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Formation of University Students' Healthy Lifestyle

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Healthy living is one of the most important issues of modern education, especially for students of pedagogical specialties. The article discusses the need for this process, its appropriateness, the study of the problem in psychological and pedagogical literature and presents the results of the pedagogical experiment. The authors reveal the main components of health: physical, psychological and behavioral; motivational aspects and psycho-pedagogical conditions of students' healthy lifestyle formation. Experimental work was organized at the Institute of Psychology and Education of Kazan (Volga Region) Federal University. The pedagogical experiment has proved the rationale of the hypothesis and theoretical thesis for the implementation of proposed pedagogical conditions of University students' healthy lifestyle formation.

Keywords: healthy lifestyle, health, methods and forms of a healthy lifestyle, the basic components of a healthy lifestyle: a balanced diet, physical activity, general hygiene of the body, hardening, avoiding harmful habits.

INTRODUCTION

Actualizing the problem

The health of young people mostly depends on their way of life, their habits, in particular. Useful habits help the formation of harmoniously developed personality, whereas harmful ones inhibit its formation. Bad habits include irrational daily regimen, poor nutrition, low physical activity. But the most harmful are the use of drugs, smoking, alcohol abuse. These habits may imperceptibly develop into a vice that can ruin a person's life, which may even lead to antisocial behavior (Ribakova & Biktagirova, 2015]. A healthy lifestyle is a prerequisite for the development of different sides of human activity, reaching active aging and the full implementation of social functions for the active participation in the labor, social, family, household, leisure forms of life.

The relevance of healthy living is caused by the increase and changing in the nature of stress on the human body due to the complexity of public life, increase of industrial, environmental, psychological, political and military risks provoking negative changes in health status.

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Explore Importance of the Problem

The health status of the population, especially children and young people is an important indicator of well-being of society and the state. Therefore, health promotion, a significant reduction of socially significant diseases, the creation of conditions and incentives for the formation of a healthy lifestyle are some of the priorities of a country's population policy. Healthy lifestyle is the only way of life that can ensure the restoration, preservation and improvement of public health. The urgency of the problem of formation of University students' healthy lifestyle is primarily due to the critical state of physical and spiritual development of young generation. (Biktagirova & Kasimova 2015; Oguz & Ataseven, 2016; Ilbay & Akin, 2014; Biktagirova & Valeeva 2013; Ozen, 2016). The causes of ill health are both environmental factors (negative environmental factors), and risk factors having behavioral basis: smoking, alcohol and other toxic, or psychoactive substances intake, lack of interest in regular physical training, poor personal hygiene, etc.

Status of the problem

In Russian and foreign pedagogy and psychology there is sufficient experience on the study of the problem of healthy lifestyle formation in the works of N. M. Amosov (2009), V. I. Dubrovsky (2005), A. V. Martynenko, Yu. V. Valentik, V. A. Polessky (2008), G. M. Shelton (2010), etc. A significant number of works are devoted to the study of preventive approach: K.G.Gabrielyan, B.V.Ermolaev (2007), L.P.Matveev (2001). However, there is an objective need for the formation of University students' healthy lifestyle and lack of programs, including effective forms and methods to promote healthy lifestyle among young people in order to reduce the negative effects of incorrect way of life.

Hypothesis

Analysis of theoretical studies and practical teaching and research activities in the aspect of the problem developed showed that today the problem of formation of University students' healthy lifestyle is understudied area of scientific knowledge and practice. It is possible to formulate the hypothesis of the study of this problem: the formation of University students' healthy lifestyle will be more effective and successful if:

- the formation of healthy living is built on the essential characteristics of the concepts of "health", "healthy lifestyle";
- the role of healthy living is defined and explained to young students;
- the program on University students' healthy lifestyle formation promotion "Health is power!" implying the usage of such forms and methods of pedagogical influence, as the method of persuasion, mini-lectures, discussions, debates, training, role-playing, watching and discussing video materials, doing exercises

MATERIALS AND METHODS

Theoretical and empirical methods

To test the hypothesis there was used a set of various methods, complementing each other:

1. Theoretical methods: the study and analysis of pedagogical, psychological and medical literature; comparison, analogy, generalization.
2. Empirical methods: formative experiment, questioning.

3. Data processing methods (quantitative and qualitative analysis), methods of mathematical processing.

Trial infrastructure

The study involved 29 second-year students of the Institute of Psychology and Education of Kazan (Volga Region) Federal University aged 19-21. The experimental study was carried out for 3 months (February 2014 - March 2014) in natural conditions of the educational process.

Stages of the research

The research was conducted in three stages:

1) The ascertaining stage, during which the initial level of studied characteristics was experimentally determined. On the basis of these results the program "Health is power!" was developed.

2) The formative stage, during which active preventive work on University students' healthy lifestyle formation was done.

3) The controlling stage is the final stage of the research study of the problem, the purpose of which was verification of the findings on the effectiveness of the program "Health is power!", which included a variety of forms and methods of preventive work on University students' healthy lifestyle formation. Comparing the results obtained during ascertaining and controlling stage it's possible to define the effectiveness and the correctness of forms and methods used.

Evaluation criteria

To implement the objectives of the research, the following methods of V.D.Purin were used: "How do you feel about your health" and "What prevents me to live a healthy lifestyle?"

The methods like research procedures, manuals, processing used in the course of the research in full compliance with the requirements. Let us consider the methods used.

For the diagnosis of students' level of health there was proposed the following method: "How do you feel about your health?". Questioning was conducted to determine the individual lifestyle of students and their attitude to the formation and learning of the foundations of healthy lifestyle.

Evaluation of individual lifestyle and attitude towards one's health was carried out on a 4-point scale. Using a scale with three answers that are given scores from 0 to 4 is widely used in social studies. In the analysis of questionnaires for choosing the ***a*** option students were given 4 points, for ***b*** *option* - 2 points, for ***c*** option– 0 points accordingly.

34 points and above scored correspond to the highest level at which all components of personal culture of careful attitude towards one's health, maturity and activity of mechanisms of preservation and strengthening of health are formed, the overall meaning of life and relationships is defined, components of a healthy lifestyle are implemented. Interpretation: "You care about your health more than about anything else, you feel good. If you continue to lead a healthy life, you'll stay energetic and active to old age. But don't you deprive yourself of some small pleasures? Joy is also a foundation of good health!"

The score from 33 to 15 points corresponds to the average level at which there is a visible manifestation of some components of healthy lifestyle and the lack of other, lack of activity and the strengthening of mechanisms on preservation of one's health, lack of adaptation to environmental conditions, unstable working capacity.

Interpretation: “You’ve got good health. You seem to be communicative, you often meet with your friends. You don’t give up the fun that makes your life varied. But think about the possible impact of some of your habits on your health over the years!"

14 points and below scored correspond to a low level, which manifests the absence of the individual components of healthy lifestyle, the need for their formation and perfection, lack of concern for the preservation and strengthening of health, low levels of adaptation to environmental conditions, low working capacity, the presence of diseases. Interpretation: “Your health primarily depends on you, but you're too careless about it. You probably already complain about your health. Give up your bad habits, pay attention to your diet!”

The aim of the methodology "What prevents me from healthy living?" is to clarify the situation in the team of the educational institution on the level of interference into students’ healthy living.

Students make written responses to 12 questions on the following scale: 5 – always; 4 – frequently; 3 – sometimes; 2 – rarely; 1 - never.

The maximum possible score totals 60 points, the minimum possible totals 12 points.

Interpretation:

12-28 points - the lowest level (LL) of interference: the student is able to cope with the current minor problems in healthy living;

29-44 points - the average level (AL): the student is not able to solve some of the problems associated with maintaining a healthy lifestyle; he/she needs correct and, if possible, operational assistance from both classmates and friends and adults;

45-60 points - the highest level (HL): the health status of the student (both physical and psychological) should cause profound fear and anxiety; urgent, sometimes drastic measures are necessary to address the existing problems.

The influence of one or another reason on student’s healthy, balanced, correct living can be seen in his/her score on each of the 12 statements/questions.

The higher the score, the greater the influence of the problem is on the personality (as well as on the physical development) of the student, the more difficult it is to solve.

Experimental procedure and its description

Indicators on selected methods were investigated in ascertaining step of the research. As a result of the diagnosis, majority of students have low level of health - 45%, average level of health is showed by 41%, and high level of health is showed by 14%. This indicates that, low level of health is dominated in the students’ group.

Further, we found out the reasons for the university students’ healthy living failure. The results are shown in Figure 2.5.1.

Analysis of the data shows, that 79% of the respondents themselves violate the norms of a healthy lifestyle (115 points out of 145). Lack of leisure time and students’ health status are at the second place, both come with 95 points (66%), at the third place there is climatic conditions with 94 points (65%), followed by family problems - 86 points (60%), bad company from neighborhood - 85 points (59%), bad company of classmates - 84 points (58%), free sale of cigarettes, beer and alcoholic beverages - 84 points (58%).

At the second stage of the study there was conducted forming stage of the experiment. In other words, intervention program was implemented, compiled on the basis of ascertaining experiment. The program was implemented during extracurricular time from February to April in 2014. Classes are held 1-2 times per week, lasting 1 hour. The program includes 10 sessions.

Program format:

Implementing the program of healthy lifestyle preventive measures among students, there were considered three basic parameters of activity:

- physical (participants talked, wrote, listened, changed their work place);
- social (participants asked questions, answered questions, exchanged opinions);
- cognitive (participants made additions, amendments, found their own solution to the problem).

During the pilot testing there were used the following forms and methods of healthy lifestyle preventive measures among students participated the program "Health is power!": educational talks, video demonstration followed by discussion, training, the method of persuasion, the story and the lecture, debate, role-playing and exercises.

RESULTS

Control experiment results

At the control stage, the same actions were carried out as it was at the ascertaining stage, but with the changed numerical series after formative stage. The purpose of this stage is to determine whether there are enough significant changes in the studied index of students, therefore, whether it is possible to argue that the special effects had a significant impact on the process of healthy lifestyle formation among students.

Results were processed and analyzed sequentially. Analysis of the data received tells us that the average level of health (59%) is dominated in the collective, low level of health status is 24%, and high level of health status is 17%. Further, we found out the reasons for the university students' healthy living failure. Analysis of the data shows, that 68% of the respondents break the healthy living rules by themselves (98 points out of 145), climatic conditions with 93 points (64%) are at the second place, at the third place there is a lack of leisure time with 91 points (63%), followed by family problems - 76 points (52%), bad company from neighborhood - 82 points (57%), students' health status – 76 points (52%), bad company of classmates - 63 points (43%).

The next stage is to compare the data obtained at the first and the third stages. The results of health level study are shown in Figure 1.

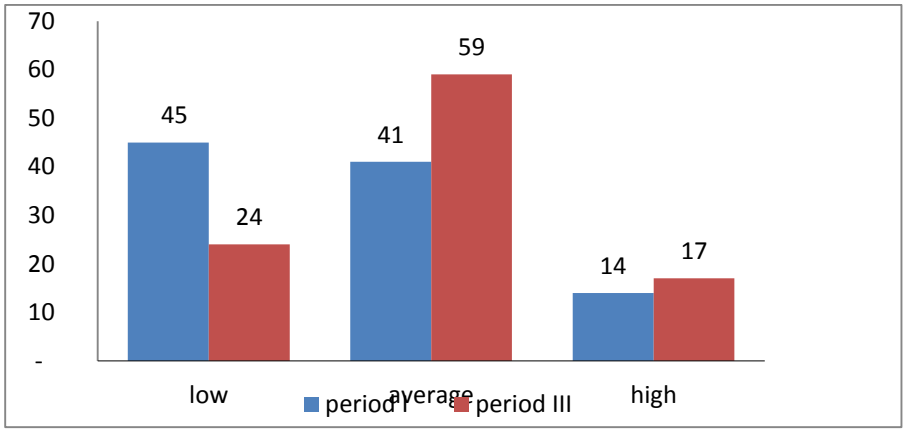

Figure 1. Students' health level comparison at the first and third stages

Figure 1. shows that health level was lower than before the experiment. There is a positive change after the program implementation. 6 students moved from low to the middle level, and 1 student moved from the middle to the high level. After the formative experiment low level index decreased by 19%, average level increased by 18%, and high level increased by 3%.

In order to find out whether there are significant differences between the indicators "before" and "after" experiment, we used a mathematical and statistical analysis of the data received on the Student's t-test. Based on the analysis in accordance with the parametric criteria there can be stated two hypotheses regarding the presence or absence of differences in index values:

H0 = the difference between the mean values of two samples is equal to zero.

H1 = the difference between the mean values of the two samples is different from zero.

For our group tcr=2,1, with a confidence level of 0.05.

temp<tcr (temp= 2,12) with p = 0,05 , hypothesis H1 was confirmed.

Students' control experiment showed that there are positive changes in the studied parameters. The results of implemented research prove the accuracy of the hypothesis. We have developed the program that contributes to the process of students' healthy lifestyle formation. Results of reasons for students' healthy living failure are shown in Figure 2. "What prevents me from healthy living?" method was used.

As figure shows, in the sample participants' group almost all indicators decreased, except the second indicator (family problems), which increased at the third stage of the experiment.

1. Next, we analyzed the results of Student's t-test, we wanted to test whether there is a significant difference in the average parameters at 1 and 3 stages of the study. There is a significant correlation between indicators of students' creative abilities development level before and after the formative experiment (rs=0.957)

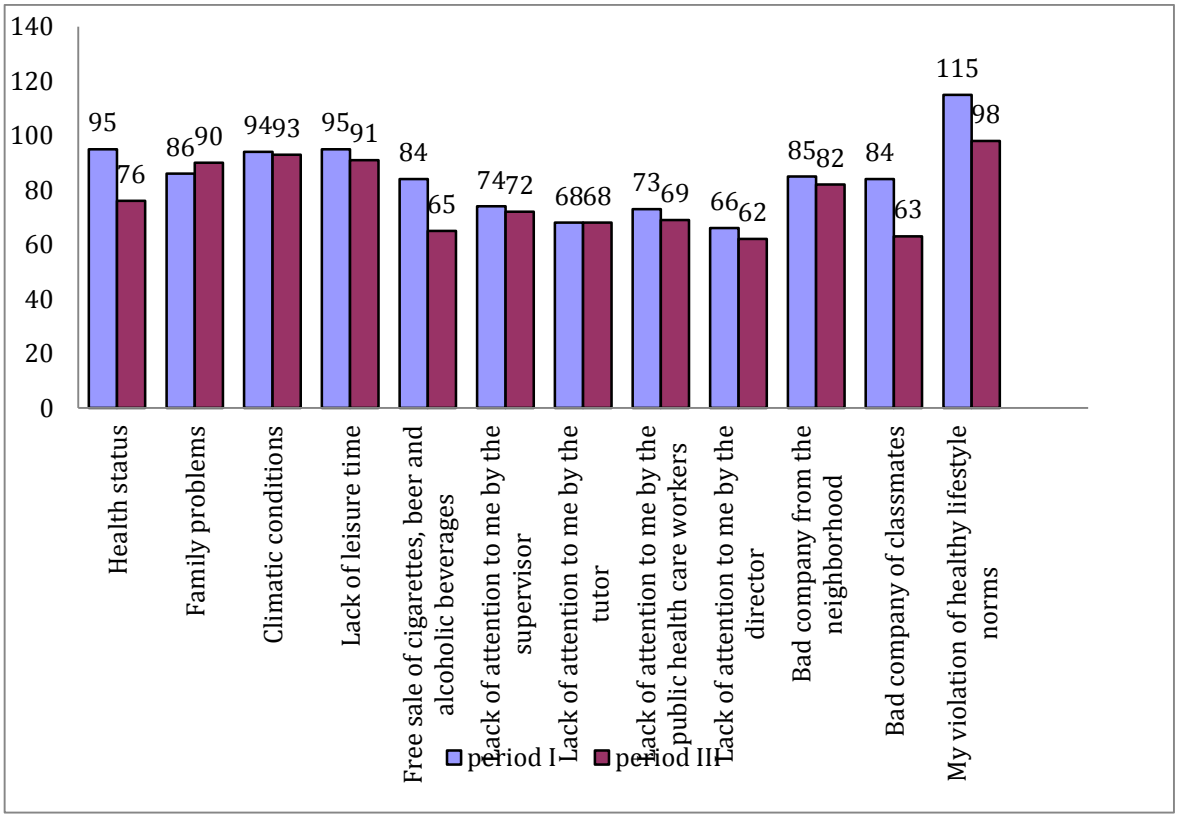

Figure 2. Results of reasons for students' healthy living failure at the first and the third stages

2. There was found out a significant correlation between aspiration indicators, received before and after the experiment (rs=0.592)

3. It is also obvious significant correlation between indicators (rs=0.956)

4. There is a significant correlation between the indicators of self-esteem (rs=0.374; with p=0,05).

5. There was found out a significant correlation between indicators of evaluations before and after the experiment (rs=0.443; with p=0,05).

The difference between mean values of the first indicator before the experiment and after its implementation is valid as temp>tcr (temp= 2,44) with p = 0.05; the difference between the mean values from the second to the fourth indicator before the experiment and after its implementation have not been found; the difference between the mean values of the fifth indicator before and after the experiment is valid as temp>tcr (temp= 2,05)) with p = 0.05; the difference between the mean values from the sixth to the tenth indicators before and after the experiment have not been found. The differences between the mean values of the eleventh indicator before and after the experiment are valid as temp>tcr (temp= 2,79) with p = 0.01. The differences between the mean values of the tenth indicator before and after the experiment are valid as temp>tcr (temp= 2,16) with p = 0.05;

Control experiment of students showed that there is a trend towards better health and healthy lifestyle. The results of study partially prove the accuracy of the hypothesis, as not all indicators were used to determine credible difference in the mean values of Student's t-test. We have developed the program that contributes to the process of university.

DISCUSSIONS

Having implemented the pilot testing on students' healthy lifestyle formation, we made the following conclusions:

1) Results of ascertaining experiment showed that there is a low level of health in the collective. Also, students themselves violate the norms of a healthy lifestyle. Keeping healthy lifestyle is prevented by health status, climatic conditions, family problems, lack of leisure time.

2) During the formative experiment our program "Health is power!" was carried out and tested, intended for university students' healthy lifestyle formation.

3) At the control stage, we re-examined the level of students' health. The results received indicate a positive trend.

During the study, we observed the students' positive dynamics of skills development, required for the healthy lifestyle formation.

According to the study it can be stated that our hypothesis is partially confirmed.

CONCLUSION

Formation of healthy lifestyle among young people is complex systematic process, covering many lifestyle components of modern society and including the main areas and directions of young people's life. Young students' orientation towards healthy lifestyle depends on many conditions. These are both objective, social, socio-economic conditions that allow to carry out a healthy lifestyle in the main spheres of activity (training, employment, family and household, leisure), and the system of value relations, directing conscious activity of young people in the direction of this particular lifestyle. We have considered various forms and methods of healthy lifestyle formation: the method of persuasion, the story of lectures, discussions and debates, training, role-playing, exercises. Pilot testing confirmed that pedagogical forms and methods of students' healthy lifestyle formation are sufficiently effective that allows to admit successfully conducted experimental work.

Thus, we can conclude that the mission of the study is accomplished the tasks are completed; tested program is effective and can be used in educational activities.

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