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DYNAMICS OF INDICATORS OF PSYCHOLOGICAL COMPATIBILITY OF MEDICAL FACULTY'S STUDENTS' GROUPS

Summary. In the following article indicators' dynamics of psychological compatibility of the third year students' groups of medical faculty of Dnipropetrovsk state medical academy (2009-2014) was analyzed. 319 students of 1st medical and 137 students of 3rd medical faculties have taken part in the research. 456 anonymous sociometric card-questionnaires were analyzed. It was established, that major psychological compatibility indicators among 1st medical faculty groups have positive dynamics, and among 3rd medical faculty – negative one. Among both faculty's students there is decreasing of the prestige of formal leaders (headmen): the level of psychological compatibility in dynamics – 70-65% at the 1st medical faculty and 81-70% at the 3rd medical faculty.

There was made an attempt to explain the multidirectional dynamics of indicators of psychological compatibility in both faculties. "Methodological instructions for improving the mental operability of students" were developed. The most simple and convenient method of autogenous training in the form of poetic modification was offered.

Key words: psychological compatibility, students, indicators, dynamics.

1. Introduction

In the century of rapid scientific progress and the enormous amount of information the priority tasks are: scientific substantiation of approaches to health protection and promotion of contemporary students and researching the features of the processes of their mental and psychophysiological adaptation. (1,2,5,12,13)

The scientific base of forming the harmonic personality, including many-thousand students' army, of disclosure of their abilities and capabilities, is psychohygiene and such an integrative part of it - psychology of interpersonal relations, which is a base of psychological microclimate of any collective, including students' (7, 8, 9, 10, 11, 12, 15, 16, 17)

Optimal psychological microclimate is the key indicator that the collective students' group is the "team", as well as it's an indicator of its maturity, the result of hard work of leadership and teachers.

Problems of psychological climate in different collectives were most actively studied in 80-90s (3, 10,11). The particular interest in these issues was associated with the results of the Hawthorne studies, which made it possible to identify the relationship between productive work team, and specialties of its psychological climate (14). In the collective activity not only to the exchange of information is important, but also the planning of joint actions, development and implementation of common solutions, the effectiveness of which depends on how harmonious the relationship between the members of the group are. This relationship is embodied in the emotional (positive or negative) momentum - the act of one member of the group determines the proper response of other individuals (12). That is why harmonization of interpersonal relationships is an important factor in the prevention of conflicts and the "long-standing" conflicts in student groups (12, 13, 15).

II. Statement of the problem

Purpose of work is to explore and assess the dynamics of psychological compatibility in student groups of medical faculties (compared to 2009-2014.); use the data to develop methods of autogenous training - as a way to improve the mental operability of the organism of students.

In determining the purpose of the work we were guided by the "Regulations on the psychological service of the educational system of Ukraine" (the Order №616 from 23.07.2009g.) And the Order № 1248 from 30.12.2009. "About the improvement of the socio-educational and psychological support of the educational process in higher educational institutions III-IV levels of accreditation", developed by the Ministry of Education of Ukraine.

Materials and methods. The study involved 456 third year students (319 students of the Faculty of 1st Medical and 137 - of III Medical Faculty). The work was performed in two stages: in 2009 and 2014. In the dynamics of 2009-2014. attended by 150 and 169 students accordingly 1st medical faculty; 74 (2009)., And 63 (2014) students of III medical faculty. Among all subjects we determined indicators of psychological compatibility, using the technique of anonymous questionnaire, which is, in our opinion, the most objective, as increases frankness of subjects. This made it possible to study the problem in details and to model a complete picture. For this purpose, we used a method of determining the coefficient of interpersonal compatibility - index, which reflects the degree of interoperability of both members and the entire student group. Interpersonal compatibility's factor is determined based on an analysis of the anonymous questionnaire - sociometric card. This technique was offered by the Crimean Institute of Health Resort (1971.). In the Black Sea branch of the Research Institute of Labour was developed a modification of the sociometric method (1989.), Which was successfully used in conducting socio-psychological research of teams in many companies and organizations, including medical (6, 7, 11, 12). The mathematical processing

of the data was performed using Excel and Statistica traditional methods of variation statistics (4). There were processed 456 questionnaires in total(- 319 students of the first and 137- the third medical faculties).

III. Results and their discussion

Psychological compatibility dynamics of student groups` memebbers of 1 Medical Faculty (2009-2014). In general are positive (Table 1).

Table 1

The indicators of psychological compatibility of students in 3 year groups of 1st medical faculty (compared for 2009-2014.)

Indicators	2009 year, abs. (%)	2014 year, Abs. (%)
Amount of students	150	169
Groups compatibility index	1,93 (64)	2,0 (67)
Compatibility index 1.5 or less (outsiders)	25,0 (17)	18,0 (11)
Compatibility index of true leaders	2,58 (86)	2,64 (88)
The highest level of compatibility of a true leader	2,9 (97)	2,9 (97)
Coinciding with the formal leader, the index	no	in 1 group only- 2,46 (86)
Compatibility Index of headmen (formal leaders)	2,1 (70)	1,96 (65)
The lowest level of compatibility of formal leaders (headman)	1,68 (56)	1,57 (52)
General amount of conflicts	77,0 (52)	38,0 (22,5)
Have more then 1 conflict	21,0 (14,0)	5,0 (3,0)

Thus, compared to 2009, the index of compatibility increased in groups, although the degree of "frindshipness" of groups remained low (64 and 67%, respectively). The level of psychological compatibility of the true leaders tends to increase (86 and 88%, respectively). At the same time the formal leaders (headman) became less popular - their level of psychological

compatibility with the group decreased from 70 (2009) to 65% (2014.). However, in 2014 in one group the personality of true and formal leader coincided (at the level of psychological compatibility of 82%).

The fact that among headmen there're no outsiders is positive (compatibility level less than 50%) - In both trials, the minimum level of compatibility was above 50% (56 and 52%, respectively), although it has fallen low. Markedly decreased (from 17 to 11%) the number of outsiders, which indirectly confirms the growth of "friendshipness" of groups. The indicators of psychological compatibility in groups of III medical faculty have mainly negative dynamics (Table 2).

Table 2

The indicators of psychological compatibility of students in 3 year groups of III medical faculty (compared for 2009-2014.)

Indicators	2009 year, abs. (%)	2014 year, abs. (%)
Amount of students	74	63
Groups compatibility index	1,98 (66)	1,94 (65)
Compatibility index 1.5 or less (outsiders)	14,0 (19)	11,0 (17,5)
Compatibility index of true leaders	2,58 (86)	2,56 (85)
The highest level of compatibility of a true leader	2,92 (97)	2,73 (91)
Coinciding with the formal leader, the index	Just in one group – 2,75 (92)	no
Compatibility Index of headmen (formal leaders)	2,75 (81)	2,1 (70)
The lowest level of compatibility of formal leaders (headman)	1,3 (43)	1,3 (43)
General amount of conflicts	32,0 (43,2)	30,0 (47,6)
Have more then 1 conflict	9,0 (12,2)	11,0 (17,5)

Thus, the level of compatibility group itself is low, tends to decrease in 2014 compared with 2009 (66 and 65%% accordingly). The prestige of the true leaders in groups reduced a little (the compatibility level 86 and 85% in dynamics), even though it is quite high and reached 97% (2009). - 91% (2014.). The most affected was the image of formal leaders - their level of interoperability had significantly decreased (from 81 to 70%, respectively), with one of the headmen is an outsider - in both studies their level of compatibility was only 43%. In addition, if in the same group in 2009, has been a personalities match of true and formal leaders, in 2014 it did not happen. Noteworthy is the growth of conflicts - both the total amount (by 4.54%), and multiple conflicts (5.3%). Only the number of outsiders in the group has a positive trend (19 and 17.5%, respectively). These findings are consistent with the data of the laboratory of psychophysiological research DMA for 2009-2010 (8).

There is positive dynamics of indicators such as the level of "friendshipness" of groups and levels of psychological compatibility of the true leaders among the students of the 1st Medical Faculty compared with groups of students of III medical faculty. However, in groups of both faculties we observed decreasing the authority of headmen - formal leaders. And, if the Group of 1st medical faculty reduce of headmen compatibility is 5% (70-65%), the Groups of III medical faculty - 11% (81-70%). Thus the general level of compatibility of headmen on the III Medical Faculty is higher than on the 1st Medical Faculty. Attention is drawn to the dynamics of such an important indicator of psychological compatibility, as the number of conflicts in students groups. So if the total number of conflicts (52%), including multiple ones (14%) at 1st Medical Faculty has fallen sharply in 2014 (22.5 and 3%, respectively), at the III Medical Faculty there is a significant tendency to growing both the total number of conflicts (43.2 - 47.6%) and the multiple conflicts (12.2 - 17.5%) in 2014.

The findings can be explained as following: at the I medical faculty (budget form of studies) there are students with higher levels of performance than at the III medical faculty (contract form of education). These students have passed strict admission competitive selection process, among them there is a high percentage of medalists, graduates of medical lyceum, more professionally oriented students, these students have a higher level of development. All these features, along with an annual growth of high-quality performance indicators reduce the possibility of manifestation of envy, intolerance to success of groupmates.

At the III medical faculty study students with significantly lower levels of academic achievement, they are less oriented towards their specialty, have a lower level of general culture. All of this generates intolerance among some students towards those who do better, had made great strides in sports, social and scientific activities. This partly explains the high level of conflict in groups, including multiple, and their tendency to increase. At the same time at this faculty group leader is respected, though their prestige in 2014 declined significantly, it is still quite high. Apparently, the dean's office of the III Medical Faculty has more responsible approach to the appointment of formal leaders - headmen, in contrast to the dean's office of the I Medical Faculty, where the level of psychological compatibility of headmen is much lower.

The findings were discussed in each group and in individual interviews, which were attended by more than half of students (optional). The research results were used as a basis for health-correction method in the form of guidelines "Autogenous training is an active method of improving the mental operability of the students` and teachers` organisms ." We used a modification of autogenous verse as the most simple and affordable option.

IV. The conclusions

1. The characteristics of psychological climate in students` groups allows to reveal the value of the group effects as a condition of interpersonal

relationships in the team, which determines their impact on the joint objective-practical activity. Moreover, the psychological climate is characterized as a state of interpersonal relations, which imply their ability to change in dynamics.

2. In general, dynamics of psychological compatibility in groups of students of the I Medical Faculty has a positive tendency: increased level of friendship in groups, reduced the number of outsiders, increased the prestige of true leaders; number of conflicts, including multiple. reduced for more than a half.
3. In general, dynamics of psychological compatibility in groups of III medical faculty students has a negative tendency: decreased level of friendship in groups and the prestige of true leaders, increased the number of conflicts, including multiple ones. At the same time, decreased number of the outsiders on the course (19 and 17.5%, respectively).
4. At the both faculties there is decreasing of the prestige of headmen (formal leaders), and if at the I medical faculty it is small (70 and 65%), then on the III medical faculty it is significant (81 and 70%). Among the headmen of this department there are outsiders, whose level of psychological compatibility is only 43%.

To improve the quality of psychological climate in student groups of all faculties dean's offices must appoint true leaders as headmen, personalities, which should be set at the end of the fall semester of 1st course.

LITERATURE

1. Александров Ю.И. Психофизиология /Ю.И.Александров.- СПб: Питер,2004.-336с.
2. Ананьев В.А.Практикум по психологии здоровья.- СПб:Речь,2007.- 320с.

3. Аникеева Н.В. Психологический климат в коллективе./Н.В.Аникеева.-М.: Педагогика, 1989.- 246с.
4. Антомонов М.Ю. Математическая обработка и анализ медико-биологический данных /М.Ю.Антомонов.- К.: Фірма малого друку, 2006.-558с.
5. Асиркіна Г.П. Організаційно-педагогічна структура соціальної адаптації студентів-першокурсників до умов навчання у вищих закладах освіти // Проблеми освіти, 2006. - №44. - С.55-59.
6. Белецкая Э.Н., Землякова Т.Д. О роли методики определения уровня психологического климата коллектива в воспитательной работе преподавателей медицинских вузов.- Ш міжнародна науково-практична конференція.- Дніпропетровськ: Наука і освіта.- Т.5.-Медицина, 2006.-С.52-54.
7. Воробейник Я.Н., Поклитар Е.А. Основы психогигиены.- К., Здоровье.- 1989.-134с.
8. Дзяк Г.В., Перцева Т.О., Канюка Г.С., Горбунова Г.В. Досвід психолого-педагогічного супроводу студентів як складова системи управління якістю підготовки лікарів./ Медична освіта.-2013.-№2.- С.58.60.
9. Куликов Л.В. Психогигиена личности. Вопросы психологической устойчивости и психопрофилактики: Учебное пособие.- СПб: Питер, 2004.- 187с.
10. Мясищев В.Н. Социальная психология и психология отношений./ В.Н.Мясищев // Проблемы общественной психологии.- М., 1995.- С.146-147.
11. Парыгин Б.Д. Социально-психологический климат в коллективе./ Б.Д.Парыгин.- М.: ЛГУ, 1998.- С.11-13.
12. Пушкар З., Войтович Г. Соціально-психологічний клімат у колективі та чинники, що впливають на його формування.// Українська наука: минуле, сучасне, майбутнє.- 2013.- С.133-143.

13. Резник Т.І. Психологічний зміст труднощів у навчанні студентів-першокурсників.//Практична психологія та соціальна робота. - №1.- 2002.- С.1-3.
14. Свенцицкий А.Л. Социальная психология управления / А.Л.Свенцицкий.-Л.:ЛГУ, 1986.- 476с.
15. Сергета І.В. Гігієнічні основи оцінки процесів перебігу психофізіологічної і психічної адаптації сучасних учнів і студентів./ Довкілля і здоров'я: Матеріали Всеукраїнської науково-практичної конференції. - Тернопіль: Укрмедкнига, 2011.- С.115-116.
16. Сучасна психогігієна: проблеми та перспективи розвитку /Сергета І.В., Мостова О.П., Теклюк Р.В. та інш.// Актуальні питання гігієни та екологічної безпеки України (сьомі Марзєєвські читання).- К., 2011.- С.177-178.
17. Kretz Y. Lebendige Psychohygiene 2000 plus. Munchen. Eberhard, 2002 – 117p.