

# Significance of Health & Physical Education Programs in India

Sandeep Sangwan<sup>1</sup>, Jagat Singh<sup>2</sup>

<sup>1,2</sup>M.D.U. Rohtak, Haryana, India

---

**Abstract:** In this manuscript, the authors have described the need & significance of health & physical education programs in India. At the moment, it looks like we're losing the fight against inactivity and obesity in our young people. We are raising the most sedentary and unhealthy generation in Indian history: Its members may have the dubious distinction of being the first generation not to outlive their parents. Meaningful, high-quality health and physical education is one of the best strategies we have to reverse this trend. And, not only does good HPE increase the chances that our young people will live healthier, more productive lifespan, it pays off in the classroom, as well. Let's look at some of the reasons we're in our current physical condition, and how and why we can start changing attitudes, in both the younger and older populations, about healthy living and exercise.

**Key words:** Health, Physical education, importance, programs, curriculum.

---

## INTRODUCTION

There are many benefits physical education provides today's students and society. Within a school setting, a physical education program can serve society in many ways if implemented and utilized appropriately. There are many areas physical education can serve and positively affect students and society. One is overall physical fitness. For example, physical education helps students and society improve skill-related components such as speed, agility, reaction time, balance, coordination, and basic movement patterns. Physical education helps students and society improve upon are strength, endurance, flexibility, and cardiovascular/respiratory activities. The Indian Heart Association (AHA, 2010) recommends that if children and adolescents want to increase their life expectancies, they need to eat healthier and become physically active. Doing those two things will help children and adolescents defend against certain diseases and other health problems. Hence, the question: why is there little emphasis on the importance of physical education in today's schools. A common phrase used by the general public is that "a healthy body leads to a healthy mind." One of the major health issues facing the United States is obesity, not only in adults, but many children as well. It is important that people strive for a healthy lifestyle to combat being overweight or obese.

According to Mood, Jackson, and Morrow (2007), children should be engaged in moderate physical activity for thirty minutes per day for five or more days per week and vigorous physical activity for twenty minutes per day for three or more days per week. The National Association for Sport and Physical Education (NASPE) (2011) stated that elementary students should be participating in 150 minutes of physical activity a week and middle and high school students should be participating in physical activity for 225 minutes a week. According to The School Health Policies and Programs Study (SHPPS) 2006 study, only 3.8% of elementary schools, 7.9% middle schools, and 2.1% high schools provided daily physical education in the United States. There were several goals for the middle school and high school students involved with this PEP grant. These goals included student improvement in (a) time involved in moderate to rigorous physical activity, (b) nutrition habits, (c) body composition, (d) flexibility, (e) aerobic capacity, and (f) muscular strength and endurance. The other goal directly involved the physical education teachers in this school district. The PEP grant provided the opportunity to pursue professional development opportunities which allowed them to better understand the changes that needed to be made in their classes regarding curriculum and class management. Furthermore, and more importantly, the professional development opportunities were intended to enhance their instruction.

## **SIGNIFICANCE OF THE STUDY**

As it has been noted throughout this first chapter, physical education serves many purposes for elementary, middle school, and high school students. Obesity is a growing concern with today's children, adolescents, and adults. Physical activity is imperative in order to defend against being overweight or obese. Effective physical education teachers and physical education programs are essential in motivating students to be physically active. Motivating students to be physically active can be done in several ways. First, physical education teachers need to think about developing a curriculum that meets the needs of students. Second, they need to adjust their teaching methods to meet the goals, needs, and interests of students. The ability of physical education teachers to be innovative and flexible also is a contributing factor to increased student participation in physical activity (Martin, McCaughtry, & Cothran, 2009). Third, providing constant feedback and reinforcement will create a positive environment and encourage students to participate in physical activity and improve their overall physical fitness (Chase, Lirgg, & Sakelos, 2003). Last, according to Martin, McCaughtry, and Cothran (2009), whenever possible or when the time is appropriate, physical education teachers need to pursue professional development opportunities.

### **Health Education Programs during Schooling**

The health and well-being of our nation's young people is not a matter of luck. It is not a chance or random event. It must be a planned outcome. The case for well-designed, well-resourced, and sustained health education in the nation's schools is compelling. Improved health status is of economic value to INDIA citizens. In 2006, the INDIA spent far more than any other nation in the world on health care, approximately INR 700 per person. Only 18 percent of Indian adults follow all three of the most important cardiovascular disease prevention measures: not smoking, maintaining a healthy weight, and exercising regularly. An investment in prevention is like putting money in the bank. Indians place a INR 1000 value on a 20 percent reduction in age standardized cancer mortality rates. It is easier and less costly to keep our children healthy than to fix preventable health problems later in life. One critical problem is our growing, nationwide obesity crisis. Approximately two-thirds of the INDIA adult population is now estimated to be overweight or obese. The estimated annual direct medical spending from overweight and obesity is approximately INR 6,00,000.

The number of obese Medicare beneficiaries nearly doubled from 1987 to 2002, and the spending incurred by them almost tripled. Overweight and obesity is also a crisis among children. The number of overweight children aged 6-11 has tripled over the past three decades. Approximately 17 percent of today's youth are overweight. The health effects of obesity are devastating. For children born in 2000 in the INDIA, if obesity rates remain unchanged, their lifetime risk of being diagnosed with diabetes at some point in their lives is estimated at 30 percent for boys and 40 percent for girls. Obesity also is a major contributor to heart disease, arthritis, and some types of cancer. Annual deaths associated with obesity are estimated to be between 100,000 and 300,000 in the INDIA. School health education programs can reduce health risk behaviors such as tobacco use, poor nutrition, lack of physical activity, drug and alcohol use, as well as actions that increase stress, and risk of injury, and violence. Because these behaviors are amenable to change, quality school health education taught by trained and certified health educators provides the best opportunity to promote positive health behavior among children and adolescents.

## **HISTORICAL OVERVIEW OF THE STUDY**

This phenomenological research study investigated the indirect impact of the Carol M. White Physical Education Program (PEP) Grant used by middle school and high school physical education teachers in a semi-rural school district in the state of Ohio. This was a federally funded project by the United States Department of Education. The primary purpose of this PEP Grant was to assist this school district's physical education teachers in implementing a program that would ensure that students would improve their overall physical fitness. Instead of focusing on the traditional sport education model, which involves learning team sports, the intention of this PEP grant was to focus more on enhancing students' physical fitness and increasing participation in moderate and vigorous physical activity.

According to Mood, Jackson, and Morrow (2007), children should be engaged in moderate physical activity for thirty minutes per day for five or more days per week and vigorous physical activity for twenty minutes per day for three or more days per week. The National Association for Sport and Physical Education (NASPE) (2011) stated that elementary students should be participating in 150 minutes of physical activity a week and middle and high school students should be participating in physical activity for 225 minutes a week. According to The School Health Policies and Programs Study (SHPPS) 2006 study, only 3.8% of elementary schools, 7.9% middle schools, and 2.1% high schools provided daily physical education in the United States. There were several goals for the middle school and high school students involved with this PEP grant. These goals included student improvement in (a) time involved in moderate to rigorous physical activity, (b) nutrition habits, (c) body composition, (d) flexibility, (e) aerobic capacity, and (f) muscular strength and endurance. The other goal directly involved the physical education teachers in this school district. The PEP grant provided the opportunity to pursue professional development opportunities which allowed them to better understand the changes that needed to be made in their classes regarding curriculum and class management. Furthermore, and more importantly, the professional development opportunities were intended to enhance their instruction.

### **PHYSICAL EDUCATION CURRICULUM**

High school physical education teachers and supervisors also need to consider the curriculum design of the physical education program. The fact remains that many high school physical education programs are failing their students (Kinchin & O'Sullivan, 2003). Rikard and Banville (2006) found that high school students indicated a much greater preference for game play compared with fitness activities. A majority of the students also indicated that they liked physical education due to the fun factor. Finally, high school students indicated their greatest reason for disliking fitness activities was because of the limited and dull choices of running activities (Rikard & Banville, 2006). Again, physical education teachers not only need to focus on differences in physical skills, but they also need to focus on what females need compared to what males need to create an effective physical education curriculum and program. This notion is further supported by a study done by Couturier, Chepko, & Coughlin (2007), in which girls indicated that they were more interested in cooperative activities, fitness, and dance than boys. Physical education teachers need to consider the differing needs of girls and boys when planning and implementing the physical education curriculum if they are to be successful in attracting and retaining the interest and participation of all their students.

An area physical education teachers need to review is the effectiveness of their school districts' physical education curricula. Since sport education is the dominant curriculum model within many schools, the question still exists: are physical education teachers providing the opportunities for students to be physically active through not only the sport education model, but physical fitness and health-related activities as well? It appears that many physical education programs are not adequately promoting physical activity and health-related fitness among young people (Bulger, Mohr, Carson, & Wiegand, 2004). It appears that physical education's role is more important than ever in meeting important public health goals for the future (Mohr, Townsend, & Pritchard, 2006).

Regarding physical education curricula, physical education teachers need to focus on gender and students' attitudes toward physical education. Generally speaking, students have favorable attitudes toward their physical education teachers and classes (Ryan, Fleming, & Maina, 2003). Furthermore, these researchers found in their study that middle school students enjoyed having a variety of activities, liked the teachers, had fun in their physical education classes, and disliked brief class periods and dressing out. Qualities middle school students liked about their physical education teachers were that they had good physical skills and were friendly. The middle school students disliked those physical education teachers who could not relate to students and they are partial to the skilled students. Physical education teachers may want to explore a more multi-activity model or models that will relate to gender differences and preferences. Future research is needed to investigate different curriculum models and teaching methods toward improving student attitudes about physical education teachers and classes (Ryan, Fleming, & Maina, 2003).

### **High-quality health and physical education programs help students succeed in life**

Clearly, we have a problem with childhood obesity in India. According to the Centers for Disease Control and Prevention, over the past three decades the childhood obesity rate has more than doubled for preschool children (ages 2-5) and adolescents (ages 12-19), and it has more than tripled for children ages 6-11. Our young people are spending way too many hours in front of computer and television screens and way too few hours engaged in heart-pumping physical activity. I call

electronic devices such as the Wii, Xbox, PlayStation, etc., the “toys of obesity.” Further complicating matters are programs such as No Child Left Behind and our current statewide budget problems, which often lead policymakers to consider cutting certain programs not seen as “essential,” including the arts and HPE.

Our dietary choices aren't helping, either. The parents of today are the second generation of families raised in a fast-food culture. Many families find that the convenience of fast food, coupled with the opportunity not to make a mess at home, is the quick and easy way to satisfy hunger. However, as we all know, most fast food falls short in providing the healthy nutrition that children need. And the high fat and sugar contents are helping contribute to growing rates of heart disease and diabetes in young people.

As we ingest fast food, junk food and other menu items of questionable nutritious value, we don't burn the calories the way our predecessors did. We've become a push-button, quick-fix, take-a-pill kind of society. We all have cars and drive them constantly, even if we're just going around the corner to the store. Instead of walking to the house or office next door to visit, or meeting in the park for a walk, we're on cell phones, sending e-mails, or hanging out on social media sites. Our jobs have us sitting at desks most of every day.

## METHODOLOGY

Within this chapter the processes for selecting the participants, treatment of the interview data, coding procedures, and design and development of the observation instrument will be discussed. The purpose of this phenomenological case study was to investigate the characteristics of an effective physical education program, motivators that influence physical education teachers to improve their instruction, and the school community's perceptions of physical education. Furthermore, this study intended to relate the three areas just mentioned to the affects and impact of a federally-funded grant on a middle school and high school physical education program in a semi-rural school district.

A qualitative approach was used in this phenomenological case study. A phenomenological case study was appropriate for this research because it is important to understand the participants' perceptions and motivations related to their occupation. Face-to-face interviews and transcribing the participants' responses provided a thick description of what they experience related to the field of physical education.

According to Creswell (2008), qualitative research is an exploration in which minimal information is known about the problem or over-arching research question or questions. In qualitative research, the purpose statement and research questions are intended to gather information from participants to better understand their experiences. “The literature might yield little information about the phenomenon of study, and you need to learn more from participants through exploration” (Creswell, 2008, p. 53). He defines a central phenomenon as “the key concept, idea, or process studied in qualitative research” (Creswell, 2008, p. 53). The central phenomenon of this study is the indirect impact of a federally-funded grant on a physical education program at the middle and high school levels. The three areas being investigated are (a) characteristics of an effective physical education program, (b) motivating factors that influence physical education teachers to improve their instruction, and (c) perceptions of physical education. According to Merriam and Associates (2002), qualitative researchers want to know how people do things and what meaning do they give to their lives. “Questions of meaning, understanding, and process are appropriate for qualitative research” (Merriam & Associates, 2002, p. 19). Also according to Merriam and Associates (2002), qualitative research is used to take the literature already present and extend upon it to continue to inform the general public. It is also used to find the gap in our knowledge concerning a certain phenomenon and explore or investigate it.

The data were collected in three ways. These include (a) two face-to-face interviews, (b) two observations of each teacher within their settings, and (c) one focus group meeting. This method of triangulation (Creswell, 2008) is being used to validate the findings of this research study. According to Creswell (2008), triangulation ensures that the study will be accurate because the information is taken from multiple sources of information, individuals, or processes. The process of triangulation or using multiple sources strengthens the credibility of the study. According to Merriam and Associates (2002), the process of triangulation strengthens the internal validity of a study. “Using multiple data collection methods, are commonly found in qualitative studies” (Merriam & Associates, 2002, p. 25).

A combination of semi-structured and standardized interviews was conducted to investigate and/or explore individual experiences and perspectives. These interviews were semi-structured because there was an already established interview protocol with guiding questions established prior to each interview. “Although researchers come to the interview with guiding questions, they are open to following the leads of informants and probing into areas that arise during interview

interactions” (Hatch, 2002, p. 94). After listening to the participants’ responses to each guided question, this researcher followed up with questions to further understand and receive in-depth information related to the desired topic at that time. There were some standardized interviews as well. “Researchers enter the interview setting with predetermined questions that are asked in the same order, using the same words, to all informants” (Hatch, 2002, p. 95). Again, there was a predetermined set of interview questions used within this study to which each participant was asked to respond. The purpose of using these predetermined questions was to gather information that can be compared in a systematic fashion through a manual coding procedure.

Observations of the participants within their educational settings were also conducted to provide further information for this study. Each participant was observed multiple times at his or her educational setting. The participants were observed interacting with their students. An observation instrument developed by the researcher and descriptive field notes were used to record how the participants were instructing and interacting with their students. The researcher took on the role of a nonparticipant observer. According to Creswell (2008), a nonparticipant observer is someone who visits the site and writes notes without becoming involved in the activities of the participants. As a nonparticipant, the researcher was located on the periphery of the site where the activities were taking place. The researcher took on the role of watching and recording the interactions, activities, and events.

The focus group interview was more formal and structured. According to Hatch (2002), formal interviews are planned events that take place away from the research setting for the purpose of gathering more information from the participants. The participants of this focus group consisted of all of the middle school and high school physical education teachers within this present study. The researcher facilitated and led the interview process. The focus group interviews encouraged participants to interact with each other and generate information on the desired topic. As questions were asked, the participants responded and took the interview in a direction more applicable to meet

their concerns and needs related to resources and professional development opportunities. The focus group meeting allowed opportunities for the participants to provide richer and more meaningful information. Last, to ensure thick description, which is a detailed account of the phenomenon being investigated, the focus group interview was transcribed.

## CONCLUSIONS

The Childhood obesity is a concern in the India. It is imperative to look at the field of physical education to combat this concern. In order to get a better understanding of the field of physical education, researchers need to focus on what characteristics make up an effective physical education program, what motivates physical education teachers to improve their instruction, and peoples’ perceptions of physical education. Regarding research question one, it was found that the characteristics of an effective physical education program provided by the participants was supported by the literature. These characteristics include: (a) diverse curriculum, (b) teacher-student interaction through instructional feedback, (c) increasing student participation in physical activity, (d) matching skill levels and interests of the students in physical education classes, and (e) teachers’ abilities to provide goals and expectations for their students in physical education classes. Concerning research question two, there has been little research done on what motivates physical education teachers to improve instruction. This is an area that needs to be further explored. Within this study, it was found that all participants were motivated to improve their instruction because of student advancement.

## References

- [1]. Smith, M. A. & St. Pierre, P. E. (2009). Secondary students’ perceptions of enjoyment in physical education: An Indian and English perspective. *Physical Educator*, 66(4). Retrieved November 22, 2010 from Education Research Complete database.
- [2]. School Health Policies and Programs Study (2010) [http:// www.cdc.gov/shpps](http://www.cdc.gov/shpps).
- [3]. Stevens-Smith, D. A. Fisk, W., Williams, F. K., & Barton, G. (2006). Principals’ perceptions of academic importance and accountability in physical education. *International Journal of Learning*, 13(2), 7-19. Retrieved November 16, 2010 from Education and Research Complete database.
- [4]. Sullivan, E. C. (2007). Character education in the gymnasium: Teaching more than the physical. *The Journal of Education*, 85-102. Retrieved December 3, 2010 from Academic Search Complete database.
- [5]. Welk, G. J. (2008). The role of physical activity assessments for school-based physical activity promotion. *Measurement in Physical Education and Exercise Science*, 12(3), 184-206.
- [6]. Wiersma, L. D., Sherman, C. P. (2008). The responsible use of youth fitness testing to enhance student motivation, enjoyment, and performance. *Measurement in Physical Education and Exercise Science*, 12, 167-183.
- [7]. Woods, M. L., Karp, G. G., Hui, M., & Perlman, (2008). Physical educators’ technology competencies and usage. *Physical Educator*, 65(2), 82-99.

- [8]. Zeng, H., Leung, R., Wenhao, L., and Hipscher, M. (2009). Physical education in urban high school class settings: Features and correlations between teaching behaviors and learning activities. *Physical Educator*, 66(4).
- [9]. Biddle, S. & Goudas, M. (1997). Effort is virtuous: Teacher preferences of pupil effort, ability and grading in physical education. *Educational Research*, 39(3), 350-355.
- [10]. Bulger, S. M., Mohr, D. J., Carson, L. M., & Wiegand, R. L. (2004). Curricular issues in physical education teacher education: Which foundational courses do PETE students really need? Should more time be spent on pedagogical content knowledge? Is the curriculum presented in the best order? Read on. *The Journal of Physical Education, Recreation and Dance*. Retrieved October 8, 2010 from Academic Search Complete database.
- [11]. Centers for Disease Control and Prevention (2010) (<http://www.cdc.gov>) Retrieved October 10, 2010.
- [12]. Chase, Lirgg, & Sakelos (2003). Teacher efficacy and effective teaching behaviors in physical education (Pedagogy). *Research Quarterly for Exercise and Sport*. Retrieved August 1, 2011 from HighBeam Research.
- [13]. Chen, A. & Ennis, C. (2004). Goals, interests, and learning in physical education. *Journal of Educational Research*, 97(6), 329-338. Chiodera, P., Volta, E., Gobbi, G., Milioli, M. A., Mirandola, P., Bonetti, A., Delsignore, R., Bernasconi, S., Anedda, A., & Vitale, M. (2008).

