



---

## Social psychology

---

Sarychev S.V.

### An experimental investigation of small group's reliability in tense situations of joint activity

*The research is funded by grants of Russian Humanitarian Foundation (projects 05-06-06210a and 06-06-72603a/L)*

*The phenomenon of small group's reliability is revealed in this paper within the framework of socio-psychological experiment. Mr. Sarychev worked out a new, dynamic approach to problems of small group's behavior and joint actions in tense situations that became everyday occurrence in nowadays Russia. That original approach was implemented into experimental study performed by the author.*

*The paper also reveals the internal correlation between fundamental features in small groups – orderliness and reliability. According to experimental data obtained by Mr. Sarychev the leading part while forming the small group's reliability belongs to particular social milieu, especially when group transforms itself and its own milieu.*

**Key words:** *reliability, small group, joint activity, orderliness, tense situation of joint activity, optimal situation of joint activity, experiment*

Significant changes in social and economic conditions of the life of Russian society, taking place between 20–21st centuries, have essential effect upon small groups and collectives. The dynamical processes inherent in a public and political life of our country, significant changes in production forces lead to intense situations in vital activity of small groups and collectives. Being initial cells of any society [6, p. 206] and forming social structure and social relations at society micro level [1], small groups make an essential impact upon the personality of a group member and on the society as well, according to the feedback principle. We do assume that the contents and the basic tendencies of these interrelations are not sufficiently investigated in social psychology in accordance with the modern social situation and should become an research object of psychologists. Conditions of vital activity of small groups were intense not only in the modern Russian history, but also in world of last decades. This fact dictates the necessity of performing the profound study of activity and group behavior in tense situations alongside with optimal ones [21]. The practical need to predict the process and results of joint activity of youth groups in optimal and tense situations makes the research of their reliability necessary.

At the same time, the problem of group reliability in tense and extreme situations is not sufficiently investigated in social psychology. There is no comprehensible theoretical explanation of the facts of group ambiguity dynamics and efficiency of its joint



activity in intense and extreme situations. The theoretical comprehension and empirical research of social - psychological basics of group reliability will allow to study more deeply both joint activity and small group itself.

In conditions of fundamental social, scientific and technical changes the problem of reliability obtains new meaning and demands modern ways of its solving [14]. The necessity of reliability study is also caused by the fact that in intense and extreme situations activity of an individual was mainly studied, and joint activity of the group in specified situations is investigated obviously insufficiently.

Experiment application in the research of group reliability. We assume that experiment is the basic method of research of group reliability in extreme and intense situations of joint activity. We based on the following reasons. Psychologists and sociologists study the problems of experiment in social studies (V.Vundt, V.N.Druzhinin, A.P.Kuprijan, T.V.Kornilova, D.Campbell, A.F.Lazursky, K.Levin, B.F.Lomov, S.Milgram, D.S.Mill, V.D.Nebylitsyn, S.Stauffer, B.M.Teplov, G.I. Chelpanov, etc.) They believe that the experimental method has an active character [4; 5; 8; 9; 10; 11; 16; 17]. K.Levin considers that experiment should also give the explanatory characteristic in psychology. It does not only establish the fact but also explains human behavior determination [9]. This point of view is based on the assumption of dynamic character of cause and effect relation and active researcher's assistance in objects changes. The general way of scientific research in social psychology, therefore, is to move from the theory to experiment in order to find out psychological laws and regularities, to predict the psychological phenomena (performing the psychological forecast).

The consideration of the experiment structure as the way to check the hypothesis is an important methodological problem of social psychology. Methods of interview, conversation, supervision, questioning, tests can be used at some stages of experimental research subjected to investigate the social and social - psychological phenomena. Russian researchers G.M.Andreeva, V.N.Druzhinin, A.P.Kuprijan, etc. believe that these methods can precede experiment, prepare it or create appropriate conditions for it, to accompany it, to follow after a stage of active influence on experimental variables. In this case experiment is not only the way of measurement and control of variables, but also the way to organize the research and integrate other methods [1; 4; 7].

Problems connected with laboratory and natural experiments application in social - psychological research, its compatibility and validity are estimated distinctly by social psychologists. G.M.Andreeva, D.Campbell, A.P.Kuprijan, A.V.Petrovsky, P.N.Shihirev sustain wide use of laboratory experiment in research of groups in social psychology but they fairly point out that the facts received this way have low validity and hardly correspond with the social context of behavior and activity [1; 7; 8; 13; 20].

Their opponents claim that laboratory experiment gives additional opportunities for comprehensive control over variables and eliciting of the investigated psychological phenomenon "in its pure state". Laboratory experiment is the mostly developed one in psychology. Psychologists started to develop this method before other methods therefore it is being used more widely, especially in American social psychology



[11; 20, p. 91; 22]. American social psychologists also assume that laboratory experiment is capable to give the unequivocal proof of causality; it fits better the needs to control external variables as well as to investigate values and parameters of complex experimental variables [22].

It is obvious, that laboratory experiment in social psychology does possess the certain advantages that cannot be ignored [16]. The solution of the problem, probably, does not come to use or to not use laboratory experiment, but in finding ways to achieve purposes and use its results and establishment of circumstances and means that allows to validate the data acquired in laboratory experiment. Small group reliability as a subject of our research demands to combine both laboratory and natural experiments so far as a full-view reproduction of tense conditions is not acceptable because of ethical reasons.

Analyzing the problem of natural and laboratory intercorrelation of experiment from the point of view of objective method use in psychology, B.M.Teplov supposed that its opposition is incorrect since they solve various problems while performing scientific research in psychology. Natural experiment is capable to put forward the vital problems, allows to contemplate hypotheses, gives an opportunity to apply the laws that already settled to an explanation of some challenges and to research the substantial aspects of activity. Laboratory experiment makes it possible to carry out scientific abstraction not only mentally but practically, to verify the estimated hypotheses and to open the mechanism of the investigated phenomena [16]. According to psychologists F.Genov, B.F.Lomov, A.S.Tchernyshev, etc. it is necessary to study group in social - significant situations by means of laboratory experiment while keeping joint activity in the social context. These researchers specify necessity to use critical situations while modeling and to use real groups as the object of laboratory experiment [2; 10; 17].

There is a number of means to manage laboratory experiment in social psychology that are traditionally applied in order to fit the situation closer to real one and to increase ecological validity of the obtained data:

- Setting of the task that is difficult enough and has high significance for participants of experiment;
- The task itself should not be too bulky and difficult as it negatively influences on the experimental situation;
- It is important to work out the instruction for participants of experiment in order to equip them with precise and clear purpose and to obtain understanding the task identically.

The reasons, mentioned above allow to outline the general strategy of research of reliability of group in tense situations of joint activity. We assume that it's expedient to use different groups of methods: observation, polling methods, hardware techniques. We have elected a combination of laboratory and natural experiment as a form of the organization of group reliability research. It is expedient to select the natural experiment as the leading method of the research organization because it allows



studying the real groups in real intense situations. It must be completed with laboratory experiment that will allow to allocate the investigated psychological phenomena "in the pure state" and to specify the data received in natural experiment.

The positions mentioned above were basic to outline the methodical block used by us for an experimental research of reliability of group in tense and extreme situations of joint activity. The methodical block integrally combines methods of observation, interrogation and device-model of joint activity. Devices "Arch", GSI-7 (Group's Sensomotor Integrator) activate the process and properties of group joint activity [18]. That methodical block was applied in social-psychological experiment both laboratory and natural ones. We suppose that group joint activity modeling by means of hardware techniques must be the prior one in laboratory experiment.

Key parameters of group reliability experimental research. According to the logic of experimental research realization, it is necessary to define its key parameters: experimental and not experimental variables, ways of its control and measurement, ways of data processing in order to specify the plan of research.

The subject of the experimental research is group reliability in intense situations of joint activity. Reliability of group is the dependent experimental variable of our research. The independent experimental variable is the situation of joint activity acts. The independent experimental variable accepted three major meanings during research realization: optimal, tense and extreme situations of joint activity. We assume that group reliability in intense and extreme situations of joint activity can be described basically by the following parameters:

- Effectiveness;
- Interaction of group members;
- Coordination of actions.

Each of parameters of reliability can be measured by means of empirical indexes that are apparent and can be directly measured by means of corresponding techniques [18].

It is essential that groups researched by us differed on the level of organization. In order to maintain the correctness of research and data comparability we came to the necessity to divide the group on the basis of orderliness. We have taken an advantage of typology of groups organization [17, p. 56] according to which three types of groups are allocated. The mentioned typology depends upon such group behavioral characteristics, as group activity success, group contribution into the success of the organization of higher level (school, the center, etc.), the level collective relations in primary collective [17].

General strategy of the experimental research of group reliability in tense and extreme situations of joint activity derived from the most widespread strategy of experiment - strategy of "experimental and control groups". Receding from that strategy we recognized that combining natural and laboratory experiments and uses of corresponding techniques does not make the realization of such strategy obviously possible. One more argument for change of traditional strategy of an experimental



research is that the characteristic acting in our research as the hypothetical reason of change by a dependent experimental variable (i.e. an experimental pulse), namely the situation of joint activity of group, changes not smoothly, but discretely and has more than two gradation in its intensity, namely - three.

It is not also possible to level all groups on orderliness as it should be made according to the initial requirements showed to the organization of experiment in social sciences [4; 7; 8]. Therefore groups of a high, average and low level of orderliness were studied in comparison, compared on the basic investigated parameters of reliability.

We intentionally selected the groups identical on the basic non experimental (neutral) variables. Practically all groups were educational; the basic kind of activity was educational; all group members related to the same age group (an early youth age). For all groups participating in research, the joint activity carried out by group was important, interesting, prestigious and significant.

So, the general plan of the experimental research was to place groups with a various degree of organization in optimal and tense situations of joint group activity (i.e. manipulating an independent experimental variable) and putting, hence, in action the hypothetical reason (entering the experimental impulse), generating hypothetical consequences.

Connection between the situations of joint activity of group reliability is a hypothetical assumption which realizes cause and effect relations in our research. Connection between the hypothetical reason and hypothetical consequence should be shown in various qualitative and quantitative changes of the basic parameters of reliability in groups with a various degree of organization in tense situations in comparison with optimal ones. The hypothesis of the research can be considered as empirically verified if the significant distinctions between the basic parameters of reliability in extreme, tense and optimal situations of group joint activity are set at the organization level by means of the methodical block in laboratory and field experiment.

Use of devices - models in the experimental research of group reliability. The wide use of hardware techniques in research of social - psychological problems of group in natural and laboratory experiments are presented in Russian psychologists works. There were known ways and requirements to use these devices for studying joint activity [3; 15; 17; 18; 19]. F.D.Gorbov developed the following requirements for modeling joint (interdependent and interconnected) activity of group according to which he created homeostatic technique:

- Group activity should be easy, with no demand of preliminary development of specific skills;
- Activity should be interconnected, activity and its course should be objectivated;
- The estimation of activity results should be carried out mediated through devices [3, p. 12].
- Models should give objective data (both psychological and non-psychological) about efficiency of group activity;



- Models of joint activity should fit to specific properties of models of the social - psychological phenomena, i.e. including their basic properties;
- The experimental model should correspond to group activity, but should not copy a concrete case (i.e. a simulator) [3].

Devices - models of joint activity «Arch» and GSI - 7 rather fully correspond to the specified requirements and possess a number of additional valuable properties:

- the big degree of freedom, the superiority heuristic above algorithmic ways of task solving are performed in the use of mentioned device;
- The result of joint activity is not the one to be realized but also the process of the activity itself
- Feedback information is accomplished (from the device - to group) so the opportunity to influence on the process of joint activity is realized as well;
- The opportunity to model official and informal interaction and process of the organization, its dynamics and properties is accomplished [17; 18].

The modeling of intense situations is required for the research of the various aspects of group reliability, the joint activity organization flexibility and «survival rate», ability of the group to be reconstructed. That can be achieved due to subject importance raising for the examinees who work with the devices - models, and also high motivation introduction. For this purpose we used competition between groups for championship, public announcement of results, etc. In 60-s and 90-s of the twentieth century in Kursk social - psychological laboratory increase of the degree of intensity of the situation of joint activity was achieved due to introduction of conditional punishment by external irritants (a sharp sound in headphones, easy impact by electric current in a wrist) while using GSI - 7 with detachable device «Stressor». Forms of punishment realization corresponded with the real situations:

- «One for all »;
- «All for one »;
- «Everyone for itself »;
- «One for all, all for one ».

The work with GSI - 7 in conditions with no return information for the majority of members of group when all return information on the course of performance of the task is accessible only to the head of group was also used. That modifications were applied by V.J.Podoroga, A.S.Tchernyshev, E.A.Shanin for various purposes [15; 17; 19].

We had developed several modifications of experimental procedures of work with devices - models to study tense situations of joint activity. The essence of updating is to create situations of organizational uncertainty, novelty, unexpectedness. Some modifications can be used both at work with «Arch» and GSI - 7. Such three procedures have been developed:

- Activity in highly reasonable conditions («setting a record»);
- Activity in conditions of a limit of time («readout of time»);
- Exception or replacement of one of group's members.

The conditions mentioned above are introduced by the instruction which is given



by the experimenter. In the procedure of «setting a record» the purpose to carry out a familiar task (to collect «Arch» or to lead movable operating element through a labyrinth of GSI - 7) is set for the group. The group has to perform the task as soon as possible and show the best time («record»). Our data testify that in this procedure average sizes of the basic psychological and non-psychological parameters are higher, than the same parameters in background conditions. Besides highly motivated conditions of joint activity can conduct to reorganization of the organization of joint activity.

Procedure with replacement or removing of one person is also interesting because it compels members of the group to change interaction (sequence and coordination of individual actions, demands the additional coordination of actions) and functional duties of group members. «Old» way of organizing of joint activity developed earlier can not be applied as there is a necessity to create a new way of organizing according to the change of situation. Additional collisions can be brought by removing or replacement of the leader - organizer (or, on the contrary, the outsider).

One of the variants of mentioned modifications is to deprive one of the group members of opportunity to participate actively in joint activity (by means of putting on opaque glasses). Even if this member of the group participates in the joint activity he can carry out only a number of the limited functions under the direction of others; the group will need to bring some changes into the organization of the joint activity and interaction.

The situation of «readout of time» is perceived by examinees rather emotionally, with the great tension. Introduction of such external condition creates difficulties of interaction, conducts to increase in number of mistakes, and in some groups - to destruction of joint activity, to a communicative shock (it concerns a small number of groups with low level of orderliness).

The next part of the article is devoted to the procedure modifications used only for GSI-7. One of them was named «Tracing-paper» (one of the examined groups named this procedure «flight in fog»). The key feature of this procedure is that the sheet of a translucent tracing-paper is imposed on the information block of the integrator that all members of the group receive the only part of feedback information. This procedure creates significant organizational uncertainty and so intensity of mutual relations and interaction. The described procedure can be combined with another - when the truncated information comes only to one of the group members (for example, to the leader). It is obvious that in this case the research procedure goes in a bit different direction and even it is more complex in interaction.

Some modifications of experimental procedures has been developed by us specially for «Arch». The «Anonymous Arch» is the modification of the device itself. It is distinguished from the originally developed design because its elements are not numbered so the assembly of «Anonymous Arch» becomes a very difficult task. Difficulties result from the fact that joint activity in this case is rather difficult to order, i.e. it is practically impossible to create the concrete script with the certain sequence of actions, to provide unequivocally set of functions for each member of the group. Rather essential



degree of uncertainty of interaction is shown both in behavior and verbal level.

Another procedure of modification suggests creating difficulties in realization of joint activity by fixing one of the hands (basically the right one) with the belt and assembling of «Arch» by a free hand. In the given procedure the significant tension created by the fact that the single person assembles «Arch» by one hand: to put the collected block of elements on the basis, to close the lock, etc. Actions which usually are carried out by a single person should now be carried out by two or several examinees. The higher level of the requirements to interaction, interference, coordination of actions, and also to endurance{quotation} and mutual tolerance of examinees are manifested.

The other group of modified procedures assumes simultaneous use of two «Arches». The first one means simultaneous assembly of two «Arches» by one group. The appearance of «Arches» is absolutely identical and their elements are completely similar also. However elements of one «Arch» do not fit the other «Arch» because of different joint of pins and apertures. Assembly of two «Arches» prompts the group to search for reserves of the organization and demands precise distribution of functions as well as closer interaction.

The task of collecting of two «Arches» which are spatially spaced (on different tables) causes significant difficulties. It is required either to create the new organization of joint activity or to duplicate the task. The essential information about the group can be obtained according to the division into micro groups, the structure and new functional duties within them, and according to the principles of mutual aid between micro groups. One of the probable tasks is that the experimenter suggests collecting one of two «Arches» from mixed elements and gives examinees one base of «Arch». In this case examinees should understand, that it is necessary to collect and join all elements of both «Arches» and then one of them to reject.

Interesting opportunities in terms of tense situation modeling of the group joint activity in laboratory experiment are produced by implementation of intergroup competition or public competition of two groups (for example, two groups of schoolboys at the presence of the school or center collective). We applied three variants of that modification: assembling of «Arch» at the presence of other group, competition of two groups in assembling of «Arch» (internal or «correspondence»), competition in assembling of «Arch» of two groups when elements of two «Arches» mixed up on one table. Variants are enumerated according to the increase of tension during the performance of joint activity. Judging by the experimental procedures described above, we came to conclusion that designing different programs of laboratory experiment is possible against the specific targets of research

Results of the experiment. The objective of the research of youth group reliability carried out in 1988-2006 was to investigate reliability of the group in optimal and tense situations of joint activity. Empirical base of the research was real youth groups (girls and young men aged 15-18) of students, schoolboys and students of professional colleges of Kursk and Kursk area: school classes, educational groups of professional





schools of system of initial vocational training (trade school), student's groups of Kursk State University, educational groups at school of youth leaders of Kursk region «Komsorg», the regional youth center «Monolith». We used the following situations of joint activity in natural experiment:

- Situations of intergroup competition;
- The situations, demanding to adjust joint actions with lack of time, in short terms;
- The situations demanding joint actions of the group in conditions of uncertainty;
- Situations in which the significant social environment gives biased estimation of the results of joint activity of the group;
- Situations with the increased responsibility, with «the high price» for a mistake in joint activity;
- Situations when the new kind of joint activity which that has not any analogues or similar cases in group experience of joint activity accustoms;
- Situations when some members leave the group and-or new people «enters» (i.e. the structure of the group, its composition change).

The important feature of all investigated groups was that all groups were already mature commonalities by the time of performing the research and continued functioning after the end of the research. Measurement of parameters of orderliness had been performed during the period which directly preceded the experimental research (introduction of an experimental impulse).

Highly organized groups in intense situations of joint activity carry out joint activity trouble-free, with the minimal disorder of the best and worse results. It is the most typical for highly motivated activity in tense situations. However in everyday activity the level of non-failure operation is rather high (91 % of tasks are carried out trouble-free) in an intense situation. The basic empirical reviewers of productivity were inter-related. Its level correlates with a degree of intensity of the situation in joint activity of the group: the higher the degree of intensity of the situation of joint activity the fewer refusals; the higher efficiency is, the less disorder of the maximal and minimal manifested results. The productivity of the highly organized groups synthesized the positive sides of the groups with an average and low level of orderliness: increase of efficiency and increase of non-failure operation in intense situations of joint activity.

Members of the highly organized groups impart great importance to the coordination of joint actions and careful working out of the plan of forthcoming joint activity. The rough (orientation) part of joint activity in intense situations has the greater densities, than in optimum situations. The substantial side of the plan of the forthcoming joint activity in the intense situation was its improvement in comparison with the optimal situation. The quality of such plan is characterized by the careful distribution of functions and capability of each member of the group to prove expediency of the distribution of these functions as well as stability of the plan. The important role in the coordination of joint activity belong to the leaders of highly organized groups whose vision of forthcoming and current joint activity is «conceptual», they can see



the situation as a whole. The highly organized groups in tense situations of joint activity are characterized by completeness of conformity of joint activity to the plan which is developed in the rough part of the activity. It is often combined with group's ability to bring a corrective amendment to the plan in accordance with changing conditions. Such groups are capable to perform self-control of joint activity according to the ideal image of result and process of joint activity (i.e. the plan) in intense situations of joint activity.

Interaction in highly organized groups in intense situations of joint activity is directed to the task integration of the group, efforts of the group members are concentrated on the key moments of the interaction which is necessary for achievement of the group purposes. Members of such groups feel the necessity and are capable to change the interaction in the name of achievement of the best possible result. In tense situations of joint activity they aspire to create more perfect form of the organization of vital activity due to reorganization of interaction. The maximal value of the basic empirical indexes are reached in highly motivated activity in the intense situation, and members of such groups aspire to carry out the careful account of probable consequences from the changes brought into interaction. The initiative in interaction is proceeded by the majority of members of such groups. In the intense situation of joint activity interaction becomes more active. The highly organized groups in tense situations of joint activity are characterized by effective balance between mutual relations and interactions at high flexibility, variability and adequacy of interaction. The highly organized groups can be characterized as reliable, and results of their joint activity in intense situations are predictable.

Mean organized groups operate trouble-free in highly motivated activity in intense situations of joint activity, in usual joint activity in intense situations non-failure operation is a little bit lower. The high level of non-failure operation in intense situations of joint activity, however, is reached at the expense of the lower level of efficiency of joint activity in comparison with highly organized groups. Groups of this type are characterized with increase in disorder of the best and worse results in intense situations of joint activity in comparison with optimum situations.

The increase in densities of a rough part of joint activity is typical to mean organized groups (as well as for highly organized groups) in intense situations in comparison with optimum situations. Mean organized groups featured by decrease in quality of the plan of joint activity due to often use of «standard» receptions, strengthening conventionality. The quality of the plan is also reduced because members of such groups frequently «don not see» changes of the situation of joint activity and if they notice, they do not estimate their novelty, new quality of the situation. This way of actions coordination which develops spontaneously as the examinees say «by itself» is fixed and kept at the majority of the groups of this type. Developing the plan of joint activity, these groups in the greater measure are focused on optimum, instead of intense situations of joint activity. The coordination of functions for members of the mean organized groups represents difficulty. Groups of this type in intense situations



of joint activity reduce a degree of conformity of joint activity to the plan because the group creates only partial rough basis of joint activity.

Interaction in mean organized groups in intense situations of joint activity is characterized by the expressed motivation of group members of the search of an optimum way of interaction, aspiration to change interaction for the activity result improvement. The majority of mean organized groups nevertheless cannot change interaction for optimization of joint activity of groups in intense situations of joint activity. Reduction of efficiency in intense situations is connected in comparison with optimum situations.

Low organized groups are characterized by essential reduction of non-failure operation in tense situations of joint activity in comparison with optimal ones, the number of refusals in highly motivated activity in intense situations is greatly grows. Groups of this type, nevertheless, are capable to increase efficiency of joint activity in intense situations (only in highly motivated activity), but at the expense of increase in disorder of the best and worse parameters of productivity and reduction of non-failure operation. In intense situations productivity becomes unpredictable in joint activity.

The prevalence of the performing part of joint activity over the rough part are inherent to the low organized groups both in optimal and in tense situations. In tense situations of joint activity in comparison with optimum situations densities of orientation in structure of joint activity is reduced. The plan of forthcoming joint activity is lacking or it is characterized by poor quality. Even if there is a plan the level of expressiveness of the empirical reviewer «conformity of activity to the plan» is reduced in intense situations. Thus, the coordination of actions and functions is carried out spontaneously, group members of low organized groups do not aspire to regulate and coordinate it either in optimum or in intense situations of joint activity.

Interaction in intense situations of joint activity does not correspond either to the group purposes, or to opportunities of the group. The level of expressiveness of interaction equally low in optimum and in intense situations of joint activity. As there is no plan of the way of interaction worked out beforehand its optimization situations for low organized groups is not feasible in intense. Just few members of low organized group were fully participated in the interaction of joint activity in intense situations, and full affiliation reduced with the increase of the degree of intensity of the situation of joint activity. Maximal affiliation in interaction is observed in highly motivated joint activity.

So, groups of different level of organization are characterized by qualitatively various types of dynamics of the basic parameters of reliability in intense situations of joint activity.

Concluding remarks. There are significant distinctions of the levels of expressiveness and dynamics of the basic parameters of reliability in intense situations of joint activity of groups of different level of organization. Qualitative feature of reliability in intense situations of groups of the mean and high level of organization is full non-failure operation in highly motivated activity.



Reliability of the group in intense situations of joint activity is determined by organization of the group. Groups of different various levels of organization are characterized by various dynamics of the basic parameters of reliability in intense and extreme situations of joint activity. The cause and effect relation between reliability and organization is not linear in its origin, and has complex and mediated character. Representing itself as mediated link of reliability, organization changes the meaning of the basic parameters of reliability in intense situations of joint activity of group.

Reliable groups in extreme situations of joint activity are characterized by relatively little change of the basic parameters of reliability. Nevertheless, the amount of passing refusals (mistakes) appreciably grows. Besides in comparison with optimum situations of joint activity in extreme situations the disorder of the best and bad results (in 1,5-2 times) grows. So both extremely high and rather low productivity of joint activity becomes obvious in extreme situations.

According to its psychological meaning, reliability acts as a system of group motives and social sets on making the organization of joint activity perfect in intense situations.

#### THE LITERATURE

1. Andreeva G.M. Social psychology. M., 1988.
2. Genov F. Management psychology. M., 1982.
3. Gorbov F.D., Novikov M.A. Issues of integrative assessment of group activity. //The heads of the reports at the II congress of psychologists in the USSR. Issue. 3. M., 1963. p. 12-13.
4. Drouzhinin V.N. Experimental psychology. CPb., 2004.
5. Kornilova T.V. Experimental psychology. Theories and methods. M., 2002.
6. Krisko V.G. Social psychology: dictionary-reference book. Minsk, 2001.
7. Kouprian A.P. Methodological problems of social experiment. M., 1971.
8. Kembell D. Models of experiments in social psychology and applied researches. M., 1980.
9. Levin K. The theory of fields in social sciences. CPb., 2000.
10. Lomov B.F. Methodological and theoretical psychological problems. M., 1984.
11. Milgrem S. Experiment in social psychology. CPb., 2001.
12. Nebilitsin V.D. Selected psychological works. M., 1990.
13. Petrovskii A.V. The questions of history and psychological theory: Selected works. M., 1984.
14. Piskopel A.A. Historical and methodological analysis of validity conceptions of socio-technical systems: Thesis of Doctor of Philosophical Science. M., 1995.
15. Podoroga V.Ya. Experimental studies of difficult situation influence upon group activity of senior pupils: Abstract of the thesis of Candidate of Psychological Science. M., 1973.
16. Teplov B.M. About objective methods in psychology. // Selected works: in 2 volumes. M., 1985. T. 1. p. 281-309.
17. Chernishev A.S. Socio-psychological bases of initial collective (using the materials of the researches carried out in youth groups and collectives): Thesis of Doctor of Pedagogical Science. M., 1980.



18. Chernishev A.S., Sarichev S.V., Lounev U.A. Apparatus methods of psychological diagnostics in groups with collaboration. M., 2005.
19. Shanin E.A. The role of speech in the organizations of schoolchildren // Socio-psychological aspects of organization of pupils' and students collectives. Kursk, 1987.
20. Shikhirev P.N. Modern social psychology. M., 1999.
21. Bettelheim B. Individual and mass behavior in extreme situations // Journal of Abnormal and Social Psychology. 1943. №38. P. 417-452.
22. Handbook of social psychology / Ed. by G. Lindzey, E. Aronson. NY, 1985.