectivity of the person. The personality shows itself in its "I". "I" acts as an intermediary protecting interests of the personality, represents «a protective belt». It is a connecting link between various mental processes, between energies of different inclinations» [7].

Distinguishing personality in a person as a totality of its characteristic features and distinguishing its "Self" in personality is a methodologically important fact for didactics and pedagogics as a whole. Genetics and heredity affect development of a person, on the one hand, and society and culture have effect on it, on the other hand. There is also the third factor. It is personality itself, its active "Self".

The given circumstance sets educational process tasks of its personification and personalization. It specifies such its existential-psychological organisation when a pupil can show the valuable attitude to studied fragments of the content, reflex, manage one's own cognitive activity, simulate one's own life, perceive a lesson as a objective reality of his/her life. The highest values in existentialism are spiritual ones, and spiritual development of pupils should become a global prospect of the modern education.

It is necessary to have reasonable limits in everything, and development of the "Self" in a person is no exception. We mean, in particular, children suffering from autism with their social problems in communication. Development of their "Self" consists not so much in development as, on the contrary, in restriction, more precisely, in switching of their way of life and educational activity, taking into account their «measure» of socialization. This problem is special and needs a special scientific analysis.

Development in the context of philosophy – its classical version – means ascension of a person to the universal and by means of it his/her approach to individuality. Here individuality appears in cooperation with the «universal» because a person can discover oneself quite completely with a palette of his/her specific traits and characteristic features only when the person has seized the general in its diverse context against a background of its plurality. For ancient Greeks the universal was Demiurg, the creator of the Universe; for Gegel it was the Absolute, the absolute idea; for believers the same universal is God; for a secular people it is culture. Culture is peculiar Demiurg, the Absolute, God, and for all people, according to philosophers, it is the



universal technology of human activity. People breathe it like oxygen. They disclose, express and realize oneselves in it. It creates their life in the image and likeness of itself. Its pluses and minuses affect directly pedagogical life which in the given text interests us in the first place. According to the story by Ju.A. Zhdanov, when V .V . Davidov in his time was asked what the logic of education at school was, he answered: there was not such logic. – Why was not there logic? – Because there was not a single theory of education. Why is not there a single theory of education? – Because there was no integral theory of culture. By the way, in succeeding years Ju.A. Zhdanov in the coauthorship with S.V . Davidovichem wrote the monograph «The Essence of Culture». Here, in the Don region, being extrapolated in pedagogics, it has played an important methodological role in relation to it.

Having come from philosophy to the category of culture, it is expedient to use the concept of philosophy of culture in what follows [7]. According to it, the culture, the dialogue of cultures, succession of cultures is driving force of civilizational development of human societies. When people became proficient in written speech, it was a huge progress in the intellectual development of mankind resulted, in particular, in hypertexts, in fundamentally new ways of communication nowadays. There are a lot of such examples. Education is in the epicentre of culture acting as a mechanism of transmission of culture of the past into the future. The culture segregates from itself such a especial part which is a means, a way of preservation, support and development of the general culture and which is qualified as education.

In what way is the specified transmission of culture carried out? It is carried out by means of its reproduction in each individual. And what is the culture reproduced in an individual? It is, if we «make round» a little and will be inexact, genetics and experience of a pupil, the "Self", the "Ego". Development, as we emphasized above more than once, is entering of a person into "Self-image", "Ego-image" at one time with going out of the limits of the own "Self", the own "Ego". Pushkin, Lermontov, Yesenin perceived by me is not already absolutely Pushkin, Lermontov, Yesenin. They have already got something from me. And I am not already absolutely me. I have got something from Pushkin, from Lermontov and from Yesenin. Our common product continues growing and developing. The poetry of the great in my soul does its clearing work; mathematics does the same in a mathematician's; biology – in a biologist's. But Lobachevsky and Darwin live within me, and I feel their imprint upon me, as well as great poets live within a mathematician and within a biologist. Psychologists have invented for this phenomenon a specific name – it is integrated individuality.

References

- 1. Abakumova I.V. Sense-didactics. Moscow, 2008. [Book in Russian]
- Abakumova I.V., Fomenko V.T. Educational technologies: new foreshortenings. Rostov-on-Don, 2012. [Article in Russian]
- 3. Asmolov A.G. Psychology of personality. Moscow, 1990. [Book in Russian]
- 4. Craig G., Bokum D. Psychology of development. Moscow, 2010. [Book in Russian]

- 5. Leontiev A.N. Problems of development of mentality. Moscow, 1972. [in Russian]
- 6. Lerner I. Ya. Process of education and its laws. Moscow, 1980. [Book in Russian]
- 7. Dictionary of philosophical terms. Ed. by Prof. Kuznetsov. Moscow, 2007. [Book in Russian]
- 8. Fomenko V .T. Initial logic structures of process of education. Rostov-on-Don, 1985. [in Russian]



Masaeva Z.V., Volkov S.I.

Studying of psychological safety in the educational environment of the post-conflict region

The article considers a feature of the educational space of the post-conflict region in the context of ensuring the psychological safety of students studying at institutes of higher education of the Chechen republic. The importance of safe educational space is topical now and especially in Chechnya where there were two military campaigns which caused heavy losses in the educational system. A research on studying of the educational environment psychological safety is carried out in the form of questioning among students for creation of safe educational space at institutes of higher education of the Chechen republic, promoting display of comfort and security among the Chechen youth.

Keywords: psychological safety of students, educational environment, post-conflict region, security, psychological comfort at the institute of higher education.

Today's sociocultural situation provides numerous examples of negative influence of external conditions on formation of a person's personality. Versions of violent acts in relation to the other are rather widespread in the modern world. If situations of overt physical violent acts are the subject which is unequivocally condemned and there is an intensive search of means of counteraction to them, psychological violence barely becomes a subject of discussion, both in public opinion, and in scientific researches. The problem of security concerning psychological violence in interaction of the educational environment participants gains a special topicality [6].

The problem of personal safety, safety of personality continues to remain a topical problem for psychology. It is caused by the most different authors' interest in studying of a person's base needs among which the special place is given to needs for self-preservation, safety, tension reduction. It is substantially connected to growth of a number of technogenic and natural disasters, with wide-ranging social changes in society, leading to destruction of habitual behavior stereotypes, to increase of information flow volume and the general acceleration of life. All these things break usual life conditions of people, frustrate the need for safety and security concerning the adverse effects endangering human life, health, confidence in the future.

Now there are reasons to assert that there was created the psychology of safety as a new direction of psychological researches and practical programs. Most successfully the development of this direction is carried out concerning psychological safety of the educational environment where the concept of psychological safety in education is created, the model of support of psychological safety in the educational institution is proved, the system of psychological technologies on its creation is suggested. Means of psychological diagnostics of the educational environment condition in a category of safety are developed and introduced.

The educational environment is a psychological-pedagogical reality containing specially organized conditions for personality formation, and also the possibilities of development included in social and spatial-subject environment; the psychological essence of this reality is a complex of activities-communicative acts and relationship of participants of the teaching and educational process. Fixing of this reality is possible through the system of relations of the subjects participating in it [6].

In the light of this subject matter importance it becomes obvious that the problem of safety should become one of priority directions in purposes of modern education. It is obvious that "for its realization such purpose including formation, development, both experience elements, and steady personal formations demands not only means of traditional educational process, but the whole moral, personal developing potential of education". The problem of psychological safety highlights a new side of the educational process mainly focused on development of sense, value sphere of pupils, the "substantial generalization" (V.V. Davydov) which allows to build a model of sense formative education, forming the sense orientation directing personality towards search of certain higher senses, towards formation of a sense of life orientation, towards achievement of psychological safety [5, p. 2].

However the situation of educational paradigm change, as well as any situation of changes, is characterized by participants' uncertainty state and feeling of insecurity and discomfort as a derivative of it. These conditions have two sources in the basis: the situation participants' dissatisfaction in the actual situation, on the one hand, and awareness of the difficulties connected with changes, on the other.

Modern education undergoes radical transformations leading to individualization, continuity, flexibility, openness of participants of the educational space. Modern educational process at the institute of higher education becomes a self-education process when a trainee chooses the individualized educational trajectory in the systematically developed educational environment independently.

An important contribution to understanding of the nature of psychological safety is made by I.A. Baeva, I.V. Abakumova, P.N. Ermakov, A.G. Asmolov, M.E. Zelenova, N.E. Kharlamenkova, V.V. Rubtsov, T.M. Krasnyanskaya, A.A. Rean, N.A. Lyz, G. Grachev, T.I. Kolesnikova, etc.

Modern approaches to studying of safety allow to characterize various criteria, levels and components in the structure of psychological safety of interacting subjects. As its main criterion they distinguish the person's physical structure integrity corresponding to norms of the stable organism functioning. Then there follows a group of the criteria concerning an individual-mental level where there enter such components as adequacy of reflection and relation to the world, mentality security, adaptability of functioning, security of the person's consciousness concerning different manipulative influences. At last, at a personal or subjective level as an object of research of safety psychology there are features of experience of social upheavals, and also consequences of emergency, physical or mental violence, arising owing to concrete events and behavioural acts which threaten own safety or safety of a person's relatives [7].



In modern psychological science the search of integrative psychological characteristics is even more emphasized. Within this direction it is possible to define psychological safety in the following way: it is an integrative characteristic of a subject reflecting a degree of satisfaction in his/her basic need for safety and determined by intensity of experience of wellbeing/ill-being. In the group of a person's basic needs the need for safety and protection against everything that threatens life and health is one of the first and defines social behavior of people, forming either of motives of behavior. Safety becomes an active and dominating mobilizer of human mentality resources at emergency: catastrophes and natural disasters, social upheavals, increase of crime. "This need is the most important person's condition of normal existence and development. In society it is realized through creation of certain organizational forms of social interaction, interrelations of private and group interests and ways of their achievement. Therefore we need to feel a relation with the world around, other people, belonging to certain social groups therefore so sharply we perceive changes, destruction of habitual communications, we take hard isolation and loneliness conditions" [4, p. 139-140].

Psychological safety is understood as a condition of the educational environment, free of psychological violence manifestations in interaction, promoting satisfaction of needs in the personal-confidential communication, creating the referential importance of the environment and providing mental health of the participants entering it.

- The category of psychological safety of I.A. Baeva is defined by three aspects:
- as a condition of the educational environment, free of psychological violence manifestations in interaction, promoting satisfaction of needs in the personalconfidential communication, creating the referential importance of the environment and providing mental health of the participants entering it;
- 2) as a system of the interpersonal relations which cause participants' feeling of belonging (the referential importance of the environment); convince a person of the fact that he/she is out of danger (absence of the above-mentioned threats); strengthen mental health;
- 3) as a system of measures directed on prevention of threats with a view of a productive stable development of personality.

The main threat in interaction of participants of the educational environment is a psychological trauma as a result of which there is damage to positive development and mental health, there is no base satisfaction of basic needs; that is there is an impediment to self-actualization.

Such interpersonal relations which cause participants' feeling of belonging (the referential importance of the environment) are considered as psychologically safe. The concept of security is closely connected with psychological safety. According to foreign researches, recognition of the referential importance of the educational environment (the relation to the environment) is a condition of feeling of identity with it along with respect, emotional support, feeling of value of each other, tolerance, trust and responsibility and can promote compensation in the educational environment of

the trainees who have been exposed to traumatizing and adverse conditions. A. Edmondson notes that, the better people know and understand each other in group, the higher the productivity of their collaboration and psychological safety in interpersonal relations is. Psychological safety is based on belief that the person will be accepted by a reference group, will have emotionally favorable relationship, will be protected from condemnation, rejection and suppression [6].

As T.M. Krasnyanskaya marks, personal ideas about psychological safety influence the specifics of subject identification manifestation; it is self-identification with the other (others), adoption of patterns of behavioural reactions, attitudes, styles of a certain life sphere safe living and overcoming of crisis situations [6].

The enumerated approaches, distinguished criteria and levels allowed T.I. Kolesnikova to define safe personality as a "certain security of consciousness concerning influences capable to change mental conditions (against own will and desire) that can radically influence a person up to change of his/her course of life" [4, p. 139].

After end of military campaigns the educational system of the Chechen republic carries out tasks of modern education, promoting the educational system improvement; undoubtedly, many years the existing information vacuum interferes with modernization of the education system; despite available problems, there are positive results towards development of education of the Chechen republic in whole.

It is clear that today providing of the safe educational space is necessary, and especially in the Chechen republic as a post-conflict region, where there were two military campaigns; the importance of safety increases several times, after all the education system of the republic took heavy losses which were reflected in the educational system development. In this regard there was carried out a research in the form of questioning among students of two institutes of higher education of the Chechen republic (The Chechen State University and the Chechen State Teachers Training Institute) for studying of features of the educational environment in a context of psychological safety. Altogether 230 students of the second and third years of philological and physical-mathematical faculties took part in the questioning. The research goal is studying of features of safety of the educational environment of the Chechen republic at student's environment. The analysis of results of questioning shows that the students taken part in the research were at the age from 18 to 21 year, 98 girls and 132 young men.

On a question, "Do you think that training at the institute of higher education promotes your intellectual development?" there were answers: 68 % – in the affirmative, 25 % – in the negative and 7 % – don't know or no response; 25 % of students believes that training at the institute of higher education doesn't promote intellectual development.

As students consider the following measures are conducive to decrease in a level of self-destructive behavior: achievement of a vital purpose, adequate orientation in life situations, manifestation of positive emotions, statement of rational life plans. It points to the difficulty of definition of sense of life, life orientations among young people; it is possible because of living position essence vagueness.



Studying the students' opinion concerning existence of psychological comfort in the educational environment of the Chechen republic the following results were received: 32 % answered in the affirmative, 50 % – in the negative and 18 % – don't know or no response. Only the small part of students acknowledges the educational process comfortable environment.

Concerning a question of safety self-sufficiency existence in educational process the following results are received: 37 % answered in the affirmative, 41 % – in the negative and 22 % – don't know or no response. The most part of youth has no ability to self-sufficiency, generated by a conflict of motives complexity, multidirectional needs, not clear inclinations, desires, aspirations. The choice of a suitable strategy of psychological safety ensuring in each case can be complicated by incomplete, perverted, or stereotypic perception of a situation, personality and own resources of the subject of its overcoming.

On a question, "Do you have in your educational process "the teacher – the student" cooperation, directed on creation of developing space?" there were the following answers: 41 % answered in the affirmative, 50 % – in the negative and 9 % – don't know or no response. Half of the interrogated students acknowledge the absence of cooperation between the teacher and the student that, in turn, is reflected in the educational environment comfort.

Answering the questionnaire question, "Do you feel respect for own personality, for own psychological space from parents?" the respondents' answers were distributed in the following way: 89% – Yes, 11% – No. Answering the questionnaire question, "Do you feel respect for own personality, for own psychological space from teachers?" the respondents' answers were distributed in the following way answered in the following way: 27% – Yes, 39% – No and 34% – Not always. Answering the questionnaire question, "Do you feel respect for own personality, for own psychological space from contemporaries?" the respondents' answers were distributed in the following way: 21% – Yes, 20% – No and 59% – Not always. From the received quantitative results it is obvious that students' feeling of respect for own personality and for own psychological space from teachers is at a low level.

On a question, "Have you ever experienced brutal treatment, violence, psychological pressure from age-mates?" the respondents' answers were distributed in the following way: 28 % – Yes, 11 % – No, 31 % – Sometimes, 30 % – Don't know or no response. On a question, "Have you ever experienced brutal treatment, violence, psychological pressure from friends?" the respondents' answers were distributed in the following way: 26 % – Yes, 13 % – No, 35 % – Sometimes and 26 % – Don't know or no response. On a question, "Have you ever experienced brutal treatment, violence, psychological pressure from students of the same year?" the respondents' answers were distributed in the following way: 15 % – Yes, 60 % – No, 12 % – Sometimes and 13 % – Don't know or no response. On a question, "Have you ever experienced brutal treatment, violence, psychological pressure from teachers?" the respondents' answers were distributed in the following way: 43 % – Yes, 9 % – No, 40 % – Sometimes, 8 % – Don't know or no

response. On a question, "Have you ever experienced brutal treatment, violence, psychological pressure from members of your family?" the respondents' answers were distributed in the following way: 7 % – Yes, 77 % – No, 16 % – Sometimes. According to students, the most considerable brutal treatment and manifestation of psychological violence is observed from the teaching staff.

Answering the questionnaire question, "What kind of mood do you usually have at the institute of higher education?" the respondents' answers were distributed in the following way: 39 % – Bad, 55 % – Good and 6 % – Don't know or no response. The negative mood generally prevails among students of the institute of higher education of the Chechen republic.

Answering the questionnaire question, "Do you feel yourself protected against public insult, humiliation, compulsion to do something against your will, ignoring, odium at the institute of higher education?" the respondents' answers were distributed in the following way: 26 % of respondents feels to be protected, 65 % – feels to be unprotected and 9 % – don't know or no response. Security is one of important indicators of psychological safety manifestation; apparently, 65 % of students doesn't feel safety.

Training at the institute of higher education is considered as interesting by 51 % of students, uninteresting by 47 % and 2 % – don't know or no response. Students' interest display induces to believe that there is a comfortable environment, but in this research nearly half of students consider the educational process at the institute of higher education uninteresting.

The carried-out questioning has revealed a low level of psychological safety of the post-conflict region educational space that is reflected in psychological comfort, brutal treatment, psychological violence, lack of interest to training, prevailing bad mood in study, public insult, humiliation, compulsion, ignoring, odium. Undoubtedly it demands the correctional developing work directed on creation of favorable psychological comfort in the educational environment of the Chechen republic.

The work on creation of psychological safety of the educational environment should be based on the humanistically focused technologies and norms of personal development. At the heart of such technologies there is the quality of the interaction process that leads to decrease in psychological tension, increases ability to self-control, "I" unity, i.e. affects mental health favorably.

The following features provide the interaction process quality:

- -dialogical communication at the heart of which there is a "dialogue of personalities" (M. Bakhtin); its main attribute is the equality relation of interlocutors and mutual personal recognition;
- -cooperation as the partner relation of two equal subjects excluding manipulation and authoritarianism, meaning mutual development of participants;
- -refusal of psychological violence [6].

It is proved that psychological safety is the leading characteristic defining the educational environment developing character. It can act be a basis for projection



and modeling of psychological conditions of training and education, at the same time promoting strengthening and development of mental health of all participants of the teaching-educational process. Psychological safety can be also an indicator of efficiency of support service activity in the educational institution, minimizing efforts at a number of traditional directions of psychological work of the practical psychology service in education.

Decrease in psychological violence in interaction at the institute of higher education as a social institute can act as a preventive moment of decrease in destructive violent acts in society as a whole. Psychological safety, experienced by the participants as a condition of security concerning psychological violence, satisfaction of basic needs in the personal-confidential communication, realized in the referential importance of the educational institution, is a condition starting positive possibilities of mental and professional development of all participants of the educational process.

Creation of safe educational space in the post-conflict region at students' environment will allow to prevent manifestation of many negative models of behavior in the social environment, will provide safe comfortable educational space providing a full development of personality taking into account specific psychological features of each personality.

References

- Abakumova I.V. Personal sense as a component of the educational process personal model. Psychology and Practice. Year-book of the Russian Psychological Society. Yaroslavl, 1998. Vol. 4. Issue 2. P. 3–5. [Article in Russian]
- 2. Abakumova I.V. Sense as a scientific category and influence of its conceptual interpretations on the education and training theory. Scientific Thought of the Caucasus. 2002. # 13. P. 146–151. [Article in Russian]
- 3. Asmolov A.G. Personality psychology: the all-psychological analysis principles. Moscow, "Smisl" Publ., "Academiya" Publ., 2002. [Book in Russian]
- Baeva I.A., Emelin N.M. On the issue of criteria of personal psychological safety // Psychological culture and psychological safety in education (St. Petersburg, on November 27–28, 2003): materials of the All-Russia conference. Moscow, 2003. P. 107–109. [Article in Russian]
- 5. Lyz N.A. Modeling ideas of safe personality. Proceedings of the TRTU. The thematic issue "Humanitarian problems of modern psychology". Taganrog: Publishing house of the TRTU, 2005. # 7. P. 21–25. [Article in Russian]
- 6. Ensuring psychological safety at the educational institution: the practical book / under the edition of I.A. Baeva. St. Petersburg, Rech Publ., 2006. [Book in Russian]
- Problems of psychological safety. Editors-in-chief A.L. Zhuravlev, N.V. Tarabrina. Moscow, Publishing house of the "Institute of Psychology of the Russian Academy of Sciences", 2012. [Book in Russian]
- 8. Tikhonov A.N., Abrameshin A.E. Voronina T.P., Ivannikov A.D. Molchanova O.P. Modern education management. Moscow, 2008. [Book in Russian]

THE YOUNG SCHOLARS

Grimsoltanova R. E.

Religious possession as a subject of psychological analysis: problem statement

The article considers features of the possession concept interpretations in the context of the most authoritative world religions (Islam, Christianity, Judaism), interrelation of a religious explanation and scientific grounds of the possession phenomenon. We consider the concept of possession from the point of view of psychiatry and analyze the subject in psychology.

Keywords: Islam; Christianity; Judaism; the Koran; the Bible; possession; exorcism; demons; diinns.

The concept of possession is an essential component in the context of the historical analysis of the most various spiritual practices.

Being the largest religions, Islam, Christianity, and Judaism cause the main interest.

There is also a scientific attempt of this phenomenon explanation within the framework of mental disorders (schizophrenia, central nervous system disorders, etc.).

From the point of view of medicine the etiology of schizophrenia is still not clear. It is only known that such people have a rich inner world, subtler psyche; they are capable to feel keener and deeper than others, quite often possess supernatural abilities. For this reason they lose their mental equilibrium easier. As a result, they become defenseless before the power of darkness which penetrates the victim without hindrance [5].

For example, neurosis, which is known over a period of some centuries, doesn't become clearer in a theoretical aspect and more curable in practice. Patients' recovery doesn't occur more often than it was many years ago [6].

Though at the moment the possession concept is treated within the framework of psychiatry, within the psychological framework this concept is also widely used as from the point of view of psychology there is an analysis of this concept. However the analysis of possession in psychology is carried out in the context of various world religions.

In Islam they say that when a person is in a stress condition, it is necessary to read ayahs and Hadithats. It is also possible to take plant medicines. When a person is in a stress condition, he/she is weak in spirit and mind, so, becomes an easy "prey" for sects, criminal and other negative powers [7].



Al-Qaradawi said, "Statements about demonic possession of a human being are absurd". A well-known Muslim scientist Yusuf al-Qaradawi doesn't see the bases to trust the stories about possession of a human being by djinns (demons). He told about it, answering a question of a televiewer when appeared live on television at Al Jazeera TV channel. The televiewer asked, "Is it true that djinns take possession of a person, get into them and put words into their mouth?"

Al-Qaradawi said, "I don't find it reliable, but I only see that the Koran denies it. Allah, the most High and Great, says, "We have honored sons of Adam... Allah made the man the lord on the Earth, the servant of God and the vicar. Could the Most High, having subordinated the Earth to a human being, having made the man his vicar, at the same time subordinate the man to djinns, having given them a possibility to take possession of the man, get into him/her and put words into his/her mouth? It is absurdity".

From the Koran we know that a human being can control djinns; these are abilities of Solomon (Suleiman). God gave him djinns from "builders" to "divers" and "others, connected with fetters" to keep in submission. "They created beautiful building, sculptures, bowls similar to basins, and motionless caldrons ..." etc.

As of the possibility of someone (from djinns) to control a person, the Koran reports what the greatest shaitan will say at the great inquest, "I had no power over you. I called you, and you obeyed me ..." That is I have no power over you, with the exception of "instigation" ("... who instigates in people's breast"). I called you for a sin, and you have answered [2].

The practice of exorcism exists in all monotheist religions. In spite of the fact that generally religions condemn the person's contacts with demons, it doesn't prevent demons from entering the body of the victim chosen by them. And, as practice shows, these cases are frequent. Such serious mental maladies, as schizophrenia, for example, are connected with invisible infernal essences' entering.

In Islam, as well as in Christianity, belief in kind God Creator is inseparably linked with belief in the Devil and demons of hell. In Islam the votaries of Allah practise a so-called rukya, i.e. driving out demons by means of the Koran. Savage ideas of the other world, which inhabitants enter people, creating malicious affairs, are spread everywhere. From here there is an exorcism practice in Islam – majnun.

The so-called "folk beliefs" explain various mental disorders by that spirits (djinns) allegedly hit a person and then enter his/her body. By the way, in the Koran there is a clear idea of division of djinns into two categories: infidels (kapyr-djinn) and Muslims. Only infidel djinns harm people and if a person becomes daly, i.e. mentally diseased, it means that kapyr-djinns, who are constantly near, tormenting the wretched person, entered him/her. In order to return the person into a normal state, it is necessary to drive away kapyr-djinns and Muslim djinns, being at the disposal of khodjas, can do it. They fight against infidel djinns and win a victory over them [5].

The Bible gives some examples of people possessed with demons or being under their influence. In certain cases, described in verses, possession led to physical

illnesses, expressed in loss of the power of speech, epileptic symptoms, blindness and so forth. In other cases it induced a person to bad deeds (Judas is the main example).

Thus, there are many possible symptoms of possession with demons. These can be physical disorders which it is impossible to explain by real physiological problems; personality changes, such as deep depression or unrepresentative aggression, supernatural force, neglect of decency or "normal" social behavior, and also, probably, knowledge of the things that a human being can't know in a natural way. It is important to pay attention that almost all, or probably all, these characteristics can have other explanations, it is necessary therefore to be extremely careful in definition of a person in depression or a demon-possessed epileptic. On the other hand, all of us perceive satanic interference on people's life insufficiently seriously.

Concerning interference of demons in life of Christians, the Apostle Peter is an illustration of the fact that the believer can be under the Devil's influence. Some consider as the possessed Christians being under strong demonic influence, but in the Sacred Writings there are no examples that a believer was possessed by a demon. The majority of theologians agree that Christian can't be possessed since the Holy Spirit is in him/her.

Satan and his evil ghosts can't do something to someone, until they obtain permission from the Lord. In this case Satan, believing that embodies own intentions, actually executes God's good plans (even in the case with the treachery of Judas). Some people attach unhealthy charm to occult and demonic rituals, but it doesn't correspond to right brains and the Bible [8].

From the point of view of Islam, the sacred Koran is the best cure for all troubles and disasters.

The latest and the most perfect religion, Islam, explained to Muslims how they should behave in various life situations.

The Prophet Muhammad himself practiced it and was a model for Muslims at all stages of his life, since the period of "Muhammad – orphan" till the period "Muhammad – head of the state". A strict divine law is to submit to him and to follow him. "So take that the envoy granted to you, and avoid that he prohibited you" (sura "Al-Hashr", ayah 7).

"Tell (Muhammad), if you love Allah, follow me, (and then) Allah will love you" (sura "Aal-e-Imran", ayah 31).

In Islam the great attention is also paid to witchcraft and fortunetelling as to a sinful act. A witchcraft doctrine existence is the truth about which it is told in ayahs and Hadithats. But since witchcraft harms belief in monotheism, destroys moral and Islam principles, it is forbidden to learn, be trained and be engaged in witchcraft.

The sacred Koran is the best cure for all troubles and disasters. The Koran can treat for witchcraft, possession by djinns, heart and corporal disease. Sincerity and knowledge of a way of treatment by the Koran is necessary for this purpose.

Allah, the most High and Great, says, "Say, it is for those (i.e. the Koran) who have believed, – guide for a direct way and (means) of (spiritual) healing" (sura "Fussilat",



ayah 44). "We send down the Koran as healing and favor for believers" (sura "Al-Isra", ayah 82). The Prophet says, "The Koran is the best cure for diseases", "The Koran and honey are your healings of illnesses".

The patient should believe that by means of the ayahs of the Koran and dua (prayers) which were said by the Prophet, Allah will help and cure him/her. And also he/she should know that the Koran and supplications are just a way; it is Allah who gives healing.

Abdullah bin Mas'ud whispered something to the possessed by djinn and the patient recovered. The Prophet asked, "What did you say?" He told that read the end of sura "Muminun" ("The Believers"). The Prophet said, "If someone with sincere conviction (belief) reads these suras facing the mountain, it will cleave in two".

The other way is writing of talismans (sabab). It is permitted to write a talisman, meeting known conditions of Islam for writing and carrying of talismans. The words written on the talisman (sabab) should be taken from the Koran or from Hadithats. It is impossible to write unclear phrases. It is necessary to write on a clean sheet of paper in pure ink. It is necessary to know precisely that the sabab is written sincerely. And the one who wrote and the one to whom it is written should remember that sabab is just a way, it is Allah who treats [3].

All religions recognize existence of evil spirits. In Judaism they call demons as mazikim (evil spirit). They are bodiless, but possess the ability to take the shape of a human being. Nevertheless they can be recognized by hoofs on feet. However, there are demons preferring cock legs.

There are female and male demons, and the fallen angel Asmodeus "directs" them. Concerning demons' nature there are some supposition. One of them is that they were created by witchcraft of Asmodeus. According to another Adam and Eve brought demons into the world.

If Borukh Gorin is to be trusted, the number of demons grows constantly. Gorin explains that demons are eternal, they don't die, their quantity increases constantly.

Certainly, there are another ways to put self beyond the reach of demons. For dwelling protection the Jews fix a mezuzah to doorposts; it is a capsule with words of a prayer written on parchment. Near a bed it is recommended to put a bowl with water so that in the morning, being awakened and without leaving the bed, to wash finger-tips from night evil spirits.

Exorcism (religious practice of ritual driving out of the devil) is characteristic not for all directions of Judaism. Borukh Gorin explained that the Hasidim don't conjure demons for a long time as they consider that Rabbi Ba'al Shem Tov exorcised them from the face of the earth two hundred years ago. But the Sephardim do conjure.

According to Gorin, people considering to be possessed by demons address to the synagogue but, as a rule, it is connected with psychophysical diseases, and they need a doctor, not a rabbi.

Orthodox believers also recognize the existence of demons. But it is considered that initially they were created as kind ones, but became proud and perverted their moral nature, became spiteful beings. Demons are invisible as infrared rays.

Professor Osipov opposes exorcism, which is called as reading out (exorcism) in the orthodox tradition.

Prayers for driving out demons appeared in the IV century, and the corresponding order of services was made in the XVII century by Peter Mogila, Metropolitan of Kiev, on the basis of Catholic sources.

But, as Osipov says, the Russian Orthodox Church never used this order of services. Alexey Osipov worries very much about prevalence of exorcism in some temples. He considers exorcism as a type charm; it is a matter of self-importance, disinclination to see own spiritual wretchedness by those priests who are engaged in it.

Driving out demons is a miracle; it was made by the Savior, apostles, saint people, who received the gifts of the Holy Spirit. Now it is realized by certain priests who do not have a blessing from a bishop without which a priest has no right to execute any religious rite.

Modern exorcists' references to blessing from a confessor are undisguised self-justification as without blessing from a bishop any religious rite, and especially exorcism (as an exclusive case, not entering into usual duties of a priest), turns into an anticanonical sinful act, having baneful consequences for both an exorcist, and patients. Professor Osipov thinks so.

According to Alexey Osipov, even St. Sergius of Radonezh, when he had an experience of work with the demon-possessed, didn't carry out exorcism, but brought together monks for a collective prayer, and they prayed for healing of the patient.

Professor Osipov pays attention to one more important circumstance: Christ and saints drove out demons only when the Lord pointed to certain persons, but not in large numbers as it happens today, bringing together a huge number of people to temples on exorcism. Osipov considers that people who think that they are possessed by demons should consult a doctor and not let themselves get away with the stories about curse and witchcraft. But if a demon has really entered the body, one shouldn't go for exorcism, but lead the Christian life.

The official position of the Moscow patriarchy isn't so unequivocal, as the point of view of Professor Osipov. As the communication service head, priest Mikhail Prokopenko, told, there is no consensus concerning the order of services at exorcism among the pastors of Church. Father Mikhail noted that, unfortunately, many people consider the order of services at exorcism as a certain magic ritual which allows to get rid of a real or imaginary devilish possession, without the full-blown church life. He also reported that at the diocesan government a believer can specify whether a bishop is informed that one or another priest practices the order of services of exorcism, and whether there is a blessing to it.

According to the Islamic doctrine, Allah created angels, people and djinns. Djinns were created from fire. As the head of the department of science of the Council of Muftis of Russia, the Sheikh Fareed Asadullin, says, djinns believed that should be above people according to their position. As a result djinns were divided into believers and non-believers. Non-believers are demons led by the devil Iblis, the fallen angel who



has come to grips with the Most High. Djinns can take the shape of a human being and will exist till the end of the world. Non-believing djinns try to seduce the faithful in every possible way, to distract them from a prayer, to force to forget own duty to the Most High. They influence souls.

Evil spirits live in ruins, desert places and in baths where people wash away their sins. But they can enter the body of a person. The Sheikh Fareed Asadullin says that the Muslim can read azan to struggle against them; this is an appeal to a prayer.

Azan sounds force Satan to abandon the believer. Also Islamic theologians recommend to the Muslims, who feel discomfort and consider that an evil spirit have entered, to read ayah Al-Kursi and sura Annas.

Mussulmans have their amulets – rukya. These are leather sacks with texts of ayahs and suras [4].

The process of driving out demons is called exorcism or purification. This process is a rather dangerous ritual, but sometimes its carrying out is inevitable. In any case this ritual should be carried out only by professionals in order to avoid negative consequences. But, before speaking about driving out demons, it is necessary to mention demons' entering the body. There is an opinion that a demon can enter the body of a person who hells around, the sinner or the faithless. Practice shows that it is not so at all. Commissions of sins, racketing are a demon's influence. But this is not terrible; changes in a person's behavior are terrible. Quite often people can't explain why they acted in that way. Everyone knows the phrase: "It's the devil's work". It appeared not for one's health. In ancient times a person's negative actions were explained by demon's getting into a person. Any person can become a victim. That is why there exist amulets, talismans and other things used for personal protection from evil. Demons' entering is a rather fast and unapparent process. Demons take possession of a person and start to do bad things. Thus, the number of criminals and sinners increases.

More often the demon-possessed don't undertake any actions to get rid of a demon's influence. It is already the business of family and friends to reveal what actually happens to a person and to try to help. Today driving out of evil spirits is a rather widespread procedure. There are experts who perform the work qualitatively. It not a hopeless case and the earlier one addresses to an expert, the more chances a person has for returning to former, normal life. Sharp changes in a person's behavior we often explain by evil curse existence. But it is not always so. The most terrible is that a person can commit terrible crimes during distraction. They have maniacal tendencies, aggression, unwillingness to change own behavior and misunderstanding of people around. A demon, entering a person's body, doesn't pay any attention to his/her body. People can mutilate themselves and others easily. But the fact that there is a solution to this problem calms. It is very important to address for the help to a right person since it is necessary not only to exorcise demons, but also not to let them enter another person. Probably, demons' entering will become the greatest problem of mankind with the lapse of time. Nevertheless, it is possible to win a victory over the powers of darkness, if to struggle against them correctly [1].

Considering the possession phenomenon from a position of three religions, it is obvious that there is nearly one explanation of this phenomenon in all religions.

All religions recognize existence of evil spirit. In Islam they are divided into bad and good, believers and non-believer. In Judaism spirits are divided into male and female. In Christianity it is considered that initially they were created as good, but became proud and perverted their moral nature, became malicious beings.

In Islamic religion there is a supposition that a person can control djinns since djinns are made to help people.

In all three religions it is absolutely common that a person is possessed by evil spirits in a condition of psychological debilitation (stress, depression). By all means mental disorder involves a person's possession by a spirit which is accompanied by manifestations of physical illnesses, uncharacteristic aggression, deep depression.

Possession treatment is possible only by means of the writings from sacred books: the Koran, the Bible, the Torah. And almost the main condition of successful treatment is the patient's confidence in possibility of releasing from evil spirits by reading of sacred prayers. This is common for all three religions and it is of interest for psychology.

References

- Possession by demons. The Magician Arkras. URL: http://arkras.com/demony-idyavol/vselenie-besov/ (accessed 8 July 2012) [in Russian]
- Al-Qaradawi: Statements about demonic possession of a human being are absurd. URL: http://www.shianet.ru/articles/mardzhijat/kardavi_utverzhdenija_ob_oder-zhimosti_cheloveka_besami_-_absurd/?action=print (accessed 7 July 2012) [in Russian]
- 3. How to protect self from witchcraft and possession? URL: http://www.islamdag.ru/vse-ob-islame/7749 (accessed 7 July 2012) [in Russian]
- 4. How to cope with devildom. Boris Klin. URL: http://www.manwb.ru/articles/simbolon/mith_and_simbol/Devil_BorClin/ (accessed 7 July 2012) [in Russian]
- The Magian Skorvol. URL: http://skorvol.com/praktika/ekzorcizm-v-islame/ (accessed 7 July 2012) [in Russian]
- Mendelevich V.D. Clinical and medical psychology: textbook. 6th edition. Moscow, MEDpress-inform, 2008. – 432 p. [in Russian]
- 7. Mental disorders in Islam. Is it possible to consult a psychiatrist? URL: http://yourallah.ru/zapretyi/psihicheskie-rasstrojstva-v-islame-mozhno-li-obraschatsya-k-psihiatru1/ (accessed 7 July 2012) [in Russian]
- 8. What does the Bible say about possession by demons? Is it possible today? URL: http://www.gotquestions.org/Russian/Russian-demon-possession.html (accessed 30 June 2012) [in Russian]



A.A. Balakina

Social-psychological characteristics of the attitude of the residents of megalopolis, cities and towns to other people and to the city

This article analyzes the significant differences of expression of social andpsychological needs, the parameters of relationships with other people, components relation to the city of inhabitants of metropolis, large and small cities. This article describes the features of relationships with other people and relation to the city of urban residents of different types due to spatial and temporal parameters of living in it. The article shows the interrelation of expression of social and psychological needs, options and other types of relationships to other people with the emotional and cognitive (the image of the city, the presence/ absence of identification with the city) components to the city. The article also shows that the image of the city, the urban identity of the inhabitants of the cities due to the type, spatial and temporal parameters of living and associated with a number of social and psychological needs, options, and types of relationships to other people.

Keywords: attitude, types of relations, relation to other, attitude to the city, spatial and temporal parameters for the relationship between the individual, social and psychological needs, a resident of the city, the image of the city, urban identity

In modern urbanization seen increased interest in the social and psychological aspects of human life in the urban environment due to changes in lifestyle, value structures of urban residents, social and economic conditions of his residence in the city, as well as transformation of the territorial organization of urban space.

At the empirical level in modern studies recorded the connection of interpersonal communication of inhabitant of the city and the individual parameters of attitude to the city as a living space, self-realization, with the image of the city [8, 11, 13]; identity with the urban space [4, 12, 14]. Research on the socio-psychological aspects of the urban environment on the one hand demonstrate the effect of spatial-temporal organization of the formation of territorial identity [Samoshkina, 2008], the structure and content of the image of the city [Glazychev, 2004; Sazonov, 2009], the processes of perception, categorization and evaluation of other people [Zhelnina, 2011]; the form of the spatial behavior of the subjects of urban life [Zhelnina, 2011; Panyukova, 2000]. At the same time, in the works of D.N. Zamyatina, M.V. Rabzhaevoy, V .E. Semenkovoi, G. Korepanova emphasizes the determination of the social and psychological aspects of the life of an individual system of interpersonal relationships within the urban community. Despite the variety of studies in this area, to date, are not enough studies in which spatial-temporal parameters, differentiating residents, and the type are studied as the factors causing the severity of the social and psychological needs, modalities and relation to other types of its

residents. The relevance of this work is also due to the development of modern approaches to the study of a large social group, characterized by a specific organization of communication and interaction [Semenova, 2007].

Therefore, the aim of our research is to explore the features of interrelation of severity socially-psychological needs, relationship to other people and to the city residents of the metropolis, the large and small cities with different spatial and temporal parameters of urban living. The subject of the study made by the severity of the socially-psychological needs, options and types of relationships to other people, the structural and substantial characteristics of the image of the city and the urban identity of the inhabitants of cities of different types with different spatially- temporal parameters of urban living.

Building on the idea of relation for the Other as a central element of the individual relationships with the various parties to objective reality, and to work M-P. Sartre, J. Mead, J. Lacan, Berger, LY Gozman others we studied two types of relations: the relation to the generalized other and particular friend and considered their options, such as modality, intensity and character. As the leading modalities of relations with other people, we consider such as: acceptance, kindness, aggression, hostility, confidence, manipulative attitude. In the works of SL Rubinstein, A. Bodaleva, VN Myasishchev, PV Simon and others have shown that the social and psychological needs of the individual determine its relationship to the world and other people. In our study, we used the classification of basic social and psychological needs of W. Schutz. Also, based on the classic social-psychological work BF Reciprocating, B. Waldenfels, Lotman, in which the category of "his / alien" stands the basic criteria and perceptions of others to do it, in our study we examined attitudes toward other people, differentiated by their "own / others", "close / far".

Explore the city spent Bourdieu [Bourdieu, 1995] M. Weber, L. Wirth, VL Glazychev [Glazychev, 2004], AE Gutnova, G. Simmel, A. Ikonnikov [Ikonnikov, 2006] VG Il'in [Il'in, 2004] S. Milgram, M. Heidegger, TV Semenova [Semenova, 2007] and others have allowed to treat it as a "space-expansion model of communication" as the intersection of economic, cultural, spatial-temporal, social, spiritual, personal origin as a large social group, characterized by features of the organization of communication and interaction between people, to others, as well as specific ideas about the city. Territorial Identity resident of substructure supports social identity and is determined [Bourdieu, 1995; Korepanov, 2009] as the nationality of the individual's awareness, purposes and values of the local community. In our work we follow AV Miklyaeva, PV Rumyantseva [Miklyaeva, Rumyantseva, 2008], N. Shmatko, Y. Kachanov [Kachanov, Shmatko, 1998] with the working definition of urban identity as definitions of themselves as residents of a particular city.

Based on the theoretical analysis, we have formulated a number of hypotheses: 1) Expression of socially-psychological needs, options and types of relation to other people, the components of attitude to the city of residents of metropolis, large and small cities can be attributed by spatial-temporal parameters of the living. 2) Features



of the attitude to the city may be interconnected with the severity of the socially-psychological needs, options and types of relationships to other people of inhabitants of metropolis, large and small cities, and vary depending on the city.

Research methods: 1) Author's profile "space-time path of personality." 2) Questionnaire interpersonal W. Schutz, adapted AA Rukavishnikov. 3) Power techniques, diagnosing different types of relationships to other people, taking other Feyya Scale, Scale Cook-Medley hostility, benevolence Scale Campbell Scale trust Rosenberg scale manipulative relationship Banta adapted A. Mendzheritsky. 4) The method of "Diagnosis of interpersonal relations" T. Leary. 5) Color Test relationships AM Etkind. 6) The method of semantic differential Charles Osgood. 7) drawing tests, "I and my city" (a modification of the method "I Group"). 8) Review of twenty statements "Who am I?" M. Kuhn, T. Makpartlenda.

Empirical object of research are residents of Moscow (120), the inhabitants of Rostov-on-Don (100) and residents of Crimea (100) aged 21 to 37 years. A total of 320 people took part. Selecting an object of research is due to a combination of criteria: size, functions of the city and its economic and geographic data with the basic development resources. These criteria determine the differences in the structure and content of different types of cities, which in our study provides cities (Moscow), the largest city (Rostov-on-Don) and small town (Crimea). The solution provided by the use of empirical problems in the study of mathematical statistics: frequency analysis procedures kvartilirovaniya, Spearman correlation analysis, U-test, Mann-Whitney, H – Test method and Kruskal Wallis test, linear regression analysis and binary logistic regression. Used computer programs Microsoft Office Excel 2007; Statistica 9; SPSS 11.5 for Windows.

Empirical Study of the severity of the socially-psychological needs and characteristics of the relationship to other people and attitude to the city of inhabitants of metropolis, large and small cities led to several conclusions:

1. Expression of social and psychological needs, options, relation to other types and components to the city of urban residents of different types differ.
1.1. Living in a megacity show average severity of social and psychological needs of the inclusion of others, the need for love at the expression level of conduct and behavior required of the other (except for the need to control others), the average level of expression of a positive attitude towards others (acceptance, trust) the highest level of expression of a negative attitude to the Other (cynicism, manipulation), and the average level of severity types relation to other factors on 'submission / aggression / friendliness ": aggressive and straightforward, disbelief, skepticism, humbly, shy, obedient, dependent, sotrudnichayusche-conventionality, responsibly-generous. Residents of large cities are characterized by the highest level of expression of social and psychological needs, positive modalities (trust, acceptance), the lowest level of severity of the negative modalities (hostility, manipulation), and the types of relationships to the Other on the factors' submission aggression / friendli-

ness. "Residents of a small town show the lowest level of severity of social and psychological needs, positive modalities (kindness, acceptance, cynicism), the average severity of the negative modalities (hostility, manipulation), the highest intensity of expression of relationship types to a friend factors 'submission' / aggression / friendliness."

- 1.2. Need to control others is most pronounced in the structure of the social and psychological needs of residents of all study types. The intensity of its severity increase with the size of the city and is the maximum among residents of the metropolis. Dependency needs (control by others) is most pronounced among residents of a small town.
- 1.3. Determines the type of differences in the types of relationships to a generalized one focused around the axes of "friendliness / aggression / submission," and does not affect the existence of differences in the axis of "domination."
- 1.4. Determines the type of difference in relation to the unconscious of the generalize other inhabitants of the city and has no effect on attitudes toward particular friend. The intensity of the positive attitude of the unconscious to the generalized other (people) and the Other, differentiated on a "friend or foe" (people of "his" city, the indigenous people, immigrants) was significantly reduced with the increasing size of the city.
- 1.5. The type of the city causes differences in the cognitive component (the image of the city, the presence/absence of identification with the city) to the residents of metropolis, large and small cities, and does not affect the emotional component of attitude to the city.
- Spatio-temporal factors affect the expression of socially-psychological needs, options, types of relationships to other people and attitide to the city. The greatest influence such spatial factors as: the "place of birth", "type of residence" and such spatial and temporal factors as: "the presence / absence of the move", "moving type", "length of stay".
 - 2.1. This slide shows the results of a linear multiple regression analysis showing the relationship of spatial and temporal parameters to the severity of social and psychological needs, modalities and types of relationships to the other residents of the metropolis, large and small cities. It was found a large number of interactions. For example, it was found that the residents of the metropolis and the largest city, the space-time biography which includes travel, show a high level of dependence on the other, expressed in the more severe needs control of the other, the high representation of dependence docile and obedient, shy types of relationships to the other.
 - 2.2. Spatio-temporal factors most influence the cognitive component (identification with the city, the image of the city) and do not affect the emotional component to the city.
 - 2.3. The presence of identification with the city (urban identity) is typical for inhabitants of the city: 1) born in the city of residence; 2) residence, whose



spatiotemporal biography includes the move, or those who have moveof megalopolis and big city is due to such spatio-temporal parameters as: the "place of birth", "availability of relocation", "length of living in the city", and among the inhabitants of a small town – only "type of residence."

- 3. Expression of socio-psychological needs, options and types of relationships to other people linked to the cognitive and emotional components of the attitude to the city.
 - 3.1. Expression of socio-psychological needs, options and types of relationships most relevant to the estimated components of the image of the city, is an indicator of the relationship to him, "the hated / loved", "cheerful / dull", "evil / good", "good / bad", "smart / stupid "", your / stranger"
 - 3.2. Residents of the metropolis to the presence of the urban identity demonstrate a high level of hostility to the other (scale of "aggression"), the expression of power-leading, independent, dominant, aggressive and straightforward, responsible, generous and obedient, shy type of the relationship to the Other.
 - 3.3. residents to the presence of urban identity, high levels of expression needs to include them in social groups initiated by other people, middle-intensity hostility to another (scale of "aggression"), regardless of the dominant-type relationship to another.
 - 3.4. Residents of a small city with the presence of the urban identity exhibit a high level of severity less hostile attitude to the other (the scale of "aggression"), disbelief, skeptical type of relationship to another. The obtained findings support the hypothesis put forward above and can be used in the analysis, explanation, prediction of social phenomena at the level of different types of cities.
- 3.5. Emotional component of the attitude to the city (acceptance / rejection) is set mainly by severity of basic socio-psychological need to include and the leading modalities and relations to other people "friendly / hostile."

References:

- Bourdieu P. Structure, habitus, practice. Modern Social Theory: Bourdieu, Giddens, Habermas. Novosibirsk, Publishing House of Novosibirsk. University Press, 1995. [Book in Russian]
- 2. Glazychev V .L. Education space. Knowledge is power. 2004. August. pp. 39–46. [Article in Russian]
- 3. Zhelnina A.A. Transformation of spaces of consumption in contemporary Russian city on the example of St. Petersburg. Abstract of thesis... Candidate of social sciences, St. Petersburg, 2011, 22 p. [in Russian]
- 4. Zamyatin D.N. Identity and territory: Humanitarian and geographical approaches and discourses. Identity as a subject of political analysis. Collection of articles on the results of the All-Russian scientific-theoretical conference Ed. by Semenenko I.S.,

- Fadeeva L.A., Lapkin V.V., Panova M.V. Moscow, IMEMO Publ., 2011. 299 p. [Article in Russian]
- 5. Ikonnikov A.V. Space and form in architecture and town planning. Moscow, Dom Kniga Publ., 2006. 352 p. [Book in Russian]
- 6. Ilyin V.T.The city as a concept of culture: thesis... Doctor of social sciences. Rostovon-Don, 2004, 331 p. [in Russian]
- 7. Korepanov G. Regional identity as the basic category of sociology Regional Development. Power. 2009. # 1. pp. 43–50. [Article in Russian]
- 8. Lynch K. The image of the city. Moscow, Stroiizdat Publ., 1982. [Book in Russian]
- Miklyaeva A.V., Rumyantsev P.V. Social identity card: content, structure, mechanisms of formation. St. Petersburg, RSPU by A.I. Herzen Publ., 2008. pp. 8–16. [in Russian]
- 10. Myasishchev V.N. Psychology of relationships. Moscow, Publishing House of Moscow Psychological and Social Institute. 2003. 400 p. [Book in Russian]
- 11. Panyukova J.G. Place as a category of analysis of the interaction between man and environment. Applied Psychology. 2000. № 5. pp. 53–61. [Article in Russian]
- 12. Punina K.A., Romashova M.V. Urban environment as a "battlefield" for a new identity. Identity as a subject of political analysis. 2011. 299 p. [Article in Russian]
- 13. Sazonov D.N. Social and psychological characteristics of the representation of urban space-object environment among residents of the city: thesis... Candidate of psychological sciences, Belgorod, 2009. 153 p. [in Russian]
- 14. Samoshkina I .S. Territorial identity as a social and psychological phenomenon. Questions of psychology [Voprosy Psyhkologii]. 2008 # 4 pp.99–105. [Article in Russian]
- 15. Semenova T.V. Theoretical and applied aspects of social-psychological study of urban mentality. thesis... Doctor of psychological sciences, Kazan, 2007. [in Russian]
- 16. Shmatko N.A., Kachanov Yu.L. Territorial identity as a subject of sociological research. Sociological Research. 1998 # 4 pp.94–99. [Article in Russian]
- 17. Lofland L.H. The Public Realm. New York: Aldine De Gruyter, 1998. 305 p.



Information on the order of presentation of publication

Submit of publishing material procedure

The original theoretical and experimental works on various branches of psychology and reviews of native and foreign research can be published in the journal.

To be accepted for publishing in the journal the material should be electronic kind typed in Word, 14 pointtype, sesquialteral range, printable field of 2,0 cm, not more than 20 pages in size, including the list of cited literature. The text should be typed in standard font of type: Times or Arial.

If cited in article the literature is pointed out alphabetically at the end of the article. The literature in foreign languages goes after the one in russian. Reference to sources as a sequence number of the cited book or article (with the number of page in semicolon) is denoted in brackets. Materials for "Scientific life" section are accepted in the course of (within) 2 months after ending of the corresponding congress, conference, convention, etc.

The figures on diskette should be in separate files (TIF or PCX format) with printout and the caption index. It is allowed to file a figure direct in Word within the text of the article.

It is essential to attach to the article a summary – not more than half a page in size – and keywords, as well as author information (name, surname, (patronymic name), home address, ZIP code, telephone number, profession, academic status, place of employment and official position, date of birth, passport data, retirement insurance certificate number, PTN -personal tax number, TIF electronic size photo of 300 dpi definition or no less than 10x15 size photography).

Forwarded to editorial staff, materials should be presented in two languages: Russian and English.

The article sent to the author to complete and being not returned to the appointed date is excluded from the editorship's stock of orders.

> For supplemental information please go to: 344038 Rostov-on-Don, Nagibin Av., 13, of. 243, «Russian Psychological Journal» editorial office. Tel. +7(863)243-15-17; fax +7(863)243-08-05

E-mail: rpj@psyf.rsu.ru