

Formative Experiment Analysis
to improve the mental health of conscripts
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The experiment assumes that the improvement of the mental health of conscripts is directly proportional to the degree of realization of the psychological conditions for its implementation.

The purpose of the formative experiment is the possibility of successful implementation and verification of the effectiveness of the Targeted Program for Strengthening the Mental Health of conscripts.

The experimental hypothesis boils down to the following: the application of the Target Program will allow a statistically significant increase in the effectiveness of the activities of officials and psychologists, their interaction and consistency in strengthening the mental health of conscripts.

To achieve the goal of the experiment and test the experimental hypothesis, we will consider one of the tasks of the experimental work - conducting a formative experiment in order to determine the effectiveness of the implementation of the Target Program according to one of the experimental plans adopted in experimental psychology; formation and verification of a battery of methodological tools that allow evaluating the implementation of the Target Program and the results of the conducted formative experiment.

The tasks of the formative experiment are to solve problems, firstly, in increasing awareness and skills for strengthening the mental health of conscripts at the stages of service and, secondly, reducing the inconsistency in the activities of officials and psychologists, forming a tendency towards convergence in the level of their interaction.

For implementation of these tasks in the formative experiment, a selected quasi-experimental design for nonequivalent groups (patchwork design) by D. Campbell (1996) with control and experimental groups of randomized samples with preliminary and subsequent testing, where (O1, O2, O3) are measurements in experimental groups, (O4, O5, O6) - measurements in control groups; (Ha, Khb) - the implementation of groups of psychological conditions for strengthening the mental health of conscripts in the activities of officials and psychologists.

R O1 (Xa) O2 (Xb) O3 R
O4 O5 O6

Experimental design for two stratified experimental and two control military rifle units with preliminary and final assessment (assessment - impact - reassessment).

The experimental plan is also based on the fact that the candidate has special training in the field of bioresonance technology (according to the program "Psychodiagnostics and psychocorrection of psychophysical health problems", including the identification of informed and uninformed use of psychoactive substances and drugs for non-medical purposes) and in agreement with The Main Directorate of Educational Work (GUVR) of the RF Armed Forces will use the ART method for experimental purposes.

The essence of the formative experiment is that the groups of psychological conditions for strengthening the mental health of conscripts and the level of interaction between officials and psychologists at the stages of military service act as an independent variable.

The dependent variable is the implementation of the Targeted Strengthening Program

mental health of conscripts in the activities of officials and psychologists.

Side Variables - Pre-Experiment Conditions of Socializations subjects, organizational and activity conditions in specific military units, which determine the specifics of military service.

Controlled variables - duration of participation of subjects in the experiment, coordination of actions and the level of professional competence of subjects of experimental activity.

Internal validity will be ensured by reducing the influence of the factors natural development, test effect and background through the simultaneous work with the control and experimental groups. The instrumental error is reduced by using standardized methods for all groups of subjects, conditions and methods of their application, taking into account the possibilities and characteristics of the survey. The formative experiment will use a diagnostic battery tested in the ascertaining experiment.

External validity is ensured by the representativeness of the sample - 136 people and partial control of variables.

The aggregate sample of persons involved in the formative experiment (conscripts, officials, and psychologists) retains statistical values.

A random sample of conscripts who have the same mental health indicators and officials, as well as psychologists who were subordinate to these conscripts, will be divided into control and experimental groups. The experimental group will implement the Target Program.

Table 1

Sampling a Formative Experiment

Sample	Number of persons
Conscripts	100
Officials	32
Psychological work specialists (psychologists)	4
Total	136

The object of the military formative experiment are (n = 136 people): conscripts (n = 100) by (n = 25) people from 4 rifle platoons of 4 rifle companies of 4 rifle battalions; officials (n = 32); psychological work specialists (psychologists) (n = 4).

Of these: servicemen of two rifle platoons (n = 50), officials (n = 16), psychologists (n = 2) act as participants in control groups, and servicemen of two other rifle platoons (n = 50), officials (n = 2) = 16, psychologists (n = 2) are subjected to psychological intervention (influence) and become participants in experimental groups.

This experimental study was carried out with the direct participation of the experimenter. The dissertation officer served as a military psychologist of the rifle battalion of the 1st OSBRO of the Ministry of Defense of the Russian Federation, which will allow her to take part both as an included observer and in the implementation of the Target Program.

In accordance with the Order of the commander of the military unit dated June 22, 2005 No. 288 "On conducting a psychological experiment on the use of the hardware and software complex" IMEDIS-BRT-PC ", as well as contracts between LLC "IMEDIS" and the department

psychological work of the Main Directorate for Internal Affairs of the Armed Forces of the Russian Federation in the period from 22.06. 2006 to 27.07. 2006 on the basis of the staff point of psychological assistance and rehabilitation of the brigade, a medical and psychological experiment was carried out with the aim of testing the APK "IMEDIS-BRT-PC". The equipment was operated by a dissertation student, who underwent specialization and improvement in this area at the IMEDIS Center and received a certificate at the end of the course, has experience in using equipment, psychological counseling and research work. The scientific supervisor of this study is Professor of the Department No. 23 of the Moral and Psychological Support of the Military University, Doctor of Psychological Sciences V.M. Crook.

In other areas, the implementation of the Target Program for Strengthening the Mental Health of conscripts in experimental units was carried out by psychologists of rifle battalions. They do not have adequate training in the use of the autonomic resonance test (ART) method, but they are trained in the use of standard methods for examining the mental health of conscripts.

Prior to the start of the formative experiment, the commander of the military unit approved the target program "Psychological conditions for strengthening the mental health of conscripts" and set tasks in accordance with which officials and psychologists carried out the planned activities.

The formative experiment was carried out with conscripts during the summer and winter periods of training, at different stages of military service. Revealing the dynamics of the mental health of conscripts in the experimental and control groups involved the study of three indicators: psychogenic, sociogenic and ecogenic, as in the ascertaining experiment. Let us consider the data on the dynamics of the psychogenic indicator of the mental health of conscripts.

In accordance with the methodological concept, conscripts, officials and psychologists were divided into two groups - experimental and control. In the experimental group, work was consistently organized to implement the Target Program for Strengthening the Mental Health of conscripts.

The initial data for the control and experimental groups were taken from the results of the ascertaining experiment. Sections of the indicators of the mental health of conscripts at the stages of service and the components of the psychological conditions for strengthening mental health in the activities of officials and psychologists have been made.

At the end of the 1st training period, intermediate diagnostics were carried out in the experimental and control groups. At the end of the 2nd training period, a cut of the indicators was carried out.

As a conventional unit of the psychogenic indicator, the data of mental stability are investigated.

The dynamics of the data of the psychogenic indicator in the conscripts of the control and experimental groups using standard methods (psychological testing, semi-structured interviewing, observation, expert assessment, self-reports of conscripts) and the ART method are presented in Table. 2, 3 and fig. 12.

table 2

Dynamics of psychogenic indicator data in military personnel
at the call of the control group using standard methods and the ART method
(number of military personnel and% data ratio)

Dynamics of the psychogenic indicator (NPI) of conscripted servicemen group											
Methods	Data psychogenic indicator (NPU)	Stages of military service									
		Stage 1		Stage 2		Stage 3		Stage 4		Stage 5	
		w / sl	(%)	w / sl	(%)	w / sl	(%)	w / sl	(%)	w / sl	(%)
ART	high	25	25.0	19	19.0	16	16.0	21	21.0	17	17.0
	average	60	60.0	56	56.0	64	64.0	56	56.0	64	64.0
	short	15	15.0	25	25.0	twenty	20.0	23	23.0	19	19.0
	Total w / sl;%	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0
CM	high	eleven	11.0	nine	9.0	12	12.0	7	7.0	7	7.0
	average	81	81.0	75	75.0	71	71.0	74	74.0	78	78.0
	short	eight	8.0	16	16.0	17	17.0	19	19.0	15	15.0
	Total w / sl;%	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0

Table 3

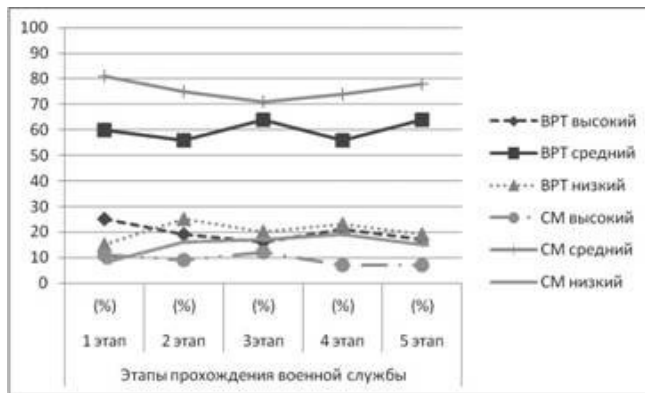
Dynamics of psychogenic indicator data in servicemen upon the call of the experimental group using standard methods and the ART method (number of military personnel and% data ratio)

Dynamics of the psychogenic indicator (NPI) of the military personnel of the experimental group											
Methods	Data psychogenic indicator (NPU)	Stages of military service									
		Stage 1		Stage 2		Stage 3		Stage 4		Stage 5	
		w / sl	(%)	w / sl	(%)	w / sl	(%)	w / sl	(%)	w / sl	(%)
ART	high	twenty	20.0	eighteen	18.0	19	19.0	21	21.0	19	19.0
	average	61	61.0	61	61.0	65	65.0	66	66.0	71	71.0
	short	19	19.0	21	21.0	16	16.0	13	13.0	ten	10.0
	Total w / sl;%	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0
CM	high	13	13.0	15	15.0	eighteen	18.0	16	16.0	16	16.0
	average	76	76.0	70	70.0	72	72.0	76	76.0	77	77.0
	short	eleven	11.0	15	15.0	ten	10.0	eight	8.0	7	7.0
	Total w / sl;%	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0

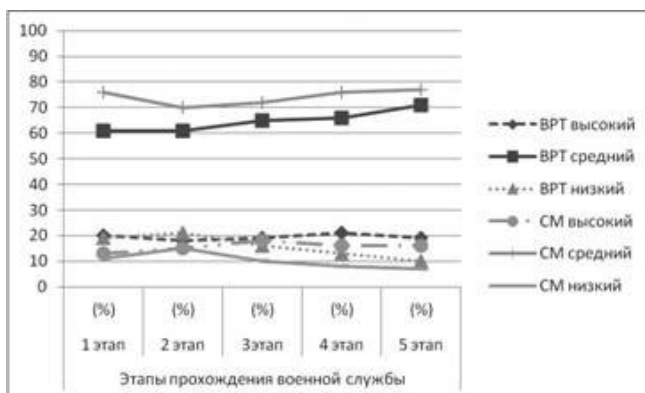
By results psychological survey mental sustainability conscripts of the control group (hereinafter - CG) in the amount of 100 people and the experimental group (hereinafter - EG) also in the amount of 100 people at the stages of military service, the following data were obtained.

At the 1st stage of military service, high, medium and low indicators of the mental stability of servicemen on the call of the CG and the EG were revealed using standard methods (hereinafter referred to as SM) and the ART method.

In fig. 1 and fig. 2 shows the graphs of the dynamics of identifying high, medium and low indicators of mental stability of servicemen upon the call of the control (CG) and experimental (EG) groups at different stages of military service using the SM and the ART method.



Rice. 1. Dynamics of indicators of mental stability of conscripts control group at different stages of military service using standard methods and the ART method



Rice. 2. Dynamics of indicators of mental stability of conscripts experimental group at different stages of military service using standard methods and the ART method

The conscripts with high levels of mental stability belong to the 1st group (high) group of professional suitability and are considered for appointment to positions involving the performance of official tasks in extreme conditions with the use of weapons.

Servicemen with good indicators of mental stability belong to the 2nd group of professional suitability and are considered for appointment to positions involving the performance of official tasks with the use of weapons and being on guard duty.

The conscripts with low levels of mental stability belong to the 3rd group (satisfactory) professional suitability and are subject to in-depth psychological examination and are considered for appointment to positions not related to duty on guard.

The conscripts with critically low indicators of mental stability belong to the 4th group (unsatisfactory) professional suitability and are subject to in-depth medical and psychological examination, referral for additional psychiatric examination for further military service.

Comparative graphical analysis of the dynamics of high indicators of mental stability of servicemen on the call of the CG and the EG at different stages of military service (Fig. 1, 2) allows us to assert the following: high indicators of mental stability of servicemen, identified by the method of ART and SM, at all stages of military service

correlate with criteria for assessing low scales; the average indicators of the mental stability of servicemen correlate with the criteria for assessing the average and high scales; low indicators of mental stability of servicemen correlate with assessment criteria on low scales.

The largest number of conscripts showed high levels of mental stability at the 1st, 3rd and 4th stages of service:

- in the CG: identified by the ART method - at the 1st stage (25%) and at the 4th stage of service (21%); SM - at the 3rd stage (12%);

- in the EG: by the ART method - at the 1st stage of service (20%) and at the 4th stage (21%); SM - at the 3rd stage (18%).

At the 1st, 2nd, 4th and 5th stages of service, the high indicators of mental stability, revealed in the military personnel of the CG by the ART method, more than twice exceed the indicators revealed by the SM (respectively, 25% and 11% ; 19% and 9%; 21% and 7%; 17% and 7%).

Among servicemen from the EG significant differences in high indices of mental stability were revealed at the 1st stage of service: ART - 20%; CM - 13%.

This confirms the hypothesis about more reliable results of the revealed indicators of mental stability with the use of hardware.

In the CG, high indicators of mental stability, revealed by ART, decrease from the 1st to the 5th stages of service: 25%, 19%, 16%, 21%, 17%; identified SM also decrease: 11%, 9%, 12%, 7%, 7%. Characterized by a decrease in results by half, compared with the results of ART.

In the EG, high indicators of mental stability of conscripts, revealed by ART, from the 1st and 5th stages of service, are stable: 20%, 18%, 19%, 21%, 19%. High indicators identified by SM at different stages of service are characterized by a smaller number than those identified using ART: 13%, 15%, 18%, 16%, 16%, but more than those identified in the CG. There is a tendency to increase by the 5th stage.

This confirms the hypothesis that the work carried out in the experimental group, in accordance with the Target Program, makes it possible to positively influence the mental health of conscripts, as evidenced by the stable results of high indicators of mental stability at all stages of service. In turn, these data allow us to assert about the successful process of adaptation of conscripts to the conditions of military service and their readiness to perform tasks as intended.

The average indicators in the CG, identified by ART, demonstrate a decrease from the 1st stage to the 2nd, from the 3rd to the 4th and an increase at the 5th stage of service: 60%, 56%, 64%, 56%, 64 %. The average indicators identified by SM are characterized by a downward trend at all stages of service: 81%, 75%, 71%, 74%, 78%.

Average indicators in the EG, revealed by ART, show an increase from the 1st stage to the 5th: 61%, 61%, 65%, 66%, 71%. The average indicators identified by SM are higher than those identified by ART: 76%, 70%, 72%, 76%, 77%. A sharp decrease in data can be traced at the 2nd and 3rd stages, with further leveling of indicators at the 4th stage and an increase at the 5th stage.

Thus, in the EG there is a tendency to an increase in the average indicators of mental stability of conscripts, revealed by the ART method, from the 1st to the 5th stages of service and the identified SM, from the 2nd to the 5th stages. The percentage of the revealed average values of ART and SM indicates the stability of the results.

The work carried out by officials and psychologists with the aim of strengthening the mental health of conscripts makes it possible to maintain and increase the number of conscripts by 5-10% with average indicators of psychological stability.

Low indicators of mental stability in the CG, revealed by ART, vary throughout all stages of service: 15%, 25%, 20%, 23%, 19%. The maximum data are typical for the 2nd and 4th stages. Low indicators identified by SM: 8%, 16%, 17%, 19%, 15%, -

less than the identified ART, and their characteristic is their increase in two times from the 1st stage to the 5th stage.

Low indices in the EG, revealed by ART, are characterized by a tendency to decrease from the 1st to the 5th stages: 19%, 21%, 16%, 13%, 10%. Low indicators identified by SM: 11%, 15%, 10%, 8%, 7% are characterized by an increase at the 2nd stage and a further decrease at subsequent stages.

This allows us to assume that measures to improve the mental health of conscripts are effective and efficient. A certain number of conscripts belonging to the 1st stage of service, to the category of "risk group", were able to successfully adapt to the conditions of military service and perform functional duties.

From the first days of military service, from the initial psychological examination, it is necessary to maximize the identification of conscripts in need of psychological assistance. One of the technologies that allows you to effectively perform such work is the ART method, which is confirmed by the results obtained both in the CG and in the EG.

In the CG, the lowest indicators of mental stability were revealed: using the ART method - at the 2nd stage (25%) and 4th stage (23%); SM - at the 3rd (17%) and 4th (19%) stages. Based on the revealed low indicators (25%) by the ART method, these servicemen were included in the group of increased psychological and pedagogical attention and were under dynamic supervision of psychologists and officials. Measures of psychocorrectional influence were carried out with them using standard approaches.

In the EG, the lowest indicators were revealed: using the ART method - at the 1st stage (19%), at the 2nd stage (21%) and SM - at the 2nd stage (15%). These conscripts (21%) were also included in the group of increased psychological and pedagogical attention and were under dynamic supervision. With them, psychocorrectional interventions were carried out in accordance with the Target Program for Strengthening the Mental Health of Military Servicemen on the Draft, using standard approaches and a bioresonance approach.

In the professional activity of a psychologist in providing psychological assistance to servicemen at the call of the experimental group, standard methods and methods of bioresonance psychocorrection were used in the following directions: elimination of adverse effects on the psyche of environmental burdens; optimization of stress and depression with targeted induction correction programs; strengthening the resources of psychological adaptation by programs of induction correction; mastering the skills of psycho-muscular self-regulation; monitoring of psychophysical well-being. The results of the measures taken were registered in the Register of conscripts seeking psychological help.

In order to solve the problems of studying (identifying) and correcting the problems of the psychophysical well-being of servicemen upon the call of the experimental groups, psychologists conducted individual and group psychological examinations and psychocorrective actions on the basis of the PP&R Center, in specially equipped rooms. Bioresonance psychocorrectional programs were used. The results were reported in the form of a report to the commander of the military unit, deputy commander for work with personnel, battalion commanders and deputy battalion commanders for work with personnel.

With officials and psychologists, measures were taken to improve the mental health of conscripts, in accordance with the sections of the Target Program.

The hypothesis is confirmed that the use of the Target Program made it possible to statistically significantly increase the efficiency of the activities of officials and psychologists, their

interaction and consistency in strengthening the mental health of conscripts.

Oleinikova, A.S. Analysis of the formative experiment to strengthen the mental health of conscripts / A.S. Oleinikova // XXII International Conference "Theoretical and Clinical Aspects of the Application of Bioresonance and Multiresonance Therapy". - M.: IMEDIS, 2016. -- S.41-50.

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