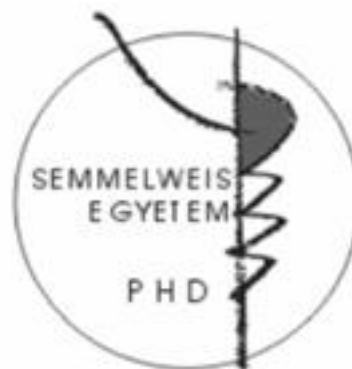


Performance sport of the disabled and how it affects its venues

Doctoral Thesis

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Introduction

The starting point of our argument is the basic fact that movement is a natural and self-evident act and claim for all of us. The disabled are no different: sport bears the same meaning for them as for the non-disabled and its significance is even further emphasized considering that it can function as a means of integration into the mainstream society.

When choosing the topic I was motivated by my experience as a sports specialist engaged in the field of disabled sport and working with disabled sportsmen on a daily basis. By selecting a target group for the topic, having realized the imminent necessity of paradigm shift in the scenes of sports, my essential purpose was to disclose this „invisible” group of society.

During the research the standpoints of my concept has further widened and now I am analyzing the performance motivation, the individual and situational motivational factors and the coping strategies of disabled sportsmen in a broader context. The results of the analyses of the health-cultural behavior and of the alteration in behavior as a consequence of active sporting lifestyle therefore provide invaluable data on our concept of sport as a complex behavioral activity.

The effect of successful paralympic qualifications and of successful performances as motivational factors for sportsmen are key points of analysis in this research, and I consider these factors as the products of interactions between individual attitudes and confirmed social feedback systems. I also emphasize the importance of discussing the positive examples promoting a physically active lifestyle and their effect on the population of the disabled, my argument being that regular sporting and active lifestyle in a broader sense improves the quality of life of the disabled and a better physical and psychological condition is a strong motivational factor for maintaining and improving their well being. The presentation of good examples could play a central role in the development of the nursery and educational concepts for (disabled) children as well as in the formulation of the courses of respective educational policies and the supporting of

professional strategic decisions. Furthermore, I am convinced that sport is one of the most emphatic element of the life-long rehabilitation of the disabled and the examples I present shall demonstrate its effect on the individual.

As a result of the research, we shall exemplify the coaches' attitudes in sports associations affirming integration and elaborate the questions of coaching and methodology raised around the sport successes of disabled and non disabled sportsmen. A further aim of the research is to augment the course material for the development of sports coaches by providing specific knowledge about disabled sport.

Therefore, in this work I make proposals on how to modernize the education of sports professionals and also present an abstract model for this. The development of the proposal relates to AEHESIS, a project of the ERASMUS Network starting in 2003 (Klein, Madella, Petry, 2006) which aimed not only at mapping and evaluating the educating institutions for sports professionals but also at developing the guiding principles necessary for the specification of the “best practices” (Petry, K. Froberg, Madella, 2005).

Sport, according to the concept of the project is the means of reaching the most important goals of our societies like health promotion, education, personal development, community building and social integration. The project therefore focuses on the facilitation and development of accessible sport and healthy lifestyle for everyone by promoting among others, postgraduate courses and communication programs in order to reach the less active groups of society (Gita, Bognár, Dorogi, Kalbi, Rigler, 2005).

An undisputed fact for those active in the education of sports coaches in Hungary is that the education content is in dire need of modernization (Kovács, Keresztesi, Kovács, 2003). Relying on the relevant results, practices and structures of sports professional education in a number of EU countries, this improvement has to be carried out by allowing the differentiation of the world of sports and the resulting social claims to enter the education of sports professionals. (Révész, Bognár, Salvara, Gita, Bíró, 2007). Such social claim is to include the sports activity of those with physical, mental, organic, sensory or other impairments in the general and specific systems of sport with the same weight and valuation (The Convention on the Rights of Persons with Disabilities, 2006).

Sport as part of our culture is particularly capable of promoting the wider acceptance of disabilities and diversity (Dorogi 2002). This was my motive when I undertook to examine the opinion and knowledge of those participating in the education of sport coaches in Hungary, about the sport of the disabled. Experience has shown that the education and post graduate education of sports professionals needs essential modernization in its content as much as in its methodology and further emphasis should be put on the implementation of the conclusions (adapted movements and their teaching methodology and methodology of inclusive education, promoting the integration of disabled persons) of national and international researches (Gita Sz., J. Bognár, L. Dorogi, K. Kalbi, E. Rigler, 2005). In view of these results we can further specify the orientation of development and the augmentation of course material for the education of sports coaches in perhaps the most obvious fields of adapted sports like athletics, volleyball or swimming (Peters, Downs, 2006).

The history of disabled sport is no longer insignificant since early 1900s and since then many great sports achievements have been reached. The exhausting trainings behind these as well as the results of qualifying competitions similar to those of the non-disabled, indicate above-average psychological abilities.

Among these psychological features the most outstanding ones are the motivation and coping strategy of these sportsmen. The specific examination of this fact provides useful results in practice (Révész et al. 2005).

Analyses of target orientation and motivational background used to appear primarily in pedagogical researches, like for example the analysis within the study of Tsang, Szabó, Soós and Bute (2005), which examined the differences in task- and ego-orientation in groups of high school students of four different countries.

In a similar study, Morgan (2006) concluded that the measured performance orientation background is higher in students of sport high schools those attending other types of high schools.

Another theoretical basis of the present study is the preceding performance-goal analyses conducted among English and Norwegian sportsmen, most notably the studies of Ames (1992), Duda (1987) and Nicholls (1992) who already compared disabled sportsmen to non-disabled ones.

The Norwegian Sorensen (2003) and Pensgaard (1999) demonstrated in their studies that the motivational background of visually and physically impaired sportsmen greatly differs from that of the non-disabled sportsmen. This is the analysis I intend to adapt and carry out with Hungarian sportsmen for the purpose of this study.

HYPOTHESES

My hypothesis is that the coping strategy of the disabled competitive sportsmen are typically more task-oriented than ego-oriented.

My hypothesis is that the disabled and non-disabled sportsmen have different motivational background. Throughout their sports career non-disabled sportsmen are inclined to have a performance-oriented background while the disabled sportsmen are inclined to have a task-oriented background.

My hypothesis is that regular sporting and an active lifestyle in a broader sense improves the life quality of the disabled, and a better physical and psychological condition is a strong motivational factor for the maintenance of a better life quality.

My hypothesis is that based on a research in the field of sports professional education, professional advises could be prepared for the trainers and sports professionals working with disabled people.

My hypothesis is that the results of the interviews will support the the notion that sport through its intrinsic structure of instruments improves the life quality of the disabled.

METHODS

The edition and adaptation of the questionnaire used to analyze the students participating in the education of sports professionals has been carried out in a preliminary research consisting of interviews which I carried out among 19 instructors and the leader of the sports coach education program. In this preliminary research the questions focused on the individual experiences, interests, future plans and the general and specific knowledge about the disabled sports. The given answers and the overall

experiences helped me form the final questionnaire, consisting mainly of open end questions. (L. Dorogi, J. Bognár, K. Kiszeli, B. Fügedi, 2009).

The final questionnaire inquired about the personal experiences and opinions of the participants of the sports coach education program, testing their knowledge about the participants, reputation, tendencies and acceptance of the sports of the disabled. For the purpose of this analysis, the target group of respondents were the students of the sports coach education program of TFTI (Semmelweis University, Faculty of Physical Education and Sport Sciences, Postgraduate Institute, Budapest) in the academic year of 2006-2007 (N=789). The rate of return of the entirely valid and useable forms within the entire research was 61.9 % (N=489).

The analysis of the performance motivation and coping strategy of the disabled sportsmen has been carried out through the questionnaires TEOSQ (13 questions) and PMCSQ (21 question).

For choosing the questionnaires, I relied on the questionnaire presented in Pensgaard's study (1999), first introduced and used as TEOSQ questionnaire by Duda and Nicholls in their study (1992).

TEOSQ (the Task and Ego Orientation Questionnaire, used to assess the individuals' goal orientation) is a questionnaire of 13 questions focusing on the relationship between task- and ego-orientation in sports, in other words, reveals whether it is the perfection of individual task performance or the successful surpassing of competitors what sportsmen justify their successful performance with.

The possible answers to the questions ranged from 1 to 5 on a Likert scale. The reliability of the scales corresponded to the value published in the original study. The value of the task-orientation scale was 0.85 and the ego-orientation scale was 0.75.

It was the study of Seifriz, Duda and Chi (1992) that the other questionnaire was based on. PMCSQ (Perceived Motivational Climate in Sport Questionnaire) is a questionnaire consisting of 21 questions, assessing the motivational background of sportsmen and highlighting the mastery and performance goals.

The possible answers to the questions ranged from 1 to 5 on a Likert scale. The reliability of the scales corresponded to the value required in the researches in Hungary. The value of the task-orientation scale was 0.85 and the ego-orientation scale was 0.75.

Apart from the two aforementioned tests, I used a third one as well, the Coping Strategy Preference questionnaire. As a result of this questionnaire, I was able to detect eight individual factors isolating the different coping strategies, of which I analyzed the following ones in detail:

Problem centric approach: The goal is to avert the threat and to change the situation.

Search for support: The goal is the same, to avert the threat and to eliminate the danger, but with the aid of a third person.

Emotion focus: the efforts of the individual aim at eliminating the negative and uncomfortable emotional status aroused by the threat.

Emotion discharge: The stress caused by the threat is channeled in uncontrolled, aimless anger-out reactions.

The questionnaire is not designed for the field of sport specifically so I choose only three of the scales to obtain a nuanced picture for the purpose of examining the motivational background of the disabled.

Pool of persons used for analysis:

The pool of participants representing the education of sports professionals consisted of students (216 male and 213 female) of the graduate and postgraduate courses of sports coaching organized by the Semmelweis University Faculty of Physical Education and Sport Sciences, Postgraduate Institute, Budapest (TFTI). 331 (67.7 %) of them were individual sportsmen and 158 (32.3 %) of them played team sports, 364 (74.4 %) of them had a high school degree and 125 (24.6 %) had a college degree or higher. It is important to point out that a considerable number of those applying for these courses did already have a coaching experience behind them, and the average of the years spent with coaching was 3.05 within this sample. The pool of participants had been divided into three groups according to their coaching experiences: 72.4 % of them had no

coaching experience, 18.6 % had 1 to 4 years and 9.0 % had 4 years of coaching experience.

The selection of the pool for the questionnaire-based motivational analysis was preceded by a close cooperation with the Hungarian Paralympic Committee. For this purpose, I approached the members of the Hungarian Olympic squad of 2004. Out of the total of 38 members of this Olympic squad, 25 sportsmen took part in the analysis which gives us a participation rate of 65 %. Competitors of the Hungarian National Sitting Volleyball Championship and the Central European Region Sitting Volleyball Championship as well as third and fourth year students (58) of the Semmelweis University Faculty of Physical Education and Sports Sciences, playing sports on a regular basis, participated in the analysis.

Altogether, the pool of the interviewees consisted of disabled sportsmen and as a control group, non-disabled sportsmen. The sample was specified according to the different types of sports (team or individual sports), as well as to the gender, age, and place of living of the interviewees, and their results achieved in their respective sport.

RESULTS

Previous researches have demonstrated that disabled and non-disabled sportsmen have different motivational background. One of the explanation for this is the presence of media coverage in the world of sports, because the attention of the public have immense effect on sportsmen in general, on their triumphs and their overall achievements. In case of disabled sportsmen, the same phenomenon is a much more insignificant factor.

In view of the above, we can assume that the non-disabled sportsmen have greater performance-oriented background and disabled sportsmen have greater mastery-oriented background throughout their sports career.

Sportsmen with disabilities also display a greater differentiation among themselves than non-disabled sportsmen therefore individual treatment have a much greater function in

the work of sports professionals (gym teachers, trainers, sports specialists, special needs teachers) who work with them.

Statistical results of the questionnaire:

The results of the Task and Ego Orientation Questionnaire (TEOSQ) led to a general conclusion that both the paralympic squad members and the other disabled competitive sportsmen react similarly when specifying the causes of success. In this respect, there are no differences between these groups.

TEOSQ analyzes the interrelation between task- and ego-orientation, in other words if sportsmen interpret their success as a result of perfecting their individual task performance or by a relatively successful performance, compared to other competitors. International researches demonstrate that ego-orientation is more frequent among non-disabled sportsmen. However, in our samples no considerable differences could be documented. The same is substantiated by the research of Campbell and Jones (1977) which resulted in the finding that there are more similarities than differences between disabled and non-disabled sportsmen.

The participants of my research on the whole are characterized mostly by task-orientation, i.e. they tend to formulate their goals in terms of tasks. This can be explained by the fact that since the non-disabled participants are not international-level sportsmen and have no sports achievements in any of the world games, for them, success means the perfection of their task performance above all. Both groups of disabled sportsmen are characterized by task-orientation which verifies that it is task performance, i.e. the learning and tough practicing of a new drill or game situation which signifies success in sports.

The motivational questionnaire (PMCSQ) brought interesting results. The above mentioned groups differed greatly in terms of their motivational profile. It can be established that disabled sportsmen have a predominantly mastery-oriented motivational profile rather than a task-oriented one.

The Norwegian researches providing a theoretical background for this study came to a similar conclusion, since in the comparison of Norwegian Olympic squad members, it was the non-disabled sportsmen who displayed a preference of task-goals.

PMCSQ assesses the motivational background of sportsmen, focusing on the mastery goals and performance goals. It is the results of this questionnaire that confirmed that disabled and non-disabled sportsmen have different motivational background and validated the hypothesis that non-disabled sportsmen have a greater performance-oriented background while disabled sportsmen have greater mastery-oriented background.

The two disabled groups are equally characterized by mastery and performance goals, which indicates that there is no difference between the paralympic and other disabled sportsmen in their motivational background.

A general conclusion of the analysis carried out in the field of the education of sports professionals is that the great majority of students (75.1 %) could not name a single disabled sportsman ($\chi^2 = 71,5$; $p = 0,001$). However, there is considerable variation in the responses according to the time spent as coaches and the gender of the interviewees. The difference analysis revealed the correlation: the more time one spent working as a coach the more disabled sportsmen he/she could name (Pearson $\chi^2 = 6,79$; $p = 0,034$). It is also clearly indicated that that women knew fewer disabled sportsmen than men (Pearson $\chi^2 = 3,62$; $p = 0,038$). On the other hand, the responses given by those with a high school degree and those with a college degree or higher did not display statistical differences and neither did the responses of players of individual or team sports.

Another remarkable issue was highlighted by the question whether the interviewees with coaching experience had met disabled sportsmen within the scope of their work before. Evidently, for this question, we only considered the answers of those with a coaching experience of 1 year or more ($n=135$). On the basis of the subsequent results we can establish that the number of respondents meeting with disabled people on a regular basis is 5; often: 27; and never: 99 people ($\chi^2 = 178,2$; $p = 0,001$). In this case

there was no significant difference between the answers of men and women, or of different qualifications, types of sports and coaching experiences.

We were also interested in whether or not disabled sportsmen play sports in an organized way within the sports clubs. At this point we asked for strictly personal experiences, assuming that sportsmen and coaches alike could be aware of the processes within their sports club or section. Subsequently it can be established that 0,7 % of the interviewees found the number of disabled sportsmen playing sports in their club “many”, 5.2 % answered with “a few”, 5.9 % said “one person” and 17.8 % did not know ($\text{Chi}^2 = 224.8$; $p = 0.001$). The majority of the sample (70.4 %) answered that there were no disabled sportsmen in their clubs. With respect to their responses, there was no difference between the variables (coaching experience, gender, academic qualifications, types of sports).

Next we focused on finding the reason for the small number of disabled sportsmen in clubs – or indeed their absolute lack of presence. For this question 31.2 % of respondents answered that they did not know, 14.7 % mentioned imperfect personal conditions and 22.8 % indicated that the club was not barrier-free ($\text{Chi}^2 = 22.78$; $p = 0.001$). In terms of answers given, there was no significant alteration between respondents of different genders, highest academic qualifications, coaching experiences or types of sports.

It is a promising sign that the vast majority (97.8 %) of the sample found it important that disabled people play sports ($\text{Chi}^2 = 8.00$; $p = 0.018$). The difference analysis revealed no significant difference between the variables of coaching experience, gender, highest academic qualification or types of sports.

For the question of why disabled sports was important, a considerable proportion of the sample (25.3 %) mentioned that everybody needed physical activity or that physical activity was part of a healthy life (34 %). Other answered that everybody deserved to do sports (11.6 %), that it activated you (7.7 %) or that it was a source of joy for everybody (11.9 %) while 9.5 % did not answer the question ($\text{Chi}^2 = 95.0$; $p = 0.001$). There were

no statistical differences between the variables of coaching experience, genders or academic qualification.

The next question inquired if disabled people could do sports together with the non-disabled. This question was answered with yes by 80 % of the respondents ($\text{Chi}^2 = 107.5$; $p < 0.001$). A greater proportion of men and those with a lower school degree answered that in their opinion disabled people could not do sports together with the non-disabled (Pearson $\text{Chi}^2 = 3.916$; $p = 0.032$), while there was no difference in the other variables of gender and coaching experiences.

Conclusions

As a result of the performance motivational analysis it can be established that the analyzed samples display no difference in their assessment of success. I conclude that their approach towards sports and performance is also similar.

Although university students and sport playing disabled people could not be considered as professional competitive sportsmen, this analysis reached a similar conclusion as the international studies. I explain this with the fact that the sportsmen entering the paralympic squad have a similar sports background as other sportsmen.

This is invaluable information for professional coming from top sports circles and intending to work with disabled sportsmen, since success and high performance in the disabled sport is still dependent on sufficient technical and professional background. The ambition of these sportsmen for success and their background for successful performance is no more than the means of improving their general quality of life.

The analysis in the field of education of sports professionals reveal that the claims, knowledge and plans of the participants of coaching courses differ in terms of the above questions. In terms of general knowledge and experiences, the majority of the respondents could not name sportsmen with disabilities. Besides, those with some coaching experience almost never meet disabled sportsmen throughout their career as coaches.

The fact that the vast majority of the respondents recognized the importance of disabled sport because disabled people needed physical activity, sport was part of their healthy lifestyle and sport was a source of joy, indicates a certain sensitivity towards the issue of the people with disabilities.

Their attention is also apparent in the answers given to the question inquiring if disabled sportsmen could play together with non-disabled sportsmen, despite the fact that in lack of experience, these answers are hypothetical and do not necessarily indicate a firm commitment from a coach towards inclusion.

In addition, the results concerning the education-related knowledge show that the a significant majority of respondents have very little knowledge and experience indeed with respect to the issue of the disabled. It was therefore anticipated that, as it happened, the majority of the sample would, in their answers to specific questions, express the importance of augmenting the content of the coaching courses with knowledge about the disabled sport. These respondents see the need for modernizing tendencies in the education of coaches specifically dire in the subjects of pedagogy, communication, coaching theory and psychology.

The questions regarding the nature of coaching revealed that merely the half of the respondents participating in the analysis would undertake coaching responsibilities in the field of disabled sports. A considerable proportion of the sample indicated that coaching work with disabled and non-disabled sportsmen differed greatly in their sport. The detailed elaboration of these differences showed that the respondents underlined the necessity of special knowledge, different communication and special coaching methods. Merely the half of the respondents believed that a coach could possibly be as acclaimed in disabled sports as in non-disabled sport and an even smaller proportion of them thought that success in the field of disabled sports was rewarded the same way as in the non-disabled sports. It is worth underlining that those giving a negative answer explained it with the indifference of society.

In sum, the opinion of the participants undoubtedly indicates the necessity of augmenting the material used for the education of sports professionals and coaches with knowledge of the disabled sport.

REGISTER OF OWN PUBLICATIONS

Domestic and international publications relating to the dissertation:

Dorogi László (2011): A Fogyatékosok Nemzeti Sportszövetsége kialakulása és működése. in: Benczúr Miklósné (szerk.) Adaptált testkultúra és sport fogyatékoságspecifikus alapismertei. ELTE BG Gyógyopedagógiai Kar, Budapest, 52-65.

Kälbli Katalin, **Dorogi** László (2009): Fogyatékos személyek és a sport. In: Szatmári Zoltán (szerk.) Sport, életmód, egészség. Budapest: Akadémiai Kiadó, pp. 760-785.

Dorogi László (2009): Integráció értelmezése a fogyatékos emberek sportjának területén. In: Szatmári Zoltán (szerk.) Sport, életmód, egészség. Budapest: Akadémiai Kiadó, 2009. pp. 785-802.

Dorogi László, Bognár József (2009): Fogyatékos sportolók teljesítménymotivációja. In: Bognár József (szerk.) Tanulmányok a kiválasztás és a tehetséggondozás köréből. Budapest: Magyar Sporttudományi Társaság, 2009. pp. 348-354.

Dorogi László, Fügedi Balázs, Kiszela Kinga, Bognár József (2009): A sportszakemberképzés egy lehetséges modellje. A fogyatékos emberek sportjával kapcsolatos ismeretek és hazai edzőképzés kapcsolata. *Kalokagathia* 47:(2/3.) 98-111.

Dorogi László, Bognár József (2007): Bevezetés a fogyatékos emberek sportjába. Budapest: Magyar Testnevelési Egyetem – Párbeszéd (Dialógus) Alapítvány – HÍD Alapítvány.

Dorogi László (2007): Integráció értelmezése a fogyatékos emberek sportjának területén. In: Dorogi László, Bognár József (szerk.), Bevezetés a fogyatékos emberek sportjába. Budapest: Magyar Testnevelési Egyetem – Párbeszéd (Dialógus) Alapítvány – HÍD Alapítvány, pp. 81-90.

Dorogi László (2007): Inklúzió a testnevelésben. *Iskolai Testnevelés és Sport. - Elméleti, Módszertani és Információs Szaklap* (34). 13-14.

Dorogi László, Bognár József, Gita Szilvia (2006):

Fogyatékkal élők sportjának ismeretei az edzőképzésben. *Magyar Edző* 9:(1) 37-39.

Gita Szilvia, Bognár József, **Dorogi** László, Kälbli Katalin, Rigler Endre (2005): Az integráció helye és szerepe a hazai pedagógiai gyakorlatban. *Magyar Sporttudományi Szemle* 6:(22). 15-20.

Dorogi László (2003): Információ és kommunikáció a sportban: akadálymentes sportvilágháló. *Magyar Edző* 6:(4) 27.

Szekeres Pál, **Dorogi** László (2002): Fogyatékos gyerekek iskolarendszere, a versenysportra alkalmas gyerekek kiválasztása. *Magyar Edző* 5:(3). 15-20.

Gita Szilvia, Bognár József, Kälbli Katalin, **Dorogi** László (2008): Comparative study on inclusive and special education curricula in Hungary. *Physical Education And Sport* 52: pp. 16-22.

Dorogi László, Bognár József, Petrovics László (2008): Introducing disability issues into the education of coaches. *Physical Education And Sport* 52: pp. 39-45.

Dorogi László, Szabó Attila, Bognár József (2008): Goal orientation and perceived motivational climate in hungarian athletes with physical and visual disabilities and in able-bodied athletes.: Ciljna orijentacija i samoprocijenjena motivacijska klima kod madarskih sportaša s fizièkom invalidnošću i oštećenjima vida i zdravih sportaša. *Kinesiology* 40:(2) pp. 162-169.

Dorogi László (2005): Personality Development of the Psychomotor Talent: The Task of the PE Teacher in the identifying and recognizing of Sports Talent. In: Hermann Rüppel, Peter Noack (edit): *Motor Control and Multimedia Aided Physical Education*. Semmelweis University Budapest, Faculty of Physical Education and Sport Sciences, pp. 66-73.

Domestic and international publications not related to the dissertation:

Dorogi László (2000): A TF-es hallgatók társadalmi jövőképének változása az egészségi problémák tükrében. *Kalokagathia* 38:(1/2.) 108-115.