ORIGINAL PAPER

TRENDS in Sport Sciences

2013; **2**(20): 107-114. ISSN 2299-9590

Personality of physical education teachers and adapted physical activity

HANA VÁLKOVÁ¹, MIROSŁAW GÓRNY²

The subject of personality of PE teachers has been investigated since the 1960s. The pioneering contributions to the area were made by Prof. Bohuslav Hodaň (Palacký University in Olomouc) and Prof. Bohumil Svoboda (Charles University in Prague). Nearly all Central European countries have dealt with similar problems related to physical education. The 1970s and 1980s witnessed the regular organization of conferences around the subject of "Personality of PE teacher" as the basic platform for exchange of information and materials. The conferences were organized by Bohuslav Hodaň and the staff of the Department of Physical Education. They were organized every 2 years, and later every 3 years, from 1972 to 1981. The period of local projects in the late 1980s was marked with the development of the Czechoslovak government projects in cooperation with Poland and Hungary. The leading institution became the Faculty of Physical Education and Sports in Prague (Prof. B. Svoboda). The subject of "coaching" was included later. Local Palacký University projects focused on the education of PE specialists under the umbrella of elementary and/or special schools teachers. They had been the starting point for the training of Adapted Physical Activity professionals. The 1990s featured a focus on APA teachers, development of study programs, connecting theory with practice and assessment of graduates. A longitudinal project of assessment of PE teachers from the time of their university education through teaching practice to their retirement was a separate project which lasted 32 years (from 1974 to 2006). Research on PE graduates between 1998 and 2005 led by Prague and Olomouc sports faculties involved all departments of Physical

¹Palacký University, Faculty of Physical Culture, Olomouc, Czech Republic ²University School of Physical Education, Department of Sport for Disabled, Poznań, Poland

Education in the Czech Republic. The aim of recent research focuses on study motivation, "successful – non-successful" graduates and curriculum development, especially within the APA and Recreology study programs.

KEY WORDS: Physical Education undergraduates, Physical Education graduates, Physical Education teacher role, Physical Education professional competencies, Adapted Physical Activity specialist.

What this paper adds?

In this article we presentation Historical background of cooperation between Czech Republic (Czechoslovakia) and Poland on the field of development and/or education of Physical Education (PE) Teachers. The presentation of research intentions with respect to the quality of PE teachers. Basic findings related to PE teachers competencies: personal attitudes, didactic skills, presentation of healthy life-style and others. Research approaches helped to establish university study program "Adapted Physical Activities" in both countries.

Received: 17 November 2012 Accepted: 23 April 2013

Corresponding author: Hana Válková, e-mail:

hana.valkova@upol.cz

Introduction

The subject of Physical Education (PE) teacher's personality has been investigated since the 1960s. The pioneering studies of Prof. Bohuslav Hodaň (then a member of the Faculty of Pedagogy, and currently of the Faculty of Physical Culture, Palacký University in Olomouc) were followed later by those of Prof. Bohumil Svoboda from the Faculty of Physical Education and Sports, Charles University in Prague. The origins of the new subject were linked with the social situation in Czechoslovakia in the late 1960s. The influence of education became commonly acknowledged, and physical activity and sports came to be perceived as an opportunity for the general population to engage in apolitical activities, and as a window in the socialist system for a balanced development of the personality of young people.

As academics began to focus on the significance of physical education for health and personal development of the young, the issue of personality of PE teachers also became important. The researchers' attention was shifted from fitness and sports skills variables in education to personal, psycho-social and didactic variables of future PE teachers (PE students) and in-service teachers. Many Central European countries tackled this issue in physical education, and a tendency among these states to cooperate in physical education and sports was logical. International conferences became the basic platform for exchange of information, knowledge and experience. The conferences were organized by Bohuslav Hodan and the staff of the Department of Physical Education for Primary and Special schools. The theme "Personality of PE teachers" was investigated in an international project sponsored by the Ministries of Education of former Czechoslovakia and other participating countries. The leading institution in the subject area became the Faculty of Physical Education and Sports in Prague (Prof. B. Svoboda). That period was marked with an extensive cooperation between Czechoslovakia and Poland. Parallel research concentrated on longitudinal assessment of personal psycho-social traits of PE teachers from entrance exams up to their retirement (Válková, 1974–2009). Later research studies examined the motivation, success of graduates or the lack thereof and curricula development, especially in the study program "Adapted Physical Activity".

The 1970s and international projects of the 1980s

University students majored in physical education with minors in subjects such as biology, languages, mathematics, geography in faculties of pedagogy (Teacher Training Colleges) in all 14 counties of former Czechoslovakia (9 in Bohemia-Moravia, 5 in Slovakia). The study program for future PE teachers lasted four years. Theory was strongly supported with development of didactic skills and practice in schools (6 weeks) as well as extracurricular sports (2 hours per week minimum). The professional competences of PE teachers were utilized, first of all, on secondary school students (6th-9th grade, aged 11-12 to 14-15 years). Students over 15 years of age continued their compulsory or optional education in upper middle schools (general gymnasiums, vocational training, etc.).

Prospective PE teachers in Czechoslovakia, who had to minor in other subjects, could only study at the Faculty of Physical Education and Sports in Prague (Charles University), the Faculty of Physical Education and Sport in Bratislava (Comenius University), and the Faculty of Natural Sciences in Olomouc (Palacký University). The university atmosphere, curricula and textbooks were strongly centralized.

The issue of personality of PE teachers was perceived as an important phenomenon which can influence the physical and spiritual development of children and youth through school physical education and extracurricular physical activities. Hodan based the idea of PE teacher's personality on the exchange of knowledge and investigation of different personality variables. He moved scholarly discussions from the departmental level to the national (1970) and international levels. Academics like Svoboda, Dobry, Drdacka, Choutka, Choutkova, Kostka, Kostkova (FPES Prague), Stráňai, Sykora, Štulrajter (FPES Bratislava), Hodaň, Válková (Ped F Olomouc) and others greatly contributed to this process.

The second conference (first international) was organized in 1972 and witnessed a paper delivered by Zofia Żukowska from the Academy of Physical Education in Warsaw. The international participation increased steadily. The 1974 conference welcomed 21 international participants, mostly from socialist countries. Experts from Poland enriched the conference program with important sociological aspects. The popularity of conferences increased due to interesting topics, quality of research and the pleasant atmosphere of the university city of Olomouc. The "Personality of PE Teachers" conference became a regular research event under the auspices of UNESCO. The May conference in 1976 was attended by 85 international experts from different countries, including N.J. Moolenizer, a representative of UNESCO

in Paris (originally from the University of New Mexico in Albuquerque). The September conference in 1978 saw the participation of 130 scholars from all over the world (Canada, Egypt, Japan, etc.), a representative of the British Sports Pedagogy Association J. Kane, and UNESCO Deputy Director Mrs. Nancy Green. It is important to stress that the frequent international contacts with the so-called Western universities and associations were possible in Czechoslovakia at that time. The conference presentations were collected in monothematic full-text proceedings with summaries in English, Russian or Czech (see the list of references).

Traditional physical education/sport skills or physical fitness then became a starting point for systematic research as the first research findings were produced. Entrance exam test batteries, curricular standards of physical fitness and skills and/or final test/exam requirements were discussed. The basic principles of assessment as well as methods and instruments for measurement were developed, innovated or confirmed [1-4]. Attention was paid to didactics and organizing skills as well as principles of interactive behavior between students and the teacher. Other research areas included motivation related to the profession of PE teaching as well as personality traits of PE students or teachers. A special textbook on the personality of PE teachers, didactic styles and instructional activities in PE lessons at different school age levels was published as the one of the main research outcomes [5-6].

In conclusion, the shift from assessment of physical variables through didactic skills to psycho-social variables became visible. The psycho-social and didactic approach was granted a governmental project by the Ministry of Schooling and Education of Czechoslovakia, from 1976 to 1980. Another governmental project in the years 1980-1985 was given an umbrella title "The Educational process in Physical Education in different age cohorts with respect to various environmental forms" - No RS ČSR 19. Its main coordinator was the FPES Prague (B. Choutková). The research focused on PE teachers was led by L. Dobrý (FPES Prague). Subtopic 19/1a of the project focused on lifestyle aspects of PE and was developed by B. Hodan from the Pedagogical Faculty in Olomouc. Subtopic 19/1b concentrated on the psycho-social aspects of personality of PE students and teachers and was developed by H. Válková from the Pedagogical Faculty at Olomouc. New contributors to the project included Jansa, Kocourek, Rychtecký, Svatoň from Prague; Mužík, Pavlík, Prášilová, Vilímová from Brno; Gajda from Ostrava, Labudová,

Medeková, Rovná from Bratislava; Trunečková from Banská Bystrica; and Belej, Durech and Stejskal from Presov. All in all, about 250 experts from different Czechoslovak universities and cities were involved in extensive and systematic research. The research area was expanded and also encompassed preschool age coaching. A little more open atmosphere of the period permitted official international cooperation between universities from Poland and Hungary. Meetings of experts were held not only in Olomouc but also in Cracow [7-8] and Budapest [9-10]. Preliminary results were summarized during the last conference in 1981 [11]. The findings with statistical and qualitative analyses were published [12]. Olomouc became the leading centre for advancement of the subject of personality of PE teachers.

Unfortunately, the network of conferences and collaborators ended due to several reasons: a) the overall social attitudes were not supportive of the main organizer Prof. Hodan who soon changed his area of research into "Personality, educators and life quality"; b) the 1976 reform of the school system that artificially merged secondary and middle schools (students from 11/12 to 18 years of age), and the establishment of a new professional title: PE teachers for grades 5-12.

The late 1980s – the period of local projects

In spite of the shift of the main governmental projects to other issues (top sports or general academic education), some smaller projects survived in Olomouc. Hana Válková continued the line of research established by Professor Hodan. The area of "Personality of PE teacher" was included in the sub-topic of the project "Physical education as part of the school educational system" between 1984 and 1988. Elementary school PE teachers working with children aged 6 to 10/11 years became the focal point of this research [13-15]. The training and education of elementary school teachers (mostly women) was supported with optional education streams (arts, music, polytechnics, physical activity and sports). Teaching games to children was positively evaluated with elementary study program graduates. They recruited mostly from small localities or recreational PA communities. Similar results were attained in the project "The effectiveness of PE graduates (TTC) and their involvement in practice" from the years 1986-1989, focused on the assessment of opinions of special education students [16, 17]. The examined students underlined training of motor competences as an important part of their education and perceived games as important stimuli

for re-education and prevention. Miscellaneous articles relevant to PE teachers or educators were collected by Prof. Hodan in a volume of proceedings titled Tělesná kultura (Physical Culture) [18].

Assessment of graduates with regard to personality traits, study motivation, assessment of university study programs related to in-service practices and school practice, including adaptation of school employment, was the main intention of the local university project "PE students and graduates of the Olomouc University Faculty of Pedagogy". The aimed population consisted of graduates of PE teacher study program for grades 5-12. The main results for the broad age range were the development of didactic skills, the range of available physical activities including extracurricular activities, perception of responsibilities and safety in a different and wide age spectrum. Another perceived problem were the numerous changes in the structure of school system and legislation, which subsequently led to the burnt-out syndrome. The late 1980s were characterized by the declining social role of PE teachers in Czechoslovakia.

Longitudinal assessment of PE teachers' personality

Longitudinal research is an important part of personality analysis of PE teachers. The leader of the longitudinal research project in this area was Valkova (see Appendix, longitudinal project). Its main goal was the description of personal attitudes and changes of the study period of future PE teachers (entrance exams, leaving exams and graduation) and changes in teaching or other professions until the retirement age. The project was realized for 32 years, from 1974 to 2006. Student-graduates of physical education who minored in another area were included in the study sample. The assessment was carried out every 5 years, face to face, as graduates were invited to Olomouc. Measurements and tests were completed with discussions related to current teachers' problems. Biodromal research strategy was the paradigm of the project. The assessed domains included fitness and health status, professional attitudes, personal values, and PE teachers' job perception. The applied assessment tools included fitness and skills measurements (in the study period) of occupational health troubles (balance problems, back pain, vocal cords problems, Cattell's 16 PF, Eysenck's personality inventory, Bel's questionnaire, HODOR questionnaire of values preferences, OAZ personal analysis of profession, and ICL - Leary's interpersonal adjectives checklist focused on behavioral interactive strategies.

The primary idea about the relationship between temperament categories or personal traits (16 PF, Eysenck's inventory) was not confirmed among populations of male-female teachers, coaches and athletes [19]. The PE teacher's personality is a special social role/position. The acceptance/non-acceptance of this role and satisfaction with it are more important variables related to interactive strategies in communication with pupils/students (ICL questionnaire).

The measured entrance fitness and skill achievements of undergraduate students are important from the viewpoint of study success (sport games, gymnastics, athletic, swimming, etc.) but not relevant to professional teaching, teaching success or continuance in PE jobs. Occupational health troubles (back pain, vocal-cords problems) influenced the persistence in profession, and led to re-qualification from PE to other professions, or giving up PE jobs. The comparison of PE students and PE teachers after 25 years of school practice showed that the latter were in better fitness condition (step-test, assessment of imbalances, BMI) than the former.

The assessed PE teachers went through numerous legislative, school, financial and social and political transformations (especially in the 1990s). The subjects were very sensitive and critical toward "administrative changes" and ready to solve problems related to students' benefits. Their main perceived problems were (OAZ findings): excessive investment into their profession with minimal social or financial awards, as well as huge responsibilities and minimal rights (both genders). Male teachers perceived low salaries and bad staff atmosphere as problems with their profession, and female teachers indicated bad staff atmosphere and adjustment to the profession (due to declining discipline of students).

Although competences and interactive and social requirements became limited, the general didactic principles and educational approaches and the communicative style toward pupils were valid in any context. It was linked with personal motivation, humanistic orientation, fair play during a life career and sports career. Personal courage can persist against any political pressure, and stamina against burnout. The assessed population of PE teachers demonstrated a strong perception of official approaches relevant to socioeconomic and political variables as well as flexibility and leading abilities. The detailed results can be found in the list of references (Válková 1977, 1987, 1988, 1990, 1991, 1993, 1994; Válková, Bortolli & Robazza 1996; Válková & Hykel 1993).

What is already known on this topic?

The personality of Physical Education (PE) Teachers is crucial phenomenon for improvement of children/students individuals through general physical education from different aspects: healthy life-style, fitness, skills, attitudes to recreation physical activities or orientation on top competitive sport, life attitudes and social inclusion. These reasons influenced the long-term interest in the topic: personality o PE teachers.

Adapted Physical Education Teachers and study curricula as PE specialization

The APA studies are based on special education and PE. First attempts to develop APA studies began in cooperation with the University School of Physical Education in Poznań at a conference on personality of PE teachers in Cracow [7]. J. Dziedzic and M. Górny (Poznań) [20-21] and Valkova (Olomouc) studied the issue of personality of PE teachers from the view of special education teachers. The project of cooperation between the mentioned institutions was formulated during a train journey from Cracow to Katowice. The contacts between the two universities continued and survived the political and economic transformations of the 1990s taking form of regular annual meetings. After Dziedzic's death, Kowalik & Górny (Poznań) and Valkova and Karaskova (Olomouc) developed further their education, research and publishing cooperation in the domain of special education and APA [22-23]. APA was included in the European CEEPUS program (Central European Education Project of University Study). In total, 11 CE universities led by Olomouc were involved in this project from 1997 to 2008. Poland was represented by the University Schools of Physical Education in Poznań (Kowalik, Górny, Dłużewska, Nadolska), Wrocław (Bolach, Sr., Bolach Jr., Wieczorek) and Warszawa (Kosmol, Molik, Morgulec, Skowroński) as partners. The international contacts between the research institutions were improved within the European Federation of Adapted Physical Activity (EUFAPA) and the Erasmus exchange program. Beside APA the cooperation continued in such research areas as psychology, sociology and philosophy (Krawczyk, Koszczyc, Kosiewicz, Osiński).

The research achievements and cooperation as well as the new education context following the Bologna and Salamanca agreements have greatly influenced the subject area of PE teacher as an APA educator [24-28]. The feedback from graduates called for attention to the unchartered territory of the phenomenon of "the other, different, and/or disability" in person-oriented education (pupils, students). There is a need to develop study programs focused on PE teaching and special education. Special education remains part of university curricula in a number of pedagogical faculties at Central European universities. The term "Adapted Physical Activity" (APA or APE) has been fully accepted by European universities (with its respective versions in other European languages).

The module structure is the basic approach to composing curricula. *Module* means composition of subjects (content, intensity, requirements) both at the BA and/or MA levels, in accordance with European recommendations in the context of future professional activities. A module usually concludes with a complex exam (state exam in the Czech Republic). It can be part of different study branches including international studies (open system) and can provide an open long-life education. Modules represent and provide knowledge, skills and typical professional competencies. The essential principles in all modules include an integrative approach as a means of socialization; theoretical knowledge linked with practical skills; and an emphasis on personal experience and attitudes *THROUGH* organizing and participating in special activities in centers, schools, in local policy. Four basic modules are typical for the program of education of APA teachers in Olomouc, which are recognized in accredited European APA study programs:

- BA interactive competences, MA teaching competences.
 Subjects: pedagogy, psychology, developmental psychology, sports psychology, sports sociology, philosophy, sports history, law and legislation
- 2. Special education competences of professional skills and communication with persons with special needs. Subjects: tyflopedy, surdopedy, somatopedy, psychopedy, etc.

(including disabilities).

- 3. Physical education and sports competences and professional skills related to the general sports environment.
 - *Subjects:* biology and medicine discipline (anatomy, exercise physiology... etc.).
 - Sports: athletics, swimming, sports games, summer and winter outdoor activities, etc.
- 4. Adapted Physical Activities (BA) competencies related to leisure time and recreation, MA competences related to PE teaching, research.

Subjects: adapted sports, wheelchair basketball, sitting volleyball, boccia, adapted swimming, monoskiing, projects creation, integration-inclusion, etc. Completion of BA and/or MA diploma theses and public defense is an obligatory part of graduation. Recent research has focused on motivation of study and job seeking, didactic APA skills, composition, realization and evaluation of adequate programs including PE integration.

Research on PE graduates in 1998-2005

The subject of personality of PE teachers was developed between 1998 and 2005 in the Czech Republic in a diverse context. The area has been modified and assessed in different universities providing study programs in Physical Education in areas such as PE teaching, APA teaching, recreation and leisure time, animation and sport management. The local activities were often focused on evaluation of motor skills and fitness of students, feedback-based curricula and study process. The graduates are employed in the teaching professions or other businesses. Due to the activities and cooperation between Prague (Jansa) and Olomouc (Válková) faculties a special project "Possibilities of Physical Education and Sports Program Graduates on the Job Market in the Czech Republic" was developed with a grant from the Ministry of Education, Youth and Sports (GAČR 406/052670). Participants/graduates were recruited from the Universities of Prague, Olomouc, Brno and pedagogy faculties in České Budějovice, Liberec, Plzeň, Ústí nad Labem, Ostrava, Hradec Králové, Prague.

The sample of 4,430 graduates (men – 52%, women -48 %) from ten sport and physical education pedagogy faculties in the years 1998–2005 were requested to give their answers on anonymous questionnaires. 42.8% of questionnaires were returned (from 1,885). The Master's program was completed by almost 70% of graduates, the rest finished the Bachelor's programs. 55% of graduates (equal percentage of men and women) from that group were working as school teachers. Approximately 6% of graduates worked at private schools and universities, more than 50% worked in primary schools, and onethird in secondary schools. 21% of graduates were active in municipal PE and in sport clubs as coaches, trainers, and gym instructors, etc. Less than one-third of respondents worked in the private sector, mainly in fitness clubs and travel services. More males (60%) than females worked in sports [29, p. 13]. The assessment of usefulness of study subjects showed the graduates

should need more didactics in practice than researchoriented theoretical subjects. Competition on the job market and employment opportunities are also linked with the regional environment. The chances of graduates' employment became one of the indicators of quality of this branch of study and the respective educational institution" [29, p. 12]. These results have to be considered as challenges for future research. They call for improvement of temporary study curricula together with respect to the professional trends in the labor market and socioeconomic situation.

Conclusion

The present study is a historical review. The historical background and social environment of the subject of "Personality of PE teachers" is, however, crucial to understand the pioneering contribution to the issue of Hodaň, who inspired research activities of several generations, broadened the spectrum of assessment in PE teaching, made effective use of former research achievements and outlined challenges for the future. The area of "Personality of PE teachers" has been a subject of intensive research for more than 40 years, which greatly influenced education curricula and PE teachers. The Czech and Polish research cooperation in the area can be regarded as an enormous contribution to the study of personality of PE teachers and Adapted Physical Activity study programs.

References

- Havlíček I. Assessment of validity of motor performance tests [in Czech]. Teorie a praxe tělesné výchovy. 1972; 20: 70-74.
- 2. Havlíček I. The issue of validity of motor performance assessment [in Czech]. Acta Universitatis Palackianae Olomucensis, Gymnica. 1974; 5: 155-159.
- Měkota K, Blahuš P. Motor tests in physical education [in Czech]. Státní pedagogické nakladatelství. Praha; 1983.
- 4. Pávek F. Physical performance of youth between 7 and 19 years [in Czech]. Olympia, Praha, Ústřední výbor ČSTV. 1977.
- 5. Dobrý L, Svatoň V. Analysis of teacher instructional activities in physical education. In: Svoboda B, ed. Didactic studies in physical education. Karlova univerzita. Praha. 1977; 63-105.
- 6. Svoboda B, ed. Didactic studies in physical education. Karlova univerzita. Praha. 1977.
- 7. Grabowski H, ed. Education of physical education staff [in Polish]. Akademia Wychowania Fizycznego. Kraków. 1988.

- Válková H. Self-adjustment to the profession of the PE teacher. In: Grabowski H, ed. Kształcenie kadr kultury fizycznej. Akademia Wychowania Fizycznego. Kraków. 1988; 205-209.
- Application of research results in the curriculum reform of training of physical education teachers and professional coaches. Hungarian University of Physical Education. Budapest. 1988.
- 10. Válková H. The effectiveness of PE teacher studies at the pedagogical faculty of Palacký University in Olomouc. In: Application of research results in the curriculum reform of training of physical education teachers and professional coaches. Hungarian University of Physical Education. Budapest. 1989a; 63-77.
- Hodaň B, ed. Personality of the PE teacher IV [in Czech].
 Univerzita Palackého, Pedagogická fakulta. Olomouc.
 1981.
- 12. Svoboda B, ed. Education process in school Physical Education in different age cohorts [in Czech]. Univerzita Karlova. Praha. 1987.
- 13. Válková H. Sport socialization of PE students [in Czech]. In: Hodaň B, ed. Tělesná kultura. Sborník kateder tělesné výchovy a tělovýchovného lékařství, Olomouc: Univerzita Palackého. 1989b; 21: 275-287.
- Válková H. The role of female PE teachers in elementary schools in contemporary schooling environment [in Czech]. Těl. Vých. Mládeže. 1990a; 56(10): 367-369.
- 15. Válková H. The social role of PE teacher in recent aspects of elementary school [in Czech]. In: Hodaň B, ed. Tělesná kultura. 1990b; 22: 20-29.
- Válková H, Bartošová L. Physical education of special education study graduates [in Czech]. Acta Gymnica Universitatis Palackianae Olomucensis Paedaogica Specialis. 1989; 5: 183-190.
- Válková H, Bartošová L. Opinions of special education study graduates: an analysis Acta Gymnica Universitatis Palackianae Olomucensis Paedaogica Specialis. 1990; 6: 255-274.
- Hodaň B, ed. Personality of PE teacher [in Czech]. Tělesná kultura. Univerzita Palackého. Olomouc. 1989.
- Vaněk M, Hošek V, Svoboda B. A study of personality in sport [in Czech]. Univerzita Karlova. Praha. 1974.
- Dziedzic J, Górny M. Education of physical education staff for special schools and sports for the disabled [in Polish]. In: Grabowski H, ed. Kształcenie kadr kultury fizycznej. AWF Kraków. Seria: Zeszyty Naukowe AWF Kraków. 1988; 279-282.
- Górny M. Special education within physical education [in Polish]. In: Pańczyk J, Współczesne problemy pedagogiki specjalnej. Wydaw. WSPS. Warszawa. 1991; 55-58.
- 22. Karásková V, Dłużewska-Martyniec W, Górny M. Determinants of views on physical training of pupils from schools for the educationally disabled. Acta Universitatis Palackianae Olomucensis. Acta Gymnica. 1999; 29: 65-72.

- 23. Kowalik S. Physical culture of people with disabilities. Adapted physical activity [in Polish]. GWP. Gdańsk. 2009.
- 24. Válková H. Adapted physical education [in Czech]. Tělesná výchova a sport mládeže. 1995a; 61(8): 24-27.
- 25. Válková H. Adapted physical activity in the Czech Republic: Development and recent conditions. In: Proceedings of the First European Conference on Adapted Physical Activity and sports: White paper on research and practice. Europeans on Adapted Physical Activity Leuven: Acco Leuven. 1995b; 337.
- 26. Válková H. Adapted physical activity [in Czech]. Tělesná výchova a sport mládeže, 1996; 62(1): 38-40.
- 27. Válková H. The role of physical education and sport in the transition period of Central Europe countries [in Czech]. Masarykova univerzita. Brno. 2001; 16-22.
- Válková H, Nováčková M. The development of career advisory offices at Czech universities [in Czech]. Sborník projektu TEMPUS-PHARE No. CME-02121-96. Česká zemědělská univerzita. Praha. 1998.
- Válková H, Jansa P, eds. Opinions of PE and sports study program graduates on job involvement in the aspect of PE teaching [in Czech]. Univerzita Palackého. Fakulta tělesné kultury. Olomouc. 2008.

APPENDIX

Proceedings of conferences on personality of PE teachers

- Hodaň B, ed. Issue of personality of the PE teacher [in Czech]. Univerzita Palackého. Pedagogická fakulta. Olomouc. 1972.
- Hodaň B, ed. Personality of the PE teacher [in Czech]. Univerzita Palackého. Pedagogická fakulta. Olomouc. 1974.
- Hodaň B, ed. Personality of the PE teacher I [in Czech]. Praha: ÚÚ VPP. 1976.
- Hodaň B, ed. Personality of the PE teacher II [in Czech]. Praha: $\acute{U}\acute{U}$ VPP. 1976.
- Hodaň B, ed. About Personality of the PE teacher [in Czech]. Univerzita Palackého. Pedagogická fakulta. Olomouc. 1978.
- Hodaň B, ed. Personality of the PE teacher IV [in Czech]. Univerzita Palackého. Pedagogická fakulta. Olomouc. 1981.
- Hodaň B, ed. Personality of PE the teacher [in Czech]. Tělesná kultura. Univerzita Palackého. Olomouc. 1989.

The projects in the late 1980s

- Válková H. Self-adjustment to the profession of the PE teacher. In: Grabowski H, ed. Kształcenie kadr kultury fizycznej. Akademia Wychowania Fizycznego. Kraków. 1988; 205-209.
- Válková H. The effectiveness of PE teacher study programs at the Faculty of Pedagogy of Palacký University in Olomouc: a practical view. In: Application of research results in the curriculum reform in training of physical

- education teachers and professional coaches. Hungarian University of Physical Education. Budapest. 1989a; 63-77.
- Válková H. Sport socialization of PE students [in Czech]. In: Hodaň B, ed. Tělesná kultura, 1989b; 21: 275-287.
- Válková H. The role of female PE teacher in contemporary elementary schools [in Czech]. Těl. Vých. Mládeže. 1990a; 56(10): 367-369.
- Válková H. The social role of PE teacher in view of recent aspects of elementary school [in Czech]. In: Hodaň B, ed. Tělesná kultura. 1990b; 22: 20-29.
- Válková H, Bartošová L. Physical education of special education study graduates [in Czech]. Acta Gymnica Universitatis Palackianae Olomucensis Paedaogica Specialis. 1989; 5: 183-190.
- Válková H, Bartošová L, Nováková S. Opinions of special education study graduates: an analysis. Acta Gymnica Universitatis Palackianae Olomucensis Paedaogica Specialis. 1990; 6: 255-274.

Longitudinal assessment of PE teachers' personality

- Válková H. Assessment of assimilation tendency of PE students through Bell's inventory. Acta Gymnica Universitatis Palackianae Olomucensis. 1977; 7: 23-30.
- Válková H. The development of personality characteristics of physical education teachers I. The preference of activities. Acta Gymnica Universitatis Palackianae Olomucensis. 1987; 17: 67-80.
- Válková H. The development of personality characteristics of physical education teachers II: The scales of personality according to Eysenck's and Bell's inventories. Acta Gymnica Universitatis Palackianae Olomucensis. 1988; 18: 41-58.
- Válková H. The development of personality characteristics of physical education teachers III. Self-adjustment to the profession of the PE teacher. Acta Gymnica Universitatis Palackianae Olomucensis. 1990; 20: 193-210.
- Válková H. The development of personality characteristics of physical education teachers IV. Self-perception of the PE teacher's role. Acta Gymnica Universitatis Palackianae Olomucensis. 1991; 21: 3-39.
- Válková H. The development of PE teachers' professional self-adjustment during their teaching career. Acta Gymnica Universitatis Palackianae Olomucensis. 1993; 23: 63-84.
- Válková H. The role of PE teachers in their pupils' perception. Acta Gymnica Universitatis Palackianae Olomucensis. 1994; 24: 81-87.
- Válková H, Bortolli L, Robazza C. Self-concept and self-efficacy differences between PE teachers and PE students. Acta Gymnica Universitatis Palackianae Olomucensis. 1996; 26: 41-57.

Válková H, Hykel J. The image of the PE teacher's role of undergraduates and graduates of PE teacher programs [in Czech]. In: Hodaň B, ed. Tělesná kultura. 1993; 24: 150-163.

Adapted Physical Education Teachers and study curricula as PE specialization

- Dziedzic J, Górny M. Education of staff in the aspect of physical education in special schools and sports for the disabled [in Polish]. In: Grabowski H, ed. Kształcenie kadr kultury fizycznej. Seria: Zeszyty Naukowe AWF Kraków. 1988; 279-282.
- Górny M. Special education within physical education [in Polish]. In: Pańczyk J, Współczesne problemy pedagogiki specjalnej. Wydaw. WSPS. Warszawa. 1991; 55-58.
- Grabowski H, ed. Education of physical education staff [in Polish]. Akademia Wychowania Fizycznego. Kraków. 1988.
- Válková H. Aplikovaná tělesná výchova (Adapted physical education). Tělesná výchova a sport mládeže. 1995a; 61(8): 24-27.
- Válková H. Adapted physical activity in the Czech Republic: development and modern circumstances. In: Proceedings of the First European Conference on Adapted Physical Activity and Sports: white paper on research and practice. European on Adapted Physical Activity Leuven: Acco Leuven. 1995b; 337.
- Válková H. Adapted physical activity [in Czech]. Tělesná výchova a sport mládeže. 1996; 62(1): 38-40.
- Válková H. Role of physical education and sport in the transition period of Central European countries [in Czech]. Masarykova univerzita. Brno. 2001; 16-22.
- Válková H, Nováčková M. The development of career advisory offices at Czech universities [in Czech]. Sborník projektu TEMPUS-PHARE No. CME-02121-96. Česká zemědělská univerzita. Praha. 1998.

Research on PE graduates, 1998-2005 (GAČR 1406/05/2670)

- Jansa P, et al. Possibilities of "Physical Education and Sports" Program graduates on the job market in the Czech Republic [in Czech]. Praha: Karlova Univerzita, Fakulta tělesné výchovy a sportu. 2007.
- Válková H, Jansa P, eds. Opinions of PE and sports study program graduates on job involvement in PE teaching [in Czech]. Olomouc: Univerzita Palackého, Fakulta tělesné kultury. 2008.

Acknowledgements. The paper was developed within the ESF No CZ.1.07/2.2.00/15.0336 grant "Physical activity training for the disabled".