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A BRIEF DESCRIPTION OF PHYSICAL EDUCATION AND SCHOOL CHILDREN'S SPORT INVOLVEMENT IN SINGAPORE, GREECE, FRANCE, FINLAND, AND THE UNITED STATES

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SINGAPORE

Physical education is required for all grade levels in Singapore. The amount of time allocated for physical education classes is determined by the school principal, although the Ministry of Education provides the recommendation that grades 1-3 have physical education three times per week (3 x 30 minutes). For grades 4 to 12, physical education classes occur twice per week, the recommended time is 30 to 35 minutes per lesson. It is not uncommon for schools to combine the 2 periods for a single exposure of sixty to seventy minutes.

The National Institute of Education (NIE) is the sole teacher training institute in Singapore. Physical Education and Sport Sciences (PESS) academic group offers a two-year programme in Diploma in Physical Education, a four-year degree (B.Sc. Ed. Specialization Course), for those who wish to pursue physical education as a career. NIE also offers master and doctoral programmes in the areas of pedagogy, sports studies, and sports science. All physical education classes in the secondary schools and above are taught by qualified PE teachers from NIE. At the primary level, the trend is moving towards PE being taught by specialized teachers.

The emphasis in the teaching and learning of PE varies across the different educational levels. At the primary level, the focus is on fundamental movement, educational gymnastics, and dance, which develop students' psychomotor skills, control, and coordination. These will lay the foundations for further learning of more advanced psychomotor skills, sports, and games. In the upper primary grades, games, athletics and swimming are normally introduced.

At the secondary level and pre-university level, the programme focuses on the extension of psychomotor and games skills and the development of games concepts in specific sports and games. These include activities such as educational gymnastics,

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dance, games, track & field, and swimming. There is also provision for outdoor education experiences at the pre-university level. The programme also equips students with the knowledge and skills to design and manage a health and fitness programme. The programme promotes expressiveness, the development of a competitive spirit, and provides opportunities for leadership training.

School physical education in Singapore is not directly linked to interscholastic sport. The Co-Curricular Activities Branch (CCAB) is the advisory board for all school sports, together with the Singapore School Sports Council; they oversee the organization of school sport competitions at the zonal and national levels. Participation in school sports is declining (Wright, McNeill, & Schempp, 2005), and 10% of school children spend their leisure time in sport activities (Singapore Sports Council, 2004).

Although all the physical education teacher trainees have some form of exposure to the social foundations of sport and exercise psychology, many of them are not specialists in this area. The interest in mental skills training among teachers in charge of sport teams has increased tremendously over the last few years. Many in-service courses and workshops were organized by CCAB to train teachers in mental skills training. A guideline book was also written for athletes in mental skills adoption (Wang, et al., 2004). The usage of mental skills has been extended to the promotion of positive self-esteem, development of life skills, and character, academic skills and self-regulation.

GREECE

Participation in physical education classes is compulsory for all pupils in both elementary and high school (grades 1-12). In most grades physical education occurs twice per week, in grades 7-8 three times per week, while in grade 11 just once per week. In all grades the duration for each class is 45 minutes.

All physical education teachers in elementary and high school have a university diploma from physical education departments. In the last decade the number of physical education teachers with a postgraduate degree has steadily increased. Teachers follow the curriculum that is proposed by the pedagogical institute of the Greek ministry of education. In grades 1-4 they focus on the development of mature patterns of locomotion, such as skipping, hopping, sliding, throwing, catching, and striking and combination of locomotor patterns in time to music. In grades 5-9 the development of sport and dance skills is emphasized. Typical activities are team sports, athletics, gymnastics, and Greek dances. In grades 10-12 pupils are expected to develop proficiency in two or three sports that they play in their free time.

Although teachers try to promote participation in out of school physical activities, school physical education is not directly linked to youth sport. Most of the existing youth sport clubs are non-profit organizations that are partially supported by the ministry of sport or local authorities and partially by the participants. Nowadays, the number of private youth sport clubs increases rapidly. In grades 5-9 about 50% of the boys participate in some type of competitive sport but this percentage is 25% for the girls (Papaioannou, Karastogiannidou, & Theodorakis, 2004; World Health Organization, 2000). According to these sources, participation in youth sport decreases rapidly in grades 10-12.

Most youngsters participate in soccer and basketball, followed by volleyball, athletics, swimming, handball, tae-kwo-do, and gymnastics. Participation in exercise and dance classes remains steady in K-12 at about 17%.

Major challenges for teachers include lack of resources and reduced financing, decrease of pupils' motivation in high school (Marsh, Papaioannou, Martin, & Theodorakis, in press; Digelidis & Papaioannou 1999; Papaioannou, 1997), a new multicultural environment including immigrants from Albania, Russia and Middle East, and the necessity for continuous adaptation of teaching skills and knowledge to new developments.

All physical education graduates have been trained in sport and exercise psychology. Alongside topics on motor control and learning, social psychological issues are particularly emphasized. New trends include creation of positive motivational climate, promotion of positive attitudes and exercise behaviors, development of life skills and self-regulation, development of morality and responsibility, gender equity and inclusive environments for all cultures. A large part of sport psychology research is conducted in schools and new textbooks have emerged concerning the application of sport psychology in school physical education.

FRANCE

Participation in physical education classes is compulsory for pupils in both elementary and high school (grades 1-12). In most of the grades physical education occurs twice a week (i.e., 3 hours for grades 1 to 9 except grade 6 where pupils have 4 hours), whereas just once a week in grades 10 to 12 (i.e., 2 hours).

For each grade, three fundamental goals are pursued in PE (1) the development of capacities and resources necessary to motor behavior; (2) the access to the cultural patrimony constituted by various physical, artistic, and sporting activities; (3) the learning of competences and knowledge useful to know better one's body, and to keep in good health. In high school, PE also contributes to the main educational goals, like citizenship, autonomy, solidarity, safety, and responsibility.

Programs set more specific objectives according to the grade. In elementary school, the aim of practicing sports and physical activities is to develop the basic patterns of the motor repertory, such as locomotion, balance, handling, throwing, and catching objects. In grades 6-9, exposing the pupils to a large variety of sports and artistic activities (like dance) is desired, each one constituting a specific and original motor experiment. At the end of grade 9, pupils must have practiced at least two cycles of 10 hours in each of the eight groups of activities envisaged by the program (i.e., swimming, track and field, gymnastics, collective sports, fighting sports, artistic activities, racket sports and physical activities in natural environment). Finally in grades 10-12, physical education's aim is to deepen knowledge in a reduced number of activities (generally three), which implies a lengthening of teaching cycle. PE is taken into account in the two diploma of the end of Junior and Senior high school.

In high school, a teacher only teaches one subject (e.g., math, language, history, PE). To become a PE teacher, it is necessary to have a Bachelor in sciences and technology of sport and to succeed a competitive exam with a number of places fixed

every year by the ministry of national education. All PE graduates have been trained in sport and exercise psychology. Motor control and learning, psychological development, group dynamic, and motivation are particularly emphasized.

At the elementary school, the same teacher teaches all the subjects including physical education. Thus, competence in sport is necessary to succeed the competitive exam to be a teacher. The initial training in physical education of these teachers is not very significant and focuses more on the didactic of some physical activities than on sport and exercise psychology.

Particularly in high school, one of the missions of the PE teacher is to support sport activities of pupils out of school. In this respect, each teacher's staff has to organize and animate a sport association in the school intended to welcome pupils who want to do sport in addition to compulsory hours (generally on Wednesday afternoon). This investment represents 3 of the 20 hours a week that a PE teacher has to do. At the elementary school, 12,500 sports associations are listed, gathering approximately 23% of the pupils. In grades 6-12, 9,000 sports associations are listed gathering approximately 18% of the students. Of course, pupils can also practice sport in one of the various clubs which are without bond with school. Most of the existing youth sport clubs are non-profit organizations that are supported by the ministry of sport, local authorities and participants. On the whole, 51% of the 12-17 years old teenagers do sport in a club related to school or not, boys being more numerous than girls (57 vs. 41%) (French ministry of sport).

FINLAND

In Finland, school children start school the year they become seven years of age. Physical education is obligatory for all students in Finnish basic education (grades 1-9). The national curriculum of the Ministry of Education determines that in basic education the students have two hours of physical education weekly. Additionally, in grades 7-9 the students can choose voluntary physical education courses which are determined in local school curricula. After basic education the adolescents may choose to continue their studies in pre-university level vocational school or in upper secondary school (grades 10-12), in which they have two obligatory physical education courses and three voluntary courses within their three academic study years. Physical education courses in upper secondary school are regulated by the national curriculum of the Ministry of Education (National core curriculum for basic education, 2004).

According to the national curriculum the central aims of the physical education in basic education are to have a positive impact on student's physical, psychological, and social abilities and well-being, and to guide the students in understanding the importance of exercise to health. Instruction in physical education offers the student skills, knowledge, and experience on the basis of which it will be possible to adopt a physically active way of life.

In the grades 1-4 of basic education physical education must take into account the students' capabilities and personal development potential. The instruction is conducted playfully, in an encouraging atmosphere, and progresses from basic motor skills towards skills in specific forms of physical activity. The point of departure for instruction in physi-

cal education is the students' activism, and the instruction makes use of their imagination and insights.

In fifth through ninth grades, physical education instruction must make allowances for the differing needs of boys and girls at this stage of development, as well as the students' differentials in growth and development generally. Diversified physical education instruction helps to support the students' well-being and growth into an independent and community-spirited person, and creates capabilities for the independent pursuit of pastimes. The instruction affords opportunities for exercise experiences and supports the student's self-expression.

All physical education teachers in secondary school and upper secondary school graduate from the Department of Sport Sciences in the University of Jyväskylä.

The most popular sports in grades 1-4 of Finnish basic PE education are skating, Finnish baseball, soccer, athletics, and indoor bandy. In grades 5-9 the most popular sports are Finnish baseball, basketball, athletics, ice-games, and indoor bandy. In the upper secondary school most popular sports are indoor bandy, basketball, muscle endurance training, Finnish baseball, and volleyball.

UNITED STATES OF AMERICA

The requirements for school physical education are not standardized in the United States. Although national organizations can make recommendations concerning how many minutes should be allocated to specific subjects, each individual state has the authority to mandate curricular requirements. These requirements are generally formulated by boards that are authorized by state legislatures to recommend educational policies, and then approved by those governing bodies. The National Association for Sport and Physical Education (NASPE) recommends that elementary schools offer 150 minutes of instruction per week and that secondary schools provide 220 minutes each week to older students (Corbin & Pangrazi, 1998). Estimates are, however, that only seven to 8 percent of schools currently meet those standards (Cook, 2005). According to a comprehensive survey conducted by NASPE (1993), more than half the fifty states require one year or less of physical education in grades 9 through 12. Less than 36 percent of elementary and secondary schools offer daily instruction. Only one state, Illinois, requires daily physical education in grades K-12.

Most states offer some level of teacher certification in physical education, but the standards for licensure vary by state. NASPE (2001), in conjunction with the National Council for Accreditation of Teacher Education (NCATE), has established standards for the initial preparation of physical education teachers. NCATE has partnerships with 50 states, and a majority of physical education teacher education programs use those standards in the accreditation process. Those standards include a focus on the application of principles of sport and exercise psychology in teaching all children, addressing the needs of diverse student populations, and creating class climates that promote active engagement. Though standards exist, and most secondary teachers must be certified in the content area, only 13 states require that a certified physical education specialist provide instruction at the elementary level (NASPE, 1993). Most states allow the elementary

classroom teacher to meet the instructional requirements for elementary students.

According to the Centers for Disease Control (2000), one in three children in the United States does not participate regularly in physical activity. Only 29% attend daily physical education classes, and nearly half (45%) do not play on any team sports during the year. The number of school-aged children who are overweight or at risk to become obese is estimated to be 16%. That represents a threefold increase in that percentage since 1980.

Traditionally, physical education programs have been sport-based, but there is little, if any formal connection between community youth sport programs and physical education instruction. Interscholastic sports programs often overshadow school physical education programs, but in secondary schools they typically involve elite participants. Especially in grades 9 through 12, there is a strong focus on competitive sports athletics for athletes, while the remainder of the student population does not participate in physical education.

In light of the growing concerns about obesity and physical inactivity, there has been an increased focus on a wellness approach that promotes lifelong physical activity in physical education classes (Langford & Carter, 2003; Vail, 2005). Despite the public health concerns related to physical inactivity and obesity, however, physical education is not listed as part of the academic core, and receives less time and attention than it did two decades ago (Cook, 2005). Increased pressures related to high stakes testing and accountability, coupled with limited resources, have made physical education programs susceptible to cuts in both funding and instructional time. It seems that at a time when we most need to focus on physical education as a means to improve public health, we are instead withdrawing support and decreasing requirements.

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