

Educational Quality of Physical Education Major in the Universities of Iran: Case Study of Table Tennis

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ABSTRACT

In today's world, physical education and sports as a specialized branch of education has had significant changes and development. Regarding the importance of the issue, the present study aims to evaluate the educational quality of table tennis education in universities of Iran. The research population includes 30 physical education experts and professionals in Iran, 15 of them were randomly selected as the participants of the present study. After selecting the participants, a questionnaire was distributed among them. Then, after collecting the data, research hypotheses were tested using SPSS software. Results showed that structural management, educational process, and training facilities for the table tennis training course in universities of Iran was at an appropriate level.

KEYWORDS: Educational quality, physical education, Structural management, table tennis

INTRODUCTION

The sports classroom teaching quality evaluation is an important part of the college sports teaching quality management which has positive significance and important role for improving the quality of PE teaching. Therefore, we should establish a set of perfect classroom teaching quality evaluation system for scientific, objective, comprehensive and fair evaluation of teachers' classroom teaching quality, and grasp the status of the teachers performing their duties (Liu, 2013).

Quality is a complicated, dynamic and multi-dimensional concept, the definition of which is a function of a set of social, economic, cultural and political condition. It is one of the most important principles of quality management and the ability to evaluate the current performance and its continuous comparison with the optimum condition. So that it is not possible to determine the performance improvement policies (Ekong et al, 2003).

According to UNESCO, quality in higher education is a multi-dimensional concept which largely depends on the environmental condition (context) of the academic system, objectives and standards of the academic major (Maroufi et al., 2007). The students who were taught by more professional and expert teachers had significantly more improvement compared to those lacking this advantage. Ultimately, the professionalism of the physical education teachers and the courses spend by them were the determining factors of physical education efficiency based on the professional capabilities of the teachers (Spruijt-Metz et al, 2013). The field of Physical Education and Sport Sciences is one of the university majors which have a significant growth regarding the number of faculties and scientific centers and also students. However, it seems that it has not developed properly in terms of quality. (Khatibi et al, 2010)

It is obvious that during the last two decades teacher and pupil behaviors in the physical education setting have been studied more and more in detail. Behavioral aspects have been specified in quantitative and qualitative directions. In combination with more appropriate research designs, the image of teacher effectiveness has become sharper and more complete (Behets, 1997).

Higher education institutions providing physical and sports education generally aim to teach individuals the academic knowledge and skills concerning the field of sports in order to train qualified personnel for industries that offer sport services programs other than Teacher Training in Physical Education and Sports as well as Sport Sciences are divided into two categories, which are daytime and evening education. While daytime education program offers daytime education services to students, the latter provides them with access to education services with the same opportunities (Yildiz, 2007).

In today's world, physical education and sport as a specialized branch of education has had significant changes and development. However, at the first stages of its development, teacher training was considered as the first product (Stone et al, 1994). There has been a lot of discussion on the meaning of quality in higher education and has been mostly used by the stakeholders in order to legitimize and justify their perspective and interests. There are two main reasons for the difficulties in defining the educational quality: (Karimian et al, 2011):

(1). There is no consensus about the objective and exact objectives of higher education. however, some of the objectives include the training of the qualified workforce, training individuals for a career in research, preparing and providing effective management of vocational training and enhancing the prospects of individual and social life;

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(2). Higher education as any other form of education is a complex and multidimensional process based on the relationship between the teachers and learners. Therefore, it is difficult to understand the interaction of inputs, processes and to determine outputs.

Having the up-to-date knowledge and using the results of scientific research in education can be effective in meeting the needs of this subject at schools. Further, reviewing and upgrading the courses and subjects of the Physical Education major at universities are among the effective factors (Hayes et al, 2008). Higher education is significantly important since it had the highest educational and research level. In other words, research and education are two main agents of the scientific process in a university. Education is significantly important than research in the higher education system of Iran. So that, some universities are changing to high schools in terms of educational quality (Samadzadeh, 2000).

Physical education is not seen as a priority in the '90's. It is under severe attack and faces competition for time within the school curriculum. Often physical education is being taught by generalist teachers with little or no preparation in physical education methods. Additionally, budget cutbacks are impacting negatively on the time and resources required to teach a quality physical education program. (Hardman & Marshall, 2000) Under the headings of 'learning outcomes' and 'programs', Pill (2008) included several points relevant to consideration of 'quality' in relation to curriculum: programs are aligned with curriculum and standards frameworks; programs are based on student-centered outcomes. Learning outcomes are developmentally appropriate and considerate of individual student learning needs and styles; all areas of the program (including, for example, Physical education, health, outdoor education, dance, home economics) are integrated; and the programs support student choice in content, assessment and reporting of achievement.

Currently, Iran has been under considerable changes in physical education and sport. Since the physical education and sport play a significant role in different levels including training teachers, managers, and researchers. Educational quality is essential and vital more specifically for this major. As about four decades has been passed since preparing the common curriculum, it is necessary to reflect on the educational structure. Therefore, the present study evaluates the educational quality of physical education major in the universities of Iran which is a case study of table tennis.

MATERIALS AND METHODS

Previous studies:

Faraji et al (2012) stated that the higher education system in Iran is certainly one of the most basic and significant social institutes for development. According to this study, the most important prophecy of this institute was to train the experts needed by society, promotion and retention of knowledge, research and providing proper condition for the development. It was stated that physical education was one of the subjects in curriculum of more than 90 percent of the countries all over the world. Schools with thousands of students were great sources of sport talents. The presence of expert physical education teachers dealing with students could cause economic savings in addition to the identification and proper conduct of the students sport talent. The study aimed to evaluate the proportion of physical education lessons and topics in line with finding sporting talent.

Khatibi et al (2010) studied the quality of educational service of the Physical Education faculty of Tehran University using the SERVQUAL model. Research population included the undergraduate students in the Faculty of Physical Education of Tehran University in Iran. The result showed that there was a significant difference between the proper condition and the current condition in terms of assurance, responsiveness, empathy, trust and tangibility. The greatest and least differences were related to assurance and tangibility, respectively. Examining the demographic factors indicated that the difference regarding the quality of educational service was significantly less for female students than males. Further, the reported difference in the quality of the services in senior students was significantly more than junior students. Comparing the difference in terms of service quality in the items of the questionnaire indicated valuable points to determine the strategies for improving the quality.

According to Liu (2013) the physical education teaching quality evaluation is an important part of the college sports teaching quality management. He introduced analytic hierarchy process into physical education teaching quality, which change the distortion phenomenon of final evaluation result in the traditional weight determination method due to human error. He established analytic hierarchy structure model of the physical education teaching quality evaluation according to AHP and used fuzzy comprehensive operation of the fuzzy operator to evaluate physical education teaching quality. Finally, he did empirical research to verify this method. The result showed that our proposed algorithm can get the better integration of qualitative analysis and quantitative analysis to overcome the arbitrariness in the original classroom teaching quality evaluations which greatly improve the accuracy of the classroom teaching quality evaluation. Physical education teaching fuzzy comprehensive evaluation method based on analytic hierarchy process has high promotion value and good prospect in the physical education teaching management.

Bailey et al (2009) examined the theoretical and empirical bases of claims made for the educational benefits of physical education and school sport (PESS). Their work is a historical overview of the development of PESS points to the origins of claims made in four broad domains: physical, social, affective and cognitive. Analysis of the evidence suggests that PESS has the potential to make contributions to young people's development in each of these domains. Also, there was suggestive evidence of a distinctive role for PESS in the acquisition and development of children's movement skills and physical competence. He argued that these are necessary, if not deterministic conditions of

engagement in lifelong physical activity. In the social domain, there is sufficient evidence to support claims of positive benefits for young people. Importantly, benefits are mediated by environmental and contextual factors such as leadership, the involvement of young people in decision-making, an emphasis on social relationships, and an explicit focus on learning processes. In the affective domain, too, engagement in physical activity has been positively associated with numerous dimensions of psychological and emotional development, yet the mechanisms through which these benefits occur are less clear. Likewise, the mechanisms by which PESS might contribute to cognitive and academic developments are barely understood. There is, however, some persuasive evidence to suggest that physical activity can improve children's concentration and arousal, which might indirectly benefit academic performance. He concluded that many of the educational benefits claimed for PESS were highly dependent on contextual and pedagogic variables, which leads us to question any simple equations of participation and beneficial outcomes for young people. In the final section, therefore, the review raises questions about whether PESS should be held accountable for claims made for educational benefits, and about the implications of accountability.

Research Method:

The present cross-sectional survey aimed to evaluate the educational quality of physical education major in universities of Iran in a case study of table tennis. The research population includes thirty physical education experts and professors in Iran, fifteen of whom were randomly selected as the participants of the present study. A research made questionnaire was used in this study to collect the required data, the reliability of which was measured as 0.96. After determining the number of participants in the study, the questionnaire was distributed among them and after collecting the data, the following research hypotheses were tested using SPSS software and bivariate regression analysis:

- H1. The quality of structural management for table tennis course in universities of Iran is good;
- H2. The quality of educational process for table tennis course in universities of Iran is good;
- H3. The quality of training facilities for table tennis course in universities of Iran is good.

Figure 1 shows the conceptual model of the study.

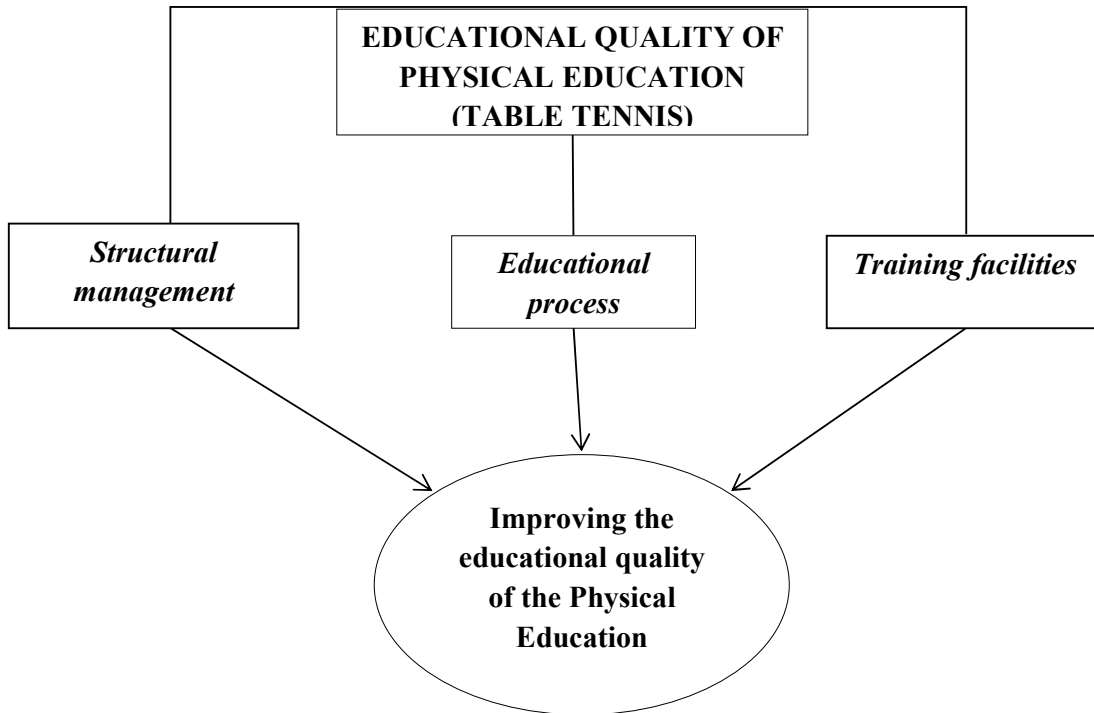


Figure 1. Conceptual model of the study

RESULTS AND DISCUSSION

In this section, first we present the descriptive statistics of variables obtained from the participants, and then the research hypotheses are analyzed using Spss Software.

Descriptive Statistics:

Tables 1-3 show descriptive statistics of three variables of “structural management”, “educational process”, and “training facilities”.

Table 1.Frequency distribution of structural management variable

Components	Very low	Low	average	High	Very high
Determining clear objectives for specialized training (Table Tennis)	.0%	14.0%	32.0%	24.0%	30.0%
Allocation of necessary resources and Accurate and timely implementation of specialized training (Table Tennis)	8.0%	20.0%	22.0%	30.0%	20.0%
Assessment of activities and specialized training (in table tennis) by the manager	6.0%	16.0%	28.0%	34.0%	16.0%

Table 2.Frequency distribution of educational process variable

Components	Very low	Low	average	High	Very high
Expertise of professors and instructors in the field of table tennis and knowing the rules of the day	.0%	8.0%	38.0%	44.0%	10.0%
Appropriate allocation of teachers based on the number of students in table tennis	14.0%	48.0%	32.0%	6.0%	.0%
Proportion in the number of courses and specialized training for table tennis	.0%	2.0%	32.0%	42.0%	24.0%
The quality of table tennis training resources	8.0%	46.0%	42.0%	4.0%	.0%
Authenticity of the methods evaluating students' progress in learning table tennis	.0%	16.0%	46.0%	26.0%	12.0%
Motivating students to learn table tennis	12.0%	32.0%	24.0%	18.0%	14.0%

Table 3.Frequency distribution for training facilities variable

Components	Very low	Low	average	High	Very high
Educational and research space proportional to the number of students for specialized training in table tennis	6.0%	52.0%	32.0%	10.0%	.0%
The standard education and research training environment for table tennis	40.0%	38.0%	22.0%	.0%	.0%
Standard devices and associated equipment for table tennis training	.0%	6.0%	50.0%	42.0%	2.0%
Providing health and welfare facilities in educational environment	22.0%	36.0%	26.0%	16.0%	.0%
Observing the principles of safety for students during the table tennis training	32.0%	36.0%	28.0%	4.0%	.0%
Adequacy of sports training facilities for table tennis training	48.0%	42.0%	10.0%	.0%	.0%
Easy, quick and convenient access to specialized training courses for table tennis	38.0%	36.0%	24.0%	2.0%	.0%

Inferential Statistics:

Testing Data Distribution: Kolmogorov-Smirnov test was used in order to assess the normality of the data distribution.

If the significance level (sig.) be higher than the p-value ($\alpha=0.05$), then the data distribution is normal. However, if the significance level (sig.) be less than 0.05, then data distribution is not normal. Table 4 shows the results of testing normality of data distribution.

Table 4.Data distribution test results

Variables	K-S	Sig.	p-value	Result
<i>Structural management</i>	.756	.618	0.05	Normal
<i>Educational process</i>	.725	.670	0.05	Normal
<i>Training facilities</i>	1.057	.214	0.05	Normal

According to the calculated Kolmogorov-Smirnov statistic in table 4, and also with respect to the significance level, it can be inferred that there is no significant difference between the expected distribution and the observed distribution of all the variables and they have normal distribution. Therefore, the parametric test could be used to test the research hypotheses.

Testing hypotheses: In this section we try to examine out assumptions.

Hypotheses 1: The quality of structural management for table tennis course in universities of Iran is good;

One-sample t-test was used to evaluate the mean of expert opinions and testing the hypothesis. Then, the results were interpreted. Obviously, the hypothesis is approved regarding the mean of more than 3, positive t-statistics value and p-value of less than 0.05.

Table 5. Descriptive Statistics of H1

Model	Variables	Mean	SD
1	Structural management and educational quality	3.47	0.759

The mean and standard deviation of the experts' opinion regarding the structural management of specialized training for tennis table are given in table 5. Accordingly, the mean score is 3.47.

Table 6. One-sample t-test results for H1

Constant value=3				
Variable	t	df	P-Value	Mean Difference
Structural management for specialized training in table tennis	4.409	49	0.000	0.473

In table 6, According to the t-statistics value (4.409) and p-value of less than 0.05 ($p < 0.05$), there is significant relationship between the variables at the 0.99 confidence level. Therefore, the structural management for specialized training in table tennis is at a proper level and first hypothesis is confirmed.

Hypothesis 2: The quality of educational process for table tennis course in universities of Iran is good

Table 7. Descriptive Statistics of H2

Model	Variables	Mean	SD
2	Educational process and educational quality	3.14	0.501

As it is shown in table 7, the mean and standard deviation the educational process of specialized training for tennis table have been calculated based on the experts' opinion. Accordingly, the mean score is equal to 3.17.

Table 8. One-sample t-test results for H2

Constant Value=3				
Variable	t	df	P-Value	Mean Difference
Educational process for specialized training in table tennis	2.069	49	0.044	0.146

According to table 8, the $t=2.069$, $df=49$ and $p < 0.05$ indicated a significant relationship between the educational process and educational quality at 0.99 confidence level. Therefore, the second hypothesis is confirmed.

Hypothesis 3: The quality of training facilities for table tennis course in universities of Iran is good.

Table 9. Descriptive Statistics of H3

Model	Variables	Mean	SD
3	Training facilities and educational quality	2.28	0.326

The mean and standard deviation of the training facilities for tennis table course have been calculated in table 9 based on the opinions given by participants. Accordingly, the mean score of 2.28 is obtained.

Table 10. One-sample t-test results for H3

Constant Value=3				
Variable	t	df	P-Value	Mean Difference
Training facilities for table tennis course	-16.705	49	0.000	-0.771

In table 10, regarding the mean of less than 3, $t=-16.705$ and $p < 0.05$, it is concluded that there was no significant relationship between the training facilities and educational quality. In other words, the third hypothesis is confirmed.

CONCLUSION

According to the descriptive, from among 30 participants and regarding frequency distribution of opinions given by the experts about the status of educational process for specialized training, it was found that determining the clear objectives for the specialized course of table tennis had the highest effect (30.0%) and the allocation of required sources and correct and timely implementation of the trainings in specialized course of table tennis had the least effect (8.0%) on increasing the educational quality in physical education.

Regarding the frequency distribution of the experts' opinion about the structural management, the proportion of the number of theoretical and specialized training courses for table tennis had the highest effect (24.0%) and appropriate allocation of professor to the number of table tennis students had the least effect (14.0%) on increasing educational quality in physical education.

The results of testing the hypotheses indicated that structural management for the table tennis training course was at an appropriate level. The results of the bivariate regression analysis showed that the structural management of the specialized training for the table tennis course was at an appropriate level. Further, the educational process of the specialized training for the table tennis course was in an appropriate condition. The results of the bivariate regression analysis showed that the educational process of the specialized training for the table tennis course was at an appropriate level. Finally, the quality of training facilities of the table tennis course had an appropriate condition. The results of the bivariate regression analysis indicated that the quality of training facilities of the table tennis course was at a proper level.

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