

HEALTH EDUCATION IN THE ENVIRONMENTAL CONTEXT AND BIOPHILE ORIENTATION OF EDUCATION

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The author points to the overlap environmental education and health education. The health reasons for an environmental protection have become an inspiration for the investigations focused on the issue of putting one's health at risk as a consequence of environmental influences. The results of the investigations show how the chosen phenomena «nature vs. recreation» is understood. They also illustrate the importance of transformation of education towards biophile orientation.

Key words: environment; biophile education; environmental education; quality of life; health care; nature; culture; health education; health.

Автор указує на перетин екологічної освіти та навчання здоров'я. Питання здоров'я для навколишнього середовища стали натхненням для досліджень, зосереджених на питанні про загрозу здоров'ю, що є наслідком екологічних впливів. Результати досліджень указують, що вибрані явища «природа проти відпочинку» розкриті. Також вони відображають важливість перетворення базової освіти до здоров'язбережувальної орієнтації.

Ключові слова: навколишнє середовище, базова освіта, екологічна освіта, якість життя, охорона здоров'я, природа, культура, здоров'я.

Автор указывает на пересечение экологического образования и обучения здоровью. Вопросы здоровья для окружающей среды стали вдохновением для исследований, сосредоточенных по вопросу о том, что угроза здоровья является следствием экологических влияний. Результаты исследований показывают, что выбранные явления «природа против отдыха» раскрыты. Они также отображают важность преобразования базового образования к здоровьесберегающей ориентации.

Ключевые слова: окружающая среда, базовое образование, экологическое образование, качество жизни, здравоохранение, природа, культура, здоровье.

Adverse changes in environmental protection limit the quality of life. As implies from a number of studies, which leading a healthy lifestyle, do not mean only elimination of health risks for humans, but contribution to the health of the environment as well. These claims are supported in the integrated conception of health, dealing with the consequences between human health and the health of the physical environment and nature. It is indisputable nowadays that the environmental crises lies not only in endangered plant and animal species, but is «*an external symptom of the crises of mind and soul*» (Koger; Winter 2009).

What are the implications for education? Primarily it is the respect for the fact that genetic dispositions of humans come from the natural environment and nature provides mental and physical health to humans. Consequently, education regulates the surplus of artificial cultural information a person is exposed to.

Health promotion, environmental protection, education

The overlap of health promotion and environmental protection arises from the characteristic features of environmental education, which stresses adequate understanding of relationships and connections among the components of the environment, complex expression of mutual conditionality of organic and inorganic nature, amongst organisms themselves, relationships between human activity and its products and nature, including the identification of undesired consequences of human transformational activities, leading to devastation and endangering of natural qualities of water, air, soil, plants and animals resulting at risks not only for human health but for the existence of life on Earth as such. Learning about and understanding this context is reflected in a responsible relationship towards the environment, in ecologically-friendly lifestyle and behaviour which supports health (Horká 2005, p. 26).

By means of content analysis of the aims of environmental education we draw a conclusion that they are in many aspects compatible with the intentions of health promotion. In the cognitive area there are common key units: understanding the relationships between humans and nature, consequences of human activity on the environment including the possibilities of lessening, restricting or even eliminating the consequences, or possible risk factors for health; understanding one's responsibility in environmental protection related to the care for one's own and other people's health; reduction of unnecessary human needs and unjustified demands based on the complex understanding of the value of nature.

On the cognitive-emotional level it concerns the acquisition of ethical principles of action and behaviour (as superficial, consumer and unethical way of life encourages human selfishness and hinders emotional, theoretical and value rehabilitation of nature etc.); understanding the aesthetic value of nature; striving for thriftiness, frugality, consideration, responsibility. In the cognitive-motor area there are skills and habits necessary for everyday desirable conduct of a citizen with an emphasis on healthy lifestyle and decision-making in favour of health promotion and sustainable development.

The overlap of health care and environment protection in research investigations

Health motivation for environmental protection became through which we attempted to find the overlap of «health care» and «environmental protection». Acting for the benefit of nature and the environment as the key imperative was an inspiration for the research investigations within the research project School of health 21.

In this paper we state the results which show how respondents from the Teaching programme think/view about relaxation in nature. First of all we briefly summarize the environmental and health impact of recreation.

Environmental and health impact of recreation (nature vs. recreation)

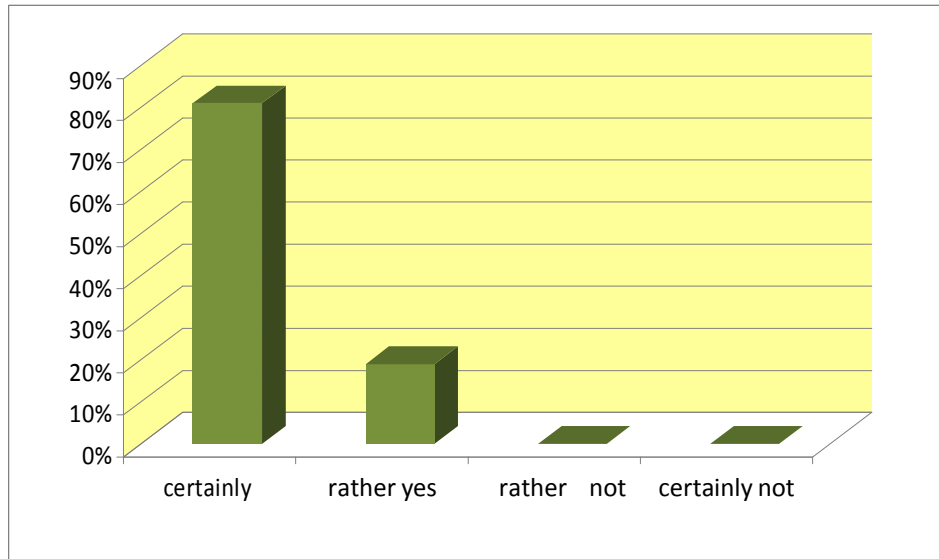
The curative effect of nature on humans in the therapeutic, relaxation and recreation area is sometimes overrated to the detriment of its function for the provision of integrity and spiritual, mental reproduction. J. Šmajš (2005, p. 93) describes it as a nature's concern about not only «*healthy body, healthy mind*», but also «*about a biologically determined humanity with adequately extensive culture*».

Relaxation in nature minimizes the adverse effects of constant physical and mental tension brought about by the busy life in a civilised society. The recognition of the beauty of nature as a therapeutic means and application of outdoor stays is a basis of ecotherapy. It is performed through a relatively solitary contact of a client with the natural landscape (ranging from hikes to places «off the beaten track» to more strenuous outdoor trips), gardening, painting, photography or looking after plants and animals. Allows, especially to young children «*without abstract concepts point to what has been overlooked by anti-natural culture against their will: creativity, mystery, superiority and beauty of earthly life*» (Šmajš 2000, p. 330).

Results of investigations on the topic How respondents — student teachers view relaxation in nature.

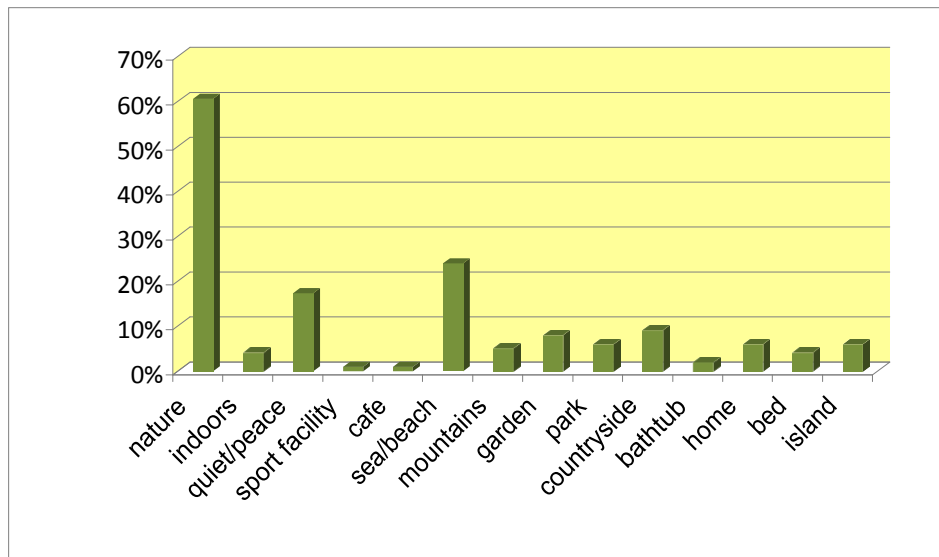
A pilot study revealed that natural environment is from the point of view of human health interesting mainly as a platform for relaxation. Therefore we attempted to find out whether the students of the Faculty of Education Masaryk University Brno (N = 104, 98 women, 6 men) consider relaxation a significant activity in the context of health care — diagram No. 1:

Diagram No. 1: «To what extent do you agree with the statement: Being able to relax properly is extremely important for human health».



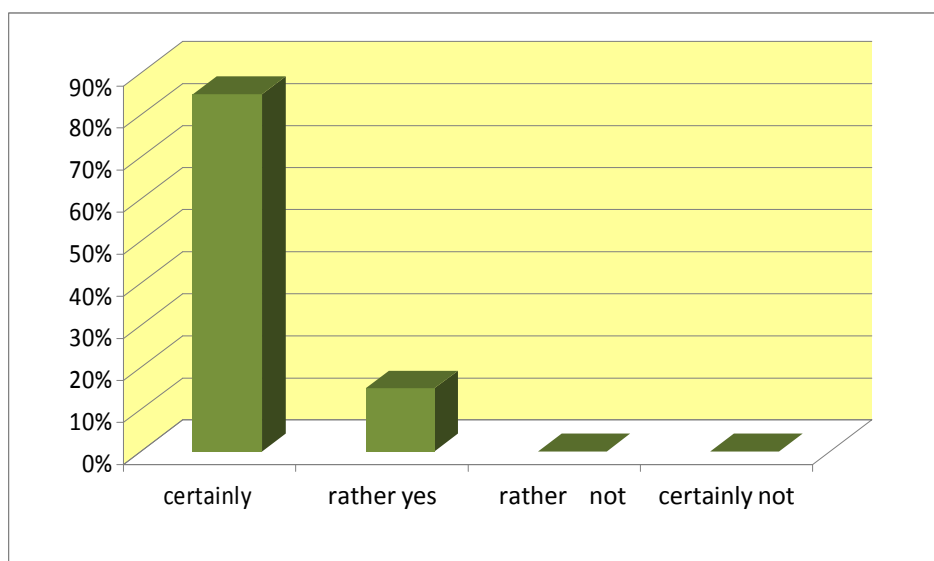
As illustrated in diagram No. 1 relaxation is definitely considered an important activity. Subsequently, we asked whether the natural environment represents an interesting place for relaxation. In our questionnaire we formulated an open item: «Imagine a place (or places) where you would most like to relax and describe the place briefly». The relative frequencies of the categories based on the answers are illustrated in diagram No. 2:

Diagram No. 2 «Imagine a place (or places) where you would most like to relax and describe the place briefly».



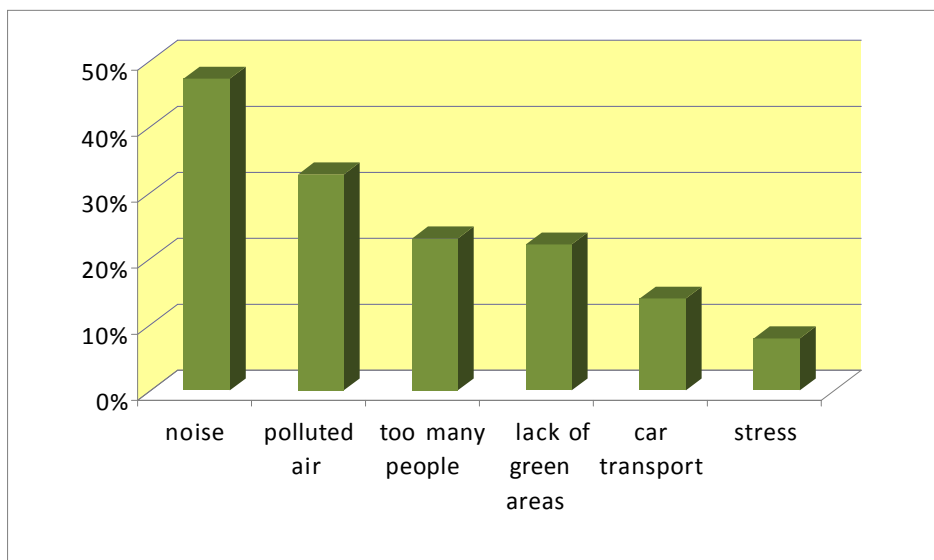
The most frequent category is *nature* with 60.6%. Other significant categories are: *sea/beach* (24%) and *silence/peace* (17.3%). Although the term «nature» is rather general and we for certain can not say what exactly respondents mean by the term, we assume that our research hypothesis that majority of students consider nature a suitable place for relaxation. To specify we used the following closed item, whose evaluation is illustrated in diagram No.3:

Diagram No. 3: «To what extent do you agree with the following statement: Nature (green areas, park, forest, etc.) is a suitable place for good relaxation».



In our research probe we were attempting to find out whether respondents experience any obstacles to good relaxation and whether these have environmental context – see diagram No.4:

Diagram No. 4: «If you think that life in a city hinders good relaxation, write down which obstacles you find».



It seems that obstacles to good relaxation often have environmental context – in the first place it is *noise* (47.6%), then *polluted air* (33%), next there is a category with social context *too many people* (23.3%), followed by *lack of green areas* (22.3%).

Good relaxation is seen as an important component of health care and it is also often associated by the respondents with relaxation in the natural environment. The obstacles to good relaxation are often attributes of the damaged environment (Horká; Hromádka 2010).

Conclusion — Ideas for the upgrade of the educational curriculum

In the context of the ecotherapeutical potential of the nature we can not overlook information on the negative reactions of some children and young people to the physical environment. They avoid practical contact with nature and they are basically afraid of it; they fear an encounter with certain objects or situations; the susceptibility of rejection of the physical

environment and expectation of a certain degree of comfort provided by life in a modern and comfortable environment (Bixler; Floyd 1997, Franěk 2001).

Our results confirm the link between the health of nature and general physical, mental and social welfare of a person. From the educational point of view this means that adequate attention should be paid to the transformation of the educational curriculum, that should meet the requirement to *teach pupils and students how to think, motivate them to solve problems that they encounter throughout all their lives, as well as the current conflict of culture and nature*»,

The above mentioned cognitive strategies foster the biophile orientation of education (Šmajš 2008: 55), that is «favouring, respecting and protecting life». In school practice this means:

- ‡ to replace the majority of teaching specific facts and passive acceptance of knowledge by promoting process thinking and sensitivity to the relationships and links in the environment;
- ‡ to emphasise the value priority of nature for human life and the fact that the natural world must be protected not only to provide for humans – the environment has a value sui generis regardless of human needs;
- ‡ to overcome the opinions that the only value is produced by humans, that one has to consider only other humans and that everything else is here for us without an respect for the Earth (the environment). Therefore, it is not advisable to present the environment at school only as an unlimited source of commodities that people use for their needs, but also as a space where they can not move boundlessly irrespective of the damage caused;
- ‡ to develop the systematic and evolutionary way of thinking in the sense that «*we do not create nature and we are not responsible for its functioning and evolution*», but we should «*use it considerately, love and respect it, damage at minimum*», a human is responsible for culture, their work, that unnecessarily damages the natural system (Šmajš 2008: 58);
- ‡ clarify what is nature, culture, evolution and its products and especially the fact that material culture is «*based on substance and energy that was formed in unique natural structures*» (Šmajš 2008: 54);
- ‡ to promote the transition from departing/alienation from nature to the value rehabilitation of nature by imprinting life as the supreme value.

Learning about nature also means understanding the fact that apart from the family, loving mother, there are other «*two impersonal mothers: the mother Nature and the intimately known group of people, the collective mother*» that the parents meet with. After one's birth, an anti-nature tradition enters one's life, it is a «product» of human faith in progress and good. The affect of school is therefore indispensable, because it starts with a systematic and sophisticated learning about nature.

BIBLIOGRAPHY

1. ABRAM, D. *Strážce hranice - Rozhovor Jeremy Haywarda s Davidem Abramem*. Pražské brány – 3rd year of multicultural festival. 2009. Available at <http://www.prazskebrany.cz/cz/osobnosti/david-abram-cv-cz/david-abram-rozhovor> ABRAM, D. *Procitnutí do živé země*. Nymburk : OPS, 2009.
2. DAVID N. C. Environmental Impacts of Outdoor Recreation in Wildlands. Available at [www: <.leopold.wilderness.net/research/fprojects/docs12/ISSRMChapter.pdf](http://www.leopold.wilderness.net/research/fprojects/docs12/ISSRMChapter.pdf) (quot. 3rd August 2010)
3. FRANĚK, M. *Psychosociální faktory ovlivňující úspěšnost environmentální výchovy*. Praha: Český ekologický ústav, oddělení environmentálního vzdělávání, výchovy a osvěty. Available at [www: <http://www.ceu.cz/edu/vyzkum/vyzkum.html>](http://www.ceu.cz/edu/vyzkum/vyzkum.html) (quot. 2nd August 2009)
4. HORKÁ, H.; HROMÁDKA, Z. Active Leisure for Health in the Context of Environmental Care. In Řehulka, E. (ed.) *SCHOOL AND HEALTH 21. Health Education: International Experiences*. Brno : Masarykova univerzita, 2010, p. 275-290. ISBN 978-80-210-5398-4.
5. HORKÁ, H.; HROMÁDKA, Z. Perception of health in the context of environmental issues among students of the Faculty of Education Masaryk university. In Řehulka, E. (ed.) *SCHOOL AND HEALTH 21. Topical Issues in Health Education*. Brno : MU, 2009, p. 33-49. ISBN 978-80-7392-097-6.
6. HORKÁ, H.; HROMÁDKA, Z. The Ecotherapeutic Potential of Nature and Taking Care of One's Health. In

- Řehulka, E. (ed.) *SCHOOL AND HEALTH 21. Papers on Health*. Brno : Masarykova univerzita, 2010, p. 201-212. ISBN 978-80-210-5260-4.
7. JORDAN, M. *Ecotherapy – personal healing and healing for the Earth* [online]. Available at [www: <http://www.ecotherapy.org.uk>](http://www.ecotherapy.org.uk) (quot. 3rd August 2010).
 8. KRAJHANZL, J. Ekopsychologie a environmentální chování. In Dlouhá, J. (ed.) *Vědění a participace*. Praha : Karolinum, 2009, p. 132-142. ISBN 978-80-246-1656-8.
 9. KULHAVÝ, V. Ekoterapie – léčba přírodou (?) *Psychoterapie*. Brno: Fakulta sociálních studií. 2009, No. 1.
 10. LIBA, J. *Zdravie v kontexte edukacie*. Prešov : Pedagogická fakulta PU, 2007. ISBN 978-80-8068-539-3
 11. STREJČKOVÁ, E. A KOL. *Děti, aby byly a žily*. Praha : Ministerstvo životního prostředí, 2005, p. 93 – 95. ISBN 80-7212 -382-3
 12. ŠMAJS, J. *Potřebujeme filosofii přežít? Úvahy o filosofii, kultuře, poznání, vzděláním řeči a popularizaci vědy*. Brno : Doplněk, 2008. ISBN 978-80-7239-221-6
 13. ŠMAJS, J. Dvě poznámky ke vztahu vzdělání a zdraví. In Řehulka, E. (ed.) *SCHOOL AND HEALTH 21 Výchova ke zdraví: mezinárodní zkušenosti*. Brno, MU, 2011 p. 77-86. ISBN 978-80-210-5451-6.
 14. *Vliv rekreace na životní prostředí*. Available at [www: <http://www.bluffton.edu/~capstone/2005-06/Fall/LAS400-1/environment/Environment_files/frame.htm>](http://www.bluffton.edu/~capstone/2005-06/Fall/LAS400-1/environment/Environment_files/frame.htm). (quot. 3rd August 2010)
 15. WIEGEROVÁ, A. Zdravie, podpora zdravia, zdravotná výchova. Bratislava : OZV 4, 2004.
 16. WINTER, D. D. N.; KOGER, S. M. *Psychologie environmentálních problémů*. Praha : Portál, 2009, ISBN 978-80-7367-593-6.
 17. www.coe.int/t/dg4/sport/resources/texts/Code_en.asp (quot. 3rd August 2010)