

PROPERTY FEATURES AND MENTAL STATE UNIVERSITY STUDENTS OF MODERN

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Annotation. The results of the study of values and mental conditions of typical Ukrainian university students. It is shown that mental health - a state of psychic sphere. It is based on the general state of peace of mind, which gives adequate behavioral reaction. Moral health - a set of motivational characteristics, need and informative aspects of life. Its basis is determined by the system of values, attitudes and motivations of individual behavior. It is established that the existing level of organization of the educational process in physical education does not create the necessary framework for the effective development of physical culture of the students and getting them non-professional physical education, only partially solves the problem of their physical fitness and recreation.

Key words: mental, spiritual health of students, values, physical education.

Introduction

Usually several components of human health are marked out and every of them attracts attention to one of health's facets [6].

Somatic health is current state of human organs and systems and its base is biological program of individual development, conditioned by basic demands, which dominate on different stages of ontogenetic development. These demands first of all are trigger mechanism of human development and, secondly, ensure individualizing of this process.

Physical health is the level of organs and systems' development and the base of it are morphological and functional reserves, which ensure adapting responses.

Psychic health is a state of psychic sphere; the base of this sphere is a state of general mental comfort, which ensure adequate behavioral response. Such state is conditioned by biological and social demands as well as be possibilities to satisfy them.

Moral health is a complex of characteristics of motivational, demand and informational life activity's sphere, with the base determined by system of values, principles and motives of individual's behavior.

All above mentioned facets of specialist's health have direct relation to formation of university graduate's activity potential.

In the block of integral social-professional graduate's competence there formed intellectual-personality base of qualities, which develops on every educational stage on the base of mental furniture, which was reached on previous one; the core, main part of it is formed in educational process in compliance with specificity and tasks of future profession. It includes social and professional competences, each of them being the whole set of sub-sets list, that is seen in available state standards of higher vocational education in section of professional competences and demands to them [5,7,8,11].

Generalizing, it should be noted: model of integral social-professional competence can be represented as four blocks:

1. Basic, providing with intellect, is thinking activity on normal level of development. According to this block HEE graduate must be characterized, as minimum, by normal development of such mental operations as analysis and synthesis; combining and comparing; systemizing; taking decision; prognostication; comparing of result with the set target.

2. Personal block, in the frame of which a person must have such features (or must be characterized by them) as: responsibility; organization; purposefulness.

3. Social block, which ensures social interactions of a person and the adequacy of this interaction to other people, groups, collectives. According to this graduate shall be able:

- to organize his life in compliance with socially significant ideas about healthy life style;
- to be guided by rules and obligations of a citizen in society;
- to have behavior, guided by values of life, culture, social interaction;
- to build and realize perspective lines of self-development (self-perfection) including building of own health;
- to integrate all acquired knowledge and use them for solving of social-professional tasks;
- to be able for co-operation, for management fro subordination;
- to communicate verbally and in written form on natural and foreign languages;
- to find way out from non-standard situations;
- to find creative solutions of social and professional tasks;
- to receive, keep, process, spread and transform information (library catalogues, information systems, internet, e-mail, etc.)

4. Professional block, which ensures adequacy of fulfillment of professional; activity. University graduate must be able to solve professional tasks of his specialty. These tasks can be invariant in the field of his activity and special (production, designing, experimental, operational).

From the above said it can be seen that personality-oriented physical education is directly connected with formation of different aspect of social-professional competence [1-4,9,10]; this physical education we tested in pedagogic experiment, which was carried out at Donetsk national university.

The work has been fulfilled as per plan of scientific & research works of Donetsk national university.

Purpose, tasks of the work, material and methods

The purpose of the research, the results of which are discussed in this article, is to establish peculiarities of psychic state of Donetsk national university’s students.

The methods and organization of the research

For reaching of our target we used the following methodic: “Value orientations” (M. Rokich); diagnostics of level of social frustration by L.I. Wasserman; differential diagnostics of depressing states by V. Zunge (in modification of T.I. Balashova); study of nervous-adapting level (I.N. Gurevich) and study of anxiety level with the help of test “Personality’s scale of anxiety determination” by G. Tailor (modified by V.G. Norakidze).

Results of the researches

For comparison of two mean values of the studied psychic indicators, which belong to two samples and for revelation of statistically confident differences between them we used t-criterion of Student. We took probability of admissible error equal to 0.05, with which confidence of calculations was 95%, admissible error does not exceed 5%, and 0.01 with which confidence of calculations was 99% and admissible error does not exceed 1%.

For conducting of further researches we should have to determine equivalency of the formed experimental and control groups. In table 1 and 2 there are given the data of calculation of Student’s t-criterion by psychological indicators of girls and boys of experimental and control groups before experiment.

Table 1

Statistical data of psychological indicators of experimental and control groups’ boys before experiment (n = 160)

Indicators	Experimental group		Control group		t
	\bar{X}	±S	\bar{X}	±S	
Nervous-psychic adapting, points	25.08	11.73	27.00	14.46	1.3
Social frustration, points	0.86	0.88	1.17	0.97	0.9
Depression, points	53.74	5/46	53.21	5.82	0.8
Anxiety, points	21.69	7.78	21.41	7.82	0.3
Health, rating	7	3.94	7.16	3.62	0.4
Cognition, rating	9.88	3.23	9.74	3.08	0.4
Development, rating	10.71	3.09	10.17	2.87	1.6

t-criterion by Student

As per the data of table 1 and 2 all calculated values of Student’s t-criterion are less $t_{table} = 1.96$ ($p \leq 0.05$) и $t_{table} = 2.58$ ($p \leq 0.01$), accordingly, statistically confident differences in psychological indicators of experimental and control groups are absent. Therefore, the formed by us groups are nearly equivalent by the levels of the studied psychological indicators.

System of value orientations determines the content of personality’s orientation and is the core of his attitude towards surrounding world, other people, towards himself; it is the basis of world vision and the core of life activity’s motivation, the ground of life conception. Studying the structure of students’ value orientations, we interested, to what extent the induced personality-oriented approach could influence on changing of their life values’ rating.

In his methodic “Value orientations” M. Rokich marks out two classes of life values: terminal – belief that final target of every individual being is worthy of striving; instrumental: they are beliefs that some manner of activity or feature of personality is preferable in any situation.

Table 2

Statistical data of psychological indicators of experimental and control groups’ girls before experiment (n = 160)

Indicators	Experimental group		Experimental group		t
	\bar{X}	±S	\bar{X}	±S	
Nervous-psychic adapting, points	25.51	8.18	25.3	10.87	0.2
Social frustration, points	0.91	0.84	0.81	0.94	0.8
Depression, points	54.61	4.98	53.75	4.85	1.6
Anxiety, points	21.51	6.44	21.64	7.4	0.2

Health, rating	6.26	4.29	6.81	4.36	1.1
Cognition, rating	10.11	4.76	9.71	4.30	0.8
Development, rating	9.69	4.33	9.82	3.26	0.3

t-criterion by Student

In our research we concentrated attention on block of terminal values, videlicet: health (physical and psychic); cognition (ability to increase world vision, educational level, general culture, to intellectual progressing) and development (work with oneself, constant physical and mental self perfection). In our opinion, personality-oriented approach to physical education must influence on actualization exactly of these values (may be together with some other) in the structure of formed personality.

It should be noted that rating of a value was determined as per place, which was given to it by the tested: from 1 to 18. Therefore, reduction of value rating witnesses about actualization and increasing of its significance in the system of personality's terminal values.

In table 3 statistical data of experimental group boys' psychological indicators before and after experiment are presented.

Table 3

Statistical data of psychological indicators of experimental group's boys before and after experiment (n = 160)

Indicators	Before experiment		After experiment		t
	\bar{X}	$\pm m$	\bar{X}	$\pm m$	
Nervous-psychic adapting, points	25.08	11.73	22.71	10.09	1.9
Social frustration, points	0.86	0.88	0.87	0.71	1.1
Depression, points	53.74	5.46	50.54	4.17	5.9**
Anxiety, points	21.68	7.78	18.79	6.3	3.7**
Health, rating	7	3.94	4.89	3.56	5.1**
Cognition, rating	9.88	3.23	7.92	2.82	5.9**
Development, rating	10.71	3.09	8.86	2.64	5.8**

Notes: t-criterion by Student, * - statistically confident difference ($p \leq 0.05$) between indicators before and after experiment, ** - statistically confident difference between group's indicators before and after experiment ($p \leq 0.01$).

The results of experimental group's boys witness about improvement of rating of such marked out by us life values as: «Health» from $\bar{X} = 7$ to $\bar{X} = 4.89$, with $t = 5.1$ ($p \leq 0.01$), «Cognition» from $\bar{X} = 9.88$ to $\bar{X} = 7.92$, with $t = 5.9$ ($p \leq 0.01$) and «Development» from $\bar{X} = 10.71$ to $\bar{X} = 8.86$, with $t = 5.8$ ($p \leq 0.01$).

As per the data, given in table 4, control group's boys did not show any confident differences by the studied vales. Rating of value «Health» was $\bar{X} = 7.16$, at the beginning of the research and at the end - $\bar{X} = 6.59$, with $t = 1.5$ ($p \geq 0.05$); «Cognition», accordingly $\bar{X} = 9.74$ and $\bar{X} = 9.09$, with $t = 1.9$ ($p \geq 0.05$) «Development» - $\bar{X} = 10.17$ and $\bar{X} = 9.59$, with $t = 1.9$ ($p \geq 0.05$).

Table 4

Statistical data of psychological indicators of control group's boys before and after experiment (n = 160)

Indicators	Before experiment		After experiment		t
	\bar{X}	$\pm m$	\bar{X}	$\pm m$	
Indicators	27.00	14.46	26.99	13.12	0.13
	1.17	0.97	1.29	0.93	1.2
Nervous-psychic adapting, points	53.21	5.82	52.42	5.28	1.3
Social frustration, points	21.41	7.82	21.69	7.59	0.3
Depression, points	7.16	3.62	6.59	3.29	1.5
Anxiety, points	9.74	3.08	9.09	3.03	1.9
Health, rating	10.17	2.87	9.59	2.84	1.9

Cognition, rating					
Development, rating					

t-criterion by Student

From data, presented in table 5 it is seen that experimental group's girls showed statistically confident changes of rating by values «Health» from $\bar{X} = 6.26$ to $\bar{X} = 3.53$, with $t = 6.3$ ($p \leq 0.01$) and «Cognition» from $\bar{X} = 10.11$ to $\bar{X} = 8.09$, with $t = 4$ ($p \leq 0.01$).

Table 5

Statistical data of psychological indicators of experimental group's girls before and after experiment (n = 160)

Indicators	Before experiment		After experiment		t
	\bar{X}	$\pm m$	\bar{X}	$\pm m$	
Nervous-psychoic adapting, points	25.51	8.18	22.74	7.39	1,5
Social frustration, points	0.91	0.84	0.9	0.71	1,6
Depression, points	54.61	4.98	52.14	4.19	4,8**
Anxiety, points	21.51	6.44	18.96	5.58	3,8**
Health, rating	6.26	4.29	3.53	3.47	6,3**
Cognition, rating	10.11	4.76	8.09	4.49	4**
Development, rating	9.69	4.33	8.84	4.09	1,8

Notes: ** - statistically confident difference ($p \leq 0.01$) between group indicators before and after experiment, t-Student's criterion.

In control group of girls there is no confident differences in marked out life values. Results of study are presented in table 6.

The obtained results of experimental groups' boys and girls, as per below mentioned methodic, are given in tables 3 and 5.

The developed in Psycho-neurological scientific and research institute, named after V.M. Bekhterev "Test for nervous psychoic adapting" (I.M. Gruvich, 1992) is oriented on revelation of one from five groups of psychic health. They are: 1st group – healthy; 2nd group – practically healthy with favorable prognosis; 3rd group – practically healthy with unfavorably prognosis; 4th group light pathology; 5th group – evident pathology.

Table 6

Statistical data of psychological indicators of control group's girls before and after experiment (n = 160)

Indicators	Before experiment		After experiment		t
	\bar{X}	$\pm m$	\bar{X}	$\pm m$	
Nervous-psychoic adapting, points	25.3	10.87	26.54	10.43	1
Social frustration, points	0.81	0.94	0.86	0.71	1.6
Depression, points	53.75	4.85	53.72	4.57	0.46
Anxiety, points	21.64	7.4	20.84	6.49	0.88
Health, rating	6.81	4.36	5.93	3.91	1.9
Cognition, rating	9.71	4.30	8.84	3.73	1.9
Development, rating	9.83	3.26	9.21	3.01	1.8

t-criterion by Student

The obtained indicators of nervous-adapting level of experimental group's boys were before experiment $\bar{X} = 25.08$ points and after - $\bar{X} = 22.71$ with $t = 1.9$ ($p \geq 0.05$), the girls' results: before experiment $\bar{X} = 25.51$ points and after - $\bar{X} = 22.74$ with $t = 1.5$ ($p \geq 0.05$). Differences are not confident.

With the help of methodic of social frustration level's diagnostics by L.I. Wasserman (modified by V.V. Boyko) the level of dissatisfaction with social achievements in main aspects of life activity was registered: the higher points were the higher was the level of social frustration.

The following levels are marked out: 3,5 – 4 points – very high level of social frustration; 3,0 – 3,4 – increased level of frustration; 2,5 – 2,9 – moderate level; 2,0 – 2,4 – indefinite level of frustration; 1,5 – 1,9 – reduced level of frustration; 0,6 – 1,4 – very low level of frustration; 0,0 – 0,5 – absence (nearly absence) of frustration level.

The level of social frustration of experimental group's boys was before experiment $\bar{X} = 0,86$ points and after - $\bar{X} = 0,87$ with $t = 1.1$ ($p \geq 0.05$), of girls – before experiment: $\bar{X} = 0.91$ points and after - $\bar{X} = 0.9$ with $t = 1.6$ ($p \geq 0.05$).

With the help of methodic for determination of depressing states by Zunge (modified by T.I. Balashova) we determined depressing state and the states close to depression.

There are following levels of depression: not more than 49 points – absence of depression; 50-59 points – light depression of situational or nervous origin; 60-69 – sub- depression state or disguised depression; 70 points and more -0 is diagnosed as real depressive state.

Mean arithmetical data of “Depression” level of experimental group's boys are rather interesting before and after experiment. As per tests' results there is statistically confident reduction of depression level from $\bar{X} = 53.74$ points before experiment to $\bar{X} = 50.54$ points with $t = 5.9$ ($p \leq 0.01$) after experiment.

Before experiment the girls' depression level was $\bar{X} = 54.61$ points and after experiment it was $\bar{X} = 52.14$ points with $t = 4.8$ ($p \leq 0.01$).

Determination of anxiety level was carried out with the help of questionnaire, modified by V.G. Norakidze. By the sum of obtained points the level of anxiety was determined.

There are following levels of anxiety: 40 – 50 – very high level of anxiety; 25 – 39 – high level of anxiety; 16 – 24 – middle level with trend to high; 5 – 15- middle level with trend to low; 0 – 4 – low level of anxiety.

Mean arithmetical data of “Anxiety” level of experimental group's boys before and after experiment were accordingly $\bar{X} = 21.68$ points and $\bar{X} = 18.79$ points with $t = 3.7$ ($p \leq 0.01$).

Mean arithmetical data of “Anxiety” level of experimental group's girls before and after experiment were $\bar{X} = 21.51$ points and after experiment $\bar{X} = 18.96$ points with $t = 3.8$ ($p \leq 0.01$).

In control groups of boys and girls there are no confident differences by the studied psychological indicators (results are given in tables 4 and 6).

Formation of students' physical culture in educational process of HEE is manifested in their attitude to values of physical culture and the in level of development of their own physical culture. Students, who took part in the researches, by the data of questioning and depending on their attitude to physical culture and their level of physical culture and sports activity, can be conventionally divided into four typological groups by the time, spent for physical culture trainings.

1. Students, who do not show any physical culture or sport activity, they spend for physical culture not more than 1 hour a week (14,8 % of the questioned).

2. Students with low physical culture/sports activity; they spend less than 6 hours a week for physical trainings (60,0 % of the questioned).

3. Students with optimal physical culture/sports activity; they spend from 6 to 7 hours a week for physical trainings (17,2% of the questioned).

4. Students with relatively high physical culture/sports activity; they spend 8 hours and more a week for physical trainings (8.0% of the questioned).

If to project these typological groups on years of study at HEE, we shall obtain that the quantity of DonNU students, who practiced physical culture/sports activity in 2011-2012 academic year, which was previous to pedagogic experiment, not more than 1 hour a week increases to 3rd year of study (at 1st year of study -8,8%) and 28,9 %. The quantity of students, who practice physical training for not more than 6 hours a week also reduces in the period from 1st to 3rd years of study: from 61.2% to 49.5%. The quantity of students with optimal regime of physical training (6-7 hours a week) also reduces in the period from 1st to 3rd years of study: at the 1st year – 17.1% and by the 3rd year - 8.1% of the questioned.

With analyzing of answers to question about sufficiency of students' motion regime for normal life activity and health preservation it was established that 63,1% of the questioned students answered positively; 22,2 % could not answer and 14,7 % were ready to admit their own motion regime insufficient. Negative evaluation of own motion regime in the structure of students' life activity to rather large extent manifest dynamics by years of study: 11,2% of first year students, 19,6 % of second year and 24,3 % of third year students consider their motion regime insufficient. It witnesses that senior students are more critical in evaluation of their own life activity content.

If to study systematic character of physical culture trainings by sex, we can see that 7.8% of girls and 25.1% of boys consider themselves sportsmen (women); 47.7% of girls and 51.1% of boys consider themselves physical culture trainees; 43.5% of girls and 23.8% of boys think that they do not practice physical culture or sports. Thus, girls participate in active sport-physical culture activity less than boys.

These data, which were obtained before experiment, were considered in the course of forming pedagogical experiment, one of tasks of which was not only encouragement of increasing of motion activity scope, but also attracting of attention to maintaining of subjectively felt optimum of own psycho-physical state. With it we decided to judge about results of such activity not by formal increasing of time, spent for physical culture/sports trainings, but by

dynamics of physical abilities and changes of functional state of all students-participants of experiment. These dynamics and changes will be analyzed in future articles.

Analysis of the obtained data shows that the following factors substantially influence on students physical culture/sports activity: desire to raise own physical conditions (52,1 %); need in optimizing weight and improvement of figure (49,6 %); desire to pass test in "Physical education" (44,5 %); desire to have ability to release tiredness, increase workability (22,4 %); training of will and character (12,1 %).

In students' opinion, their demands, interests and motives of entering physical culture activity are determined by the state of sports material base, by orientation of physical education and training processes, by availability of equipment, sport uniform, friendly atmosphere. Such inner factors as lack of time, absence of demand in physical culture-health improving activity, harmful habits (alcohol, smoking and etc), state of health are obstacles for formation of motivation and active positive attitude to physical culture/sports activity.

For increasing of physical culture/sports activity's effectiveness it is necessary to regard principle of priority in choosing of physical exercise trainings' forms in HEE. Significant interest of 1st and 2nd years students is caused by trainings of the chosen kind of sports in circles (37,5%).

The second by significance form of physical activity is walks, games, swimming (35,1 % of students). Part of students consider the most acceptable form club trainings according to their sport – health related interests (14,1 %). Certain part of students would like to use for physical culture/sports activity only independent form of trainings (14,9 %).

If to regard students' forms of physical activity by years of study, then first year students prefer circle trainings of the chosen kind of sports (33,1 %), and then walks, games and swimming (26,3 %); second year students, as it turned out, are still more interested in circle trainings of the chosen kind of sports (45,2 %), and then in walks and games 23,5 %).

Summary

1. As per testing results according to methodic of differentiated diagnostics of depressive states by Zunge in experimental group of boys we observed confident reduction of quantity of students with depressive state. Before experiment $\bar{X} = 53.74$ points and after experiment $\bar{X} = 50.54$ points with $t = 5.9$ ($p \leq 0.01$). Mean arithmetical value of "Depression" level of experimental group's girls were before experiment $\bar{X} = 54.61$ points and after experiment $\bar{X} = 52.14$ points with $t = 4.8$ ($p \leq 0.01$).

2. The obtained mean arithmetic data of "Anxiety" level of experimental group's boys were $\bar{X} = 21.68$ points and $\bar{X} = 18.79$ points with $t = 3.7$ ($p \leq 0,01$). The results of experimental group's girls are: $\bar{X} = 21.51$ points and $\bar{X} = 18.96$ points with $t = 3.8$ ($p \leq 0.01$).

3. Analysis of students' answers to question "What is physical culture for students?" is an important source for further generalizations and conclusions. Great majority of the questioned students think that physical culture is only pleasant kind of leisure, game, entertainment (40,4 % of the questioned, including 39,2 % of boys and 41,2% of girls).

4. Results of teachers and students' questioning for evaluation of "Physical education" discipline's fulfillment by years of study showed that fulfilled scope of lectures and methodic-practical classes, which is traditionally planned in Ukrainian HEE, is insufficient for formation of student's physical culture.

5. So, the existing level of organization of educational process on physical education does not create required foundation for efficient formation of students' physical culture and obtaining by them non professional physical culture education; it can only solve the tasks of physical preparation and recreation.

The prospects of further researches imply more profound study of psychic state of modern university's students.

References:

- 1 Avksent'ev E.N. *Formirovanie gotovnosti studentov pedagogicheskikh vuzov k fizkul'turno-sportivnoj deiatel'nosti* [Formation of readiness of students of pedagogical universities to sports activity], Cand. Diss., Cheboksari, 2004, 184 p.
- 2 Akulova K.Iu. *Pedagogicheskie usloviia formirovaniia u studentov gotovnosti k samopoznaniuu v processe fizicheskogo vospitaniia* [Pedagogical conditions of formation of students' readiness for self-knowledge in the process of physical education], Cand. Diss., Moscow, 2006, 24 p.
- 3 Barybina L.N. *Pedagogika, psihologia ta mediko-biologicni problemi fizichogo viovanna i sportu* [Pedagogics, psychology, medical-biological problems of physical training and sports], 2012, vol. 10, pp. 10-15.
- 4 Belova T.Iu. *Kompleksnyj podkhod v formirovanii motivacionno-cennostnykh orientacij v uchebno-trenirovochnom processe studentov specializacii «Legkaia atletika» v tekhnicheskome vuze* [An integrated approach to the formation of motivational and value orientations in the training process of students specialization "Track and Field" in a technical college]. *Aktual'nye voprosy bezopasnosti, zdorov'ia pri zaniatiiakh sportom i fizicheskoi kul'turoj* [Topical issues of safety and health in sports and physical education], Tomsk, TSPU Publ., 2004, vol. 1, pp. 21–25.
- 5 Galiamina I.G. *Proektirovanie gosudarstvennykh obrazovatel'nykh standartov vysshego professional'nogo obrazovaniia novogo pokoleniia s ispol'zovaniem kompetentnostnogo podkhoda* [Design of state educational standards of higher education of the new generation with the use of the competence approach]. *Trudy*

- metodologicheskogo seminara «Rossiia v Bolonskom processe: problemy, zadachi, perspektivy»* [Proceedings of the methodological seminar "Russia in the Bologna Process: Issues, challenges and prospects"], Moscow, 2004, pp. 19-31.
- 6 Dobroradnykh M.B. *Formirovanie cennosti zdorov'ia u studentov v processe ikh professional'nogo obrazovaniia* [Formation of the value of health in students during their professional education], Cand. Diss., Moscow, 2003, 164 p.
 - 7 Zimniaia I.A. Kul'tura. Obrazovannost'. Professionalizm specialista (K probleme unificirovaniia trebovanij k urovniu professional'noj podgotovki v strukture gosudarstvennykh standartov nepreryvnogo obrazovaniia) [Culture. Education. Professionalism specialist (the problem of alignment requirements for the training in the structure of state standards of continuing education)]. *Problemy kachestva, ego normirovaniia i standartov v obrazovanii* [Quality problems, its regulation and standards in education], Moscow, 1998, pp. 157-174.
 - 8 Korshunov S.V. Podkhody k proektirovaniu obrazovatel'nykh standartov v sisteme mnogourovnevnogo inzhener'nogo obrazovaniia [Approaches to the design of educational standards in the system of multi-level engineering education]. *Trudy metodologicheskogo seminara «Rossiia v Bolonskom processe: problemy, zadachi, perspektivy»* [Proceedings of the methodological seminar "Russia in the Bologna Process: Issues, challenges and prospects"], Moscow, 2004, pp. 111-122.
 - 9 Ayers S.F. Recreation facilitation styles and physical activity outcomes in elementary school children. *The Journal of Physical Education, Recreation & Dance*, 2009, vol. 2, pp. 43–46.
 - 10 Committee of Physical Activity, Transportation and Land Use. *Does the built environment influence physical activity? Examining the evidence*. Special Report 282, Washington, DC, Transportation Research Board, Institute of Medicine, National Academies of Science, 2008, 104 p.
 - 11 Taking a refreshing dip: Health, cleanliness and the empire. *The International Journal of the History of Sport*, 2007, vol. 24(5), pp. 693–706.

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