

FORMATION OF MENTAL SET OF SUBJECTS OF HIGHER EDUCATION INSTITUTION FOR MANAGEMENT BY THE CORRECTION GAME METHOD

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Abstract: *The relevance of the research: the article is devoted to the problem of formation of mental set of educational activities participants for management of higher educational institutions, namely the refusal of the command-bureaucratic style of leadership that is relevant and necessary in these days. The aim of the research: the sense of this process is the formation of mental set of participants of educational activities for management of higher educational institutions, restructuring of certain personal characteristics - the conceptual and value orientations of each subject of management and the clarification of the impact of this restructuring on their age, intellectual and characterological peculiarities. At the same time, the effectiveness of this kind of management is conditioned not only by changing goals, tasks and methods of activity, but also by formation of a positive I-concept of a manager. Research methods: in accordance with the stated goal-to determine the ways of mental set formation of participants of educational activities for management of higher educational institutions, we have developed and experimentally tested the system of psychological factors and conditions of the formation of this kind of mental set. Results: we offer a correction game, which is carried out in the natural conditions of the activities of participant of educational process as the way of psychological and managerial training. In its external form it is an event that can be carried out by any participant of an educational process with a high level of mental set for managing activity and a psychologist with a subject who is not ready for it. Significance of the research: our proposed corrective measure for increasing the level of mental set of participants in educational activities for management of higher educational institutions has proved its expediency and effectiveness at the level of the managerial process.*

Keywords: mental set formation, management, correction game, higher education institute.

Management in the recent past considered to be a process of command and bureaucratic leadership. Herewith, a monopolistic and multilevel linear functional structure was used. The management process was carried out on the basis of a strict form of organization with the use of administrative means of management and strict hierarchical links. There was an unconditional subordination of lower management levels to the higher ones, the neutralization of horizontal link forms,

orientation to power, order, control, but not to motivation. Such an administrative command and bureaucratic management led to a low organizational culture, the introduction of hard vertical links and underestimation of the independence of the government subjects. This article is devoted to this actual problem.

Literature review

Necessary background for solving the problem of higher educational institutions management creates certain groups of research. Some aspects of the psychologists and educators research are related to our research the most directly. Among them there are A. V. Voznyuk,¹ P. E. Herchanivska,² Des Derlow,³ S. B. Zharaia,⁴ L. M. Karamushka,⁵ S. L. Markov,⁶ I. R. Petrovskaia,⁷ N. I. Pinchuk,⁸ G. Ponomareva⁹ and others. We formed the psychological mental set of participants in educational activities for management of higher educational institutions by the method of correction game. There are games for people without any experience in practical work and for its improvement. The scientists M.

¹ A. V. Voznyuk, "Model of psychological training of managers for the management of pedagogical workers in educational districts", in S. D. Maksimenko, L. M. Karamushki (Eds.), volume 1, *Organizational Psychology. Economic psychology: Social Psychology*, 42, (2015), pp. 44-48, Kiev, Institute of Psychology named after G. S. Kostyuk NAPS of Ukraine, 2015.

² P. E. Herchanivska, *Culture of management: teaching manual*, Kiev, ICTS Publishing House "Politehnika", 2005.

³ Des. Derlow, *Key management decisions: Technology of Decision Making*, Kiev, Naukova dumka, 2017.

⁴ S. B. Zharaia, "Development of communicative competence of heads of educational organizations in the system of postgraduate education", in *Current problems of public administration, pedagogy and psychology*, 1 (8), (2016), pp. 77-81.

⁵ L. M. Karamushka, *Psychology of Educational Management: teaching manual*, Kiev, Lybid', 2014.

⁶ S. L. Markov, "Psychological factors of managerial competence of the manager", in S. D. Maksimenko, L. M. Karamushki (Eds.), volume 1, *Organizational Psychology*.

⁷ I. R. Petrovskaia, "On the Problem of Personal Development of Educational Leaders", in *Conf. Proc. on Management in Education*, April 14-16, 2011, pp. 247-248.

⁸ N. I. Pinchuk, "Content and components of psychological training of managers and staff of educational organizations for work with gifted children in postgraduate pedagogical education", in S. D. Maksimenko, L. M. Karamushki (Eds.), volume 1, *Organizational Psychology*.

⁹ G. Ponomareva, "Formation of the pedagogical professionogram: traditions and innovations of the high school", in V. I. Sipchenko (ed.), volume 3, Ch. 2, *Humanization of the educational process: collection of scientific papers*, Slavyansk, SDPU, 2015, pp. 33-40.

Banks, A. Grum, A. Oppenheim,¹⁰ R. N. Maydment, R. N. Bronshtein,¹¹ R. Mendel,¹² who developed business and pretend game, note that as a result of the game, its participants learn the technique of decision-making, understand the need for theoretical training for practical work.

T. M. Khlebnikova,¹³ Ch. Elgger¹⁴ say, that according to this game, they get familiar with the problems and difficulties that may occur in real activity. As R. Dawson¹⁵ notes, it develops the skills of interaction with others participants. According to L. Olivas and I.V. Newstrom,¹⁶ a person learns to perform roles. R. Dawson¹⁷ especially states that in the game there is a role-based behavior. M. Beckmann¹⁸ also points out that the game with traditional teaching methods not only transmits a certain amount of knowledge, but primarily develops the ability to analyze, synthesize and use the received information. According to C. Grinblett, R. Duck,¹⁹ all this is possible due to the fact that the games allow you to get a complete picture of reality by reproducing only the essential components of the system, reducing the time and space intervals, the ability to repeat game, and so on. Pretend game increase the motivation of learning through involving its participants in the situation (R. N. Maydment, R. H. Bronstein),²⁰ creating an informal learning environment (L. Olivas, I. V. Nustroma),²¹ the need for quick action (Ch.

¹⁰ M. Banks, A. Grum, A. Oppenheim, "Gaming and simulation in international relations", in *Political Studies*, 16 (1), (1968), pp. 27-35.

¹¹ R. Maydment, R. H. Bronstein, *Simulation games: Design and implementation*, Zanesville, Ohio, Columbus, 1973.

¹² R. Mendel, "Political gaming and foreign policy making during crisis", in *World Politics*, 30 (4), (1977), pp. 610-625.

¹³ T. M. Khlebnikova, *Business game as a method of active teaching of the head of the university: teaching methodological manual*, Kharkiv, Osnova, 2015.

¹⁴ Ch. Elgger, "Use of the inter-nation simulation in undergraduate teaching", in H. Guetzkow (ed.), *Simulation in international relations: Developments for research and teaching*, New York, 2003, pp. 150-189.

¹⁵ R. Dawson, *Simulation in social science*, New York, 1962, pp. 1-15.

¹⁶ L. Olivas, I. W. Newstrom, "Learning through the use of simulation games", in *Training and Development Journal*, 35 (9), (1981), pp. 63-66.

¹⁷ S. L. Markov, "Psychological factors of managerial competence of the manager", in S. D. Maksimenko, L. M. Karamushki (eds.), volume 1, *Organizational psychology*.

¹⁸ M. Beckman, "Evaluating the case method", in *The Educational Forum*, 30 (4), (1992), pp. 231-237.

¹⁹ K. Greenblat, R. Duke (eds.), *Gaming-simulation*, New York, 1975.

²⁰ R. Maydment, R. H. Bronstein, *Simulation games*.

²¹ O. V. Kozlova, *The correctional game method and its role in professional development of staff*, Moscow, Znaniye, 2017.

Elgger),²² ensuring the realization of different motives for various categories of participants (T. O. Kudryavtseva,²³ I. Orbech).²⁴

There are warnings together with the positive assessments of the use of pretend game. K. Cohen and I. Fenman²⁵ point out a number of constraints that must be taken into account using them. V. S. Wincstrom²⁶ notes the danger of false conclusions that participants can make from the game, the lack of knowledge transfer to the real activity process, because the realism of the game situation is doubted. There are also described failures in such game, for example, turning them into conferences or seminars. O. V. Kozlova,²⁷ K. Cohen, I. Fenman²⁸ find the reasons for these failures in that the participants of the game are poorly acquainted with the problem which is the base of imitation, they are unable to correlate the desired goals with their capabilities, and according to K. Cohen²⁹ there are a lot of factors which are involved in the game. On the other hand, it lacks the confidence of the decision that is made in reality.

The main theoretical basis for conducting of pretend game for learning purposes is behaviorism. The laws of training formulated by N. Latigina,³⁰ K. Greenblat and R. Duke³¹ correspond to the practice of conducting business and pretend game. However, one of behavioral principles of education remained unspecified: it is pretended that in the game, like on practice, takes place the acquisition of knowledge and skills

²² Ch. Elgger, "Use of the inter-nation simulation in undergraduate teaching", in H. Guetzkow (ed.), *Simulation in international relations: Developments for research and teaching*, New York, 2003, pp. 150-189.

²³ T. O. Kudryavtseva, "Business game as a means of preparing future managers for solving problem situations in professional activity", in *Actual problems of public administration, pedagogy and psychology: collection of scientific papers*, 2 (9), (2014), pp. 304-308.

²⁴ E. Orbech, "Simulation games and motivation for learning: A theoretical framework", in *Simulation and Games*, 10 (1), (1979), pp. 3-40.

²⁵ K. Cohen, E. Fenman, *The role of management games in education research*, New York, 1975.

²⁶ W. S. Wincstrom, "The serious business of business game", in *Management Record*, 22 (2), (1989), pp. 1-9.

²⁷ O. V. Kozlova, *The correctional game method and its role in professional development of staff*, Moscow, Znaniye, 2017.

²⁸ K. Cohen, E. Fenman, *The role of management games in education research*.

²⁹ K. Cohen, "Political gaming in the classroom", in *The Journal of Politics*, 24 (2), (1992), pp. 367-381.

³⁰ N. Latigina, "Business game as simulation active teaching method", in *Intl. Conf. Proc. on Innovation development of higher education: Abstracts of reports*, March 10-11, 2016, pp. 172-175.

³¹ K. Greenblat, R. Duke (eds.), *Gaming-simulation*.

through attempts and mistakes. You can be mistaken only during the game, because the price of this error is not the same as in real life.

Methods

The purpose of our article is to determine the ways of forming the mental set of participants in educational activities for managing higher educational institutions.

Authors formed the psychological mental set of the participants of educational activity for management of higher educational institutions by method of raising the level of psychological mental set of the participants of the educational process for management of higher educational institutions. We identified it as a method of correction game. The correction game, in its turn, was conducted in the natural conditions of the educational process participants' activities in the form of psychological and managerial training, which, in its external appearance, is a measure taken by a psychologist with a person who is not ready for such activity.

The main sense of this measure is to change certain personal characteristics - the conceptual and value orientations of each subject of management activity according to innovations in higher education institution and to find out the influence of this changing on their age, intellectual and characterological peculiarities. At the same time, the effectiveness of this kind of management is conditioned not only by changing goals, tasks and methods of activity, but also by the formation of a positive manager's I-concept.

Results

The conditions of the formation of person's mental set in educational activity for management of higher educational institutions were developed and experimentally tested by us during the formation experiment. It was tested during 2014 -2017. The main purpose of this test is to form the psychological mental set of the participants in the educational process for management of the higher educational system, namely: restructuring certain personal characteristics - the conceptual and value orientations of each person for management activity according to innovations in higher education institute and the clarification of the impact of this restructuring on their age, intellectual and characterological peculiarities. At the same time, the effectiveness of this kind of management is conditioned not only by changing goals, tasks and

methods of activity, but also by the formation of a positive I-concept of a manager.

In accordance with the goal of the forming experiment, the main tasks are defined: to develop and experimentally verify the system of psychological factors and conditions for the formation of the psychological mental set of person in educational activity for managing the higher educational institutions.

In order to realize the forming experiment there was created two groups with the same number of participants (314 persons of each group) - experimental and control one (among them there are 66 heads of, 82 university teachers, 78 parents of students and 88 students). These groups included an approximate number of men and women with the same age status (from 16 to 65 years old), who worked and studied at universities of the same level; had approximately the same experience of pedagogical activity (10 - 25 years) and management experience (5 - 15 years); belonged to the number of high school students; both groups improved the level of psychological mental set for the management of universities, but the experimental group had a systemic nature of such training, and the control group had a fragmentary one.

It is necessary to pay attention to the fact that during the game there appears the effect of social gain, or the effect of the audience. Impact is carried out not by any observer, but only by competent one, meaningful for the performer and able to give an assessment. The more competent and meaningful is the observer, the more meaningful this effect is as well. Thus, the presence of an external observer increases the motivation of the subject. So, it can either improve performance, or lead to "remotivation" and cause a breakdown of activities. All variants of the behavior in the forming experiment can be explained by actualization of the same motive - the desire for positive self-representation, it means the desire to look better as much as possible.

Based on the above-mentioned, the correction game was conducted in the natural conditions of the participants in the educational process as psychological and managerial training, which has an external appearance of a measure that could be carried out by any educational process participant with a high level of psychological mental set for managerial activity related to innovations at the universities, and by the psychologist with the person who is not ready for such kind of activity. This event is conducted within the educational institution on the sidelines of the educational process, which is called as "correction game". The purpose of this psychological training is to achieve the success of the participants in the educational process in the field of

management activity and interaction with other people (administration, teachers, parents of students and students), in which they were previously unsuccessful. The psychological basis of such correction work is the process of hypercompensation, which takes place under the specially designed requirements of maximum favorability and in the process of pretend activities.

The purpose of the training is to get the experience and improve the skills and abilities of the management action of all participants in the educational process. Its tasks are: to summarize the received knowledge and experience of managing higher educational institutions; to connect theory with the practice of university management; to develop the skills of analyzing pedagogical and managerial situations, to react promptly to them by making managerial decisions, to predict possible results; to form and develop managerial experience in all participants of the educational process.

During the process of conducting psychological and management correctional training, the listeners and the leader evaluate a certain situation with a particular problem: the goals are set for its realization in practice; the plan is projected to be real and perfect. Targeting is the process of correlating two plans: the plan of real reality and the plan of the ideal model. Real reality means the reality in which the person participates, and the ideal model means a certain perfect result of the activity. The basis for changing the style of relationships (for example, an administrator with a student in the conditions of democratization) is getting a reflexive position over real-life plans and an ideal model in their relationships. As a result, the output of this process in this training may be a developed targeted integrated program. In these conditions, the participant of the training, which builds the model, acts as the creator of his own and collective future activities, detects errors and contradictions in it, designs its realization in real time.

Therefore, the following features of the method of psychological and managerial training are:

- 1) The most important element of psychological and managerial training regarding the open psychological training is that the participant of educational process gets the success of reality and the high personal and social significance. The positive dynamics of correction is reflected by the improvement of its setting, it means the improvement of positive attitudes in previously unsuccessful spheres, based on its positive experience, strong sides, it seems that he “accidentally” has skills of previously unrelated activities and involves in previously unfeasible and psychologically inaccessible interactions and relationships.

Psycho-management training can be called a game of the specific role distribution in this type of activity. In such a way, there are always (one or several) main characters in this game - the administrator, teacher, students or their parents who must succeed, expand their adaptive activity and behavioral repertoire. There is always a “director” who invented the content of the correction game, organized and conducted it, as much as possible contributes to the achievement of success by the main hero. There are also assistants of the director (manager), who divide into those who are familiarized with the course of correction work, and those who are not. Correction psychological-management game takes place “inside” of the usual educational activity and can take place during training, meetings, discussions, extra-curricular activities and other professional-significant events and situations. During this process the known role distribution in correction actions often does not coincide with the role distribution in the real activity of the administrator, teacher, student and his\her parents.

2) The method of psychological and managerial training reproduces a certain situation and human activity in it in its essential components. It also reproduces the facts taken from the reality, which allow us to explore the person and his/her activities in conditions that are as close to life as possible. Its realization is a specific activity, conditional practice in comparison with changed real reality. The construction of such training is primarily the construction of specific human activities, as a rule, a collective activity. The complete reproduction of a particular type of certain practical management activity in its essential components makes it possible to make the latter a subject of psychological analysis and study.

3) The method of psychological and managerial training involves the personality of the participants. The presence of personal engagement of participants in the evolving situation, the expression and depth of experience during its conduct is a strong empirical fact. It is an emotional saturation and emotional tension which indicate an increase of the motivation of this kind of activity, rise of interest to the studied subject. This method is important for its participants due to the proximity of simulated situations to real ones, and it allows you to get acquainted with management activities, study the simulated reality, test yourself, opportunities in practice, demonstrate your achievements in a prestigious field and so on.

4) Reproductive activity is carried out in the conditions of relative uncertainty in relation to the decision which will be taken. This uncertainty is given differently: in the case of “hard” imitation, there is a

choice of the alternative solutions in the “free” imitations that are closest to the real-life conditions it means that the participants form themselves problems, decisions and actions. In some cases, participants clearly set the goal and the way for winning in this game, in others cases, there are situations that give gamers more freedom, they can set goals themselves and use it for achievement. But at the same time it is necessary to pay attention to the fact that this type of correction game often reproduces conflict situations, and then the choice of a decision can be more dramatic.

5) Comparing this type of psychological and managerial training as a pretend game with other correction methods and the study of personality, it should be noted that it also has a number of advantages compared with laboratory methods. This is determined by the fact that it gives the opportunity to observe the actual personality manifestations, his/her life, and don't restrict of the results with a retrospective nature. Game situations are perceived by the participants not as a special experimental situation, but as a continuation of their normal life, real life situations. Along with the proximity of imitated situations to the real life of the participants, they are model ones, so the process of manifestation of the individuals could be only relatively controlled. The structure of the pretend game, the rule availability, the ability to control the conditions, create typical situations, introduce certain features of game imitations clearly distinguish it from such methods of psychological research, as observing behavior in the natural conditions, and so on.

6) Correction game is used as a model of possible future managerial situations, events. It involves psychologically different groups of those under research, explores the role of personality factors in the formation of specific management decisions. It has predicted a possible result of events that are modeled in reality.

7) The logic of this method leads to approach, when study and correction of the participant in the educational process is performed through its targeted change, the influence on it during the pretend game. In this case, this method can be considered as psychotherapy and diagnosing at the same time. It allows purposefully to create programs for changing one or another behavior aspect and solve a unique problem of each individual because of a sufficiently hard structure and a rule system.

8) The method of psychological and managerial training primarily serves as a method of studying the integrity of the management of higher education institutions. The subject of analysis is a complex-organized and multilevel human activity that is modeled. Therefore, it is proposed

to use pretend game for modeling and studying decision-making processes in management activities. It has suggested to carry out a normative description of the organization's activity and decision-making process at a certain level. Then the real actions of the studied subject relatively to the normative organization are errors or deviations from the required norm.

9) Psychological and management training is as an active method of training. In modern conditions of practical management activity which is changing rapidly, a person is required to be able to quickly and accurately choose a solution and implement it in practice. At the same time, the price of a possible error has sharply increased, and as a result, the responsibility of the person for the chosen decision has increased as well. The task was to find new teaching methods that would give the opportunity to teach practical management even before the actual situation has come and the real activity has begun, teach such experience that cannot be translated into words and which is acquired only in the process of action, participation, making decision. Correction, pretend game corresponds to this task most of all, because of managerial activity imitation.

Summarizing the successful practical experience of the author, which is given in the provisions provided for preparing and conducting a psychological and managerial correction training for increasing of the level of psychological mental set for management activity of the participants in the educational process, we've got the following scheme of preparation and implementation of correction activities of its setting: diagnosis (preparatory stage), modeling of correctional psychological and managerial training, preparation of correction work, implementation of correction work, securing of positive settings.

During the diagnostics, the direction of activity of the participant in the educational process, its setting, emotional content, interests, sociometric status and other is determined. It is conducted a purposeful search of the person's positive features and his/her psychological problems. There are determined the types of activities during which those positive and negative settings manifest.

During the modeling of correctional training, there is modeled such an activity, which could relate to the previously unsuccessful activity (positive settings). However, it is necessary to take into account the characteristics of the participant in the training and the social situation of its development, activity, competence.

The preparatory stage of the psychological and management training is completed by the preparation of the correction training. A

psychologist with an administrator, teacher, student or his/her parents, unnoticeably prepare the participant of the educational process for a certain type of activity and favor the creation of conditions aimed at achieving the person's success in this type of activity.

The implementation of correction work takes place when a psychologist involves a personality in a psychological and managerial correctional training, directs the course of this developed action.

In the case of a successful completion of the correctional training, a psychologist helps a participant to realize his/her success, then prepares the next correctional training, as a result it goes to direct training.

In the case of failure, timely intervention of a psychologist should make this failure the least noticeable. Interpersonal support is organized. Than everything repeats from the first stage – a diagnostics with the aim to find the way into psychology of the participant of educational process, more precisely, it should identify his/her problem and strong suit. Analysis of unsuccessful cases of training showed that in the untrained participants in the educational process for management activities, the motivation of preventing failures prevails over the motivation of achievement.

The results of the forming experiment, first of all, express significant changings in the peculiarities of all participants setting in the educational process according to their emotional evaluation and content (as a result of content analysis). The received results in this part of the experiment were evaluated on the basis of criteria which are related directly to the formation of the psychological mental set of the participants in the educational process to manage higher education institutions.

A comparative analysis of the results of the first (before the forming experiment) and the second (after the completion of the forming experiment) sections which were performed in experimental and control groups, showed that there is a dynamics of certain components of mental set in the experimental group, and there is no such dynamics in the control group.

Basing on the obtained data, we can conclude that according to the experimental group there are statistically significant differences ($p < 0,01$) between the results of the first and second sections. So the number of persons of (1) level has increased from 11.1% to 34.5%, and of sufficient (2) level – from 14.65% to 43.15%. Conversely, the number of persons of an average (3) level of readiness dropped from 39.2% to 13.1%, and of the low (4) level - from 35.05% to 9.3%.

Discussion

The results of the experimental study indicate that it happened in result of decrease in the groups of the number of persons of “average” and “low” levels of psychological mental set of the participants of educational process for management of higher educational institutions.

Basing on the analysis of the problem and the solution of the tasks that we have set, we can make the following **conclusions**:

Our research proved that the effective formation of the psychological mental set of participants in educational activities for management of higher educational institutions is possible as a result of the restructuring of certain personal characteristics: semantic assumptions, value orientations of each subject of management activity; finding out the influence of this restructuring on their age, intellectual, characterological features; differentiation of the content and organizational forms of psychological training for different categories of participants in the educational process.

Psychological and management training for the management of universities, promotes the development an experience and improve skills and abilities for performing administrative actions of all participants of educational activities and discoursing the problems of the scientific base for universities management, increasing an interest in the theory, generalization of knowledge and management experience, connecting theory and practice, developing skills in analyzing teaching and managerial situations, react quickly for management decisions and predict possible results. The psychological basis of such correction work is the process of hypercompensation, which takes place in specially created conditions. The main features of this method are: assigning the high personal and social significance to the success achieved by the participant in the reality educational process; reproduction of managerial situations taken from the real life, which allows to explore the person and his/her activities in conditions that are as close as possible to life; and it performs as an object of innovative influence and is a mental, activity equivalent of the management process; it promotes awareness of the correlation between gaming and real activity; it is used as a model of possible future managerial situations and events where psychologically different groups of persons take part. The study and correction of the participant in the management process is carried out through its targeted changing, influence him/her during the pretend game and it acts as a method of study of integral activity and is an active method of training.

A correction measure proposed by us regarding the increasing of the level of psychological mental set of the participants of educational activities to the management of universities has proved its expediency and effectiveness at the level of educational and managerial processes, which is confirmed by mathematical calculations.

We consider promising the studies concerning the means of formation of an effective management team, the development of psychologically proved technologies for solving of actual managerial problems in higher educational institutions.