

# TRAINING WORKSHOP ON THE BASIS OF GYMNASTIC QIGOING AS A FACTOR OF PERSONAL DEVELOPMENT OF STUDENTS WITH POOR HEALTH

Kramida I.E.

Siberian State Aerospace University

Annotation. The aim is to study the effectiveness of the training of students of special medical group health program of the workshop and its change in the context of the students' positive personal qualities. A total of 282 participated relatively healthy 3 rd year student and more than 250 students of special medical group. Survey methods were used and statistical methods of data processing. It is proved that the lessons of the workshop on the basis of health qigong exercises are more effective in terms of personality development of students than the physical training for the relatively healthy students. It is proved that the development of positive personality traits of students increases with the duration of their training under the program of the workshop. It is shown that any of the workshop sessions on the basis of qigong exercises are an important factor in personal development of students with poor health.

Keywords: students, physical education, qigong, personality development.

### Introduction

Great number of higher educational establishments' students has problems with health and it is proved by the researches, which have been carried out by domestic and foreign scientists for the last ten years. In different HEE situation is nearly the same: about 35–40 % of students have weak health, less than 70% of students belong to special health group [8]. Students, who attend physical culture trainings for main groups can be considered only relatively healthy (RHS) because most of them have some weak diseases or diseases of middle gravity. It is necessary to develop and implement in academic process new technologies, increasing health improving efficiency of physical culture trainings for students with health problems. These technologies shall be effective both as means of physical and psychic improvement of students' health and as means of development of students' sound personalities.

In our HEE up to 12% of students, who study at faculty of physical education and sports, belong to special health group (SHG). Such students are trained in physical culture by specialization program "Health improving practical training on the base of Chinese gymnastics Tsi Gun (HIP).

This program stipulates in-class trainings, at which students fulfill special health improving exercises: relaxing and joint warming ups, Chinese gymnastics Tsi Gun and exercises for self-control (in detail, see [1]).

Part of SHG students, who study by the program of this specialization do not attend in-class HIP trainings owing to different reasons. These students fulfill individual home tasks (HT). HT is a system of exercises for self-control, emotional re-creation, for development of positive relation to themselves and to life, for solution of personal problems (in detail, see [1]).

In scientific-pedagogical literature for last years we could not find publications, devoted to analogous complexes of HEE students' training. The closest by topic the works by S.A. Litvinov [5], A.V. Makarov [6] and T.V. Sastamoynen [7] can be considered.

S.A. Litvinov and A.V. Makarov studied effectiveness of gymnastics Ushu (analogue of gymnastics Tsi Gun), but only for perfection of physical level of students, who attend main groups of physical culture classes. These authors did not regard application of this gymnastics for SHG training and for development of students' personalities.

T.V. Sastamoynen studied effectiveness of sahadzha yoga exercises for SHG students' training both for psycho-physical development and for spiritual perfection of trainees. These trainings contain components, which change social-psychological and mental qualities of a person, but they do not contain exercises analogues to Chinese gymnastics Tsi Gun.

In our works [3, 4] we fulfilled analysis of SHG students' personalities' development in the process of their training by HIP program. The obtained results witness about high effectiveness of HIP trainings for development of student's personality. However, it is necessary to clear up what has changed for recent years (i.e. to regard this problem in its dynamic) and in what direction it is required to improve HIP.

A personality can be considered healthy, if it has eight main positive qualities developed, each of them including several particular characteristics—features of character or human abilities (the latter are listed below in brackets): positive attitude to life (ability to learn lessons from troubles, optimism, ability to find something positive in any life event, cheerfulness, ability to make correct conclusions from mistakes), successfulness (in study, in business, in personal life), emotional stability (inner balance, low vulnerability, low anxiety and irritability), tolerance towards other people (ability to understand and accept other people, amicability, low aggressiveness), self-confidence (high self evaluation, ability to accept own self as it is, faith in own forces, independence, absence of inferiority complexes), activity (ability to adjust oneself for important things, life activity, purposefulness, self-organization, responsibility), self control (awareness of own self as personality, awareness of demand in work with own self, ability to understand own state, ability to relax without any relaxants like alcohol and etc., ability to release negative emotions), communicability (ability to communicate, to find friends, relaxedness in communication).

© Kramida I. E., 2013

doi: 10.6084/m9.figshare.691014



Let us consider that positive personality's changes are those, with which the extent of development of the listed above eight personality's qualities increases.

During several years we researched students' positive personality's changes in the period of their study at faculty of physical education and sports. In the present work, in order to clear up the dynamics of trained by HIP program SHG students personalities' development, we carried out comparative analysis of some final results, which were obtained in researches, conducted in 2001-2004 and 2008-1012.

Modern changes in Russian society require upgrading of education and, in particular, upgrading of physical culture educational process. One of the main tasks of higher educational establishment (HEE) is formation of initiative, moral, enterprising and independent personality of a specialist, who would be ready to personal development. Development and implementation in educational process of new effective technologies both for physical and psychic students' health and for their personalities' development in the process of their study at HEE is an important task. In our HEE new health improving technology has been introduced in educational process – health improving practical training on the base of Tsi Gun gymnastics for SHG students. The research of this upgrading of educational process is an important practical task.

The work has been fulfilled as per plan of scientific & research works of Siberian state aero-space university, named after academician M.F. Reshetniov.

# Purpose, tasks of the work, material and methods

The purpose of the work is to study effectiveness of SHG students' training by HIP program, its probable dynamics in development of positive personalities' qualities development.

The tasks of the work.

- 1. To carry out comparative analysis of positive personalities' changes of SHG students, who were trained by HIP program during 1-3 years and relatively healthy students (RHS) of the 3<sup>rd</sup> year of study, who had the best indicators among RHS of the 1<sup>st</sup>-2<sup>rd</sup> years of study [2, 3].
- 2. To carry out comparative analysis of positive personalities' changes of SHG students, who were trained by HIP program in the periods of 2001-2004 and 2008-2012.

*Material of the researches.* For the researches, we selected the students, who actively attended physical culture trainings. They were arranged in different groups of students, who studied in HEE in 2001-2004 and 2008-2012. These groups are designated as follows (below, in brackets, the sample sizes are given for groups of 2001-2004 and 2008-2012c correspondingly): *3* RHS of the 3<sup>rd</sup> year of study (46 and 236 persons), who attended usual physical culture trainings; A1 – SHG students, who attended in-class HIP trainings during one academic year or less (45 and 169 persons); A2 SHG students, who attended HIP trainings during three or four semesters (12 and 53 persons); A3 – SHG students, who attended in-class HIP trainings during five or six semesters (16 and 33 persons); D1 – SHG students, who fulfilled HT during one academic year or less (27 and 69 persons);D2 – SHG students, who fulfilled HT during three or four semesters (18 and 35 persons); D3 – SHG students, who fulfilled HT during five or six semesters (4 and 12 persons, who fulfilled HT in full scope); In total, 282 of RHS of the 3<sup>rd</sup> year of study and more than 250 of SHG students took part in this research.

The methods of the research.

- 1. Questioning. At the end of corresponding academic year students were proposed to evaluate by 0-10 points' scale the level of their personalities' development at the beginning and at the end of academic year.
- 2. Primary mathematical processing of the questioning results of every student: 1) calculation of difference between initial and final evaluation of every characteristic of main positive personality's quality growth of points for the period of study ( as a positive mark of negative quality we took value 10-N, were N is evaluation of the extent of negative quality's development); 2) calculation of mean value of points' growth for certain personality's qualities, which were the manifestations of every of eight main personality's qualities.
- 3. Statistical methods of data processing: 1) calculation of mean value of points' growth of main positive personality's qualities for every of the questioned group; 2) evaluation of confidence of difference between mean values by t-criterion of Student. Differences were accepted as substantial with significance level less than 0.05 and were interpreted as a trend to difference with significance level more than 0.05, but less than 0.15 (in the table below these cases are marked with asterisk). The values were accepted as equal with significance level more than 0.75.

# **Results of the researches**

Below we present final table of mean values of points' growth of eight listed above positive personality's qualities' development for 3<sup>rd</sup> year RHS and SHG students, who were trained by HIP program for corresponding period of study (1, 2 or 3 years).

Legend of the table: oth.- other; '3' – data of group 3, i.e. RHS of the 3<sup>rd</sup> year of study; A – data of all SHG students, who attended in-class HIP trainings; D – data of all SHG students, who fulfilled HT.



Table 1

Mean grows of points of students' personalities' positive qualities for a certain period of study Growth of points +(0-10)Important significant correlations points Qualities of personality Years Η 3 **Dynamics** For every period of time A2 A3 D1 D2 D3 3,6 3 < all; A2, A3 > A1; D > A 2001–2004 1,0 1,4 2,0 2,2 2,6 2,8 A32 > A31Positiveness 2008-2 0,8 1,5 2,1 2,9 2,7 2,5 2012 (3) < all; D, A3 > A2 > A1 2,3 2001–2004 1,1 0,7 1,3 2,0 1,8 2,4 `3`, A1< oth.; A3>A2; D2>D1, A 31` > `32`; Successfulness A31 > A32; 3 < all, A1\*; A3, D1 > A1; 2008–2012 0,5 0,8 1,1 1,3 1,6 1,8 2,1 D21 > D22D2 > A2; D3 > D1, A32001–2004 0,0 0,7 1,0 1,3 1,8 2,2 1 2,4 `3` < all; A3 >A1; D2 >D1, A A32 > A31; Emotional stability (3) < all; A3 > A2 > A1; 2,7 2008-2012 -0,10,9 1,3 2,0 1,6 1,8 D21 > D22D1 > A1; D2 > A2; D3 > D1, A32,5 2001–2004 0,6 1,3 1,5 1,9 2,4  $^3$ , A1< oth.; D2 > D1, A2 31` > `32`; 0,8 A12 > A11;Tolerance  $^{3}$  < all; A3 > A1; 2008–2012 0,3 A32 > A31; 1,2 1,4 1,9 1,9 2,0 2,8 D1 > A1; D2 > A2; D3 > D1, A3D21 > D22 $^{\circ}$ 3, A1< oth; A3 > A2; 2001–2004 1.0 2,7 2,1 2,4 2,8 1,1 1,6 D1 > A1; D2 > A2Self-confidence A31 > A32\*(3) < all; A3 > A2 > A1; 2008–2012 0,8 1,2 1,7 2,4 2,0 2,2 2,8 D3 > D1; D1 > A1; D2 > A2A3 > A1,`3`; D2 > D1; D1 > A1, `3`; 2001–2004 1,0 1,0 1,1 1,6 1,8 2,3 2,2 D2 > A2 > 3\* 31` > `32`; Activity  $^{3}$  < all; A2\*, A3 > A1; A22 > A21\* 2008–2012 0,6 1,6 1,8 2,2 1,1 1,5 2,8 D1 > A1; D2 > A2; D3 > D1, A31,4 2,0 2,2 2,7 2,9 1 2001–2004 1,0  $^{3}$  < all; A2, A3 > A1; D > A 31` > `32`; Self control 3 < all; A3 > (A2\* > A1); A12 > A11;2008–2012 0,7 1,7 2,1 2,7 2,6 2,6 3,2 A32 > A31D3 > D1, A3\*; D1 > A1; D2 > A22001–2004 1,0 0,7 2,0 1,7 1,7 1,1  $2,4 \mid A3, D > A1, A2, ^3$ Communicativeness 3 < A3, D; A3 > A2, A1; A12 > A11\*2008–2012 1,0 1,0 1,2 1,9 1,5 1,6 2,2 D1 > A1; D2 > A2\*3 < all, A1\*; A3 > A2 > A1; 31` > `32`; 2,4 | 2,7 | D1> A1, A2; D2 > A2, A3; 1 2001–2004 0,8 1,0 1,4 1,9 2,1 A12 > A11; D3 > D1\*, A3A32 > A31\*Mean values of all qualities (3) < all; A3 > (A2 > A1\*); D11 > D12\*;2 2008–2012 0,6  $1,2 \mid 1,5 \mid 2,1 \mid 1,9 \mid 2,1 \mid 2,7 \mid D1 > A1, A2; D2 > A2;$ D21 > D22D3 > D1, D2, A3\*

The questioning of students showed the following:

1. In both regarded periods of time, for all 8 main positive personality changes, the growth of points for all SHG students, who were trained by HIP program, is significantly higher than for RHS of the same period of time. In 2001-2004 the growth of six positive personality changes (except activity and communicability) and in 2008-2012 of seven (except communicability) of SHG students after the second year of in-class training by HIP program is much higher than the same of RHS of the 3<sup>rd</sup> year of study.

Mean value of points' growth of all eight positive personality changes of SNG students, who were trained by HIP program, increased as a trend already after the first year of training, in 2001-2004, and became much higher than the same of RHS of the 3<sup>rd</sup> year of study in 2008-2012.

We can surely say that positive that positive development of personalities' of students, who attended in-class HIP trainings, progresses more successfully than the development of RHS personalities, who did not pass such training.

- 2. Both in 2001-2004 and in 2008-2012 the data of A3 group are much better than the data of group A1 or both other groups of students, who attended in class HIP trainings, for all positive personality's changes. Mean results of all personality's changes of students' groups, who were trained during one, two or three years (A1, A2, A3) is successively and significantly growing in 2001-2004 and is growing as a trend in 2008-2012 after the first year of study. We can conclude that positive personality's changes of students, who attended in class HIP trainings, are growing with the growth of period of training.
  - 3. Both in 2001-2004 and in 2008-2012 for all eight positive personality's qualities, the growth of mark points



of SHG students, who fulfilled HT, is much higher than of RHS of the 3<sup>rd</sup> year of study.

This permits to make conclusion that positive personality development of SHG students, who fulfilled HT, was more intensive than the development of students, who attended in-class HIP trainings or physical culture trainings for RHS.

4. Both in 2001-2004 and in 2008-2012 the data of points' growth for main positive personality changes of D1 students are either equal the data of group A3 or are significantly higher than the data of group A3 or A2. Mean values of all eight personality's changes for groups D1 of both periods of time are much higher then the same of groups A2, and insignificantly differ from the data of groups A3.

It means that personality development of students, who fulfilled HT HIP during one year, is significantly higher than the same of the students, who attended in-class HIP trainings during two years and is very close to personality changes of those, who attended in-class HIP trainings during three years. I.e., those, who fulfilled HT show quicker positive personality's development, than the students, who attended in-class HIP trainings (and still more higher than of RHS of the 3<sup>rd</sup> year of students).

- 5. Comparison of data for 2001-2004 and 2008-2012 witnesses that:
- 1) there is negative dynamics of points' growth of positive qualities' development of 3<sup>rd</sup> year RHS;
- 2) development points' growth of five from eight positive personality's qualities (except successfulness, self confidence and activity) of SHG students, who attended in class HIP trainings, and in 2008-2012 after one or three years of training (groups A1 and A3) is much higher than in 2001-2004, and after two years of training (group A2) the growth of points of seven personality's qualities in both periods of time differ insignificantly, while for one (activity) increased as a trend in last years;
- 3) in 2008-2012 the growth of successfulness points of A3 students was significantly lower and the growth of self confidence points was as trend lower than in 2001-2004. These two indicators of personal development are interconnected. It can be assumed that if at HIP trainings to pay more attention to development of self confidence and positive attitude to own self, the students' successfulness will also grow;
- 4) in 2008-2012 there is reduction of indicators of personal development of SHG students, who fulfilled HT HIP during one or two years: mean value of pints' growth of groups D1  $\mu$  D2 is much lower than this indicator was in 2001-2004 for three positive qualities of personality: successfulness, emotional stability and tolerance. This fact shall be stipulated in training complex for HT for SHG students, i.e. it is necessary to stipulate more efficient exercises for development of these students' qualities.

# **Summary**

- 1. SHG students, who were trained by program of health improving practical training on the base of Tsi Gun gymnastics, have positive personality changes. The intensity of these changes is much higher than the same of RHS, who were trained in main groups of physical culture.
- 2. The level of students' personality positive qualities is growing with the increasing of period of their training by practical training's program.
- 3. Effectiveness of in-class training by practical training's program increased in 2008-2012 in comparison with 2001-2004. Intensity of students' positive personality's changes, who were trained by practical training's program out-of-class, reduced in the second year of training, in 2008-2012 in comparison with 2001-2004, however it remained still higher than the same of the students, who were trained in main group by usual physical culture program.
- 4. Any HIP training on the base of Tsi Gun gymnastics is an important factor of personality's development of students with health problems.
- 5. In order to increase effectiveness of in-class training of students by HIP program, for the development of their personalities, it is necessary at HIP trainings to pay more attention to development of self confidence and positive attitude to their own selves. For increasing of out-of-class students' training by HIP program, for development of personality it is necessary to stipulate in HT complex for SHG students more effective exercises for development of successfulness, emotional stability and tolerance.

Small sizes of samples of 3<sup>rd</sup> year students did not permit to obtain significant correlations between indicators of personality development of these and other students. Concerning students of the 3<sup>rd</sup> year of study the formulated above conclusions are preliminary. We have found directions, in which it is necessary to perfect HIP. It is necessary ti make the necessary corrections of training processes of in-class and out-of-class HIP trainings and carry out questionings of students in the nearest 1-2 years, in order to check up the efficiency of these corrections. Increasing of sample sizes for different groups will permit to obtain statistically more confident results.

#### References

- Dubrovinskaia E.I. *Social'no-psikhologicheskie usloviia formirovaniia motivacii pervichnogo otkaza ot tabakokureniia sredi studencheskoj molodezhi* [Social and psychological conditions of the primary motivating smoking cessation among students], Cand. Diss., Moscow, RSSI Publ., 2012, 16 p.
- 2 Kramida I.E. Valeologicheskij praktikum na osnove kitajskoj gimnastiki cigun dlia studentov special'noj medicinskoj gruppy [Valeological workshop based on Chinese qigong exercises for students of special medical group]. Fizicheskoe vospitanie, sport, fizicheskaia reabilitaciia i rekreaciia v vysshikh uchebnykh zavedeniiakh: problemy i perspektivy razvitiia [Physical education, sport, recreation and physical rehabilitation in higher education: problems and prospects], Krasnoyarsk, 2011, pp.179-181.
- 3 Kramida I.E. Zaniatiia valeologicheskogo praktikuma na osnove kitajskoj gimnastiki cigun kak faktor oslableniia zavisimosti studentov ot kureniia [Valeology workshop sessions on the basis of Chinese Qigong as a factor that would reduce dependence students from smoking]. *Fizicheskoe vospitanie, sport, fizicheskaia reabilitaciia i rekreaciia v vysshikh uchebnykh zavedeniiakh: problemy i perspektivy* [Physical education, sport, recreation and physical rehabilitation in higher education: problems and prospects], Krasnoyarsk, 2011, pp.182-185.
- 4 Kramida I.E. Izmenenie zavisimosti ot alkogolia u studentov, obuchaiushchikhsia po programme valeologicheskogo praktikuma na osnove gimnastiki cigun, kak pokazatel' effektivnosti praktikuma [Change of alcohol dependence among students enrolled in the program valeologicheskogo workshop based on Qigong, as an indicator of the effectiveness of the workshop]. Fizicheskoe vospitanie, sport, fizicheskaia reabilitaciia i rekreaciia v vysshikh uchebnykh zavedeniiakh: problemy i perspektivy razvitiia [Physical education, sport, recreation and physical rehabilitation in higher education: problems and prospects], Krasnoyarsk, 2011, pp.186-189.
- 5 Kramida I.E. Valeologicheskij praktikum na osnove gimnastiki cigun kak faktor razvitiia lichnostnykh komponentov zdorovogo obraza zhizni u studentov [Valeological workshop based on Chi Kung as a factor of personality components of a healthy lifestyle among students]. *Aktual'nye problemy, mekhanizmy i perspektivy razvitiia fizicheskoj kul'tury i sporta v vysshikh uchebnykh zavedeniiakh Minsel'khoza Rossii* [Actual problems, mechanisms and prospects of development of physical culture and sports in higher education Russian Ministry of Agriculture], Irkutsk, 2011, pp.255-259.
- 6 Kuz'menok G.F. *Sovershenstvovanie sistemy organizacii profilaktiki upotrebleniia psikhoaktivnykh veshchestv sredi uchashchejsia molodezhi* [Improving the system of organization of prevention of substance use among students], Cand. Diss., Moscow, MSMDU Publ., 2010, 17 p.
- 7 Radkevich N.V. *Social'no-psikhologicheskie aspekty tabakokureniia sredi studentov medicinskikh i nemedicinskikh vuzov* [Social and psychological aspects of smoking among medical students and non-medical university], Cand. Diss., Moscow, MMA Publ., 2005, 21 p.
- 8 .Waters K. Characteristics of Social Smoking Among College Students. *Journal of American College Health*, 2006, vol.55(3), pp. 133–139.
- 9 .Lyvers M., Hall T., Bahr M. Smoking and psychological health in relation to country of origin. *International Journal of Psychology*, 2009, vol.44(5), pp. 387–392.



## Information about the author:

**Kramida I. E.:** atosn35@mail.ru; Siberian State Aerospace University Newspaper Krasnoyarsk Worker avenue, 31, Krasnoyarsk, 660014, Russia.

Cite this article as: Kramida I. E. Training workshop on the basis of gymnastic qigoing as a factor of personal development of students with poor health. *Pedagogics, psychology, medical-biological problems of physical training and sports,* 2013, vol.4, pp. 35-40. doi:10.6084/m9.figshare.691014

The electronic version of this article is the complete one and can be found online at: http://www.sportpedagogy.org.ua/html/arhive-e.html

This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/3.0/deed.en).

Received: 11.04.2013 Published: 30.04.2013

40