

# Empirical Analysis and Management Measures of Physical Education Teachers in "985 Project" Universities

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**Abstract.** To explore the status of the P.E teachers in "985 Project" universities is important for improving the quality of a "985 Project" university's talents. On the basis of the large number of documents, mainly using sample survey, statistical analysis, case studies and other empirical research methods to select regional and representative five "985 Project" universities. Having performed statistical analysis on the current situation of PE teachers in the title structure, educational structure, sex structure, age structure, some achievements were affirmed, some existed problems were found, and the causes of the problem were analyzed. Finally, some suggestions for improving the structure of P.E teachers in "985 Project" universities, which is important for strengthening and improving the construction of sports teachers in the "985 Project" university.

**Keywords:** "985 Project" universities; Physical education teachers; Case study; Statistical analysis

## Introduction

In May 4<sup>th</sup> 1998, Jiang Zemin put forward to construct a number of the first-class universities with advanced world level at Peking University centennial. Since then, "985 Project" universities have undertaken the significant mission of construction of the world first-class universities in our country. Most of the world first-class universities are research universities, but compared with famous sports universities in world, construction of sports teachers in our research universities lacks leading professors and experts<sup>[1]</sup>. P.E teachers is the principal part of promoting the smooth development of sports work in "985 Project" universities and P.E teachers are the key and foundation of promoting better development of school sports work in the future. Research universities in our country aim at cultivating high-level talents, therefore, P.E teachers play an important protective role in cultivating talents and they are vital to physical and mental health of elite talents and the training of lifelong physical education consciousness. By inquiring the documents, now our construction of sports teachers in "985 Project" universities has received more improvement and development than before, however, it does not match with school development goals and needs to develop further<sup>[2]</sup>. Therefore, strengthening and improving P.E teachers in "985 Project" universities will be one of the important tasks in construction of teachers in colleges and universities.

## 1. Definition of basic concept

Definition of P.E teachers refers to teachers engaging in physical education activities who are on regular payroll of colleges and universities and in the professional and technical positions of P.E teachers, engaged in sports teaching and training, scientific research, management, and other related work, composed of different title structure and educational structure.

P.E teachers in "985 Project" universities refer to: with the development of the "985 Project" school physical education function, P.E teachers not only have the basic qualities of teachers in research universities, but also adapt to fundamental changes in knowledge structure and ability structure of P.E teachers at present. P.E teachers need transform themselves from teaching-oriented teachers to research-oriented teachers. As the important part of construction of sports teachers in "985 Project" universities, P.E teachers refer to sports worker who both have basic function of teachers in "985 Project" universities and have special characteristics of P.E teachers.

## 2. Empirical analysis of current situation of physical education teachers in "985 Project" universities

With the progress and development of society, P.E teachers has improved obviously from every aspect recently. According to geographical landscape, this study carries on empirical analysis by taking samples of construction index of sports teachers from five "985 Project" universities, mainly using sample survey, statistical analysis, and other empirical research methods.

### 2.1. Sampling statistics of current situation of physical education teachers in "985 Project" universities

#### 2.1.1 According to Table 1, we can see the title structure of P.E teachers in five "985 Project" universities takes on

oval structure, which is basically similar to the situation where according to Lv Yan's statistical data, it takes on 70% of oval structure<sup>[3]</sup>.

Because it does not take on inverted pyramid ideal structure as faculty structure of research universities in foreign countries does, there is a lot of room for improvement in the title structure of P.E teachers in five "985 Project" universities. The status of P.E teachers in five "985 Project" universities is shown as Table 1.

Table 1 Title structure list of P.E teachers in five "985 Project" universities

	PE teaching and researching section in A university		PE school in B university		PE section in C university		PE department in C university		PE section in C university	
	number	ratio %	number	ratio %	number	ratio %	number	ratio %	number	ratio %
professor	6	12.2	7	11	6	20.2	5	7	4	7.7
associate professor	34	69.3	26	41	11	36.6	33	46	23	44.2
lecturer	5	10.3	28	43.7	11	36.6	31	43	18	34.6
assistant	4	8.1	3	4.7	2	6.6	2	2.8	7	13.5
total	49		64		30		71		52	

\*data sources: websites of sampled universities; deadline: May 2013

2.1.2 Education of teachers in "985 Project" universities represents the scientific research ability and academic level of the whole teachers. With regard to the trend of global higher education development, universities in developed countries attach great importance to the highly educated teachers<sup>[4]</sup>.

The number of doctors is an important indicator of the quality of a university. A lot of research has taken doctoral rate of university teachers as a evaluation indicators for evaluating strength of a college faculty in the evaluation system. In our colleges and universities, especially in the general colleges and universities, there is a big gap in doctoral rate compared with foreign research universities (such as France reached 100%). On the basis of detailed statistics, educational structure of P.E teachers in five "985 Project" universities is shown as Table 2.

Table 2 Educational structure list of P.E teachers in five "985 Project" universities

	PE teaching and researching section in A university		PE school in B university		PE section in C university		PE department in C university		PE section in C university	
	number	ratio %	number	ratio %	number	ratio %	number	ratio %	number	ratio %
bachelor degree	25	51	34	53	23	77	31	44	24	46
master degree	13	27	20	31	6	20	35	49	24	46
doctor degree	11	22	10	16	1	3	5	7	4	8
total	49		64		30		71		52	

2.1.3 Age is a sign of growth, and there should be a reasonable teacher age structure in a good group.

According to Jia Zhenyong's study, unreasonable teacher age structure is one of the main reasons that affect the teaching of physical education in colleges and universities<sup>[5]</sup>. We need old teachers with rich teaching experience, meanwhile, more creative middle-aged teachers and young teachers who dare to challenge new things need to be involved. This age structure is in line with law of educational development and law of talent cultivation. Experience tells us that the average age about 40 years old of teachers is quite reasonable. But P.E teachers not only require to have good athletic skills, but also require a good physiological function. And age is closely related to the physiological function, therefore, the age of P.E teachers should be younger than the average age of other professional teachers. Statistical age structure is shown as Table 3.

Table 3 Age structure list of P.E teachers in five "985 Project" universities

	PE teaching and researching section in A university		PE school in B university		PE section in C university		PE department in C university		PE section in C university	
	number	ratio %	number	ratio %	number	ratio %	number	ratio %	number	ratio %
over the age of 50	10	25	8	28	6	35	14	36	17	63
between the age of 40 and	19	39	32	50	13	43	33	46	15	29

between the age of 30 and 39	17	35	17	27	10	33	21	30	10	19
between the age of 20 and 29	3	6	4	6	0	0	1	1	10	19
total	49		64		30		71		52	

2.1.4 Sex structure refers to the ratio and composition of different gender members in a group structure. Due to the effect of traditional idea and the specialty of physical education, there is an imbalance in the sex structure of the university P.E teachers<sup>[6]</sup>.

According to statistics of overall sex structure of P.E teachers in "985 Project" universities, we can obtain the result as shown Table 4. The ratio of female teachers is about 30-40 percent. With the increasing of modern sports new projects, the short of female teachers has also restricted the development of the overall construction of sports teachers in colleges and universities.

Table 4 Sex structure list of P.E teachers in five "985 Project" universities

	PE teaching and researching section in A university		PE school in B university		PE section in C university		PE department in C university		PE section in C university	
	number	ratio %	number	ratio %	number	ratio %	number	ratio %	number	ratio %
female	19	39	19	30	9	30	27	38	15	29
male	30	61	45	70	21	70	44	62	37	71
total	49		64		30		71		52	

## 2.2. Statistical analysis on the status of physical education teachers team in the "985 Project" universities

First, Analysis on the achievements of the construction of physical education teachers in the "985 Project" universities.

Physical education discipline construction has made great progress under the leading of all leaders, the construction of teaching staff has also been significantly improved. But the development dose not keep up with the pace of the times, in the future, we still need to make more efforts to make our construction of Physical Education Teachers catch up with the international first class universities teaching teams. From the sampling data, there are some problems in the teaching team of Physical Education: 1. Age structure, teachers over 50 years of age accounted for a large proportion, with an average of about 37%, such as the proportion of A University achieves 63%. The teacher ratio from the age of 40-50 close to half between 29%~50%. 2. The structure of professional title is mainly in the majority of the deputy senior teachers, accounting for more than 45%. 3. Refer to education, mainly bachelor's degree, accounting for more than 51%, physical education teachers with a master's degree, doctoral degree and age at 30~40 years accounting for 19%~35%. This part of the youth sports teachers, is about to become the main force. They have nearly ten years of work experience, with the leading of the old teachers and their own education degree, they are growing into the backbone of the physical education team. 4. Refer to age, the number of 20~30 year old teacher is relatively small, the proportion of young teachers in most sports schools (departments) are below 10%, young teacher age under 30 in C University is "0", which means in recent years, we didn't pay attention to the need of discipline development trend in the introduction of physical education teachers.

Second, the existing problems of "985 Project" universities physical education teachers team

From the overall sampling, Physical education teaching team has various degrees of problems and deficiencies in title education, age, gender and other structural aspects as follows. From the statistical data, among "985 Project" universities physical education teachers, the proportion of professors is significantly low. The proportion of Physical Education professor in A university accounted for 12% of the total number of physical education teachers, the proportion in B university is 7%, the proportion in C university is 20%. The proportion of associate professor was obviously larger. The proportion of associate professor in the department of physical education team in A university is 69.3%, most of them are close to about 50%. The proportion of the instructor is close to that of the associate professor, the highest is 43.7%~10.3%. The proportion of assistant teacher is obviously insufficient, which means in recent years, "985 Project" universities young physical education teachers recruitment is more strict, but the lack of fresh blood supply is also an important factor that hinder the development of physical education teaching team.

Third, The situation of senior teaching staff in "985 Project" universities physical education teachers team is not optimistic.

We can see the age of senior teachers from the statistical results of table 5, "985 Project" universities physical education teachers mainly in middle and young age, more than half from 40-49, Teachers over the age of 50 accounted for about 35%. The quantity of associate senior teacher under 30 is less than half in almost every school,

the highest proportion is in A university which is accounted for 20%, C university is 6%. There is no associate senior or above titles teacher under 30 in E university. Overall, the team of associate senior or above titles teachers hasn't formed a reasonable structure. In the follow-up teaching staff training, we should strengthen the training of young teachers. Through a reasonable evaluation system, to help the young teachers grow up faster and enrich the high level teaching team.

Table 5 Physical education teaching staff list of five "985 Project" universities

Name of University	Age of professor, associate profess((proportion)						Education of professor, associate profess((proportion)						Doctoral tutor, master's tutor Number		Total
	Above 50		40-49		30-39		Doctor		Master		Bachelor				
A Physical Education Department	10	25%	22	55%	8	20%	10	25%	6	15%	24	60%	无	7	40
B Physical Education Department	8	28%	18	62%	3	10%	9	38%	8	33%	17	71%	无	无	29
C Physical Education Department	6	35%	10	59%	1	6%	1	6%	3	18%	13	6%	无	5	17
D Physical Education Department	14	36%	21	54%	4	10%	10	25%	6	15%	24	60%	2	8	39
E Physical Education Department	17	63%	10	37%	0	0	2	7%	5	19%	20	74%	无	13	27

### 3. The management measures to improve physical education teachers team in "985 Project" universities

For the "985 Project" universities physical education teaching team construction, we should make full use of the successful experience of other universities, combined with the running goal of the university, to use the relevant knowledge of human resource management, in view of the existing problems, put forward reasonable and constructive suggestions and improvement measures.

3.1. The physical education teachers in the "985 Project" universities should strengthen their own professional quality, and give full play to the subjective initiative of teachers through the theory of teacher professional development.

The development of teachers is the process of the realization of the value of teachers' lives. The school provides a new stage for the development of physical education teachers, and puts forward higher requirements for the comprehensive quality of physical education teachers. Physical education teachers should fully aware the practical significance of education, combine the school development goals, and constantly enhance their spiritual pursuit, enhance professional ethics, master the law of education, expand the discipline knowledge, strengthen the professional skills and improve the level of education and teaching. Through the improvement of the teachers' own understanding, develop a reasonable development plan, keep up with the pace of development of the times.

3.2. Refer to the management department and related personnel of "985 Project" universities, they should refer to the professional particularity of physical education teachers, to overcome the system and mechanism shortages caused by historical reason, change ideas, to improve the current situation of the construction of physical education teaching team through making evaluation and examine index system for the development of physical education teachers.

In general, to build a high quality "985 Project" universities physical education teachers team, first we should understand and analyze the current status objectively, at the same time, fully understand the cultural characteristics of the group and its unique way of working. Combined with the construction and management of physical education teachers, make overall aim. Whether in the system development, or assessment methods, it is not only to consider the specialty of physical education teachers, but also follow development of the times, to provide a strong guarantee for the development of physical education teachers team.

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