

## A social work study on quality on quality of physical education programs in primary schools: A case study of governmental and non-for-profit schools in city of Esfahan, Iran

Allahyar Arabmomeni<sup>a\*</sup>, Mohammad Reza Iravani<sup>b</sup>, khodayar Momeni<sup>c</sup> and HajarJannesari<sup>d</sup>

<sup>a</sup>Department of Human Science of Islamic Azad University Khomeinishahr Branch, Isfahan, Iran

<sup>b</sup>Assistant Professor, Department of Social Work, Islamic Azad University Khomeinishahr Branch, Daneshjou Blvd, Iran

<sup>c</sup>Department of Human Science of Islamic Azad University Meymeh Branch, Isfahan, Iran

<sup>d</sup>MS Student, Counseling Department, Islamic Azad University of Khomeinishahr, Khomeinishahr Branch, Daneshjou Blvd, Iran

### CHRONICLE

#### Article history:

Received October 5, 2012

Received in revised format

20 January 2013

Accepted 22 January 2013

Available online

January 22 2013

#### Keywords:

Physical education

Elementary schools

Educational programs

### ABSTRACT

Physical education is one of the most important parts of schoolchildren studies and it could influence of social and academic performance of children, significantly. This paper studies physical education among schoolchildren who attend elementary schools in city of Esfahan, Iran over for the educational calendar of 2010-2011. The study selects 52 schools as sample, 18 non-for-profit and 34 governmental schools and half of them belong to female students. The results of this study indicate that physical education has a somewhat better quality in non-for-profit educational system compared with governmental ones although this difference is not statistically significance ( $P < 0.05$ ). In our survey, ten percent of time, physical education was performed poorly, twenty five percent was in average condition, forty eight percent was in good condition and seventeen percent was in excellent condition.

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## 1. Introduction

Physical education is one of the most important parts of schoolchildren studies and it could influence of social and academic performance of children, significantly. There are many studies associated with the relationship between physical activities and other issues such as educational performance, social activities, etc. (Subramaniam & Silverman, 2007; Chedzoy & Burden, 2009; Rasberry et al., 2011). Lack of physical activities could cause some deceases such as obesity (Fernandes & Sturm, 2010). According to van Beurden et al. (2003), Physical education (PE) lessons are an ideal setting to improve child fundamental movement skills (FMSs) and improve physical activity (PA) for optimal health. Hastie and Saunders (1991) investigated the accountability in secondary school physical education. They proposed a model to examine the interrelationships among the variables related to accountability, namely, active instruction, monitoring, and the rewards system operating in classes.

\*Corresponding author. Tel: +989133688572

E-mail addresses: arabmomeni@iaukhsh.ac.ir (A. Arabmomeni)

They tested their model using Linear Structural Relations and confirmed that the accountability factors of monitoring directly influenced involvement while active instruction and the rewards system impacted involvement indirectly through the students' valuing of the teacher. van Beurden et al. (2003) discussed whether we could skill and activate children through primary school physical education lessons. Their results provided some preliminary evidence for the reliability and validity of measures derived from some tripartite efficacy instruments, and supported their implementation in future research designed to examine physical education engagement.

Rengasamy (2012) performed a physical fitness intervention program within a physical education class on selected health-related fitness among Malaysian secondary school girls. Their results indicated that a ten-week physical fitness program within a physical education class had been effective in enhancing cardiovascular endurance and flexibility. Theodosiou and Papaioannou (2006) investigated motivational climate, achievement objectives and metacognitive activity in physical education and exercise involvement in out-of-school settings. Their findings underscored the importance of task orientation and mastery climate for the development of metacognition in physical education and underlined the necessary of research on the causal relationship between metacognition and sport involvement.

According to Cox et al. (2008), the efficacy of school-based physical activity interventions, within and outside of school, was linked to the degree of support for students' self-determined motivation. Katartzi and Vlachopoulos (2011) investigated motivating children with developmental coordination disorder in school physical education. Dudley et al. (2012) determined the levels of physical activity (PA), lesson context and teacher interaction students receive during physical education (PE) in secondary schools in New South Wales, Australia. They explained that levels of skill instruction and practice were well below international comparisons and may had implications for PA participation later in life.

Aktop and Karahan (2012) examined physical education teacher's self reported view about various teaching methods and Turkish physical education curriculum and to study the gender differences in selecting the teaching methods and reported that there was an incongruity between physical education teacher's views, preferences and Turkish physical education Curriculum recommending about teaching methods for physical education classes

This paper studies physical education among schoolchildren who attend elementary schools in city of Esfahan, Iran over for the educational calendar of 2010-2011. The study selects 52 schools as sample, 18 non-for-profit and 34 governmental schools and half of them belong to female students.

## 2. The proposed study

In this paper, we study physical education among schoolchildren who attend elementary schools in city of Esfahan, Iran over for the educational calendar of 2010-2011. The organization of this paper first presents the proposed study in section 2, while details of our findings are given in section 3 and concluding remarks are given in the last to summarize the contribution of the paper. We use the following formula to calculate the minimum number of sample size,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where  $N$  is the population size,  $p=1-q$  represents the yes/no categories,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. Since we have  $p=0.5$ ,  $z_{\alpha/2}=1.96$  and  $N=557$ , the number of sample size is calculated as  $n=52$ . The society has been divided into five regions and Table 1 demonstrates details of our sample size.

**Table 1**  
Details of survey population

Region	Population			Sample size	
	Governmental	Non-for-profit	Society	Governmental	Non for profit
1	50	12	62	4	2
2	48	19	67	4	2
3	102	29	111	8	4
4	103	36	139	8	4
5	116	42	158	10	6
Total	419	138	557	34	18

We designed a questionnaire with 26 questions covering physical education characteristics covering what participants believe about the quality and quantity of various courses. All questions were designed in Likert scale from one to five, where one represents a weak and five represents strong point.

When a question receives a point of 31 to 60, the response to that question is considered weak, 61 to 90 is a an average point, 91 to 120 is rated good and finally any number above 120 is considered as an excellent point. Table 2 shows details of our findings about the process of physical education in terms of frequency and percentage.

**Table 2**  
Details of our findings

	Very poor		Poor		Average		Good		Excellent	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Governmental	0	0	5	14.7	8	23.53	16	47.06	5	14.71
Non-for-profit	0	0	0	0	5	27.77	9	50	4	22.22
Total	0	0	5	9.61	13	25	25	48.07	9	17.30

As we can observe from the results of Table 2, nearly half of the participants believed that physical education programs are in good conditions while 22% of the participants believed non-for-profit organizations rated excellent non-for-profit organizations but only 14.71% of the participants gave this ranking to governmental schools. We have analyzed the results based on gender and Table 3 shows details of our survey.

**Table 3**  
Details of our findings on performance of physical education programs in terms of their gender

	Very poor		Poor		Average		Good		Excellent	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Boys	0	0	1	3.84	9	34.61	12	46.15	4	15.38
Girls	0	0	4	15.38	4	15.38	13	50	5	19.23
Total	0	0	5	9.61	13	25	25	48.07	9	17.30

The results of Table 3 are similar with Table 2 and we do not see a significant difference between female and male people on this kind of courses.

The proposed study of this paper considers the following three hypotheses.

1. There is a difference between the qualities of physical education programs in schoolchildren in governmental and non-for-profit ones.

2. There is a difference between the qualities of physical education programs in schoolchildren in female's ones compared with male's ones.
3. There is a difference between the qualities of physical education programs in schoolchildren in different regions.

### 3. The results

In this section, we present details of our survey on examining the quality of physical education between governmental and non-for-profit schoolchildren.

#### 3.1. *Quality of teaching in governmental and non-for-profit schools*

The first hypothesis of this survey investigates whether there is any difference between governmental and non-for-profit schools. Table 4 demonstrates the results of our survey.

**Table 4**

The results of the survey of the quality of physical education in different kinds of schools

School	Number	Mean	t-value	Degree of freedom	P-Value
Governmental	35	4	1.03	50	0.3
Non-for-profit	17	4.4			

According to the results of Table 4, there is no meaningful difference between governmental and non-for-profit schoolchildren in terms of quality of physical education programs although non-for-profit schools seem to have better performance.

#### 3.2. *Quality of teaching in governmental and non-for-profit schools*

The second hypothesis of this survey investigates whether there is any difference between different types of schoolchildren in terms of gender. Table 5 demonstrates the results of our survey.

**Table 5**

The results of the survey of the quality of physical education in different kinds of schools

School	Number	Mean	t-value	Degree of freedom	P-Value
Boys	35	4.1	0.52	50	0.6
Girls	17	3.4			

According to the results of Table 5, there is no meaningful difference between male and female schoolchildren in terms of quality of physical education programs although schools whose students are male seem to have better performance.

#### 3.3. *Quality of teaching in inside and between different regions*

The third hypothesis of this survey investigates whether there is any difference between different regions of schoolchildren in terms of gender. Table 6 demonstrates the results of our survey.

**Table 6**

The results of the survey of the quality of physical education in different regions

School	Sum of square	df	Mean square	F-value	P-Value
Between region	7.6	4	1.1	1.1	0.15
Inside region	50.4	47	1		

According to the results of Table 6, there are some differences for the quality of physical education programs but these differences are not statistically significance.

#### 4. Conclusion

This paper investigated physical education among schoolchildren who attend elementary schools in city of Esfahan, Iran over for the educational calendar of 2010-2011. The study selected 52 schools as sample, 18 non-for-profit and 34 governmental schools and half of them belong to female students. The results of this study indicated that physical education had somewhat better quality in non-for-profit educational system compared with governmental ones although this difference was not statistically significance ( $P < 0.05$ ). In other words, there was no meaningful difference between governmental and non-for-profit schoolchildren in terms of quality of physical education programs although non-for-profit schools seem to have better performance. In addition, there is no meaningful difference between male and female schoolchildren in terms of quality of physical education programs although schools whose students are male seem to have better performance. Finally, there are some differences for the quality of physical education programs but these differences are not statistically significance.

#### Acknowledgment

The authors would like to thank the officials of educational programs of schoolchildren for cordially cooperating in this survey. We are also grateful for constructive comments on earlier version of this work.

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