

LEISURE OF UKRAINIAN SCHOOLCHILDREN AND PLACE OF MOTOR FUNCTIONING IN IT

Bodnar I.R., Kindzera A.B. Lviv State University of Physical Culture

Abstract. <u>Purpose:</u> to determine interests and degree of average school age pupils' motor functioning in leisure time and at physical culture lessons. *Material*: in the research 5-9th form pupils participated [n=325, age 10-14 years). With the help of questioning we find structure, content of leisure and preferred activities in free time. Results: Children's attitude to physical culture lessons differs significantly depending on health state (health group). Leisure time is spent at TV or computer by most of children. It was found that 44.5% of children spent less than 2 hours a day for interactive activities. In days off time for TV watching or computer increases greatly and time for walks in he fresh air reduces. Time for walks differs depending on day of week. **Conclusions:** in general we observed positive attitude to physical culture lessons and physical activity. It is a contradiction that most of schoolchildren choose passive kind of rest (TV watching or computer activities). Walks in the fresh air, attendance of sport circles and mobile games hear house take much less part of pupil's free time.

Key words: schoolchild, leisure, motor functioning, sports, free time.

Introduction

Leisure is one of the most important components of human life. As on to day, specificities of scientifictechnical progress and shortening of physical loads result in immobility and strengthening of nervous-psychic fatigue. In such situation correct organization of children's leisure acquires especial importance. In modern society person has still less and less free time. That is why it is very important to spend it with high quality. Leisure is time for self development, for rest and preferred activities [1, 8]. That is why it is important to correctly distribute this time and use it with profit.

Recent decade there has been appearing a number of scientific works dealing with structure and content of children's and youth's physical activity in leisure time and its influence on human organism. Specialists [5, 16, 20, 23] regard physical functioning as a basis of healthy life style. The authors determined significance and influence of physical functioning on health of different age children:

- A model of adolescents' health culture formation was offered, which included in its structure four subsystems: health-preservation technologies; health related technologies; technologies of healthy life style teaching; formation of personality's qualities, which facilitate health strengthening. It was found that the offered model orients pupils on formation positive individual picture of health as the necessary condition of their life activity [4];
- Conclusions were presented about academic disciplines' realization of their functions, when familiarizing pupils with health components; pupils training for healthy life style as well as realization of children's and adolescents' health monitoring [10];
- Physical functioning functions at different stages of human life were elucidated: reasons of person's immobile way of life were found and their after effects in health were pointed at. Conclusion about health related, therapeutic and training effect of physical exercises was made [6];
- Monitoring of different age schoolchildren's health, who live in hills and plains of Carpathian region, was fulfilled. It was found that independent on region of residence there is close connection between physical fitness, somatic health indicators, physical condition and motor functioning level of schoolchildren [9];

Other scientists [11, 13, 19 21] note that with physical activity increase in educational process, schoolchildren's learning progress improves. The authors determined:

- Scientific theoretical principles of different health groups' schoolchildren's integrative physical education in comprehensive educational establishments. They offered the system of current testing and express assessment of schoolchildren's health and physical fitness [1];
- Youth feels serious crisis in respect to own identity in free time. Information about ways to spend free time out of school is provided [12];

© Bodnar I.R., Kindzera A.B., 2016

- It is necessary to urgently implement programs for increasing adolescents' physical functioning [14];
- Young people and adults shall spend free time, mainly, practicing different physical functioning forms.
 Children shall be informed about movements' positive influence on human organism. Children shall know that physical exercises improve physical form and health [23];
- Three the most popular kinds of leisure are: computer games; shopping or coffee taking; listening to music or watching TV [22];
- Girls spend more time at home or in shopping. Boys are more oriented on external world, sports, technologies and earning money [17, 18].

The authors note that still more schoolchildren chose passive kinds of leisure. They say that interactive activities (TV watching and computer-sitting) conquer still larger audience and become more often the main kind of leisure spending. All these sharply reduce volume of schoolchild's physical functioning. Most of pupils do not follow recommendations of World health protection organization concerning daily norm of physical functioning (60 minutes a day) [3].

In our previous works we found that physical culture lessons take above average level of popularity among children of average school age: more than half of children assess it with highest quantity of points; next 30% assess their attitude by 9 and 8 points; in conditions of health worsening we also observed a tendency to worsening of schoolchildren's attitude to physical functioning: (from 9.17±1.50 points to 8.89±1.13 points, p>0.05) [2]. We found what kinds of motor functioning can be preferred by schoolchildren at physical culture lessons [1]. In particular we determined that rating of sport games' popularity (54.8%) substantially prevails over other kinds of sports. But there was no comparison of desired and admissible kinds of activities in free time as well as the structure and content of schoolchildren's leisure has not been studied sufficiently yet.

Study of schoolchildren's leisure, assessment of modern status and place of physical functioning in schoolchild's life will permit to work out recommendations on effective monitoring of young generation formation. Determination of favorite time spending will help to more successfully influence on quality of schoolchild's leisure.

The purpose of the research is to determine interests and degree of average school age pupils' motor functioning in leisure time and at physical culture lessons.

Material and methods

Participants: in experiment 325 schoolchildren (161 boys and 164 girls) of 5-9th form of Lvov, Poltava, Kiev comprehensive schools participated.

Organization of the research: for determination of schoolchildren's favorite leisure kinds we worked out a questionnaire, which consisted of 24 open and closed questions. So, character of rest, quantity of time for certain kind of activity and schoolchildren's favorite activities were determined.

Statistical analysis: for results' processing SPSS 22 programs were used.

Results

Physical functioning is an integral part of every person's life. The scope of day motor functioning is conditioned by a number of social-economic and cultural factors. It depends on organism's morphological-functional characteristics, type of nervous system; quantity of free time and accessibility of sport facilities. In schoolchild's physical activity his/her attitude to physical culture lessons is a decisive factor. The data of our questioning show, that schoolchildren's attitude to physical culture lessons and their activity at these lessons differ depending on their health group. Average school age children's attitude is above average and is 8.4 points (by 10-points scale, where ten – is the highest mark). With it, popularity of physical culture lessons gradually weakens with worsening of pupils' health: in main health group it was 8.7 points, in preparatory group – 7.8 points and in special health group (here and after SHG) – 7.3. It proves the data of research [2].

The same tendency of attitude to physical culture worsening was marked also in pupils' assessment of their activity at physical culture lessons (see fig.1): main health group pupils get pleasure at physical culture lessons (57%); among preparatory group — only 25% of children get pleasure from teacher's tasks; in special health group there are only 12.1% of such pupils. Preparatory group pupils the most often (39%) miss physical culture lessons and do not fulfill teacher's tasks always. SHG pupils (30%) often try to avoid participation in physical culture lessons. That is pupils' belonging to definite health group influences on their activity on physical culture lessons.



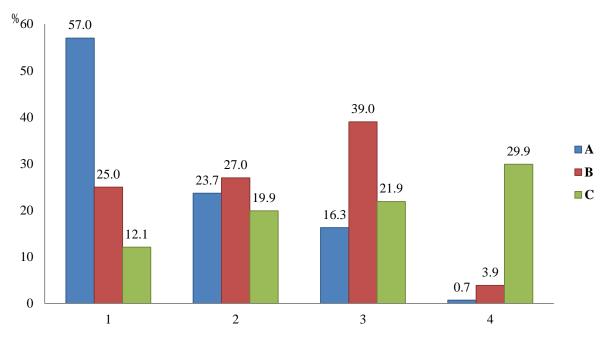


Fig.1. Degrees of schoolchildren's activity at physical culture lessons: A - Main group; B - Preparatory group; C - Special health group; 1 - all teacher's tasks are fulfilled with pleasure; 2 - all teachers tasks are fulfilled but without pleasure; 3 - sometimes I mess lessons; 4 - I avoid participation in lessons.

In modern conditions school can not ensure required for schoolchildren's health motor functioning to the fullest extent. That is why out of school time acquires special importance: before or after classes or during vacations. Results of our questioning show that in leisure time schoolchildren mainly play computer games, communicate in social sites or watch TV (66.8%; 75.8%; 79.0% respectively). It is proved also by the data of other authors [1, 7, 8]. At the same time percentage of those, who prefer active leisure is much less: 36.6% of schoolchildren play out door games; 12.8% practice hiking; 17.7% attend sport competitions; 43.9% practice sports in circles; 65.6% walk with friends in the fresh air; 44.6% of schoolchildren help their parents with housework; 28.7% have classes with tutor (see fig.2). Sports and outdoor games take 7-8th places in rating of out-of-class activities in average school age. The majority of 5-9th form pupils have passive leisure. Most of free time they are watching TV or sitting at computer. For them the only source of physical functioning is physical culture lessons in school. For such children active leisure kinds are not popular.

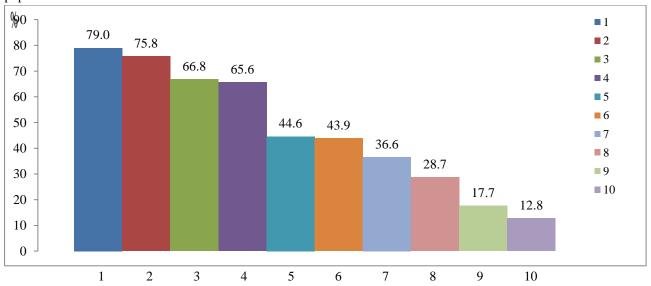


Fig. 2. Schoolchildren's activities during leisure time: 1 - Watching TV; 2 - Communication in social sites; 3 - Computer games; 4 - Walks with friends; 5 - Help with housework; 6 - Attending of sport circles; 7 - Outdoor games; 8 - Out-of-school classes with tutor; 9 - Attendance of sport competitions; 10 - Hiking.

Special and preparatory groups' pupils spend their free time more passively than pupils of main health group, SHG pupils spend most of their time for interactive games and watching TV: 92.8% of SHG pupils play computer games every day; 89.5% communicate in internet; 91.2% watch TV every day. This indicator is much higher than in preparatory and main health groups (58% and 67.4% respectively). Main health group prefer more active leisure kinds: outdoor games (37.1% of main health group pupils, 27% of preparatory group and 19.3% of SHG pupils).

Every second main group pupil (49.2 %) practice sports in circles. In preparatory and special health groups this percentage is much less: every third pupil of preparatory group (31.0%) practices the preferred kind of sports and 3.2% of special group pupils attend additional sort classes.

Tab	le 1.	Scho	oolcl	nild	lren'	s activities at l	eisure time
-----	-------	------	-------	------	-------	-------------------	-------------

Description of activity	Main group (%)	Preparatory	SHG (%)	Total (%)
		group (%)		
Watching TV	76.5	77.0	91.2	79.0
Internet communication	69.7	82.9	89.5	75.8
Computer games	67.4	58.1	92.8	66.8
Walks with friends	63.6	64.8	62.1	65.6
Outdoor games	37.1	26.8	19.3	36.6
Help with housework	46.2	40.0	21.6	44.6
Sport circle	49.2	31.0	3.2	43.9
Classes with tutor	28.0	33.2	22.3	28.7
Sport competitions	16.7	13.1	4.5	17.7
Hiking	12.9	13.8	4.1	12.8

Schoolchildren were put the question: which activity they prefer most of all in free time (see fig.3). They answered: sport circles trainings (14.8%); walks with friends (13.7%); computer games, mobile telephones or notebook games (11.7%); cinema going (6.5%) and watching TV (5.7%) compose the second by rating of interests group of activities. Outdoor games and swimming rather lag behind (3.6%). This fact witnesses that children interest in sports (may be feeling demand in additional motor functioning); though their attention is distracted by modern interactive entertainments, which, as on today, displace usual communication and outdoor games.

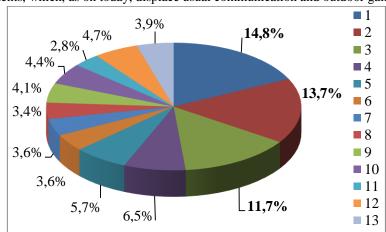


Fig.3. Schoolchildren's the most favorite activities: 1 - Sport; 2 - Walks with friends; 3 - Computer games; 4 - Cinema going; 5 - Watching TV; 6 - Outdoor games; 7 - Swimming, competitions; 8 - Visiting friends; 9 - Singing; 10 - Reading; 11 - Rest, sleeping in day time; 12- Internet; 13 - Visiting summer cottage.



Schoolchildren were asked, how much time they usually spend at computer, notebook or TV. Analysis of results showed that on weekdays 27.5% of schoolchildren practice such activity for less than one hour; 28% of children spend time with computer for one-two hours and 44.5% - spend more than two hours a day (see fig. 4. Regular spending of two and more hours with computer is inadmissible. It worsens eyesight, causes unfavorable processes in skeletal-motor apparatus, muscles and joints; facilitate stresses and nervous disorders. That is why, in days off it is necessary to compensate deficit of motor functioning. Our research shows that quantity of time, spent at computer or TV increases in days off: 70.9% of schoolchildren spend more than two hours for interactive entertainments. Such critical situation is connected with substantial quantity of schoolchildren, who overdo with internet entertainments. It witnesses that it is necessary to seek ways for increase of motivation for motor functioning.

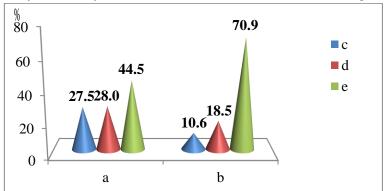


Fig.4. Quantity of time spent at computer, notebook or TV: a – weekdays; b – days off; c – less than 1 hour/day; d - 1-2 hours/day; e - 2 and more hours/day.

It is interesting that quantity of time spent at computer differs depending on health group. Main group pupils spent at computer/TV less time that pupils of preparatory group and SHG (see fig. 5. More than 2 hours/day are spent by the following pupils: SHG - 55.5%; preparatory group -49.1%; main group -38.5%.

In days off quantity of time spend before monitor increases in all groups. But main group pupils spent much less time for interactive games than preparatory group and SHG even in days off.

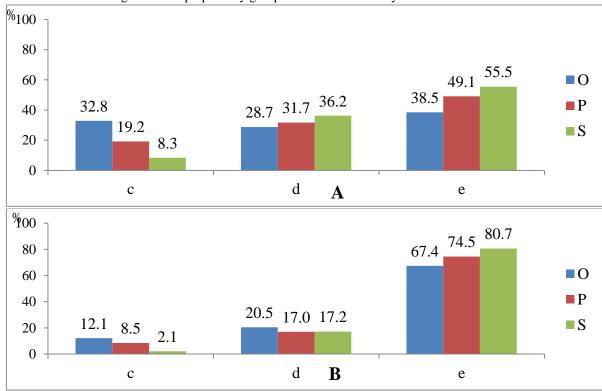


Fig.5. Quantity of time spent by pupils at computer in weekdays, depending on belonging to health group (A) and in days off (B): O – main group; P –preparatory group; S – SHG; c – less than 1 hour/day; d - 1-2 hours/day; e - 2 and more hours/day.

Of not less importance is the quantity of time spent in the fresh air. Analysis of results showed that every fifth pupil (19.9%) spends in the fresh air on weekdays less than 1 hour a day (see fig.6). It is a negative tendency. Walks in the fresh air are extremely important for young organism. Deficit of such walks render negative impact on child's health [5]. Scientists say that absence of regular walks in the fresh air results in somatic health worsening. This reason is one of the most important and makes 25 cases per 100 children.

In days off more pupils find time for walks: 56.2% say that they have here and more hours' walk a day. We did not observe any substantial distinctions in indicators of different health groups' pupils in respect to duration of walks.

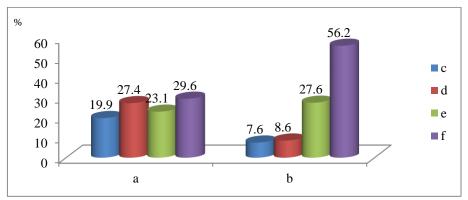


Fig. 6. Schoolchildren's walks in the fresh air:

a – weekdays; b – days off; c – less than 1 hour/day; d - 1-2 hours/day; e - 2 and more hours/day; f – more than 3 hours a day.

Discussion

The fulfilled by us research proves and supplements special literature results [8, 9]. Most of pupils prefer passive activities in free time: watching TV or computer games. With it, recent time quantity of children, spending time in this way, sharply increased. Much time is devoted by children to physical functioning. It can negatively influence on children's health.

Our results prove the data of other researches [11, 12, 20]: sport circles and outdoor games are one of favorite activities alongside with watching TV and computer games. In contrast to our research [20] children also prefer listening to music and hiking. But these activities take much lower place ion rating of favorite activities.

Generalization of the research results proved [1] presence of clear dependence between health status (health group belonging) and pupils' self-assessment of pleasure with physical culture lessons.

We, for the first time, found: significant quantity of modern pupils (44.5% of pupils in weekdays and 70.9% in days off) spend before monitors much more time than it is admissible; first rating place is taken by sports (giving way only to interactive entertainments). The further researches shall be devoted to this phenomenon as well as to seeking way out from critical situation.

We also determined that duration of walks in the fresh air equals to time of sitting at computer. For testing validity of pupils' answers it is necessary to fulfill objective study of regularity and duration of children's different leisure activities.

Conclusions

Attitude to physical culture lessons is assessed by pupils as above average (8.4 points by 10-points scale). Attitude to physical culture lessons and activity at them differ depending on health group belonging: main group pupils like these lessons more (8.7 points).

Most of schoolchildren spend their leisure passively, with computer or watching TV: sports practicing and outdoor games take 7-8th places in rating of leisure activities. There are some distinctions, depending on health group



belonging. Main group schoolchildren are more active in leisure time. They oftener than other prefer outdoor games, participation in sport competitions and sport circles or hiking. It was found that sport practicing is one of favorite kinds of leisure. Among favorite activities schoolchildren also call walks with friends and computer (telephone, notebook) games.

As usual schoolchildren spend in average not less than 2 hours a day for computer games. It exceeds maximal admissible time, which can be spent at computer without harm for health. On days off the quantity of children, who overdo with time for computer entertainment, increases.

The quantity of time for walks in the fresh air much differs, depending on day of week. Most of schoolchildren say that in days off they spend in the fresh air three and more hours a day.

Conflict of interests

The authors declare that there is no conflict of interests.

References

- 1. Bodnar IR. *Integrativne fizichne vikhovannia shkoliariv riznikh medichnikh grup* [Integrative physical education of schoolchildren of different health groups], Lviv: LDUFK; 2014. (in Ukrainian)
- 2. Bodnar I. Misce rukhovoi aktivnosti u dozvilli uchniv seredn'ogo shkil'nogo viku [Place of motor functioning of average school age children's leisure]. *Sportivnij visnik Pridniprov'ia*, 2013;2:257–264. (in Ukrainian)
- 3. Global recommendations on physical activity for health. I.World Health Organization; 2010.
- 4. Davydova TM. Formation of schoolchildren's healthy life style culture as one of key problems of modern comprehensive educational establishment. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2015;10:18-23. doi:10.15561/18189172.2015.1003
- 5. Leshchenko GA, Plachinda TS. *Fizichna aktivnist' osnova zdorovogo sposobu zhittia* [Physical activity the basis of healthy life style], 2011. (in Ukrainian)
- 6. Luk'ianchenko M. Fizichna aktivnist' iak neobkhidna skladova rozvitku osobistosti [Physical activity as necessary component of personality's progress]. *Molod' i rinok*, 2012;7(90):35-39. (in Ukrainian)
- 7. Moskalenko NV, Gontarovs'ka NB. System of provisions on formation of knowledge of bases of an able-bodied mode of life in general educational educational institutions. *Pedagogics, psychology, medical-biological problems of physical training and sports,* 2008;1:112-116.
- 8. Sidorenko TP, Berdnik OV. Vpliv riznikh chinnikiv na proces formuvannia zdorov'ia zdorovikh pidlitkiv [Influence of different factors on formation of healthy adolescents' health]. *Medichni perspektivi*, 2010;15(4):106–109. (in Ukrainian)
- 9. Cap MI, Cap IG. Rukhova aktivnist', fizichnij rozvitok i fizichna pidgotovlenist' v sistemi monitoringu stanu somatichnogo zdorov'ia shkoliariv [Motor functioning, physical condition and physical fitness in system of schoolchildren's somatic health monitoring]. *Visnik Chernigivs'kogo nacional'nogo pedagogichnogo universitetu*, 2014;118(1):S. 370-374. (in Ukrainian)
- 10. Shahnenko VI. Preparation of pupils to conducting an able-bodied mode of life in the contents healthforming courses of general educational institutions of independent Ukraine. *Pedagogics, psychology, medical-biological problems of physical training and sports,* 2008;1:67-175.
- 11. Beth Daly LL. Morton The End of Leisure: Are Preferred Leisure Activities Contraindicated for Education-Related Stress/Anxiety Reduction? *Education Research International*, 2011;4:10-15.
- 12. Dr Besa Havziu Dr, Teuta Ramadani Rasimi. Leisure time for secondary school students. *International Journal of Cognitive Research in Science, Engineering and Education*, 2015;3(1):51–56.
- 13. Educating the Student Body: Taking Physical Activity and Physical Education to School [Internet]. Kohl HW, Cook HD, editors. Washington (DC): National Academies Press (US); 2013 [cited 2016 Sep 19]. Available from: http://www.ncbi.nlm.nih.gov/books/NBK201500
- 14. Hana Al-Sobayel, Hazzaa M Al-Hazzaa, Nanda A Abahussain, Dina M Qahwaji, Abdulrahman O Musaiger. Gender differences in leisure-time versus non-leisure-time physical activity among Saudi adolescents. *Annals of Agricultural and Environmental Medicine*, 2015;22(2):344–348.
- Heather Erwin, Alicia Fedewa, Soyeon Ahn. Student Academic Performance Outcomes of a Classroom Physical Activity Intervention: A Pilot Study. *International Electronic Journal of Elementary Education*, 2012;4(3):473-487.

- 16. Kokkinos P. Physical Activity, Health Benefits, and Mortality Risk. ISRN Cardiology. 2012;2012:1-14.
- 17. Marina Videnović, Jelena Pešić and Dijana Plut. Young People's Leisure Time: Gender Differences. *Psihologija*, 2010;43(2):199–213.
- 18. Samuel C Dumith, Marlos R Domingues, Denise P Gigante, Pedro C Hallal, Ana M B Menezes, Harold W Kohl. Prevalence and correlates of physical activity among adolescents from Southern Brazil. *Revista de Saúde Pública*, 2010;44(3):457-467.
- 19. Shephard Roy J, Trudeau François. Physical education, school physical activity, school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity*. 2008;5(1):10-21.
- 20. Sinan Bulut. A social determinants of health, physical activity. *Türk Hijyen ve Deneysel Biyoloji Dergisi*. 2014;70(4):205-214.
- 21. Brusseau TA, & Hannon JC. Impacting children's health and academic performance through comprehensive school physical activity programming. *International Electronic Journal of Elementary Education*, 2015;7(3):441-450.
- 22. Tzu-Ching Lin, Taiwan Tun-Pei Pao. Leisure activities' selection and motivation. *International Journal of Academic Research in Business and Social Sciences*, 2011;1(3):308–320.
- 23. Wojciechowska P. Physical activity and human health. Studia Medyczne, 2015;30(4):254-260.

Information about the authors:

Bodnar I.R.; http://orcid.org/0000-0002-7083-6271; ivannabodnar@ukr.net; Lviv State University of Physical Culture; 11, Kostushko str., Lviv, 79007, Ukraine.

Kindzera A.B.; http://orcid.org/0000-0002-0777-1532; anytka7793@ukr.net; Lviv State University of Physical Culture; 11, Kostushko str., Lviv, 79007, Ukraine.

Cite this article as: Bodnar I.R., Kindzera A.B. Leisure of ukrainian schoolchildren and place of motor functioning in it. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2016;5:10–18. doi:10.15561/18189172.2016.0502

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/4.0/deed.en).

Received: 15.09.2016

Accepted: 01.10.2016; Published: 30.10.2016