

AFTER- SCHOOL SERVICES OF WELLNESS ORIENTED PHYSICAL ACTIVITIES IN CHILDREN WITH HEARING AND VISUAL DISABILITIES

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Abstract: *The main purpose of the program “Public Health” is to guarantee healthy European society. Integration and inclusion of challenging children in local after-school programs is going out of the human rights perspective of people with disabilities and is aimed to their full health-social rehabilitation. Movement activities, and especially controlled movement activities, are defined as one of the most obvious and unquestionable tools for influencing positively human health over life (Velemínský, 2011). The aim of the study is a comparability analysis of availability in the after-school movement activities for children with hearing or visual disabilities (8 - 15 years old) in South Bohemia region of Czech Republic and in regions of selected EU states (Bulgaria, Slovenia and Great Britain). The integration process is viewed as the health-social model. The investigative research work was oriented on accessibility of controlled movement activities for challenging children and to uncover social, economic, material, organizational barriers in selected regions. It was analysed the quality of promotion and variety of movement activities offered for challenging children. Methods of exploration, interview, document analysis and content analyses of regions information systems were used during the investigative research.*

Key words: *Children with disability; Hearing disability; Visual disability; Controlled exercise; Wellness; Personal and social development; Health life style.*

1 Problem

The European commission is realising the special program oriented towards improving the public health for the period of action 2007-2013. Integration process of challenging children participation in after-school movement programmes can be described as a continuum of “no services” through “special programs of adapted physical activities” to the “inclusion in the movement activities” generally on a local scale of exercise activities for children (in the spirit of the idea “Sports for All Children”). Local after-school movement programs should

give equal opportunity to choose and to provide movement activities without any social, economic, material, etc. barriers (comp. Kornatovská, Trajková 2012, Šauerová 2011a).

In the context of health support and health development of all children is necessary to accent that not every type of movement activity can result in the health-social benefits. Uncontrolled movement activities can guide to poor motoric education level and even bring danger to health of participants.

Our preference of controlled movement activities is going out of its important attributes:

- To achieve a high level of motor learning and motor education;
The motor learning is controlled of expert in PE, APA, etc.
- To achieve wellness state during and after movement program;
Knowingly executed movement guides to experience of harmony, saturation.
- To eliminate or completely reduce wrong movement stereotypes;
Controlled movement activities enable amplification of pulses from the control center of the brain. Movements are more economic, surer, and qualitatively different (Véle, 2012).
- To combine and coordinate movement activity with breathing activity.

Controlled breath during movement activities is an important tool because during inspiration increases muscle strength, when expiration is released. Consciousness breath facilitates movement activity and enhances performance. Practicing shows that controlled breath during movement activities can be carried out to achieve performance even in very weak muscles. The focus on coordinating movement with breath, relaxes the mind while improving the ability to concentrate (Krejčí, 2011).

Named attributes are very important for health support of children in nowadays life style, which is determined of hypo-kinesis, muscle dysbalances, disruption of circadian rhythms, stress overload, and prevalence of depression states in children and youth (see http://ec.europa.eu/health/ph_determinants/life_style/). Controlled movement activities can promote quality of life and mental health in children with disability by giving a condition for independent movement, learning to cooperate, conveying possibilities of socialisation, controlling and understanding own body.

It is possible to use also the strategy of peer tutoring. The peer tutoring is also applied as a part of physical activities in order to create reasonable opportunities for increasing motor competencies and at the same time it leads to the improvement of self-confidence and self-control (Šauerová, 2011b).

Teacher or trainer organises and guides controlled movement activities according to individual skills and possibilities of participated children. Krejčí (2010) defines the term “adequate movement regime” like a coherent system of movement activities, which are adequate to the individual skills, inclinations, interests and which are suitable implemented in daily life. She characterizes principles of adequate movement regime (in the line according the importance and the consequence) in the next 7 points:

- **Coping** - in the sense of individual managing and mastering of movement. What for one is easy, for the second is difficult. The main role play: condition, age, health situation, impairments, etc. Coping is the base of progress in motor learning.
- **Spontaneity** – in the sense of freedom, pleasure during the movement activity, eventually to experience in the “flow“- effect. Such sense of spontaneity is a preposition for the saturation.
- **Saturation** – in the sense of satisfaction, self-realization, self-determination during the movement activity and after it. In the case of saturation child has tendency to return to the movement activity again and again. (Tůma, Tůmová, 2010).
- **Repeatability** – in the sense to develop the performance as possible. Only in this step is real to start with regular training process. The person accepts discomfort and even a pain during movement activities.
- **Training** – in the sense of the variable dosage of the intensity according to the health situation, age, condition, body structure, sex, etc. During the training process can be developed a positive dependency on the movement activity. An obstacle can be availability to the everyday movement activity.
- **Availability** – in the sense of regular, daily application of movement activity. It depends of nature conditions, time factors, solvency, laws, etc. Here usually begins combination of daily activity with season, temporal movement activities (for example yoga + alpine skiing + biking). Adequate movement regime is created.
- **Safeness** – in the sense of the accident prevention, rescue during the movement activity realization. Only safe movement activity is adequate to the person. Again an

important role plays: health situation, age, condition, body structure, sex, availability of equipment, etc.

2 Aims, Hypotheses

The research study identified the following goals:

- To compare the availability of controlled physical activity for children with hearing, visual disabilities in selected regions of the EU: Czech Republic-South region, Bulgaria-Plovdiv region, Slovenia- Primorska region, UK- *West Midlands* region.
- To analyse the scale of offering movement activities for children with hearing and visual disabilities in the named regions of the EU.

On the base of goals following hypotheses were identified:

H1 Availability of controlled physical activity for children with sensual disability is significantly higher then:

H1a: UK- West Midlands region compared to the researched region-Bulgaria Plovdiv region.

H1b: UK- West Midlands region compared to the researched region in the Czech Republic-South Bohemia region.

H1c: UK- West Midlands region compared to the researched region of Slovenia-Primorska region.

H2 Availability of controlled physical activity in children with sensual disability in regions Bulgaria-Plovdiv region, Czech Republic-South Bohemia region, Slovenia- Primorska region is equivalent, without any significant differences.

3 Methodologies

3.1 Characteristic of samples:

Challenging children of both sexes were investigated, 8 - 15 years old, with a hearing disability, with visual disability.

Procedure:

Oriented basic research methodology NABS (Nomenclature pour l'Analyse et la Comparraison Budgets et des Programmes Scientiques) in the EU according the 4th Area: "Protection and improvement of human health". In the selected regions we applied the procedure of investigative research in the form of "Investigative Pentagon" (Molnár, Z. et al., 2012).

3.2 Methods:

During the research study follow methods were used:

- Analysis of scientific references;
- Selecting of regions in EU through the stratified random selection and simple random selection;
- Investigative survey in selected regions through “Investigative Pentagram” (Autor) - Inquiring E-mails to sport clubs; Documents analyses; Literary and Internet References; Direct Interview - Telephonic Interview;
- Comparative Methods (Hendl, 2008) For the process of data comparison statistic data of the Institute for Information in Education (ÚIV, online) in Czech Republic, of the National statistical office in Bulgaria (NSI, online) and of the document “Regional development strategy for social services“ in the selected regions.
- Evaluation of results. Verification of hypotheses. Inductive, Deductive Methods.
- Conclusions for health-social rehabilitation of challenging children.

The document “International Classification of Functioning, Disability and Health” (ICF) classifies the functional abilities of a particular individual. This important document contains the following chapters: 1 Human development; 2 Body Constitution; 3 Health status; 4 Disability evaluation; 5 Socio-economic factors; 6 Causality; 7 Classification; 8 Manuals. The text shows that a clear trend of health and social care in the EU is an active social participation of persons with disability in society.

In this context, it is discussed irreplaceable role of the controlled physical activities in the process of physical, psychological and social rehabilitation of children with disability. The main benefits of controlled physical activity in children with disability should be:

1. Improving of health;
2. Reducing of medicaments consumption;
3. Better medical prognosis;

However, in the Czech Republic and former post - communist countries are becoming limiting factors restricting the participation of children with disability in controlled physical activities. These limiting factors are: availability, variety of menus, amenities, social barriers.

4 Results and discussion

4.1 Regional consensus on the number of children with disability

Table 1 Sums of children according the type of disability in the surveyed regions

Region	Σ dětí s disab.		Σ dětí s disab. mentální		Σ dětí s disab. sluchovou		Σ dětí s disab. zrakovou		Σ dětí s disab. ostatní	
	N	%	N	%	N	%	N	%	N	%
South Bohemia	2812	100	1355	48,2	84	3,0	49	1,7	1332	47,3
Plovdiv	3115	100	640	20,5	76	2,4	53	1,7	2346	75,3
Primorska	3211	100	1417	44,1	80	2,5	55	1,7	1660	51,7
West Midlands	2935	100	598	20,4	81	2,8	51	1,7	2205	75,1
CELKEM	12073	100	4010	33,2	317	2,6	208	1,7	7543	62,5

In the Table 1 we can see almost full similarity in the sums of children with hearing disability and full similarity in the sums of children with visual disability in the all analyzed regions. An interesting fact was found in the case of children with mental disability. From the Table 1 is clear that region in Great Britain (West Midlands) and the region in Slovenia (Primorska) prefer “soft” classification in the case of children with mental disability. From the presented numbers in the Table 1 we cannot interpret, that in the regions of Great Britain and Slovenia fewer children with mental disability being born than in the regions of the Czech Republic and Bulgaria. From the comparison of data in the column of “Children with mental disability” and the data in the column “Children with other disability” is evident that region in Great Britain (West Midlands) and the region in Slovenia (Primorska) prefer during the process of classification to give to 50 % more children a label of “other disability”. They are going out rigorously from the document “International Classification of Functioning, Disability and Health” (ICF) and save children and their parents before impertinent attacks of others. Along with that, they are consistently looking about the childcare in the controlled physical activities. Not by chance, just in these two regions is found out the highest level of integration and supply and hence the availability of controlled physical activity for children with mental disability. It is a good example for classification process in the regions of Czech Republic and Bulgaria.

4.2 Offer and variety of physical activities for children with disability

It was found that the offer of controlled physical activities for children with sensory disabilities is 56% bigger in Czech region (South Bohemia) than in Bulgarian region (Plovdiv). From the view of variety of physical activities for the handicapped children is the situation in Czech region 10 times better of Bulgarian region. Basic difference was found in the availability of website information, when in the Bulgarian region (Plovdiv) website information is missing comparing to the Czech Republic region (South Bohemia).

Similar situation was found out in the case of physical activities for children with hearing disability. Investigation found out that in the region of Plovdiv only 1 organization is specialised on physical activities for people with hearing disability. This club is a member of Bulgarian Sport Association for Deaf People (“Sportna federacia za gluhi”) and only on official republic website is possible to find information about this club in Plovdiv (but contact information are not valid), which has had not own websites. Information about a concrete offer and variety of the intentionally organized physical activities for children with hearing disability was necessary complete through method of direct and telephonic interview. On this base basic information were obtained – from Bulgarian Sport Association for People with Hearing Disability (BDSF), which units 10 regional organisations and sport clubs in whole Bulgaria. One of them is in region of Plovdiv, e.g. sport club for people with hearing disability (SKG – “Sporten klub na gluhi”).

From the Table 2 is evident that the best availability of the Controlled Physical Activities of the controlled physical activities for children with disability mental, hearing or visual is in Great Britain, in the region West Midlands. This finding confirms the first hypothesis H1:

Availability of controlled physical activity for children with sensual disability is significantly higher then:

H1a: UK- West Midlands region compared to the researched region- Bulgaria Plovdiv region.

H1b: UK- West Midlands region compared to the researched region in the Czech Republic-South Bohemia region.

H1c: UK- West Midlands region compared to the researched region of Slovenia- Primorska region.

From the Table 3 is evident that the best offer and variety of the controlled physical activities for children with disability mental, hearing or visual is also in Great Britain, in the region West Midlands. This finding confirms the first hypothesis H2:

Availability of controlled physical activity in children with sensual disability in regions Bulgaria-Plovdiv region, Czech Republic-South Bohemia region, Slovenia-Primorska region is equivalent, without any significant differences.

Sports, which are under the sport association developed, are: athletics, soccer, bowling, shooting, table tennis, badminton, volleyball, beach-volleyball, Greco-Roman wrestling. Investigated were also associations for people deaf/blind (NASGB – “Nacionalna asociacija za sliapo-gluhite v Balgaria”) from Plovdiv and a sport club of blind/deaf (“Obedinenensporten klub na sliapo-gluhite”). In Plovdiv city (BG) similarly as in České Budějovice city (CZ) gives very good service the special secondary school for hearing disability children, which organizes physical activities for children with hearing disability in after-school time. This school has also own websites (SSUDUS “Prof. Dr. St. Belinov“ Plovdiv – “Sredno specialno uchilishte za deca s uvredensluh”). But we are streaming to give the post school chance to motor learning and social development of the children with disability. So, from this point of view is not the right way to hope in the special school activities. It could guide to social segregation.

Our investigation found out that there are no sport clubs or organizations specialised on physical activities for children with visual disability in the region of Plovdiv. From interviews resulted that there are not many children with visual disability there, the number is not so high to create for them special sport clubs. If the children are pupils of special schools, have bigger chance to be included in leisure time sport activities. If they are integrated in “normal” schools, in opposite they are dispensed from PE at school or it is offered them corrective gymnastic. It should be found possibility how these children include in the sport clubs and give them possibility full personal and somatic development.

Table 2 *Range and the offer of the Controlled Physical Activities
“CPA” in the surveyed regions*

Region	Σ of offering CPA	Most offered CPA	Integration	Offer on websides
South Bohemia	130	Table tennis, Athletics, Swimming	40%	No
Plovdiv	41	Table tennis, Futsal, Swimming	0%	No
Primorska	292	Athletics, Swimming, Dancing	100%	Yes
<i>West Midlands</i>	368	Dancing, Yoga, Water sports, incl. Swimming	100%	Yes

Table 3 *Review of availability of the Controlled Physical Activities
“CPA” in the surveyed regions*

Region	Σ of offering CPA	Σ of offering CPA in the capitol of the region	Σ of offering CPA out of the capitol of the region	Participation of parents in financing of CPA
South Bohemia	130	38	92	80%
Plovdiv	41	36	5	0%
Primorska	292	72	220	100%
West Midlands	368	130	238	100%

4.3 Results of compare analysis

No significant differences between Region of South Bohemia-CZ and the Regions of before socialistic states were found out in next determinants:

- In the compared regions “Regional Sections of Education” do not dispose of information about the controlled physical activities for children with the mental disability, with the hearing disability and with the visual disability in the region.
- In the compared regions there is no central evidence of organizations (e.g. sport clubs) for children with the mental disability, with the hearing disability and with the visual disability or of sport organizations accepted children with disability in training process.
- In the compared regions of Czech Republic and Bulgaria the offer of the controlled physical activities for children with hearing disability is on the same level. In both regions one sport club and one sport club established under special boarding school co-exist together. In the both regions is the offer of the named clubs concentrated in capitols what is limitation for children from others parts of region, but probably it is supposed that children absolve the schools just in the boarding regime, what means better access to physical activities and sports, but isolation from parents. The Slovenia region Primorska is on the best way to approach to give the service of quality and level of integration to the region of Great Britain.
- It can be constant that in the compared regions, where exist websites, is significantly higher integration in the controlled physical activities as in the regions without websites offering. It is very important finding with memento for future.
- It seems that the special offer of the controlled physical activities for children with visual disability is very poor. In the region of South Bohemia is only one organization

with a small offer for children till 15years old. Much better is the integration in the sport clubs as in Great Britain and Slovenia. It is high profiled progressive way to make purposeful controlled physical activities on the high level of motor learning.

Significant differences between GB Region and the Regions in post-communistic countries:

- The number of organizations offered controlled physical activities for children with sensual disability in the region of West Midlands is significantly higher than in the Regions in before post-communistic states.
- The variety of offered physical activities for children with sensual disability in the region of West Midlands is significantly higher than in the Regions in before post-communistic states.
- Only in the region of Great Britain all sport clubs and sport organisations are offering controlled physical activities for children with mental, hearing or visual disability and have very clear and easily accessible websites.

5 Conclusions, Hypothesis verification

Both hypothesis H1 and H2 were verified. The trend in health and social care in the EU is an active social participation of persons with disability in society. In 2010 UNO validated the new version of Convention on the rights of persons with disabilities. The new version includes quite a lot of changes and especially defines the education of challenging children with an accent on the inclusion in educational system, what helps to tolerance and respect to challenging children. In the aim to guarantee the participation in leisure, sport and top sport and in all levels of physical activities states confirm to accept follow principles:

- To guarantee possibilities to organise and develop sport and leisure activities for persons with disabilities and to guarantee them possibilities to participate in these activities.
- To guarantee to challenging children equal access as to other children to participate in playing, in games, in recreation, in sport activities in leisure time as well as in school environment.
- To guarantee to persons with disability an access to service of persons and institutions organised recreation, touristic, leisure and activities

(Gasparini, Talleu 2010).

Main functions of the controlled physical activity in children with disability are same like in other children:

- to improve health;
- to reduce the consumption of drugs;
- to have a better medical prognosis.

We can conclude that it is necessary to create conditions for the irreplaceable role of controlled physical activities in the process of physical, psychological and social rehabilitation in challenging children. (Tůma, 2013).

Above rules take a part of legal order in Bulgaria and Czech Republic as well.

In the context that motoric experiences create a base of challenging children development, Válková recommends to accept disability people in sport clubs. The clubs should cooperate on the creation of new branches to be easy for people with disability to include in sport activities, whereas they could decide to join activities organized only for disabled or in activities for all. She stressed that people with disability are valid members of society and have all rights to require such forms of physical activities corresponding to their specifications and views (Válková, 2012).

6 References

Gasparini, W., Talleu, C. (2010) *Sport and discrimination in Europe*. 1st ed. Strasbourg: Council for Europe Publishing. 158 p. ISBN 978-92-871-6722-4.

Hendl, J. (2008) *Kvalitativní výzkum: Základní metody a aplikace*. 2. vydání. Praha: Portál, s.r.o., 2005. 407 s. ISBN 80-7367-040-28.

Kornatovská, Z., Trajková, A. (2012) Availability, organization and health-social benefits of physical activities in disabled children - a comparative study of 2 regions in Bulgaria and the Czech Republic. *Rozprawy Naukowe*, 2012; 39(4) 19–30. ISSN 0239-4375.

Krejčí, M. (2011) *Výchova ke zdraví – strategie výuky duševní hygieny*. 1. vyd. České Budějovice: Jihočeská univerzita. 255 s. ISBN 978-80-7394-262-5.

Krejčí, M. (2010) *Adequate movement regime and bio-psycho-social determinants of active life style*. 1. vyd. České Budějovice: Jihočeská univerzita. 192 s. ISBN 978-80-7394-239-7.

Molnár, Z. a kol. (2012) *Pokročilé metody vědecké práce*. 1. vyd. Zeleneč: Profess Consulting, 170 s. Věda pro praxi (Profess Consulting). ISBN 978-80-7259-064-3.

Šauerová, M. (2011a) *Projekty osobnostního rozvoje v nestandardních výchovných podmínkách*. 1. vyd. Praha: VŠTVS Palestra: European Science and Art Publishing. 165 s. ISBN 987-80-904815-5-8 (VŠTVS), ISBN 987-80-87504-08-6 (ESAP).

Šauerová, M. (2011b) Didactic Aspects of Physical Activities in Education of ADHD Syndrome Affected Children. In: SÉGARD, M., HÁTLOVÁ, B. (Eds.). *Psychomotor Therapy in Mental Health Care*. 1. vyd. Ústí nad Labem: UJEP. 55 – 70. ISBN 978-80-7414-439-4.

Tůma, J., Tůmová, A. (2010) Smysl života a svoboda jedince. In *Zdravý způsob života*, Ukrajina: Lvov, 2010, roč. 47, s. 46. ISBN 966-7119-14-9.

Tůma, J. (2013) Význam potřeb v životě jedince. In *Zdravý způsob života*, Ukrajina: Lvov, 2013, roč. 11 (77), s. 40. ISSN 2307-0722.

Véle, F. (2012) *Výšetření hybných funkcí z pohledu neurofyzologie*. 1. vyd. Praha: Triton. 222 s. ISBN: 978-80-7387-608-1

Válková, H. (2012) *Teorie aplikovaných pohybových aktivit pro užití v praxi I*. Olomouc: UP. 1. vyd., 92s. ISBN: 978-80-244-3163-5.

Velemínský, M. (2011) *Celebritami proti své vůli*. 1. vyd. Praha: Triton. 124 s. ISBN 978-80-7387-447-6.

WHO Library Cataloguing-in-Publication Data International Classification of Functioning, Disability and Health (ICF) <http://www.uzis.cz/publikace/mezinarodni-klasifikace-funkcnich-schopnosti-disability-zdravi-mkf> ISBN 92 4 154542 9

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