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# Educational Institution Health Service Management: Key Aspects of Communication and Interaction Within the Team

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### ABSTRACT

The relevance of the researched problem is caused by the need of ensuring effective interaction of the main members of management of health saving activities - heads of structural subdivisions of the Health Service (HS) of an educational institution. The purpose of the publication consists in the development of conceptual provisions for ensuring interaction of the main members of the HS management team. Systematically-activity approach is a leading approach to research of this problem which allows us to research activities of heads of structural subdivisions of the HS as an object of management and as subjects of a small group. Managers' activities of structural subdivisions of the HS are researched as the object of management and as activities of interaction of its members are disclosed; the model for aim coordination by the team members, the stages and the principles of this coordination are provided; the criteria of formation and development levels of health care management team and efficiency of its members' interaction are highlighted. The materials of the publication can be useful to heads and managers of educational institutions regarding the organization and ensuring effective management of health saving activities in the organizations, by means of ensuring interdepartmental integration of the leading experts involved in activities for preservation and promotion of the student health.

#### **KEYWORDS**

Criteria and an expert evaluation of the development level; interaction of team members; management team; model of aim coordination; the Health Service (HS) of an educational institution ARTICLE HISTORY Received 03 April 2016 Revised 24 June 2016 Accepted 24 June 2016

### Introduction

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The efficiency of educational institutions' operation for preservation and promotion of student health (as well as other members of educational process) provides inclusion in this type of educational activities the considerable number of specialists of various profiles (physical culture, biology, psychology, etc.) and

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various departments (education, health care, social services, etc.). The need of ensuring interaction of these specialists is caused by specifics of the health saving activities providing many-faceted impact on a person in goal achievement of preserving human health: ensuring physical, psychological and social wellbeing. In turn, consolidation of considerable number of specialists and ensuring coordination of their activities causes allocation at the expense of internal reserves of the educational organization of a structural department – Health Service, or creation of the relevant coordination center (Kazin, Blinova & Litvinova, 2000; Kolbanov, 2000; Le-van et al., 2014; Tretyakova & Fedorov, 2014; Fedorov & Tretyakova, 2015; Kalimullin, Vlasova & Sakhieva, 2016).

The structure of the HS would depend on the directions of health saving activities implemented by an educational organization. It is found that the main ones are the following (Tretyakova & Fedorov, 2014; Fedorov & Tretyakova, 2015):

1) the medical, sanitary and hygienic support connected along with providing the proper sanitary and hygienic conditions of educational process, the need of medical support for students (as well as other members of educational process), carrying out work on diagnostics of a health condition with the subsequent analysis and development of the appropriate recommendations, and acceptance of preventive measures;

2) forming of a health-oriented personal attitude of students by pedagogical means which causes the need of theoretical and methodological projects on reasons, determination and effective application of pedagogical technologies, methods and forming means of tutors' experience over health saving activities and motivation to active search of the optimum strategy directed to updating of their health saving potential, i.e. forming of readiness to health-oriented activities;

3) *fitness and health recreation support* is determined by the special importance of physical training and development of required physical qualities creating potential physical health; this direction provides the corresponding theoretical and methodological developments on reasons, determination and effective application of fitness and health recreation technologies, methods and means in educational process;

4) *psycho-pedagogical support* connected with the need of student maintenance by means of implementation of systemically and individually enriching and correctional oriented programs;

5) monitoring the level of physical development and health condition of the students is determined by the need of collection, operational handling, systematization and storage of information on a health condition of the trainees for the purpose of identification of risk factors and timely implementation of the adjusting and warning actions providing the corresponding substantial, organizational and managerial developments on carrying out monitoring.

Taking into account the directions of health saving activities in the HS as a relatively independent structural organization, it is reasonable to allocate structural subdivisions which certain powers and responsibility are assigned to: 1) medical, sanitary and hygienic; 2) valeological and pedagogical; 3) fitness and health recreation; 4) psycho-pedagogical; 5) monitoring. Their managers are in charge of subdivisions' work; all activities of service are coordinated by the HS Manager (facilitating agent of health saving activities) endued with appropriate authority (Tretyakova & Fedorov, 2014).

The given structure of the HS allows to part spheres of competence of various areas specialists involved in health saving activities of the educational organization without assuming at the same time dissociation of their efforts and providing preserving strategically single vector aligned on goal achievement –

preserving the student health. Meanwhile, the problem of interdepartmental integration is still unresolved in practical activities of the HS (Tretyakova, 2011; Tretyakova & Andryukhina, 2012). The main contradiction is the discrepancy between the need of effective interaction of both heads of structural subdivisions of the HS and the key employees involved in health saving activities of an educational institution (health workers, teachers of physical culture, social workers, psychologists and others) taking into account their interdepartmental dissociation and specialization and unreadiness of conceptual provisions for ensuring these interaction acts.

In this regard, the development of conceptual provisions for ensuring effective interaction of heads of structural subdivisions of the HS in educational institutions is becoming relevant. For achievement of a stated objective, it is necessary to solve the following problems: 1) to research activities of the leading experts of educational institutions involved in health saving activities as members of a small group, and one of management objects; 2) to disclose conditions of forming of health care management team; 3) to research processes of interaction of members of health care management team; 4) to develop a model of goals' agreement by the players of health care management team, disclosing the stages and the principles of this coordination; 5) to provide the criteria and to carry out an expert evaluation of formation and development level of health care management team, and efficiency of interaction of its members.

### Materials, Methods and Methodological Framework

### Research methodology

The leading methodological basis for identification of a systemically important factor in the organization of interaction of heads of structural subdivisions of the HS lies in the system and activity approach (Bespalko, 1990; Leontyev, 1977; Lomov, 1996; Rubenstein, 1999), which provides elimination of interdepartmental dissociation and divergence of the employees involved in activities for preservation and promotion of the student health by means of systematic agreed purposes, values, actions, and also integration of separate functions, in general system of managerial interaction.

The methodology of the research is enriched by: 1) management theory (Milner, 2002; Fayol, Emerson & Taylor, 1992; Falmer, 2005) according to which development of any activities surely assumes management of it that has formed the basis for allocation in the educational organization of specific structural subdivision, more specifically the HS and the organization of work as on management of this structure development, and in general to all health saving activities of the educational institution; 2) theory of the organization of group activities and management of it (Weber, 1997; Prigozhin, 1995; Umansky, 2001), which has become the forming basis of structural subdivisions management team of the HS of an educational institution according to the principles of designing and development of small groups. *Research methods* 

The complex of methods is used for the solution of the research tasks: 1) theoretical: analysis of methodological, psychological and pedagogical, economic literature; studying of directive, regulating and program and methodical documents in education; system analysis; generalization; modeling; 2) empirical: studying and generalization of pedagogical experience; complex of sociological methods: generalization of empirical material; supervision; analysis of products of activities; method of expert evaluations; experimental and search work. *Experimental and search base of the research* 

Experimental and search base of the research is presented by the general education establishments of the cities of Novosibirsk (No. 27), Novouralsk (No. 41,

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61), and also the professional educational establishments of the cities of Novouralsk (Novouralsk Branch of Sverdlovsk Medical College) and Revda (Revda Branch of Sverdlovsk Medical College).

### Results

# Operation of the leading experts of an educational institution involved in the management of health saving activities as members of a small group

Within the considered problem, activities of the leading experts of the educational institution involved in health saving activities are becoming one of objects of management. It can be characterized as the psychological and pedagogical interaction caused by social and psychological characteristics of corporate employees (as cumulative subject of a labor activity) and features of direct activities (Davydova, 2010; Zhuravlev, 2005, 2009; Karibyants, 2003). In this regard, activities of the leading experts of the educational establishment involved in health saving activities as object of management need to be considered in furtherance of procedural individual components, distinguishing characteristic of the personnel and educational institution in general.

The idea of group corporation of heads of structural subdivisions of subject to management in a specialized group is quite reflected by the concept "management team". It is a certain administrative unit (set of closely related employees) performing certain tasks. In the researched context the term "team" underlines target interrelation of groups of people between professional and personal bases that implies a possibility of accomplishment of collateral actions in achievement of the collectively programmed result. An adjective "managerial" emphasizes the semantic-content focus of professional team activity.

Management team is presented by the researchers as the system phenomenon created in the educational organization for the purpose of the solution of social and pedagogical, educational and managerial tasks (Vershinina, 2001; Zhuravlev, 2009; Karibyants, 2003). The team itself makes possible to overcome isolation of its members, to provide a democratic leadership style, to adjust interrelation of the business relations and personal contacts of employees.

From a perspective of social psychology (Zhuravlev, 2005; Nemov & Altunina, 2008), the HS managerial team can be considered as an elementary small group (group from 2 to several tens of people; notably in our case, the most effective is group of 5 people that corresponds to the number of main directions of health saving activities of the educational institution) including the insignificant number of the people who are residing one with another or located close to each other.

Adhering to the traditional views of group as the community of people limited in sizes, creation of the HS management team is performed on the basis of the following features: structure, social set-up, nature of the carried-out activities, ego level, etc. At the same time, an essential feature of health care management team as a small group and the compulsory provision of its origin is the orientation on joint activities, i.e. health saving.

The HS management team reflects in itself social relations and refracts them in intra group; consequently, a generic indicator of a small group lies in its belonging to a social group, and specific – direct and steady personal contact. Thereby, it is a complete system wherein all inherent features in the system are reflected (Bespalko, 1990; Lomov, 1996). At the same time, being a complete system, a small group shows a relative self-sufficiency and in this sense, the HS is the isolated structural subdivision of an educational institution.

The HS management team as a small group and a specific type of a human community is characterized by the following so significant characteristics for productivity of health saving activities: direct contact between its members, their interpersonal interference and interaction; a solidarity in purposes, motives, mindsets, values and norms concerning health and activities for its preserving and strengthening in the educational establishment; an internal dispersal of the functions and group roles reflected in the directions of health saving activities; specific localization and the widely-known stability through time.

One of the modifications of a small group is the team. In the Russian scholarship, research works by A.L. Zhuravlev (2005), R.S. Nemov (1982), N.N. Obozov (2012), L.I. Umansky (2001) etc. are devoted to the social and psychological aspects of the team. Considering the team as a special high-quality condition of the small group which has reached the high level of socialpsychological maturity, it becomes important to provide this growth to the HS management team. There are all suppositions, since group employment by socially valuable and personally significant joint activities (involving activities for health protection of the child) can characterize it as a group of high development – namely, the team. Respectively, it is important to provide development of nominal consolidation of heads of structural subdivisions of the HS as a small group to the level of the team.

Based on L. I. Umansky's researches (2001) we allocate three sets of structure of the team which in relation to the HS can be characterized as follows:

1) the social set (includes a social orientation on preserving the student health, discipline and readiness of the team players to health saving activities reflecting the corresponding ideological, managerial, vocational and business spheres of group activity of the HS);

2) the personal set (connects intellectual, emotional and volitional communicativeness reflecting relevant parties of consciousness and lifesustaining activity of the specialists entering into the HS);

3) the set of general qualities (includes psychological and pedagogical characteristics of the team of the HS, such as integrity, microclimate, referentiality, leadership, inter-and enter-group activity).

In the development of the HS from the level of a small group to the level of a team it is necessary to take into consideration a number of the psychological and pedagogical phenomena (Maxwell, 2001; Stewart, Manz & Sims, 1998; Umansky, 2001; Huszczo, 1996), arising during interpersonal interaction in groups and finding reflection in characteristics of the team: 1) an orientation – a social value of the purposes accepted by executives of the HS, motives of activity, valuable-oriented and group norms; 2) self-discipline – ability of managerial staff of the HS to self-management; 3) competence– readiness of managerial staff of the HS for a concrete type of health saving activity, formation of knowledge, abilities, skills necessary for this purpose; 4) intellectual communicativeness – emotionality of interpersonal communications of members of the HS, the loudspeaker of an emotional spirit and its emotional potentials; 5) strong-willed communicativeness – ability of the HS managerial staff to resist to difficulties and obstacles, resistance to stress.

Among the most important parameters of the team which are shown in joint activities and can serve as criteria of efficiency of such activity, the researchers allocate: collectivism, team spirit, responsibility, self-discipline, openness, an information awareness and sociability (Nemov, 1982; Umansky, 2001). Efficiency analysis of team performance has shown that the key impact on it is exerted by such changes which take place out of structural and formal parameters of the team (composition, size, a general task), namely in the relations, characteristic of the team activities. Therefore, the level of development of the HS depends on a capability of its members to establish the purposes, to build and to change flexibly the structure of mutual relations and interactions. It is important to consider that 2846 00 N. V. TRETYAKOVA ET AL.

the most considerably managerial functions affect characteristics of the team: intensity and methods of interaction between structural subdivisions of the HS; methods of vertical and horizontal coordination of health saving activities; extent of centralization of managerial system of the HS; the prevailing principles and the range of internal control, etc.

### Conditions of forming of the HS managerial team

Important condition of forming of the HS management team is the clear understanding of phases of development of command tendencies in groups (Zhuravlev, 2005; Nemov, 1982; Maxwell, 2001; Huszczo, 1996):

 $\Box$  a blueprint phase of structure and tasks of the team (the HS Manager needs to represent distinctly a task which the management team is formed for; to consider the specific knowledge and abilities of the team players necessary for accomplishment of tasks; to delegate their rights, duties, powers);

 $\Box$  a phase of the organization of conditions for productive work of the team (the process of determination and the organization of necessary conditions for work of the HS management team providing allocation of the working place, the necessary equipment, financing, etc.);

 $\Box$  a phase of development of group regulations (the beginning of activities of the HS management team, implementation of the specific directions of health saving activities, wherein the management team would work in as something united in implementation process; clearness in allocation of responsibilities between the team players);

 $\Box$  a control phase (the HS Manager performs judgment of the reached level of development of the management team).

As can be seen from the above, having determined components (social and personal) of the HS management team as a small group, it is possible to program its system effect, stability, and activity-based efficiency.

### Processes of interaction of the HS management team players

The results analysis of empirical data of implementation and functioning of the HS indicate the need while forming the HS management team to pay special attention to processes of interaction of its members (as the objective and universal form of the process and development determining existence and the structural organization of any material system) (Tretyakova & Fedorov, 2014).

N.N. Obozov (2012) offers the participants interaction classification of joint activities which should be considered as a condition and level of forming of productive interaction of the HS management team: 1) a level of physical and/or social isolation; 2) a level of expected interaction arising in case of the need for communication; 3) a level of passive interaction (silent presence); 4) an interaction level as influence and interference; 5) a level of the valid interaction when actions of one member of the group are impossible without prior or simultaneous action of the others; 6) a level of collective interaction. The interconnection of the last level can be increased due to the strengthening of valuable-oriented unities of the HS management team by coincidence of personally significant and socially valuable content of joint health saving activities.

Successful interaction of specialists in the management process of health saving activities depends on a number of objective (external) and subjective (internal) conditions. The first are categorized as requirements of society, in particular, to the level of a student's health condition; the level of science development; a condition of vocational training of the experts implementing activities for preservation and promotion of the students' health; availability of objectives in regulating documents, the regulations and rules in the educational institution restricting health saving activities; personal and professional qualities of the head of the establishment and head of the HS, etc. It is necessary to refer strategy of educational organization development to internal conditions, the place of health saving activities in it; availability of corporate organisation (the HS); the level of professional competence of the specialists involved in health saving activities, their level of health culture, etc.

It should be taken into consideration that the organization of interaction between management team members of the HS is performed as intensive exchange of information, views, and emotions at the strategic, tactical and operational levels, also it is possible to single out the main tasks of the organization of such interaction:

□ reorganization of direct managerial impacts to cooperative system of communications on long term interests: establishment of the relations of subordination, cooperation, harmonization and feedback;

□ record maintenance of the development level of the HS team when using various ways of managerial impact;

□ establishment and making certain obligations under the employees, creation of the single status, regulation of compliance of the rights and obligations to content of activities and their individual features;

□ time-and-motion management with quality orientation;

□ prevention of possible negative consequences in case of interaction of the managed and managing systems.

# The model of an agreement of objectives by the HS management team members

The key aspect of the organization of interaction of the HS management team, in our opinion, is the pedagogical goal-setting as the process of projecting the transition from opportunities (education system potential) to reality (implementation of potential). While developing this vision, we have developed the model of an agreement of objectives by the HS management team members in the conditions of the modern educational institution which at the same time can act as a method of the research of the educational environment, as a starting point and also as the condition of reflexive judgment of objectives deepening understanding of health saving activities of the educational institution, an internal psychological state and boundaries of the personal liability the HS members (Tretyakova & Fedorov, 2014). This model includes personal selfdetermination of the HS management team members as a condition of formation of their subjective activity through awareness of specifics and the purposes of a health saving activities, and also the organization of a dialogue/polylogue for coordination of the purposes between them. The model acts as a necessary condition, process and result of the organization of health saving activities of an educational institution in the mode of self-development.

The implementation technology of an agreement of objectives model between the management team members of the HS includes a number of phases.

1). A preparatory phase (the HS management team members should identify and understand the potential of the educational institution development as basic value focused on health). At this phase, subjects of coordination are individual ideas on the system of values and problems determining the specifics of health saving activities. Phase tasks are the following:

□ determination of the organization capacity through the analysis of a number of indicators and factors: level of development of the educational institution at present; condition of external social and pedagogical environment

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(SWOT analysis); level of management aspiration of the educational institution concerning the prospects of health saving activities development; compliance of a labour potential to the level of management aspiration; level of motivation of a pedagogical staff; quantity and "pedagogical weight" of employees whose participation is taken into account by the management team; views of the management team and the employees on prospects and the possible directions of health saving activities development;

□ valuable and motivational attitude formation to long-term step-by-step activities for expansion of health saving activities and to finding of the perspective directions of its development (efficiency analysis of the existing directions of health saving activities and their prospects should be carried out in advance);

□ preliminary approvals of values by the HS management team members (fundamental psychological, philosophical, culturological bases).

2). The phase of new ideas quest of health saving activities development of the educational institution. In this case, new ideas are understood as not completely new, not applied before anywhere, but the new ones in relation to implemented in the educational institution earlier. Phases tasks are the following:

□ organization and carrying out of analytic and search (identification of cause-and-effect relations) actions for identification of new unique ideas and directions of enhancement of health saving activities;

 $\Box$  values coordination during the staff activity on search of ideas and the directions of health saving activities improvement;  $\Box$  priorities identifying.

Finding and coordination of new unique ideas and the directions must become the phase result from the perspective of the HS management team - a proto portrait-image.

3). The coordination phase of health saving activities by the HS management team members in terms of the system of single valuable bases. The main objective of this phase is the creating of content of portraits-images of ideas and the directions of health saving activities improvement in its purposes as both certain subjects of the management team, and the HS in general (as corporate member). Phase tasks are the following:

□ providing the HS management team members with sufficient standard, technological, substantial, communicative and other information on ensuring processes of health saving activities;

 $\Box$  objectives modeling of the perspective development of health saving activities;

□ preliminary objectives coordination.

4). Development phase of target development programs of health saving activities. The phase purpose – development, coordination and creation of a single program of health saving activities development of an educational institution. Phase tasks are the following:

□ advancing development of the HS management team members of skills for research activities in the direction of preserving the students' health;

□ program elements designing of health saving activities development of an educational institution;

□ public coordination of contents of the program taking into account results of internal examination (the educational and methodical committee, pupil's/student's conferences, etc.);

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□ approval of the agreed development program of health saving activities at the higher council of the educational institution (a faculty/academic council).

5). The phase of the program presentation of the health saving activities development of an educational institution. Coordination provides external examination of the program content. Phase tasks are the following:

 $\Box$  preparation for the program presentation of the health saving activities development of the educational institution;

□ identification of perspective external relations.

The phase result shall be an understanding by the HS management team itself as an active subject of social transformation of the environment.

6). The phase of expansion of the team work on carrying-out of the development program of health saving activities of the educational institutions. Phase tasks are the following:

□ system-based, planned accomplishment of actions for the health saving activities program implementation;

□ flexible adjustment of the purposes and tasks of health saving activities according to the changing conditions;

□ results monitoring and efficiency analysis of health saving activities.

The phase result shall be a step-by-step formation of a mechanism of continuous objectives coordination by the HS management team members during the program implementation.

We have distinguished the principles for interaction implementation among the HS management team members:

 $\Box$  education humanization – commitment of the HS management team members to humanistic values in the process of interaction with participants of health saving activities. Activities of managers of structural subdivisions of the HS shall be characterized by a humanistic commitment: an authority delegation both at the level of the HS, and at the level of all educational institution; stimulation and encouragement of new ideas, etc.;

□ consensus and encouragement of disagreements – an opportunity to each member of the HS management team to state own point of view, and to consider mistakes as a possibility for self-improvement;

 $\Box$  single status – provision of equal opportunities to all HS management team members regardless of the status and a current position;

□ implicit control – rendering trust and respect for colleagues as a condition for maintenance of creative work and an initiative;

□ the maximum authority delegation – development of horizontal communications between the members of the HS management team and other employees involved in health saving activities; that is the HS Manager's delegation of some authorities and functions to divisional managers:

□ integrity of cooperation arrangements of the HS management team members- a reference point on the level of professional competence of the management team members; substantial integrity (purpose, tasks, conditions, achievement methods, result); an integrity of the professional environment (interaction in various combinations); integrity of forms of professional selfimprovement (a combination the organizational forms with the expressed orientation to subsequent self-development). 2850 OO N. V. TRETYAKOVA ET AL.

### Criteria and expert evaluation of the formation and development level of managerial team of the Health Service: efficiency of interaction of its members

We have carried out the academic works analysis on research of problems of people community management (groups and staff) for the purpose of identification of the criteria reflecting the conditions of forming of the HS management team (Davydova, 2010; Zhuravlev, 2009; Karibyants, 2003; Maxwell, 2001; Nemov, 1982; Stewart, Manz & Sims, 1998; Umansky, 2001; Huszczo, 1996). That has led to the identification of a number of the essential characteristics reflecting the essence of the labour collectives used by us for estimation of the developmental level of the HS management team:

□ focus as a decisive impact on interaction of joint health saving activities members that is exerted by accurately formulated purpose caused by group interests, social attitudes and views;

□ motivation as the dynamic and concerned relation to joint health saving activities;

□ integration as a unity of the elements constituting health saving activities: interconnection degree, density, frequency and intensity of contacts between members of managerial team of the Health Service;

□ structure as accurate allocation of responsibilities, the rights and obligations between the members of the Health Service management team;

□ coordination as mutual "teamwork" of employees;

□ self-discipline as orderliness and subordination to a certain order of management and performance of joint activities;

□ productivity as an ability to achieve the planned results during the joint health saving activities and interaction.

The use of the provided criteria makes possible to estimate the formation and development level of the HS management team, and interaction efficiency of its members.

Let's consider the dynamics of a developmental level of the HS management team of the educational institutions which have served as experimental and search base of research.

At the initial stage of experimental and search activities, the studying of divisional managers' coordination level has allowed to establish the insufficient level of their interaction and integration in achievement of effective objectives of health saving activities. Based on such a result, step-by-step work has been organized and carried out in the educational institutions (the provided earlier technology of implementation of the coordination model among the HS management team members) directed to increase of level of interaction and productivity of the HS divisional managers. The results of this work are unity, integration, high activity, increased self-management level, dynamism in implementation of agreed decisions of subjects of managerial team members of the HS. The expert evaluation of productivity is carried out by three groups of experts. Pedagogical staff of the educational organization has entered the first group of experts (internal audit); the second – specialists from the municipal district (external audit); the third group was directly constituted by divisional managers of the Health Service Departments (introspection).

The results of expert evaluations have allowed to establish the essential growth of the interaction and productivity level of the HS management team. So, average values of indicators (on five-point grading scale) at the initial stage of experimental and search activities and a stage of its formation, the main development of health saving activities in the educational institutions are the following: in the 1st group of experts the average values have constituted 3,07 ( $\pm 0,31$ ) points in case of an indicator error 0,29 and 4,68 ( $\pm 0,47$ ) points in case of an error of an indicator 0,23; average values of the 2nd group of experts have respectively estimated 4,06 ( $\pm 0,35$ ) points in case of an indicator error 0,24 points; in the 3rd group – 2,87 ( $\pm 0,14$ ) points in case of an indicator error 0,33 and 4,78 ( $\pm 0,32$ ) points in case of an error of an indicator 0,25 (figure 1). In all cases indicators are 3 times more and exceed the mistake, thus the results are considered to be reliable and representative (Glass & Hopkins, 1984). Total average value of a growth amounted to 1,28.

It must be noted that the group of external experts could give quantitatively reliable assessment only on three indicators of an assessment of interaction and productivity level of the HS management team – focus, structure and productivity, having an opportunity to examine confirming documents. To a large extent, subjective nature of an assessment of other indicators requires longer and closer studying. In this case "internal" expert evaluation appears more reliable, than the "external" one.



**Figure 1.** Distribution of average values of indicators of an expert evaluation of interaction and productivity level of the HS management team at the initial phase and developmental phase of health saving activities formation of an educational institution.

In general, the analysis of expert evaluations has given an option of confirming the fact that distinct distribution of functions, their integration in general system of managerial interaction, and also special activities for an agreement of the purposes and actions promoted consolidation of the HS management team members. Coordination of strategy of health saving activities development of educational institutions has become the result of this consolidation; clarifying and upgrading of tactical, current actions; possibility of constructive joint discussion of vital and urgent problems; efficient distribution of current activities within the general work management.

The coordinated work of the HS management team members promoted entirely high-quality transformation of health saving activities of the educational institutions, ensuring its efficiency. The results of these changes which prove the dependence of health saving activities quality of the educational institutions on the level of coordinated management by the team of HS divisional managers are 2852 00 N. V. TRETYAKOVA ET AL.

presented in the corresponding publications of authors of this research (Tretyakova & Fedorov, 2013, 2014; Tretyakova, 2015).

### Discussion

The review of psychological and pedagogical literature, studying of directive, regulating and program-methodical documents in education enable to state the lack of special researches devoted to a problem of elimination of interdepartmental dissociation and target divergence of actions of the employees involved in activities of an educational institution for preserving and strengthening of the student health.

The scientists have offered schemes of specialists grouping involved in this type of activities by means of creation of the valeological centers, valeological services, coordination centers (Kazin, Blinova & Litvinova, 2000; Kolbanov, 2000; Le-van et al., 2014; Tretyakova & Fedorov, 2014; Fedorov & Tretyakova, 2015). There are standard legal fundamentals for creation of such services in educational institutions, and it is important to distinguish the following:

1) The order of the Ministry of Health and Education of the Russian Federation "About improvement of system of medical support of children in educational institutions", d.d. 30 June, 1992 No. 186/272. The official paper provides the measures for the detailed practical solution of the health saving tasks set for the educational institutions which should be put into practice by health workers together with pedagogical staff as directly in the educational institutions, and in treatment-and-prophylactic institutions. The task of using more efficient organizational forms of a student medical support by the educational institutions is designated in this paper for the first time ever; taking into account local conditions and the available work experience, it is recommended to implement new organizational forms along with the present ones, for example, creation of the centers (departments) of child welfare.

2) The order of the Ministry of Education of the Russian Federation on approval of the Regulation on the Center of assistance to students' health promotion, pupils of educational institutions, d.d. 15 May, 2000 No. 1418. General provisions, purposes, tasks, the main directions and the organization of activities of the Center are disclosed in the document.

Certain practical experience of the HS activities is gained today (Kazin, Blinova & Litvinova, 2000; Kolbanov, 2000; Brooms, 2000). Nevertheless, such divisions do not solve the problem declared in this research, in consequence of inconsistency and divergence of actions of its members that mainly affects efficiency of health saving activities while its results do not justify resource costs of the educational institution.

Management traditionally acts as the condition of existence and systemically important sign of the organization (Fayol, Emerson & Taylor, 1992). An ultimate goal of management is an optimization of functioning of system, and achieving of the greatest possible useful effect with minimal efforts.

Using the management theory concepts (Milner, 2002; Fayol, Emerson & Taylor, 1992; Falmer, 2005) has allowed to apply the creation principles of the organization (division of labour, or specialization and structuring) in the process of creating the HS: as a result, we have provided the main activities, structural subdivisions and hierarchy of management (the Health Service Chief Manager (top-level managers) and divisional managers (middle-level managers)) of the HS.

The problem resolution of the organization of interaction of the HS divisional members as the main members of health saving activities became the following step. Scholarly works on group collective activities and management of it became the basis to search for solution (Weber, 1997; Prigozhin, 1995; Maxwell, 2001; Within the social psychology background (Zhuravlev, 2005; Nemov & Altunina, 2008) one of the modifications of group is the team – its highest stage of development which is characterized by the social-psychological maturity of its members. Considering a number of psychological and pedagogical special considerations (Umansky, 2001) of interpersonal interaction in groups, it has become possible to extract the main characteristics of the Health Service management team (an orientation, self-discipline, readiness, intellectual and strong-willed communicativeness) and stages of development of command tendencies; it has allowed programming its activity efficiency.

Studying the collective development, the researchers pay special attention to the interaction processes of its members (Trains, 2012; Maxwell, 2001; Stewart, Manz & Sims, 1998; Huszczo, 1996); that laid the basis to determine conditions (external and internal) and levels of productive interaction forming of the HS management. In this process of interaction the special part is assigned to a pedagogical goal-setting (Davydova, 2010; Karibyants, 2003); an agreement of objectives model of the HS management members in the conditions of the modern educational institution is developed on the basis of the process of interaction; the stages of its implementation are elicited.

Detailed studying of works on investigation of management problems of a community of people – groups and teams (Davydova, 2010; Zhuravlev, 2009; Nemov & Altunina, 2008; Trains, 2012; Umansky, 2001) has allowed to determine the criteria reflecting the formation level and development of the HS management team, and interaction efficiency of its members.

In general, the analysis of theoretical sources and empirical data has offered the possibility to come to the conclusion that purposefully processes of ensuring effective interaction of the main members of health saving activities of educational institutions — managers of structural subdivisions of vocational structural education – services of health, in the previous researches have not been considered yet.

At the same time, the results of this research on development of conceptual provisions of ensuring effective interaction of the main management members of health saving activities and its experimental and search approbation have shown that the reached interdepartmental coordination and centering of the directions of the employees actions of participating in activities for preservation and promotion of student health allow to provide the greatest productivity and efficiency of this type of activity, and decrease its recourse requirements. **Conclusion** 

Considering interdepartmental dissociation and a versatility of specialization of the employees involved in activities for preservation and promotion of student's health, it is important to provide their effective interaction by means of stepbystep forming of structural divisions of the HS management team of an educational institution according to the principles of designing and development of a small group; wherein the main condition acts as a systematic agreement of objectives, values, actions, and also integration of separate functions into general system of managerial interaction. The indicators of consistency and regularity of the organization of health saving activities, activity and productivity, efficiency and clearness of work are presented as efficiency criteria of activities of the management team, according to the theoretical background of the organization of group activities and management.

### **Recommendations**

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The offered conceptual provisions for ensuring effective managerial interaction of the HS structural divisions can be used by the managerial team of the educational organization:

1) for research of a condition of the existing level and the subsequent developmental designing of the managerial team of structural subdivisions of the educational institution from the level of formal consolidation of management members to the level of the team in case that joint activities have socially valuable and personally significant nature;

2) for ensuring effective interaction of staff of other structural subdivisions and services by means of implementation of the offered objectives agreement model among the members of joint activities; in particular, for ensuring interaction of educational subdivisions as a result of the development of new and implementations of the existing educational programs;

3) for an efficiency evaluation of work of structural subdivisions managers of the educational institution according to the offered criteria of formational level and development of the management team;

4) for determination of the direction of further academic search and research of interaction processes of joint activities among members in dynamically changing socio-economic and socio-pedagogical conditions.

The results of the provided research will be useful to: the scholars studying questions of health saving activities in the educational institutions and ensuring its quality; the teachers working in the educational establishments of various types; students of pedagogical higher education institutions, and others interested in this problem.

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### References

Bespalko, V. P. (1990) About Opportunities of the System Approach in Pedagogics. Soviet Pedagogics, 7, 59–60.

Brooms, N. A. (2000) School of health. Tyumen: Tyumen state university. 248p.

- Davydova, N. N. (2010) Process Management of Self-Organization of Educational Institution. Education and Science, 11, 23–32.
- Falmer, R. M. (2005) Encyclopedia of modern management. Moscow: Finance and Statistics, V. 2: Organization as Management Function. 142p.
- Fayol, A., Emerson, G., Taylor, T. (1992) Management is a science and art. Moscow: Republic. 167p.
- Fedorov, V. A. & Tretyakova, N. V. (2015) Quality Management of Educational Institutions in Protecting Students' Health: Conceptual and Structural-Functional Innovations. Scientific bulletin of National Mining University. 6(150), 134–143.

- Glass, G. V. & Hopkins, K. D. (1984) Statistical methods in education and psychology. Englewood Cliffs, New Jersey: Prentice-Hall. 495p.
- Huszczo, G. E. (1996) Tools for Team Excellence: Getting Your Team into High Gear and Keeping It There. Palo Alto, California: Davies-Black Publishing. 230p.
- Kalimullin, A. M., Vlasova, V. K. & Sakhieva, R. G. (2016). Teachers' training in the magistrate: Structural content and organizational modernization in the context of a federal university. *International Journal of Environmental and Science Education*, 11(3), 207-215.
- Karibyants, L. V. (2003) Pedagogical conditions of personnel management in the modern organizations. PhD Thesis. St. Petersburg: St. Petersburg Academy of Post-Degree Education. 191p.
- Kazin, E. M., Blinova, N. G., Litvinova, N. A. (2000) Bases of individual health of the person. Moscow: Vlados. 190p.
- Kolbanov, V. V. (2000) Valeological service of educational system of Saint Petersburg. Condition and prospects of valeological service of educational system of Saint Petersburg: Materials of the Scientific and Practical Seminar (pp. 3-9). St. Petersburg: St. Petersburg Academy of PostDegree Education. 325-331.
- Leontyev, A. N. (1977) Activities. Consciousness. Personality. Moscow: Politizdat. 304p.
- Le-van, T. N., Madzhuga, A. G., Malyarchuk, N. N., Tretyakova, N. V. (2014) The Model of Interregional Coordination Council Concerning a Health-Saving in Education. Bulletin of the Moscow Pedagogical University. Pedagogics Series and Psychology, 2, 8–21.
- Lomov, B. F. (1996) Systemacity in psychology. Moscow: Institute of Practical Psychology. 384p.
- Maxwell, J. C. (2001) The 17 Indisputable Laws of Teamwork: Embrace Them and Empower Your Team. Nashville, Tennessee: Nelson Books. 265p.
- Milner, B. Z. (2002) Theory of the organization. Moscow: Infa-M. 480p.
- Nemov, R. S. (1982) Psychological conditions and criteria of overall performance of a collective. Moscow: Knowledge. 165p.
- Nemov, R. S. & Altunina, I. R. (2008) Social psychology. Moscow: Piter, 427p.
- Obozov, N. N. (2012) Psychology of management in the conditions of joint activities. St. Petersburg: Asterion. 248p.
- Prigozhin, A. I. (1995) Modern sociology of the organization. Moscow: Intertraks. 296p.
- Rubenstein, S. L. (1999) Fundamentals of the general psychology. St. Petersburg: Piter. 720p.
- Stewart, G. L., Manz, C. C. & Sims H. P. (1998) Team Work and Group Dynamics. New York: Wiley. 208p.
- Tretyakova, N. V. (2011) Research of a Condition of Health Saving Activities in Educational Institutions of Sverdlovsk Region. Scientific Notes of the Lesgaft National State University, 9(79), 155–158.
- Tretyakova, N. V. (2015) Complex Efficiency Evaluation of Health Saving Activities of the Educational Organizations. Siberian Pedagogical Journal, 3, 171–176.
- Tretyakova, N. V. & Andryukhina, T. V. (2012) Educational Institutions: Analysis of Health Saving Activities. Pedagogical Journal of Bashkortostan, 4(41), 69–75.
- Tretyakova, N. V. & Fedorov, V. A. (2013) The Quality of Health Saving Activities of Educational Institutions: Conceptual Aspect. *Education and Science*, 4, 112–132.
- Tretyakova, N. V. & Fedorov, V. A. (2014) The quality of health saving activities of the educational organizations: Theory and technologies. Ekaterinburg: Russian State Vocational Pedagogical University. 208p.
- Umansky, L. I. (2001) Personality. Organizing activities. Kostroma: Kostroma State University of N. A. Nekrasov. 208p.
- Vershinina, L. M. (2001) Forming of management team as a condition of productive activities of a gymnasium: PhD Thesis. St. Petersburg: St. Petersburg Academy of Post-Degree Education. 146p.
- Weber, M. (1997) The Theory of Social and Economic Organization. New York: Free Press. 448p.
- Zhuravlev, A. L. (2005) Psychology of joint activities. Moscow: Institute of Psychology of the Russian Academy of Sciences. 640p.
- Zhuravlev, A. L. (2009) Collective Subject: Main Signs, Levels and Psychological Types. Psychological Journal, 5, 72–80.