

A comparison of PE teachers and female students' attitudes toward physical fitness tests

Hamideh Shariati

Department of Physical Education, Aliabad Katoul Branch, Islamic Azad University, Aliabad Katoul, Iran

ABSTRACT

Physical education constitutes an important component of school curriculum so that disregard for physical education may cause irreparable damages to students' motor, physical, mental and social development. The present study aims at comparing PE teachers and female students' attitudes toward physical fitness tests in junior and senior high schools of Golestan province. The study adopted a descriptive-comparative method so as to describe, compare and report the status quo of physical education without subjective inferences. The population of the study consisted of all female PE teachers as well as all female students at junior and senior high schools in Golestan province in the 2008-2009 academic year. A number of 138 female PE teachers and 384 female students were randomly selected as the participants using Morgan table. The data was collected using a researcher-made questionnaire. The face validity of the scale was approved by a few experts. The reliability of the scale was estimated and approved using Cronbach alpha formula. Kolmogorov-Smirnov and Mann Whitney U tests were run to analyze the data. The results showed no significant difference between PE teachers and students' attitudes toward assessment problems of physical fitness tests, fitness test-induced injuries, consistency of fitness tests with students' physical strength, the amount of training required for fitness tests, general status quo of fitness tests, teaching methodology of physical education courses, sports facilities and equipment and increased hours of PE lessons in the curriculum. The study ends up with a few applicable and research recommendations.

Keywords: assessment, physical fitness, PE teachers, students

INTRODUCTION

With appropriate planning and experienced teachers, physical education would play a crucial role in children growth and development. PE Teachers should primarily aim to help students discover their talents, accept responsibility and participate in social activities as active members. Many a schoolmaster in developed countries has noticed that physical education is an inseparable part of education that may contribute to students' general development and fulfillment of educational goals. Experienced PE teachers report that engagement in PE lessons provide students with new interests in schools. Besides, physical fitness contributes to greater self-confidence as well as mental composure and health [3]. Physical education constitutes the acquisition and processing of motor skills, development and maintenance of physical fitness to improve well-being, and development of positive mental imagery toward physical activities as a means of improving performance. Not only is physical education concerned with physical benefits gained through participation in physical activities, but it also improves knowledge of learning

situations and continuous activity. In order to realize the benefits of physical education, coaches need to consider developing appropriate training programs so that the students may reap the ultimate benefits from PE lessons [8].

Well-being, healthy recreations and rhythmic movements are considered as the subsets of physical education and sports. These subsets share several objectives with physical education, aiming to develop human potential and improve the quality of life. Improved well-being and healthy recreational activities are experiences that contribute to a better life along with physical activities [3]. Students practice sports in their PE courses so that they are expected to pay greater attention to their physical and mental health and continue doing physical exercise after their graduation. In all societies, sports are considered as an educational tool. In Iran, sports are growing in popularity due to the young texture of the population and positive attitudes toward sports. Sociologists contend that, under mechanized life and increased leisure time, sports can be considered as an appropriate means of healthy recreation and recovery. Healthcare experts and doctors consider sports as an important tool in improving physical well-being [9]. Mental contributions of sports include discovery of latent talents, personality development, nurturing a sense of cooperation and preventing egotistical subjectivism as well as physical stimulation in order to prevent mental concerns, seclusion and fears. It also aims to create mental balance and adjust emotions, wrath and maladjustment [13].

Physical fitness training is an inseparable part of physical education program. It entails physical exercise, perception of motor skills, health-related pleasure driven from physical activity, long-term well-being, cardio-vascular endurance, flexibility, body composition, and muscular strength and endurance. Skills-related physical fitness involves balance, agility, coordination, speed and power. It has a considerable potential to contribute to students' lives [16]. Physical fitness is one of the essential human needs, which refers to the ability to do daily routines without a sense of exhaustion. It is a favorable condition allowing the individual to do their daily activities readily. It reduces the risk of inactivity-induced physical diseases and facilitates participating in various activities and physical exercise. This approach to physical fitness emphasizes physical health rather than athletic performance. In this regard, physical fitness would entail muscular strength, endurance, flexibility, aerobic power and body composition [4].

Most school PE courses, from elementary to high schools, concentrate on common but controversial training. The content of PE courses addresses commonplace principles and provides no room for skill development. Another approach is that the PE teacher is the coordinator of all PE programs so that students' interests, opinions and needs are not taken into consideration. Such programs are often recursive and boring. Moreover, they do not heed individual differences and positive social behavior in students. This failure results from the structure of PE courses. While PE lessons are supposed to provide students with cheerful hours, they usually cause dissatisfaction, as difficult physical fitness tests are not consistent with female students' physical capacities [12]. Teachers need to direct exercise training in order to make sure that all students are involved. Rather than sticking to a certain number of students, teachers should walk around in class and help students with the problems they face. They should provide students with feedback on their performance during both training and post-training review. It is necessary to assign different tasks to different students consistent with their physical abilities in heterogeneous classes. The most constructive teacher behaviors are considered as providing post-task feedback, creating motivation, identification and correction of group and individual mistakes. Such behavior facilitates skill learning and development. The main part of this research was conducted through observing and recording PE teachers' behavior [13].

A variety of studies have investigated the role and quality of PE classes in schools, each of which has addressed a certain aspect of the issue [6, 8, 11, 14, 15].

In the present study, the researcher aims to investigate PE teachers and female students' attitudes toward the quality and content of PE courses, concerning physical fitness, in junior and senior high schools of Golestan province. It is expected that the present study help eliminate the problems posed to PE teachers and female students in order to minimize the potential damages to students.

MATERIALS AND METHODS

The method of the present study was descriptive-comparative. The researcher aimed to describe, compare and report the status quo of PE courses in junior and senior high schools of Golestan province without any subjective bias. The population of the study consisted of all female PE teachers and female students in junior and senior high schools in the 2008-2009 academic year. From among the population, a number of 138 teachers and 384 students were randomly selected as the participants using Morgan table. The membership in either teachers or students population was considered as the independent variable while all the attitudes compared between these two populations were considered as the dependant variables. The data was collected using a researcher-made questionnaire. The face validity of the scale was approved by a few experts. The reliability of the scale was estimated and approved using Cronbach alpha formula. The questionnaire consisted of three subscales: (1) questions addressing the problems associated with physical education assessment (14 items); (2) questions addressing general assessment issues (8 items); (3) questions addressing practical issues and school facilities (16 items).

Descriptive statistics including frequency distribution, mean and standard deviation were used to describe raw data. Kolmogorov-Smirnov and Levene's tests were run to examine the normality of the data and homogeneity of variances, respectively. Non-parametric Mann Whitney U test was run to compare the mean scores between the two groups. SPSS 18 was used to do statistical analysis.

RESULTS

Table 1 illustrates the mean scores of teachers and students' attitudes toward the general status of physical fitness tests, including the respective items addressing this subscale. A comparison of mean scores shows that PE teachers obtained higher mean scores in all items except for items 5 and 6 that address oxygen consumption and menstrual cycle.

Table 1. Mean scores of PE teachers and students' attitudes toward the general status of physical fitness tests

No.	Item	Mean	Students' mean score	PE teachers' mean score
1	Is everybody equally involved in physical education lessons?		2.28	2.91
2	Are basic factors such as cultural factors addressed in physical education programs?		2.20	2.74
3	Are students' physical characteristics accurately measured in PE classes?		2.00	2.63
4	Do PE lessons provide students with knowledge of the lifelong benefits of sports?		2.93	2.98
5	Are oxygen consumption and the energy required for task performance accurately measured in the students?		3.20	2.28
6	Does PE program contribute to the occurrence of menstrual cycle and maintenance of health in the students?		3.34	3.10
7	Is there appropriate time management in PE classes?		2.89	2.96

Figure 1 illustrates mean scores of teachers and students' attitudes toward the general status of physical fitness tests. As shown in the figure, the two groups of subjects obtained relatively similar mean scores so that they did not show a considerable difference in their obtained mean scores.

Table 2. Mann Whitney U test results of comparing PE teachers and students' attitudes

Components	Z value	P	Result
Assessment problems of physical fitness tests	-1.081	0.280	Insig
Fitness test-induced injuries	0.707	0.479	Insig
Consistency of fitness tests with students' physical strength	-1.307	0.191	Insig
The amount of training required for fitness tests	-1.431	0.152	Insig
General status quo of fitness tests	1.877	0.279	Insig
Teaching methodology of physical education courses	1.110	0.267	Insig
Sports facilities and equipment	1.025	0.298	Insig
Increased hours of PE lessons in the curriculum	-1.938	0.055	Insig

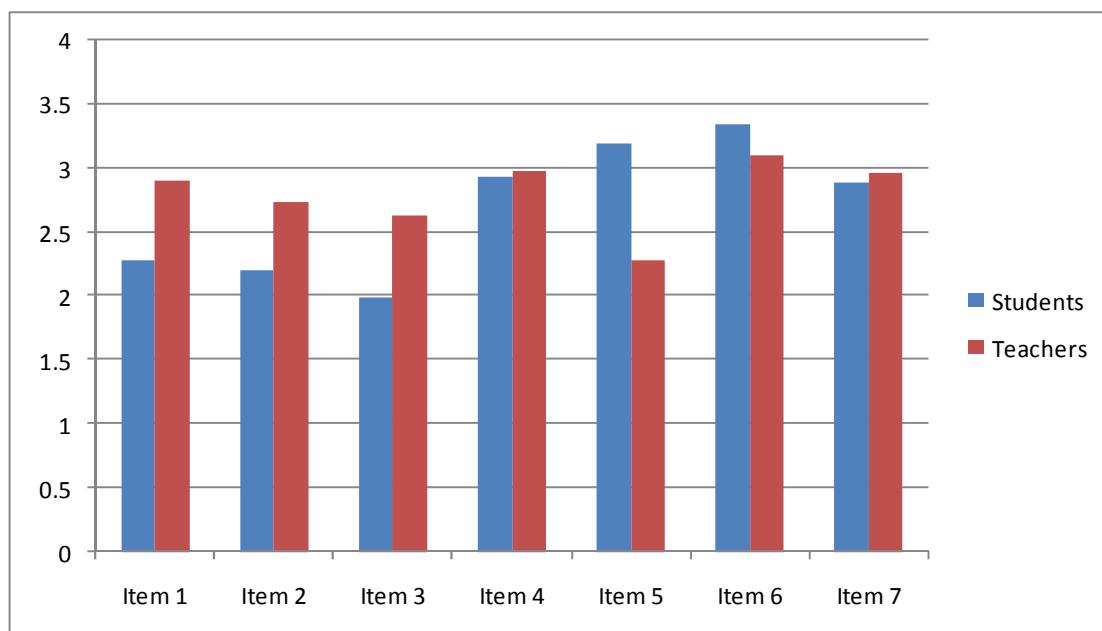


Figure 1. Mean scores of PE teachers and students' attitudes toward the general status of physical fitness tests

In order to compare the mean scores between the two groups, the normality of the data was examined first. Since the data proved non-normal, non-parametric Mann Whitney U test was run to compare the attitudes of teachers and students across the measured components as illustrated in Table 2. Considering the levels of significance and the P value (0.05), there was not a significant difference between PE teachers and students' attitudes in any component so that both groups of subjects held close attitudes across the eight components concerning PE courses.

DISCUSSION AND DISCUSSION

The study was conducted to compare PE teachers and female students' attitudes toward physical fitness tests in the 2008-2009 academic year in Golestan province. The data was collected using a researcher-made questionnaire that was developed in two separate versions for PE teachers and female students. The questionnaire was on a 5-point Likert scale ranging from Very Low to Very High. The results showed no significant difference between PE teachers and students' attitudes toward assessment problems of physical fitness tests, fitness test-induced injuries, consistency of fitness tests with students' physical strength, the amount of training required for fitness tests, general status quo of fitness tests, teaching methodology of physical education courses, sports facilities and equipment and increased hours of PE lessons in the curriculum.

One of the marked limitations of the present study was scarcity of literature on the topic, which made it difficult to compare the present against previous findings. Still, the present findings correspond in part to the findings of Zarei (2001) and Mousavi (2001). The detailed findings showed that female students were reluctant to do physical fitness tests. Rather they were interested in traditional games such as tug of war and Lagori. PE assessment through physical fitness tests did not prove motivating for the students so that PE teachers did not score students based on fitness tests. This is consistent with the findings of Mahdavi Zadeh Tehrani (1997), Hart (1999) and Ross (1989) emphasized assessment problems in PE courses and contended that students' interests should be addressed in PE lessons.

Both PE teachers and female students reported that four types of physical fitness tests caused complications to female students. Both groups reported that more time was needed to train students in physical fitness tests. They believed that fitness tests did not contribute to female students' physical fitness. This is consistent with the findings of Hemati Afif (2001) and Carlson et al. (2007) who reported that increased PE hours optimally improved the efficiency of physical education lessons so that improvements in students' behavior was observed following 10

weeks of physical fitness training and verbal prompts. Besides, both PE teachers and students reported the insufficient sports facilities and equipment. This is consistent with the findings of Latifi (1993), Kaardal (2001) and Suarez and Portland (1974). The results showed that the students were not scored based on their performance in physical fitness tests. Neither PE teachers nor students were interested in fitness tests and they addressed many problems associated with these tests. Therefore, it is recommended that a new PE assessment procedure be developed based on female students' physical capacities. The results also revealed that both PE teachers and students believed that physical fitness tests were allocated insufficient time considering the volume of the work and wasted time. Therefore, it is recommended that some components of physical fitness tests be excluded and subsequently replaced with alternative programs. PE teachers and students reported limitations in sports facilities and spaces. They reported that athletic fields did not have standard lining, nets and other equipment. Therefore, it is recommended that schools use sports salons and allocate budgets for standard lining and providing sports facilities. It is recommended that future studies concentrate on students' interest in local, traditional games rather than physical fitness programs. It seems that further studies should be conducted on the content of PE books so that students may optimally benefit from PE classes.

REFERENCES

- [1] Carlson JAK, Kimpton A, Oswald L, Puglisi L, *J Phys Heal Edu*, **2007**, 6-11.
- [2] Enright E, O'Sullivan M, *Young People Phys Act Sport*, **2008**, 129-136.
- [3] Farahani A, *General physical education: Course 1*, Tehran, **1994**.
- [4] Gaeeni AA, Sports, fitness and well-being, Ministry of Education, Tehran **1998**.
- [5] Hart BSM, *The Art and science of classroom assessment*, **1999**.
- [6] Hashemi Javaheri AA, MA thesis, Tehran University (Tehran, Iran, **2001**).
- [7] Hemati Afif A, MA thesis, Tehran, Iran, **2001**.
- [8] Kaardal K, Learning by choice in secondary physical education. *Chapaigh, TI Human kinetics*, **2001**.
- [9] Kashef M, Mojtaedi H, M.S thesis, Tehran University, (Tehran, Iran, **1989**).
- [10] Latifi H, M.S thesis, Tehran University (Tehran, Iran, **1993**).
- [11] Mahdavi Zadeh Tehrani R, M.S thesis, Tehran, University, (Tehran, Iran, **1997**).
- [12] Mousavi ES, MS thesis, Teacher Training University, (Tehran, Iran, **2001**).
- [13] Ramazani Nezhad M, *Physical education in schools*. Tehran: SAMT Pub, **2003**.
- [14] Sobkin, V. S., *Education and Society*, **2006**, 70/048, 3.
- [15] Zarei M, M.S thesis, Tehran University (Tehran, Iran, **2001**).
- [16] Zhaleh Doust Sani B, Physical fitness, An approach to health. Tehran, **1993**.