

ACTIVE LEISURE FOR HEALTH IN CONTEXT OF ENVIRONMENTAL CARE

Hana HORKÁ, Zdeněk HROMÁDKA

Abstract: *The increased number of active leisure - comprising a variety of sports - takes place in variable environments (e.g. extensive sports facilities built in the natural landscape, ski slopes risen at the borders of national parks or ecological impact of motor-ing to get to sports facilities) are bringing a lot of changes. There has recently been an increased interest in such activities on the other hand the environment is being affected by such events. Thus the care for the health is in a sharp conflict with the care for the environment. The article describes the influence of those activities on the environment. The research investigation is focused on the students' behaviour concerning the above noted activities and their respect for the environment. A potential relationship between the responsible care for the health and the care for the environment is also investigated.*

Keywords: *environmental education, protection of nature, relaxation in the nature, active leisure/ doing sports, care for environment, care for health, education to health*

Starting points

Quality natural environment with cultural monuments represents the source of miscellaneous opportunities for stay, relaxation and active leisure executed usually “for the sake of human health”. Rising number of active leisure in non-standard environments (e.g. large sports facilities built in the natural landscape, ski slopes on the borders of national parks or environmental impact of motoring “to get to the sports facilities”) bring a lot of changes. On the one hand it leads to increase of the interest in sports activities, on the other hand the natural environment is affected negatively. Care for health is thus in sharp conflict with the environmental care.

With respect to the fact that we are concerned with environmental aspects of education to health, we are interested in impact of the sports activities or another active leisure, executed “for the sake of one’s health”, on the environment. The empirical part contains results of the investigation focused on establishment to what a degree this fact is considered by the future teachers. Theoretical reflection of empirical data can contribute to a more pregnant determination of the educational curriculum.

Importance of the active leisure is unquestionable for human health, but its impact on the environment is more and more explicit. The teacher asks how can he/she

prevent devastation of our environment from his/her position. The teacher agrees with the claim that impairment of the environment results from permanent „*ignorance of biological factors of the cultural life, from missing arguments against dangerous trends in the lifestyle*“ (ŠMAJSOVÁ BUCHTOVÁ, 2009, p. 80), from ignorance of the real natural values, etc., which facts ultimately highlight the necessity of otherwise oriented education. Mirovský (2003) characterizes the “responsible, intelligent and sensitive tourist, „smart voyager“, as the educated man capable of a more complex perception, environmentally conscious and friendly.¹ Education undoubtedly takes part in creation and development of these desirable qualities. Education leads to prevention and active care for health (and/or for environment) considered important features for improvement of unfavourable indicators. Therefore our intention is to determine the governing tasks of education for balanced cultivation of the inner and external human world from the point of education to health and environmental education.

The theoretical starting points presented in the first part are based on the fact that adequate active leisure together with environmental impacts, nutrition and way of life represent the intervening factors for health remaining uncompensated anyhow.

Clean environment and active lifestyle as regulating mechanisms (determinants) for health

Environment is considered the basic determinant for health. This claim also follows from definition of health as the status of full physical comfort, mental and social wellbeing resulting from the relations between the human organism and between social, economic, physical, chemical and biological factors of the living environment, working environment and the way of life. The lifestyle as the „*individual set of attitudes, values and skills reflected in human activities*“ includes „*interpersonal relationships, nutrition, organization of leisure time, hobbies, interests and also physical activity*“ (HARTL, HARTLOVÁ 2000). The active lifestyle incorporates „*quantitatively and qualitatively valuable exercise programs and satisfaction of interests, leisure time spending as the features determining state of health*“ (LIBA, 2007, p. 64). From carried out identification and quantification of the share of regulatory mechanisms - determinants for health - we have come to a very significant establishment that the lifestyle and personal behaviour of the individual affect health by 40-50 % and living and working environment - by 20-30% (compare ÁGHOVÁ 1993, FOSTER 1994, ROVNÝ 1998, HARTL; HARTLOVÁ 2000 – In LIBA 2007, p. 17-19). Contribution of the active lifestyle accommodates on the one hand improvement of fitness, defence to infections and on the other hand a better mood and self-confidence, psychological performance and resilience, mastering social roles, more joyful and active leisure time, restful and refreshing sleep, etc. (compare COOPER 1990, SLEPIČKOVÁ 2001, KŘIVOHLAVÝ 2001, LIBA 2007). It is important from our point of view that quality of life is improved by the active lifestyle incorporating regular and suitably chosen physical activities.

¹ **Hard tourism** – does not consider impact on the environmental, social and cultural environment; in particular the mass tourism

Soft tourism – tries to behave sparingly and gently to the environment where it is realized and to contribute to the permanently sustainable development of tourism

Active leisure as the instrument for maintaining body and mental balance

The active leisure is understood versatile physical activities saturating health, hygienic, compensating, protective, preventive, regenerative and rehabilitation functions. It contributes to maintaining the body and mental balance, leads to self-fulfilment, increase of fitness, performance, self-confidence, facilitates mental relaxation, emotional experience, reduces psychological stress, anxiety, depressive mood, negative emotions, affects intellectual performance, etc.

Under intensive physical activities we understand rapid cycling, aerobic, swimming, jogging, running, tennis singles or squash. Rapid walking, dancing, gardening, slow cycling represent the medium intensive physical activities. The active leisure is realized in different environments - in the fitness centre, gym, swimming pool, dance studio or at home, in the flat or in the garden (e.g. exercise machines), at school or on the playground. Our attention is focused in particular on the outdoor recreational environment (e.g. lake, hiking trail), park, places close to our home/house (e.g. for running, skating, cycling, rapid walking). In this part we would like to highlight consequences of physical/sports activities on the environment from the consumer recreation point of view.²

Impact of physical/sports activities on the environment

The individual consciously selects stay in the healthy environment not only for housing, but even for spending the leisure time during the walks, trips, weekends and holidays, for different sports activities. Cross-country skiing, skiing on untreated downhill courses and/or winter hiking in the past is nowadays superseded by snowboarding, variant skiing, night skiing, paragliding, surfing on frozen lakes, orienteering, etc. Swimming, diving, canoeing is nowadays not enough in summer, the people are „in“ when river rafting, surfing, water scootering or sports fishing (MOUREK 2002). Development of new modern sports affects flora and fauna negatively. Construction and operation of tourist transport equipment (cableways, ski lifts, snow groomers), downhill course treatment, artificial snowing, creation of bike and walking trails, ports/marinas for yachts and motor boats or construction of sports and recreational resorts (golf courses, amusement parks or sports centres) are considered the most important sources of negative flora and fauna affection. Devastation of the environment is caused in particular by inadequate growth of interested people and related quantities, activities of mass, unrestrained and uncoordinated character (compare for instance DAVID N. COLE, 2001, SNOWDON, P., SLEE, B., FARR, H., 2000, KOLÁŘOVÁ, H. 2006, ZELENKA, J.; PÁSKOVÁ, M. 2002, ZELENKA, J.; PÁSKOVÁ, M. 2007, <http://vitejtenazemi.cenia.cz/krajina/index.php?article=111>).

² Inspired by the materials at <http://vitejtenazemi.cenia.cz/krajina/index.php?article=111>, where even the historical, naturalistic, protectionist, prey and numinous attitudes are differentiated.

Based on the chosen literature sources, below you will find impact of physical/sports activities - downhill skiing in our case - on the environment³:

Interventions into environment	Negative impact on the environment (<i>consequences of interventions</i>)
<p>Construction of the downhill course and corridor for the ski lift and cableway, construction of sports facilities and structures and access roads.</p>	<p>Acquisition of agricultural and forest land / deforestation - <i>opening of forest stands (impacts of wind and frost, drying up, windfalls and large area blowdowns), danger of windbreaks. Partial or full restriction of forest functions, e.g. habitat for plants and animals, restriction of erosion, water retention.</i></p>
<p>Felling in the midst of a large forest stand, fragmentation of the area into two or even more parts.</p>	<p>Landscape fragmentation and creation of obstacles - <i>obstacle for the animals due to bad passability</i></p>
<p>Extension of mountain paths, release and removal of swards (e.g. when mountain biking outside the paths, intensive operation and movement of the people on the trails - tourists do not observe the defined routes, in particular when cycling).</p>	<p>Linear and area erosion - <i>destruction of vegetation, reduction of porous soil character and thus capability to soak water, damage of herb stands and tree roots. Damage of ground cover and subsequent removal of soil particles when biking in the sloping terrain.</i></p>
<p>Masts of cableways and ski lifts, downhill course in the midst of a large forest stand, bobsled, hotels and other accompanying investment units (parking places, restaurants, new access roads, etc.). Light pollution, the so called night skiing - more detailed information see http://amper.ped.muni.cz/noc/krap.</p>	<p>Impact on the landscape - <i>impairment of aesthetic landscape appearance and pollution of the landscape by solid waste landfills, creation of black dumps. Great land acquisition, more tree cutting, import of non-original materials (rocks, soil, building materials, technical devices draining miscellaneous operating liquids, etc.).</i> Let us present a short abstract of a complex J. Hollan report for your illustration - available at the address http://amper.ped.muni.cz/noc/krap: „<i>Municipalities and owners of Giant Mountain cottages are not aware that by using strong lamps visible from a great distance they harm the mountains. They take away beauty of the mountains which they certainly had before introduction of electricity and on many place before use of modern discharge light sources. The former week bulbs (electricity was relatively expensive in the past) could not pollute the landscape so much...</i>“</p>
<p>Operation of motor vehicles incl. exhalations, oils, detergents. Noise in ski resorts - systems of cableways and ski lifts, music and high-pressure snow cannons. Presence and unsuitable behaviour of visitors.</p>	<p>Disturbance of animals - <i>the animals do not have peace for reproduction and for food intake; the animals are weak and even die.</i></p>
<p>Non-observance of approved routes, passing through the forest stands outside the paths, excessive collection of berries and other parts of plants.</p>	<p>Intentional destruction of vegetation</p>

³ Certain ski resorts are located in the mountain regions, mostly in specially protected areas.

Survey of attitude of the students of the Faculty of Education of Masaryk University to the active leisure and care for health in context of the environmental care

It has been proved that different sports or other physical activities executed by the people "for the sake of their health" burden the environment in a different way.

The very objective of our investigation was to establish: 1. the degree the students consider possible impairment of the environment following from certain physical activities; 2. relationship between responsible care for one's own health and between environmental care.

1. Descriptive part of investigation

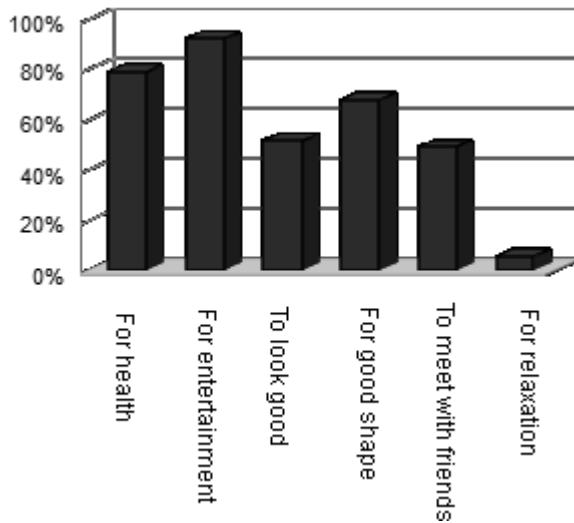
Within the scope of the descriptive part of investigation we present results of the frequency (univariate) analysis of data distribution for those items of the questionnaire that were chosen as decisive for this study.

sex		absolute frequencies	relative frequencies	valid relative frequencies	cumulative relative frequencies
valid	man	5	3.8	3.8	3.8
	woman	128	96.2	96.2	100.0
	Total	133	100.0	100.0	

The research sample contains 133 respondents (students of the Faculty of Education of Masaryk University), 128 women, 5 men. It is the available selection, i.e. results of investigation cannot be generalized to the population and have to be considered as rough ones only.

Item No. 3

„If you find the reason(s) for your active leisure/physical activity in the table below, be so kind and tick it/them (and/or add if your reasons are missing in our offer):“		
Reason for active leisure	absolute frequencies	relative frequencies
for health	105	78.9%
for entertainment	123	92.5%
to look good	69	51.9%
for good shape	90	67.7%
to meet with friends	65	48.9%
for relaxation	7	5.3%



Graph 1; reason for active leisure/physical activity

Modal category : for entertainment

The second most frequent category : for health

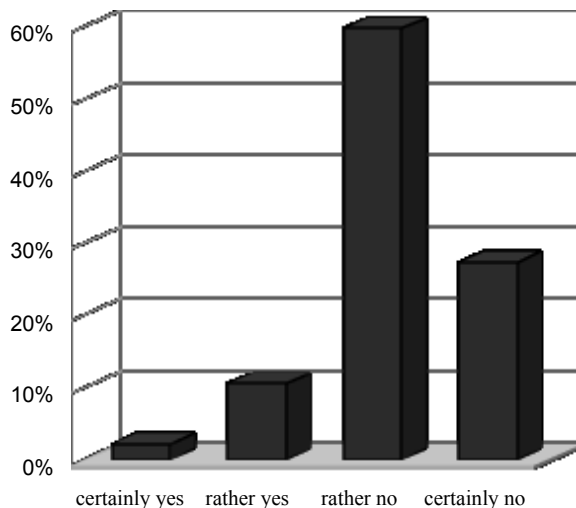
The third most frequent category : for good shape

It means that respondents from our set most frequently do sports or exercise physical activity for entertainment (92.5%). The second most frequent category is “for health”, i.e. 78.9% of respondents spend active leisure as the integral part of the care for their own health.

The item above was semi-closed, i.e. the respondents could add a specific “reason”. The least frequent reason (5.3%) was “for relaxation”.

Item No. 4

degree of consent with the claim: „When exercising a certain physical activity, I think how this activity burdens the environment.“					
		absolute frequencies	relative frequencies	valid relative frequencies	cumulative relative frequencies
valid	certainly yes	3	2.3	2.3	2.3
	rather yes	14	10.5	10.6	12.9
	rather no	79	59.4	59.8	72.7
	certainly no	36	27.1	27.3	100.0
	Total	132	99.2	100.0	
invalid	I do not know	1	,8		
Total		133	100.0		



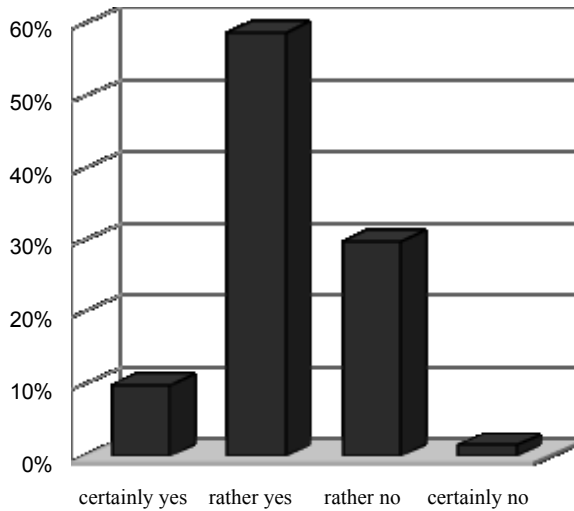
Graf 2; Degree of consent with the claim: „When exercising a certain physical activity, I think how this activity burdens the environment.“

Modal category: rather no

In most cases (87.1%) the students do not think how the exercised physical activities burden the environment. Nevertheless validity of this item is problematic to a certain degree. If somebody only takes walks as his/her active leisure, we cannot await that he/she will consider its environmental burden.

Item No. 5

degree of consent with the claim: „I take care of my health responsibly.“					
		absolute frequencies	relative frequencies	valid relative frequencies	cumulative relative frequencies
valid	certainly yes	13	9.8	9.9	9.9
	rather yes	77	57.9	58.8	68.7
	rather no	39	29.3	29.8	98.5
	certainly no	2	.5	1.5	100.0
Total		131	98.5	100.0	
invalid	I do not know	2	1.5		
Total		133	100.0		



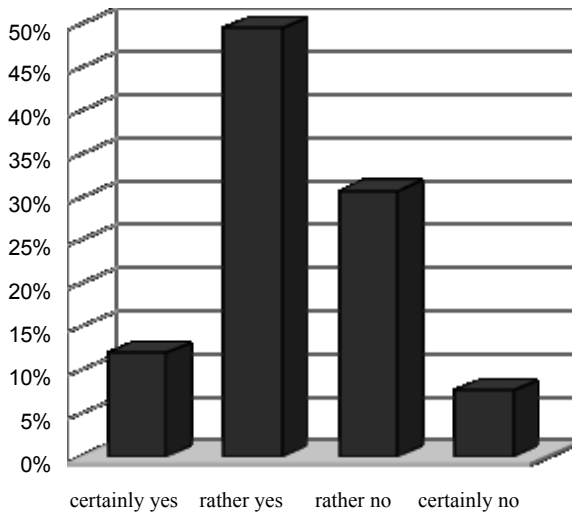
Graph 3; Degree of consent with the claim: „I take care of my health responsibly.“

Modal category: rather yes

The majority of people from our set (68.7% valid) agree with the claim that they take responsible care of their own health.

Item No. 6

degree of consent with the claim: „I take care of my health so to burden the environment to the lowest possible degree.“					
		absolute frequen- cies	relative frequencies	valid relative frequen- cies	cumulative rela- tive frequencies
valid	certainly yes	14	10.5	12.0	12.0
	rather yes	58	43.6	49.6	61.5
	rather no	36	27.1	30.8	92.3
	certainly no	9	6.8	7.7	100.0
	Total	117	88.0	100.0	
invalid	I do not know	16	12.0		
Total		133	100.0		



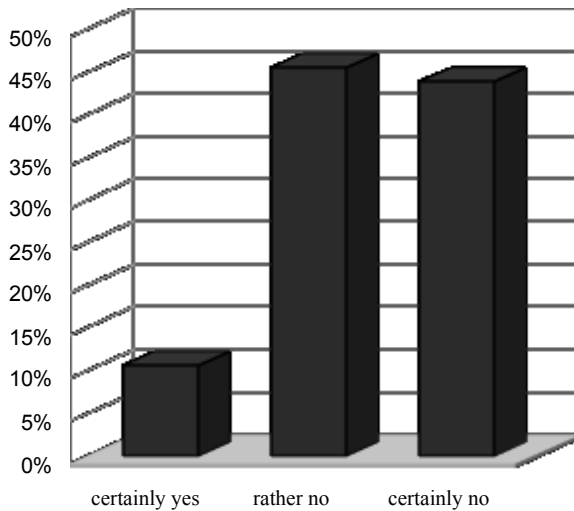
Graph 4; Degree of consent with the claim: „I take care of my health so to burden the environment to the lowest possible degree.“

Modal category: rather yes

The majority of people from our set (61.6% valid) declare that they take care of their health so to burden the environment to the lowest possible degree. This is a relatively surprising result for us. The research assumption was that when taking care of their health, people rather did not consider the environment.

Item No. 7

degree of consent with the claim: „Nature should not stand in the way of the projects serving to the active leisure.“					
		absolute frequencies	relative frequencies	valid relative frequencies	cumulative relative frequencies
valid	rather yes	13	9.8	10.6	10.6
	rather no	56	42.1	45.5	56.1
	certainly no	54	40.6	43.9	100.0
	Total	123	92.5	100.0	
invalid	unanswered	2	1.5		
	I do not know	8	6.0		
	Total	10	7.5		
Total		133	100.0		

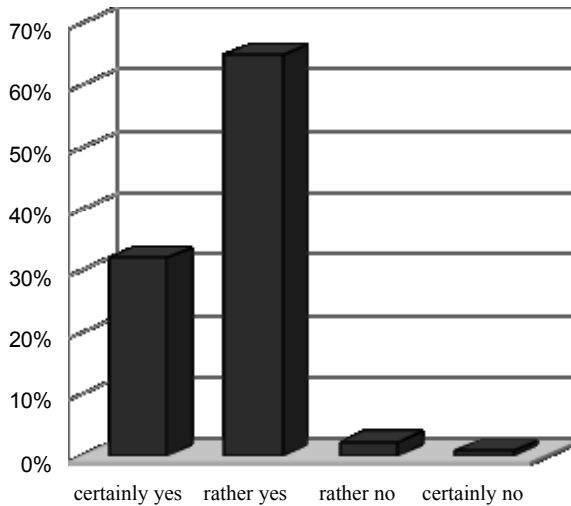


Graph 5; Degree of consent with the claim: „Nature should not stand in the way of the projects serving to the active leisure.“

Modal category: rather no

Strong majority of respondents (82,7% valid) do not agree with the claim that nature should not stand in the way of the projects serving to the active leisure. Our environment is evidently preferred to the “sports complexes“ by the majority of respondents.

degree of consent with the claim: „I try to behave myself gently to the environment.“					
		absolute frequen- cies	relative frequencies	valid relative frequen- cies	cumulative rela- tive frequencies
valid	certainly yes	42	31.6	32.1	32.1
	rather yes	85	63.9	64.9	96.9
	rather no	3	2.3	2.3	99.2
	certainly no	1	.8	.8	100.0
	Total	131	98.5	100.0	
invalid	I do not know	2	1.5		
Total		133	100.0		



Graph 6; Degree of consent with the claim: „I try to behave myself gently to the environment.“

Modal category: rather yes

Like in the preceding investigations, realized with the students of the Faculty of Education of Masaryk University, a strong majority of respondents (97% valid) tries to take care of the environment (compare HORKÁ, HROMÁDKA 2009, p. 39).

Item No. 12

degree of consent with the claim: „Is it possible to take responsible care of one’s own health and to be friendly to the environment at the same time.“					
		absolute frequencies	relative frequencies	valid relative frequencies	cumulative relative frequencies
valid	certainly yes	87	65.4	66.9	66.9
	rather yes	37	27.8	28.5	95.4
	rather no	6	4.5	4.6	100.0
	Total	130	97.7	100.0	
invalid	I do not know	3	2.3		
Total		133	100.0		

Graph 7; Is it possible to take responsible care of one’s own health and to be friendly to the environment at the same time.“

Modal category: certainly yes

Strong majority of respondents (95.4% valid) agree with the claim that it is possible to take care of their own health and to be friendly to the environment at the same time..

2. Relational part of investigation

Main hypothesis

H1: There is a relationship between care for one's own health and between environmental care.

Statistic zero (null) hypotheses:

h_0 : Computed value of the correlation coefficient does not testify dependence between the ordinal variable *degree of consent with the claim: „When exercising a certain physical activity, I think how this activity burdens the environment.“* and between the ordinal variable *degree of consent with the claim: „I take care of my health responsibly“.*

Kendall correlation coefficient $t_b = 0.18$

Correlation is significant at the level of significance 0.01, i.e. we must reject the zero hypothesis, but the dependence, following from the correlation coefficient value, is *very weak*.

h_0 : Computed value of the correlation coefficient does not testify dependence between the ordinal variable *degree of consent with the claim: „I take care of my health responsibly “* and between the ordinal variable *degree of consent with the claim: „I take care of my health so to burden the environment to the lowest possible degree“.*

Kendall correlation coefficient $t_b = 0.33$

Correlation is significant at the level of significance 0.01, i.e. we must reject the zero hypothesis, but the dependence, following from the correlation coefficient value, is *low*.

h_0 : Computed value of the correlation coefficient does not testify dependence between the ordinal variable *degree of consent with the claim: „I take care of my health responsibly “* and between the ordinal variable *degree of consent with the claim: „I try to behave myself gently to the environment“.*

Kendall correlation coefficient $t_b = 0,32$

Correlation is significant at the level of significance 0.01, i.e. we must reject the zero hypothesis, but the dependence, following from the correlation coefficient value, is *low*.

Interpretation of results

The students most frequently exercise sports (and/or another voluntary physical activity) for entertainment, but in 78.9% cases also for health which - as indicated by

certain studies (e.g. HORKÁ, HROMÁDKA 2008 p. 25) - is understood by the students (in the majority of cases) the top item in the list of values. Sport is undisputedly one of the tools of the care for health, but nowadays we more and more often meet the situation, when the active leisure faces the environmental care (e.g. large sports complexes built in the natural landscape, downhill courses on the borders of natural parks, extraordinary resource consuming sports facilities or environmental impact of motoring to get to the sports facilities).

It follows from our investigation that the majority of respondents takes a responsible care of their health (68.7%). Strong majority also agrees with the claim that it tries to behave gently to the environment (97%) and, finally, the majority of respondents declares that it takes care of their health so to burden the environment to the lowest possible degree.

We have tried to establish attitude to the situation, when the active leisure and the environmental care clash, namely by the degree of consent with the claim: „Nature should not stand in the way of the projects serving to the active leisure“. The majority of respondents has disagreed with this claim (82.7%).

We have also succeeded to establish that the majority of respondents thinks that it is possible to take responsible care of one's own health and to be friendly to the environment at the same time.

Results of investigation can be assessed as favourable - the respondents mostly take care of their health as well as of the environment and in the majority of cases they prefer the environment to the physical activities that would lead to its impairment. The investigation was not focused especially on what is understood as gentle behaviour to the environment or whether the respondents are aware fully of all environmental consequences of their active leisure. In conclusion of the descriptive part of the investigation we can only say that the “positive attitude” to the active leisure and care for health dominates in context with the environmental care.

In the relational part of investigation we have established a very interesting relationship between “responsible care for one's own health” and between the “efforts to behave gently to the environment” (correlation $t_p = 0.32$). In our research set we have revealed a low (but significant) dependence between care for one's own health and between the environmental care. The research set is very small and has not been chosen by the method which could lead to the possibility of result inference to the population. Nevertheless the result implies possibilities of further research investigations that would be focused on a detailed examination of this remarkable relationship on a more representative research set.

Conclusion

Lack of active leisure, hypokinetic biodegradation of the man (LIBA 2007, p. 74) according to Hošek (1995), incorrect dietary habits and psychosocial factors are considered risk factors for the health. Continuous updating of the education curriculum contributes to avoidance of the clash between the care for health and the environmental care, namely not only at the cognitive level (to understand contexts, relationship of the man and the nature, consequences of human activities on the environment, incl.

the possibilities to mitigate, restrict or even eliminate the consequences, incl. the risk factors for the health; to understand values of the nature complexly, in all dimensions, with subsequent reduction of unnecessary human needs and unfounded and groundless claims), the affective level (acquisition of ethic principles of acting and behaviour and overcoming primitive egocentric opinions and values; understanding of aesthetic value of the nature; promoting consideration, economy, humility, thoughtfulness) as well as at the practical and transformation level (skills and habits of safe behaviour, healthy lifestyle, cooperation in the environmental care; involvement in solution of the issues connected with environmental protection, communication on environmental issues, assessment of objectivity and severity of the information concerning environmental issues and health. Results of the research investigation are understood a call for transformation of preparation of the future teachers for their profession.

Literature

- COOPER, K. Aerobický program pre aktívne zdravie. Bratislava: Šport 1986.
- COOPER, K. H. *Aerobický program pre aktívne zdravie*. Bratislava : Šport, 1990.
- DAVID N. C. Environmental Impacts of Outdoor Recreation in Wildlands. Dostupné na [www: <leopold.wilderness.net/research/fprojects/docs12/ISSRMChapter.pdf](http://www.leopold.wilderness.net/research/fprojects/docs12/ISSRMChapter.pdf) (cit. 3. 8. 2010)
- HORKÁ, H.; HROMÁDKA, Z. Health care nad the environment from the viewpoint of primary school pupils. In Sborník *School and health*. Brno : MSD, 2008, s. 21-33. ISBN 978-80-7392-043-2.
- HORKÁ, H.; HROMÁDKA, Z. Perception of health in the context of environmental issues among students of the faculty of education Masaryk university. In Sborník *School and health - topical issues in health education*. Brno : Centrum pedagogického výzkumu PdF MU, 2009, s. 33-49. ISBN 978-80-7392-097-6.
- <http://amper.ped.muni.cz/noc/krnep/noc-krnap4.htm>
- <http://vitejtenazemi.cenia.cz/krajina/index.php?article=111>
- JANSA, P. Sport a pohybové aktivity v životním stylu české dospělé populace (18- 61 a více let). In. *Sport a pohybové aktivity v životě české populace*. Praha: FTVS UK, 2005, s. 7-82.
- JORDAN, M. *Ecotherapy – personal healing and healing for the earth* [online]. Dostupné na [www: <http://www.ecotherapy.org.uk>](http://www.ecotherapy.org.uk)(cit. 3. 8. 2010).
- KOLÁŘOVÁ, H. *Udržitelný rozvoj: Hledání cest, které nekončí*. Praha : UK, 2006. ISBN 80-87076-02-8
- LIBA, J. *Zdravie v kontexte edukacie*. Prešov : Pedagogická fakulta PU, 2007. ISBN 978-80-8068-539-3
- MIROVSKÝ, O. Ekoturismus – žhavé téma dneška. In *Sedmá generace*. 2003, č. 7-8.
- MOUREK, D. Cestovního ruch a životní prostředí. In *Sborník K udržitelnému rozvoji ČR: vytváření podmínek*. Praha : Centrum UK pro otázky životního prostředí, 2002.
- MOUREK, D. Motivace k cestovnímu ruchu a ochraně životního prostředí. In *Sborník K udržitelnému rozvoji ČR: vytváření podmínek*. Praha : Centrum UK pro otázky životního prostředí, 2002.
- Outdoor Recreation Research. Dostupné na [www:<http://www4.ncsu.edu/~leung/recres1.html](http://www4.ncsu.edu/~leung/recres1.html)

- SNOWDON, P., SLEE, B., FARR, H. The Economic Impacts of Different Types of Tourism in Upland and Mountain Areas of Europe, In GODDE, P. M.; PRICE, M. F. AND ZIMMERMANN, F. M. (eds) *Tourism and Development in Mountain Regions*, 2000.
- ŠMAJSOVÁ BUCHTOVÁ K potřebě obratu ve vzdělávání studentů ekonomických oborů. In *K problému ontologie kultury. Ekologické a sociálně ekonomické souvislosti*. Brno : Tribun EU, 2009, s. 80-84. ISBN 978-807399-736-6
- DUFFKOVÁ, J. Životní způsob/styl a jeho variantnost". In *Aktuální problémy životního stylu. Sborník referátů a příspěvků ze semináře sekce sociologie integrálního zkoumání člověka a sekce sociologie kultury a volného času*. Praha: Masarykova česká sociologická společnost při AV ČR - Univerzita Karlova v Praze, 2005.
- Vliv sportu na životní prostředí*. Dostupné na www: <http://www.unep.org/sport_env/general_information/impact_sport.asp (cit. 1. 8. 2010)
- Vliv rekreace na životní prostředí*. Dostupné na www: <http://www.bluffton.edu/~capstone/2005-06/Fall/LAS400-1/environment/Environment_files/frame.htm. (cit. 3. 8. 2010)
- ZELENKA, J.; PÁSKOVÁ, M. *Vlivy cestovního ruchu na přírodní a antropogenní prostředí, konkrétní pozitivní i negativní příklady, SWOT analýza. Masový a individuální cestovní ruch*. Praha 2007.
- VALJENT, Z. Vývoj v hodnocení tělesné výchovy a sportu studenty FEL ČVUT. In *Sborník z mezinárodní konference Optimální působení tělesné zátěže a výživy*, Hradec Králové : Univerzita Hradec Králové, 2005, s. 347- 356.
- SCHMIDT, CH. W. *Putting the Earth in Play: Environmental Awareness and Sports*. Dostupné na www: <: <http://www.ncbi.nlm.nih.gov/> (cit. 25. 8. 2010).
- Research Unit Sports Tourism International Council. *Journal of Sport & Tourism*, Volume 1, Issue 3 May 1994 , pages 25 – 35.
- Code for sustainable development in Sport - Council of Europe*. Dostupné na www: <http://www.coe.int/t/dg4/sport/resources/texts/Code_en.asp (cit. 3. 8. 2010)

POHYBOVÉ AKTIVITY PRO ZDRAVÍ V KONTEXTU PÉČE O ŽIVOTNÍ PROSTŘEDÍ

Abstrakt: Nárůst pohybových aktivit v nestandardních prostředích (například rozsáhlé sportovní areály v přírodní krajině, sjezdovky na hranicích národních parků či ekologický dopad dopravy při „cestách za pohybem“) s sebou přináší řadu změn. Na jedné straně vede ke zvýšení zájmu o sportovní aktivity, na straně druhé však dochází k narušování přírodního prostředí. Péče o zdraví se tak dostává do konfliktu s péčí o životní prostředí. Stať nejdříve popisuje vlivy pohybových/sportovních aktivit na životní prostředí. Výzkumné šetření sleduje, jak studenti zohledňují poškozování životního prostředí při uskutečňování svých pohybových aktivit. V druhém plánu pak zjišťuje, zda u studentů existuje vztah mezi zodpovědnou péčí o vlastní zdraví a péčí o životní prostředí.

Klíčová slova: environmentální výchova, ochrana přírody, relaxace v přírodě, pohybové aktivity, péče o životní prostředí, péče o zdraví, výchova ke zdraví