

PHYSICAL EDUCATION TEACHERS' PERCEPTIONS OF SCHOOL HEALTH EDUCATION AND SOCIAL SUPPORT FOR IT: RESULTS OF THE PILOT STUDY

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ABSTRACT

Research background and hypothesis. Health education (HE) is integrated in various modules especially in biology and physical education (PE). Therefore the quality and effectiveness of integrated health education should be analyzed systematically.

Research aim. The aim of the study was to examine PE teachers' perception of health education and social support for HE at their schools.

Research methods. The data of convenience sample consisting of 70 physical education teachers (62% were women) from one of the largest Lithuanian cities were analyzed. Respondents ranged in age from 25 to 69 years, average age was 45 ± 11 years. 44.8 percent of participants indicated that they work at school which belongs to the SHE (School for Health in Europe) network. Anonymous questionnaire was developed to assess PE teachers' health education perceptions and attitudes towards HE.

Research results. Only one of ten physical education teachers understood conception of HE and correctly defined its main goal. Neither teachers from schools within the SHE network, nor the ones who began their career after Independence fundamentally differed in their understanding and attitudes towards HE from teachers who did not belong to the SHE network or began their carrier before Independence. The findings of the current study demonstrated that in this sample PE teachers' behavior change – related competencies were not well-developed for the implementation of effective and safe HE.

Discussion and conclusions. This pilot study showed that HE perception of PE teachers' was incorrect and their attitude towards health education should be optimized. No important differences were observed between HE perceptions of teachers in regard of school belonging to SHE network. PE teachers working in SHE school network reported higher social support for HE activities.

Keywords: health education, physical education, instrumental competencies.

INTRODUCTION

Since Lithuania became an integral part of Europe as well as the world community, human life is more and more affected by trends common for many developed countries: global integration, technological changes and sedentary lifestyle. In recent decades, growing

culture of consumerism has aggressively unfolded in cultural and social fields, changing personal value system, touching the human self-awareness and interpersonal relationships. Mass culture and consumption are phenomena of economic growth in democratic countries, but in a young

democracy development of consumerism takes particularly aggressive and often distorted forms. Social, cultural and even political ill-preparation of a country to accept the opened-up possibilities of freedom evoke devastating consequences for its citizens, touching not only personal and interpersonal relations, but also one of the most expensive human assets – their health. Some of the most sensitive parts of our society are children and adolescents.

Health-related behaviour of school-aged children in Lithuania is problematic. The number of schoolchildren who smoke tobacco and consume alcohol is higher than in other EU countries

Schools are considered to be settings for both health education and health promotion. Complementary to the national initiatives, health promoting school is a part of a global strategy for health promotion development (Jourdan et al., 2008). Health education (HE) is any combination of planned learning experiences based on sound theories that provide individuals, groups, and communities the opportunity to acquire information and skills needed making quality health decisions (*Joint Committee on Terminology*, 2001). HE is purposely created situation in order to provide knowledge, to form positive health-related behaviours and attitudes as well as healthy living skills, induce bad habits refusal and change personal behaviour for better health. HE is the basis for health promotion (Cottrell et al., 2005). Research shows that schoolchildren brush their teeth, eat healthier more often, they are less bullied and have fewer bad habits at schools where health promotion programs were implicated and received greater attention in comparison to those where those activities were developing slowly (Zaborskis et al., 2005). Thus, successfully organized health education activities at schools can significantly reduce the prevalence of harmful habits and improve health status of schoolchildren.

HE is not compulsory in Lithuanian schools. Rather, education is based on the idea that HE should be integrated into other subjects and primarily into are biology and physical education. Therefore the quality and effectiveness of integrated health education should be analyzed systematically.

Outstanding theories of behaviour change (i. e. *The Theory of Reasoned Action and the Theory of Planned Behaviour*) assume that individuals consider behavioural consequences before the

particular behaviour, and the incidence of actual behaviour performance is proportional to the amount of control an individual possesses over the behaviour and the strength of the individual's intention in performing the behaviour (Sheppard et al., 1988; Ajzen, Manstead, 2007). Unfortunately, understanding of behavioural change techniques in our schools is complicated because of the lack of evidence – based knowledge and conviction that information giving or teacher – centred approach is the proper way to teach HE. However, the transference of knowledge and development of appropriate attitudes are not enough, formation of certain skills and competencies is necessary (Jociūtė et al., 2008). Consequently, the analysis of behavioural change – related competences of PE teachers is the question worth consideration.

Competence in educational area is understood as completeness of knowledge, skills, attitudes, values and personal characteristics (Jucevičienė, Lepaitė, 2000). This means that the teacher of physical education should have not only enough knowledge and skills to teach various health topics, but also good understanding of the subtleties of teaching methods (Jociūtė et al., 2008). PE teachers', who are supposed to be HE providers, perception of HE and their competencies regarding behaviour change is an understudied area. So, research in the field of physical education teachers' knowledge about health education, their preparation to carry out health promotion activities is very important. The aim of the study was to examine PE teachers' perception of health education and social support for HE at their schools.

We hypothesized that: 1) PE teachers, who started their carrier after the Independence of Lithuania would have more proper perception of HE; 2) PE teachers working within the SHE network would have more proper perception of HE and more positive perception of social support than those working outside the SHE network.

RESEARCH METHODS

Participants. Convenient sample of PE teachers from gymnasiums and secondary schools of one of the biggest Lithuanian cities was formed. The study involved a total of 73 PE teachers, 62% were women. Nobody refused to participate in the study, but three questionnaires were damaged, so the final sample consisted of 70 subjects. Respondents ranged in age from 25 to 69 years, an average age was 45 ± 11 years. 95.7% of participants had

higher education qualifications. Respondents' work experience lasted from 1 to 48 years, an average of their work experience was 20.2 ± 12.5 years; 62.9% of teachers reported that their teaching experience was less than 20 years (64% of them were women); and 37.1% of teachers reported that their professional career lasted 20 years or more (65 percent were women). 44.8% of participants (58% of them were women) indicated that they worked at school, which belonged to the SHE network.

Measures. The questionnaire was developed specially for this study. Participants were asked to report demographic data, further they were asked whether they integrated health education activities in physical education lessons (Yes / No); if they did, how they understood HE (open ended question); if they applied student – centered teaching methods of HE (Yes / No) and if they did, what methods in particular they used (open ended question); if the school community actively supported health promotion activities (Yes / No); and finally, the areas in which teachers had the least knowledge were determined (list of areas).

Procedure. The study was conducted in accordance with the principles of benevolence and anonymity. Those, who did not want to participate in the study, could refuse. Teachers were visited at their schools by the research team. Questionnaires were distributed and filled in in the free time from their classes. There also was the opportunity to fill them in at home. The questionnaire included 20 questions; it took approximately 15 minutes to fill in.

Statistical analysis. Analysis was conducted using statistical package *SPSS for Windows 17.0*. The differences between the groups were evaluated on the basis of χ^2 test and the results of the differences were considered statistically significant if the error probability value p was less than 0.05.

RESEARCH RESULTS

First, we tried to find out PE teachers' competencies in HE. Surprisingly, only 7.1 percent of participants correctly answered the open question about the main objective of HE, the distribution of the correct answers between respondents within and, outside the SHE network was similar accordingly: 6.5 and 7.7 ($\chi^2 = 2.09$; $df = 1$; $p = 0.35$). All respondents ($n = 70$) indicated that HE was integrated in their PE

lessons. However, only 7.1 percent of participants presented the right definition of HE. It is worth noting that all of them were working in schools which did not belong to the SHE network, accordingly 12.8 and 0% ($\chi^2 = 9.74$; $df = 1$; $p = 0.01$). It is interesting to note that 51.4 percent of teachers used active teaching methods during PE classes. Answers distributed between working within and outside the SHE network teachers in a similar way 948.8 and 48.7). However, only 31.4 percent of teachers listed one or more active student – centered teaching methods which were used in their classes. Teachers who worked within and outside the SHE network did not differ in their answers according to the application of student – centered teaching methods accordingly: 6.5 and 23.1% ($\chi^2 = 3.68$; $df = 1$; $p = 0.16$).

Further, we tried to determine whether work experience was related to perceptions and attitudes towards HE. We compared these variables between PE teachers who began their career before and those who began it after the Independence. The perception of HE did not differ in the groups of teachers with different length of carrier, both who started their carriers before and after the Independence were similarly wrong in their answers accordingly: 6.8 and 7.7% ($\chi^2 = 0.02$, $df = 1$, $p = 0.89$). However, the question about the main goal of HE was correctly answered more often by younger teachers accordingly: 11.4 and 6% ($\chi^2 = 3.60$, $df = 2$, $p = 0.17$). Unexpectedly, more teachers with teaching experience of more than 20 years reported that they applied several student – centered methods compared to those with less experience accordingly: 30.8 and 6.8% ($\chi^2 = 9.74$; $df = 1$; $p = 0.01$).

Then we tried to identify the areas where the lack of knowledge and teaching skills was the greatest. All PE teachers (100 percent), regardless of schools they worked at- within or outside the SHE network, emphasized three main areas – prevention of harmful habits, healthy diet and communication as well as collaboration. However, only 8.6% of teachers admitted that they lacked knowledge and skills in teaching about sexuality, mental health (20%), accident prevention (4.3%), disease prevention (4.3%), personal hygiene (7.1%), allergies (22.1%) and stress reduction (21.4%).

Finally, support of social environment for HE at schools was explored. As many as 58.6 percent of PE teachers reported that there were not enough PE – related HE events organized in their schools.

As it was expected, this statement was supported by teachers who worked in schools outside the SHE network 71.8 and 41.9% ($\chi^2 = 6.35$; $df = 1$; $p = 0.01$). Even 67.1 percent of teachers agreed with the statement that the school community did not participate in HE activities. This statement was also more frequently supported by teachers outside the SHE network, 79.5 and 51.6% ($\chi^2 = 6.08$; $df = 1$; $p = 0.01$). Every other teacher reported that promotion of health education in their school was accomplished under the project work. 8.6% of PE teachers reported that there was no HE in their schools. Teachers who worked in schools outside the SHE network agreed with it more often than those who worked within the network, 15.4 and 0% ($\chi^2 = 5.22$; $df = 1$; $p = 0.02$). As many as 55.7% of teachers indicated that the optimization of HE at schools was influenced by the lack of funding, 15.7% reported the lack of competent professionals, and 18,6 percent reported that there was not enough attention from school administration. One third of respondents agreed with the statement that there was a lack of school community support for HE. The lack of school community support was more often indicated by PE teachers who did not work within the SHE network than by those who worked in it, 43.6 and 22.6% respectively, 79.5 and 51.6% ($\chi^2 = 3.38$; $df = 1$; $p = 0.07$).

DISCUSSION

This pilot study was aimed at examining physical education teachers' perceptions of health education and comparing those variables between physical education teachers working in SHE schools and schools outside the SHE network. Moreover, we expected that teachers who started their carriers after the Independence of Lithuania would have more positive evaluations of investigated variables than those who started working before the Independence. The results of the study showed that physical education teachers' perceptions of health education were unsatisfactory because the majority of teachers could not explain the main aim and did not understand the essence of health education. This study was pilot and the interpretation of its results should be very limited having in mind small convenience sample. However, our findings are important for further studies which should test our results in representative randomized samples. Moreover, further studies might be directed to compare instrumental behavior change – related

competencies of physical education teachers among samples of postsoviet countries, where integrated health education in schools and gymnasiums is a substitute of the compulsory subject and some western countries, where HE is a compulsory subject.

Our results indicated that perception of health education did not differ in the groups of teachers with different length of carrier, but unexpectedly, more teachers with teaching experience of more than 20 years admitted using methods for active health promotion more often than teachers with less experience. These results are not in consistence with D. Castelli and L. V. Williams (2007) who found that years of experience were not associated with confidence in health education, but age was – the older the teacher, the lower the confidence. However, interpretation of our results is limited because of small convenience sample and this finding might be incidental.

We expected that physical education teachers working within the “Schools for Health in Europe” (SHE) network would understand and implement the goals of health education more frequently than teachers outside the SHE network. The survey revealed that only one out of ten physical education teachers understood the concept of health education and correctly defined its main goal. Though half of teachers said they used active teaching methods during physical education classes, only one third of them could list one or more of these methods. Unfortunately, working within the SHE network was not associated with better results. The study in China province showed that after changes from teacher – centred teaching methods to active student – centred methods, school community gained knowledge and skills and developed a deeper understanding about health. Health impact was also demonstrated in reduced injuries, smoking and educational impact was demonstrated in improved relationships of children with parents and teachers, improved social qualities and teacher satisfaction (Aldinger et al., 2008). As far as it relates to physical education teaching methods, for example, in Denmark traditional physical education with the focus on making experiences in the classroom, on the sports ground or in the gym was replaced by a pilot project employing dialogue groups as a didactic method in physical education, reflecting experiences as a part of the learning process in those arenas. This case study showed that retelling, rethinking, deconstructing,

joking about bodily experiences in sport and physical activity were educative experiences – if an adequate pedagogical method was employed (Christensen, 2007). Moreover, S. G. Trost (2004) also suggests that teachers should care about schoolchildren's knowledge, attitudes and health-related competencies, rather than physical fitness only. Links of physical education and public health are beyond doubt. However, if physical education is narrowed to physical fitness testing, movement skill development and competitiveness, its role in public health is diminished and it lacks attractiveness (Trost, 2004). Therefore, student – centred teaching approach should dominate in health education and physical educators should be trained to use these methods despite the fact that health education is not compulsory, but integrated into physical education subject.

Physical education teachers in this sample, regardless of the school they worked in, within or outside the SHE network, showed lack of knowledge and skills in the prevention of harmful habits, healthy eating and communication areas. It is tempting to draw more attention to the latter area. First, promoting health, educator (teacher of physical education) must be able to communicate and promote co-operation (Trost, 2004; veikauskas, 2005), therefore the lack of these skills confirms physical education teachers' difficulties to perform the work related to health education and health-related physical activity. However, only less than ten percent of teachers in the current study admitted that they lacked knowledge and skills in teaching about sexuality, accident prevention, disease prevention, and personal hygiene. Some other studies revealed that teachers' understanding of certain areas of expertise might differ from the actual content of the knowledge and skills and teachers have the tendency to overestimate their abilities. For example, in the study of D. Castelli and L. Williams (2007) results indicated that physical education teachers were very confident in their knowledge of health-related fitness, however their actual health-related fitness test did not meet the expected. Moreover, it was found in Australia that physical education teachers in their diet recommendations for overweight adolescents provided scientifically unjustified and harmful weight-loss techniques (O'Dea, Abraham, 2001). Moreover, in their review article, J. Evans et al., (2004) suggested that prominence of overweight and obesity, inaccurate interpretation of facts

and even scientific speculations contribute to the development of harmful attitudes towards health which are transmitted by physical education teachers. Therefore, our analysis leads to the idea that it is necessary not just to reveal the subjective opinions of physical education teachers about their health education competencies, but also to investigate them objectively.

Moreover, teachers should be highly critical consumers of the scientific information related to young people, physical activity and public health. First of all, health education should be safe (O'Dea, 2005). Preparing teachers of physical education, basic health behavior change theories should be presented as well as active teaching methods, so that physical education teachers would know and have the skills for effective integration of behavior modification methods in the physical education program. These methods help convert health-related information to knowledge, as well as personally meaningful issues affecting each person's behavior in expected ways (Tones, 1986; Mačiūnas et al., 2006). Therefore, the findings of the current study demonstrated that physical education teachers' behavior change – related competencies were not well-adapted for the implementation of integrated health education. It can be concluded that professional growth is very important and lifelong learning is essential having in mind that after Lithuanian Independence the aim of the physical education had changed from competitive sport to health – related physical activity promotion.

Finally, more than two thirds of teachers in our study agreed that school community did not participate in health promotion activities. As it was expected, teachers who worked at schools where health promotion was implemented under the SHE network reported that health education was being implemented, there was a sufficient number of health promotion events organized in their schools and the school community participated in health promotion activities more often than teachers outside the SHE network. This result is not surprising because of the main aims of the SHE network. However, this pilot study added evidence that schools in SHE network provided better social environment for health promotion compared to those schools outside the network.

The main weakness of the present study is small and convenience sample, therefore the interpretation of the results should be very limited. Nevertheless, the authors do believe that the

problem exists and further nationally representative randomized studies should be carried out to assess behavior change – related competencies of physical education teachers.

CONCLUSIONS AND PERSPECTIVES

The results of the pilot study revealed that health education perceptions of physical education teachers were incorrect and they should be optimized. PE teachers working in SHE schools network reported higher levels of social support for HE activities.

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KŪNO KULTŪROS MOKYTOJŲ SAMPRATA APIE SVEIKATOS UGDYMĄ MOKYKLOJE

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SANTRAUKA

Tyrimo pagrindimas ir hipotezė. Lietuvoje moksleivių su sveikata susijęs elgesys yra problemiškas. Ypatingas dėmesys sveikatos ugdymui ir stiprinimui turėtų būti skiriamas šalies mokyklose. Todėl kūno kultūros mokytojų elgesio keitimo kompetencijų ir požiūrio į sveikatos ugdymą kūno kultūros srityje tyrimai labai aktualūs.

Tikslas: nustatyti sveikatos ugdymo suvokimą ir iširti, kaip bendrojo lavinimo mokyklų kūno kultūros mokytojai suvokia socialinę paramą sveikatos ugdymui.

Metodai. Iš viso buvo tiriama 70 kūno kultūros mokytojų, iš kurių 62% sudarė moterys, 44,8% tiriamųjų nurodė, kad dirba mokykloje, kuri priklauso „Mokyklos – europiečių sveikatai“ (MES) tinklui. Tyrimo metu buvo naudojama specialiai šiam tyrimui sudaryta anketa, kurią sudarė demografiniai klausimai ir klausimai apie sveikatos ugdymą.

Rezultatai. Tik vienas iš dešimties kūno kultūros mokytojų supranta, kas yra sveikatos ugdymas ir teisingai nurodo pagrindinį jo tikslą. Nei mokyklos priklausymas MES tinklui, nei profesinės karjeros pradžia po Nepriklausomybės neturėjo esminės reikšmės sveikatos ugdymo suvokimui ir požiūriui į jį. Daugiau kaip du trečdaliai mokytojų sutiko su teiginiu, kad mokyklos bendruomenė nedalyvauja sveikatos stiprinimo veikloje, tačiau dažniau su tuo sutiko MES tinklui nepriklausančių mokyklų mokytojai.

Aptarimas ir išvados. Šios imties kūno kultūros mokytojų sveikatos ugdymo suvokimas yra optimizuotinas. Nenustatyta esminių sveikatos ugdymo suvokimo ar požiūrio į jį skirtumų, lyginant MES tinklui priklausančių ir nepriklausančių mokyklų kūno kultūros mokytojus. MES tinklui priklausančių mokyklų mokytojų suvokiamas socialinės aplinkos palankumas sveikatos ugdymo veiklai yra geresnis negu šiam tinklui nepriklausančių mokyklų mokytojų.

Raktažodžiai: sveikatos ugdymas, kūno kultūra, instrumentinės kompetencijos.

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