



Combating Obesity in K-12 Learners

PHYSICAL EDUCATION AND PHYSICAL ACTIVITY: A HISTORICAL PERSPECTIVE

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An historical perspective can illuminate the crucial role that physical education plays in the development of lifelong physical activity habits.

A large number of recent studies have shown that the lack of physical activity is one of the most evident causes of obesity, diabetes, and cardiovascular diseases among children and adolescents (Toschke, von Kries, Rosenfeld, & Toschke, 2007; Zieff, Guedes, & Wiley, 2006). However, few studies have shown the connection between the lack of physical education and the prevalence of sedentary behavior among the youth population.

The presumed link between physical activity and physical education is still a taboo subject among educators, parents, and school administrators. Palliative solutions have been adopted that aim to bring activity to schools through after-school programs. However, these programs attend only to part of the youth population, leaving behind a large number of children. As we know, many after-school programs lack a systematic approach or curriculum for developing fundamental motor skills and health-related fitness work that prepare children to enjoy being active throughout life. This work should be done within the physical education curriculum, to address the needs of all children. The mission of physical education is to make permanent its pedagogical approach of educating the body by teaching children about movement and to develop the necessary skills to become proficient in many kinds of physical activity. The result of this endeavor will be an understanding of the crucial role of physical activity for a healthier, wellness-oriented lifestyle.

The purpose of this article is to briefly trace the historical, intrinsic relationship between physical education and physical activity, its development as pedagogical work, its responsibility beyond the school walls, and the need for new strategies to educate children, parents, and administrators.

The Concept of Physical Education

American society has long viewed physical education as “recess time,” “leisure time,” “sport,” or “game classes.” Yet, to teach a child how to play is akin to teaching a priest how to pray. We know that physical education provides more than entertainment or play time. Physical education was a pedagogical discovery of the late 17th and early 18th centuries. At that time, Western society was seeking to create social rules that would allow individuals to coexist, and there was great interest in other issues such as preventing disease. Devising ways of developing and preserving physical strength among boys was among the social initiatives of the time. Books such as *Gargantua and Pantagruel*, by François Rabelais (1653/1838), showed the need for integrating intellectual and physical development in a successful process of education:

When Ponocrates knew Gargantua’s vicious manner of living, he resolved to bring him up in another kind;.... Then for three good hours he had a lecture read unto him. This done they went forth, still conferring of the substance of the lecture, either unto a field



A pioneer in American physical education, Luther Halsey Gulick (1865–1918) edited *American Physical Education Review* (*JOPERD*'s original name) from 1901 to 1903. For his contributions to basketball, he was inducted into the Basketball Hall of Fame in 1959. In remembrance of him, AAHPERD established the annual Luther Halsey Gulick Award as its highest honor for service to the allied professions.

near the university called the Brack, or unto the meadows, where they played at the ball, the long-tennis, and at the piletrigone (which is a play wherein we throw a triangular piece of iron at a ring, to pass it), most gallantly exercising their bodies, as formerly they had done their minds. All their play was but in liberty, for they left off when they pleased, and that was commonly when they did sweat over all their body, or were otherwise weary. (Chapter I, XXIII)

Many years later, in his book titled *Some Thoughts Concerning Education*, John Locke (1693) evoked the famous words of the Roman poet Juvenal (10.356), derived from Satire X: *Mens sana in corpore sano* (a healthy mind in a healthy body). In 1764, Jean-Jacques Rousseau published *Emile*, a book that is based on his ideals of healthy living. These classic works reinforced the desire for a new field of education that would focus on educating the body for a healthy mind and the importance and need of physical education for intellectual development. For the Western world, this was a late rediscovery and one still neglected in many educational programs. Thousands of years ago, however, Eastern cultures understood the benefits of training children in all areas of life, integrating the mind and body in their educational system (Patanjali).

The Profession of Physical Education

In 1885 in the United States, Luther Halsey Gulick labeled physical education the “new profession” during one of the meetings of the American Medical Association. In the same year, the American Association for the Advancement of Physical Education was created. Gulick was an advocate of physical fitness for youths, and he recommended integrating gymnastics and physical education into their daily lives. The main principle of Gulick’s interests was the enrichment of human life through education, health, and social engagement. His greatest contributions to education were the inspiration and direction that he gave to physical education.

In 1896, the *American Physical Education Review* (*APER*) was created to spread professional knowledge about the new field and encourage research to feed the emergent need of the young profession (Park, 2005). In 1930, *APER* became the *Journal of Health and Physical Education* (which eventually became *JOPERD*), and the *Research Quarterly for Exercise and Sport* was created. Journals are considered the proper way to communicate to others—both within and outside of a discipline—the advancement of a specific field. According to Park:

Journals established by scholarly and professional organizations serve a number of functions, ranging from the publication of original articles and the advancement of knowledge to such routine matters as the time, place, and program of annual meetings. They may provide a means for members to discuss and debate issues, and, in a number of instances, they have had a significant role in advancing an organization’s or field’s status. For those that are composed of numerous specialties, such publications may offer, on occasion, something akin to a sense of ‘community’ that can be useful when the need to confront internal or external challenges arises. (p. S6)

Park’s work on the history of the *Research Quarterly* points toward the goal of sharing with our peers what we do, why we do our job in so many different ways, who we teach or coach, and what the best ways are of teaching physical education. The objective of the dialogue however, lost its identity when the fight for power and scientific recognition within the academy became the priority.

The lack of consideration of pedagogy as a science by professionals within the scientific subdisciplines also led to a form of “professional amnesia” when the memory of physical education as the basis of the field was forgotten. On the other hand, practitioners within the field of physical education also forgot that the work conducted under the auspices of the scientific subdisciplines form the basis for understanding human movement, an integral component of the field of pedagogy. The term “pedagogy,” has been used to refer to physical education teachers or physical education teacher education because of its lack of scientific or academic basis. However, “pedagogy” should be highlighted in this article, because this term comes from the ancient Greek and means “to lead the child.” Pedagogy is the “art, science, or profession of teaching,” according to *Webster’s Ninth New*

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looks morbidly obese. Different ethnic groups have varying ideas about the meaning of overweight and obesity that may be different from those of mainstream American culture or of medical and science practitioners in this country. The terms *big boned*, *thick*, *juicy*, *stacked*, and other similar words in English and other languages are often used but not necessarily associated with the health consequences of being overweight or obese. Voluptuousness and larger frames are more acceptable. Therefore, many may not identify themselves as at risk for disease due to their physical appearance. Furthermore, “having weight” or a certain thickness is associated with being healthy because the person is obviously eating. Thinness is associated with being sick and unhealthy, and skinny people are often more ridiculed than overweight people in certain cultures.

Those conducting research on obesity or battling it in schools would be wise to consider cultural factors that compound obesity in ethnic minority populations. There cannot be a one-size-fits-all approach. A program, curriculum, or protocol that is not culturally competent will not be effective in tackling this problem (Harris, 2006). A program designed to reduce the incidence of obesity in particular populations must consider the cultural norms and sensitivities of people, otherwise the program will be less effective than it can be and will eventually become irrelevant. Being culturally competent includes a combination of proficiencies at the individual, institutional, and policymaking levels.

Professionals such as teachers, doctors, counselors, and health and fitness educators are in the front line to help eradicate the problem of obesity. However, if these individuals are not culturally informed, if the institutions they work for are not inclusive in their approach to educating and developing teaching materials, and if the policies are not sensitive to the viewpoints of different ethnic groups, then they will not be effective in reducing the incidence of obesity in the populations most seriously affected.

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Collegiate Dictionary. We use pedagogy to teach movement. Mathematics teachers teach their students to be skillful with numbers, just as physical educators, or “pedagogy people,” teach students to be physically skillful in order to engage joyfully in physical activities for life.

Since the crises that emerged in physical education during the 1960s and 1970s, and the growing disconnect between the scientists and practitioners, the pedagogical subdiscipline of physical education has been too isolated from the academic dialogue about the aims of the field. As a result, pedagogy professionals and practitioners have been unable to assume their rightful responsibility of advocating for and defining the nature of the field at the school level. This also includes taking the lead in educating parents, administrators, faculty, and staff about physical education class, its curriculum, designed outcomes, and benefits.

Some of the results of appropriate physical education are better health, developed social skills, responsibility, and leadership. All of us know these benefits. Why do the recipients of our work fail to recognize the educational service we have been developing? Is it perhaps due to a lack of promotion

and marketing? A lack of scientific-based arguments? Or a lack of confidence to stand for ourselves?

The Role of Physical Education

Throughout physical education's 120-year history, social demands on body shape have influenced how society views this field and its direct relation to issues of overweight and underweight. But how has physical education responded to these concerns and to the brand new scientific data that proves the benefits of physical activity for life? How has physical education responded to the increasing number of people adopting sedentary behaviors?

The lack of motor skills and ability often causes frustration among participants in physical activities, and repeated frustrated attempts lead to avoidance instead of adherence. The responsibility of physical education is to "educate" the body, giving knowledge about the potential of movement for developing the skills needed to participate with enjoyment in many kinds of physical activity. It is necessary, therefore, that physical education teacher-training programs take responsibility for educating the academy and the broader society of the role that physical education plays in preparing human beings for participation in physical activity.

In order to fix the "house," it is necessary that the professionals and scholars in the field of physical education evoke the past and learn from great leaders such as Luther Halsey Gulick, Jane Adams, Sidney Peixotto, and Thomas Denison Wood, who all believed in the field not as a salvation of the world but as an unquestioned component of the educational mission. History also suggests the need for a better integration of the subdisciplines in the future. Scientific data recently published on obesity, physical activity benefits, and sedentary behavior should be read from the perspective of the five dimensions of human life: historical, biological, anthropological, economical, psychological, and sociological (Strong et al., 2005). Furthermore, this knowledge should be transmitted to those served by our profession.

Historically speaking, physical education has not stood up for itself. It is time to do so.

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Assessment Issues

~~In the few studies that have investigated the relationship between motor skill development and physical activity, development has been evaluated by either assessing ability in individual skills or by using a test that purportedly measured the construct of motor skill development (Fisher et al., 2005; McKenzie, Sallis, & Broyles, 2002; Okely et al., 2001a, b). In many of these studies, measures of motor skill development represented either a "product" or result of the child's movement, such as the number of successful catches or a description of the child's way of moving. Studies that used a process oriented approach to examine motor skill competence did not relate the movement description to a developmental continuum. Rather, they focused on whether the child's movement approximated the movement of an expert or elite performer. In this approach, two children can receive the same "score" for quite different "distances," neither of which represents the children's actual level of motor development.~~

~~In short, the developmental validity of many previously used measures of motor skill competence and the types of tasks that have been examined have been questioned, not only by traditional developmental assessment standards, but also by the researchers themselves. Moreover, when the definition of "expert" performance is overly simplistic, the resulting scores tended to have ceiling effects that made it impossible to distinguish between intermediate and advanced motor skill development. In light of these concerns, new research in this area clearly needs to use valid measures of motor skill development.~~

~~The increasing trend of physical inactivity and childhood obesity in our society is multifaceted, with many underlying factors. The inclusion of a developmental perspective on this issue is necessary and the factors included in our model will provide a better understanding of why children, adolescents, and adults choose to be either physically active or sedentary.~~