# Investigation and Effect Evaluation on Factor of University Table Tennis Club Performance

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#### Abstract

This paper studies the qualities and motivations for Participation that affect the development of table tennis clubs in University of Chongqing. A total of 400 students of universities in Chongqing participated in the study. All samples were administered to respond to a self-complete constructed survey questionnaire. All students were agreeable to voluntarily participate in response to self-complete questionnaire. Through the design, issuance and recovery of the questionnaire, we get the first-hand research data. The collection of data. The data are collected and analyzed by statistical software. The findings revealed that it promoted the healthy development of physical and mental health of a large number of college students in Chongqing and improved students' personal mental, social inclusion; strengthened and enriched the construction of campus sports culture; and effectively improved the welfare of faculty and staff. The hypothesis was tested and the resulted showed that qualities have a significant supported the influence on table tennis club performance and the motivations for participation have also a significant supported the effect on table tennis club performance.

Keywords: Table tennis club, Management, Membership

## Introduction

With the development of economy, social progress, and continuous improvement of science and technology, human physical labor has become less and less. People's needs and desires for physical exercise are getting higher and higher. Especially in contemporary colleges and universities, there is a need for a good sports culture and atmosphere. Because the university is the cradle of talents in today's society, it is the institution of higher learning that trains the future builders and managers of the country. The burden on the shoulders is a long way to go. Whether a college student has a good or bad academic performance, he or she must have a physical and mental health. Their physical health is closely related to the prosperity of the country. Their physical health is related to the country's development, future and destiny.

Chongqing is located in the southwestern part of China, with a unique climate, hot and hot summers, and wet and cold winters. It is also known as the "mountain city" and is also known as the fog of China, which is not conducive to outdoor sports. Due to the special geographical location and climatic characteristics, all major universities in Chongqing have listed indoor table tennis as one of these main sport courses. Therefore, table tennis is an important part of college sports. If you can establish a table tennis clubs in Chongqing's major universities and carry out effective management, then it will cultivate the healthy body and healthy personality of college students and enrich the campus culture of important.

## Research Objectives

- 1. To study how factors such as venue facilities, coach level, consume prices of management influence on table tennis club membership.
- 2. To study how factors such as venue facilities, coach level, consume prices of management influence on profits of table tennis club.
  - 3. To found motivation for participation in table tennis club of university.

## Methodology

Populations in this current research are more about 760,000 students of universities in Chongqing. Since there is a known population size about (760,000 students). The researcher applied Yamane's Table for the sample size. The result presents 400 samples. Questionnaires are distributed by snowball, first to the students, then to coworkers (colleagues); then to the students by their teachers, and then from students to other students. A total of 400 students of universities in Chongqing participated in the study. All samples were administered to respond to a self-complete constructed survey questionnaire. All students were agreeable to voluntarily participate in response to self-complete questionnaire.

The survey questionnaire was separately and sent directly to the students of universities in Chongqing. The individual who were anonymously assigned to respondent identification were informed about the purpose of the study and asked to participate into response to all items of the self-complete constructed questionnaire. They would also be asked to send the questionnaire back directly to the researcher after completing the questionnaire. Then, all data archived from the individual questionnaires with specific respondent identification would be edited and, subsequently, entered into the database access for data analysis.

The obtained data from survey questionnaires were entered and processed using the computation computer software. The general description of respondents as well as other relevant biographical details was described by using descriptive statistics.

The One-way ANOVA was used to test influences of First, quality (venue facilities, coach level, consumer price, service quality) Second, motivations for participation (fitness, lose weight, improve skills, communication, Leisure and entertainment) on the dependent variables using inferential statistics which included Multiple Regressions and One-way ANOVA at significant level 0.05 (P < 0.05).

#### **Results**

Demographic data of respondents obtained from the questionnaires were analyzed and described in the following tables.

Table 1 Respondents' Demographic Characteristics Classified by Gender

Gender	Frequency	Percentage
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Male	262	68.1
Female	123	31.9
Total	385	100

Findings from Table 1 showed that the majority of respondents were male (68.1%) rather than female (31.9%). These suggest that male was likely to be the main resource available at the playing table tennis of universities in Chongging.

Table 2 Respondents' Demographic Characteristics Classified by Ages (Years Old)

Age (years old)	Frequency	Percentage
18 – 19	138	35.8
20 – 21	126	32.7
22 – 23	78	20.3
24 and above	43	11.2
Total	385	100

Respondents' ages, Table 2, were classified 4 groups which were 18 - 19, 20 - 21, 22- 23, and 24 and above years old. Findings from Table 2.2 revealed that majority of the respondents were the age group of 18 - 19 years old (35.8%), followed by the age groups of 20 - 21 years old (32.7%), 22-23 years old (20.3%), and 24 years old and over (11.2%) respectively.

Table 3 Respondents' Demographic Characteristics Classified by Grade

Grade	Frequency	Percentage
One	136	35.3
Two	128	33.2
Three	77	20.0
Four	44	11.4
Total	385	100

Findings from Table 3 revealed majority of the respondents' grade of proportion were 35.3%, grade two of proportion were 33.2%, grade three of proportion were 20.0%, and grade four of proportion were 11.4% respectively.

Since this present research is trying to investigate the relationships between qualities (venue facilities, coaches' level, consumer prices, service, advertisement) and table tennis club performance, we employed several groups of factors which from the literature reviews stated that have relationships to each other. From the conceptual framework, we linked together those factors in 3 boxes and tried to evaluate their influence using descriptive statistics including Mean and standard deviation (S.D.) to see how important they are when compare to other factors. The results are presented below:

Table 4 Analysis Results of Influencing Factors Mean Ranking from Q5 to Q16

Questions for variables (factors)	Mean	SD	Level	Ranking
4. Places and equipment are the main reasons				
that affect the learning effect of table tennis	3.64	.957	Agree	11
clubs.				
5. The school table tennis courts can meet the	2 71	004	A = u = =	0
needs of students.	3.71	.994	Agree	9
6. The more standard table tennis club	3.94	1 170	Agroo	3
venues, the better.	5.94	1.172	Agree	3
7. The level of coaches is the main reason that	t			
affects the learning effect of table tennis	3.77	1.086	Agree	8
clubs.				
8. The higher the technical level of coaches,	4.02	1.000	\ aroo	2
the better.	4.02	1.000	Agree	۷
9. The more teaching experience coaches have	4.13	.997	\ aroo	1
the better.	4.13	.991	Agree	1
10. School Table Tennis Clubs Should Fee.	2.92	1.399	Neutral	14
11. The Main Reasons of Consumer Price				
Affecting the Learning Effect of Table Tennis	3.46	1.203	Agree	13
Clubs.				
12. Healthy consumption is worthwhile.	3.92	1.171	Agree	5
13. Service quality is the main reason that	3.55	1.337	Agree	12
affects the learning effect of table tennis clubs	5.55	1.551	Agree	12
14. School table tennis clubs must have good	3.80	1.276	Agree	7
service quality.	5.00	1.270	Agree	r
15. Service quality is an important symbol of	3.82	1.251	Agree	6
club management level.	3.02	1.231	715100	O
16.Good advertising can effectively increase	3.67	1.086	Agree	10
the membership of college table tennis				
clubs.				
17. Good network publicity can quickly	3.82	1.000	Agree	6
increase the membership of college table				
tennis clubs.				

Questions for variables (factors)		Mean	SD	Level Ranking
18.	Proper increase of advertising	4.93	0.997	Agree 4
investment can effectively increase the				
membership of table tennis clubs in Colleges				
and	universities.			
Valid	N (list wise)			

Table 5 Analysis Results of Influencing Factors Mean Ranking from Q17 to Q31

Questions for variables (factors)	Mean	SD	Level	Ranking
19. Table tennis teaching in schools can				
meet the needs of the growth of	3.66	1.300	Agree	7
individual tennis skills.				
20. The purpose of my participation in the				
table tennis club is to improve table	3.61	1.305	Agree	8
tennis skills.				
21. I like to participate in table tennis	3.47	1.451	Agroo	11
competitions.	5.41	1.431	Agree	11
22. The purpose of my participation in	3.93	1.247	Agree	1
table tennis is is to exercise.	3.93	1.241	Agree	1
23. I am in good health.	3.78	1.260	Agree	3
24. The characteristics of table tennis are	3.77	1.262	Agree	4
very suitable for my exercise.	5.11	1.202	Agree	4
25. The purpose of my participation in the	3.54	1.346	Agree	9
table tennis club is entertainment.	3.54	1.540	Agree	
26. The purpose of my participation in the	3.66	1.262	Agree	6
table tennis club is leisure.	5.00	1.202	Agree	O
27. The purpose of my participation in the				
table tennis club is to enrich my spare	3.72	1.252	Agree	5
time.				
28. The purpose of my participation in the	3.22	1.554	Neutral	13
table tennis club is to make friends.	3.22	1.551	ricatiat	13
29. My personality is more extroverted.	3.53	1.356	Agree	10
30. I think diplomacy is also an important	3.87	1.237	Agree	2
part of College life.	3.01	1.231	715100	_
31. The progress of table tennis				
technology can increase the sense of	2.96	1.526	Neutral	14
achievement of college students.				

Questions for variables (factors)	Mean	SD	Level	Ranking
32. Every victory in table tennis				
competition can increase college	2.75	1.599	Neutral	15
students' sense of achievement.				
33. Participating in table tennis clubs in				
Colleges and universities can effectively	3.30	1.368	Neutral	12
enhance the sense of achievement of	3.30	1.500	Neutrat	12
college students.				
Valid N (list wise)				

## Conclusions

The researcher analyzed demographic data of the respondents, as well as qualities (venue facilities, coaches' level, consume price, service, advertisement) and motivations for participation (improving skills, fitness, communication, leisure, achievement) of universities in Chongqing. A total of 400 questionnaires were distributed to students (table tennis option class student) of universities in Chongqing, and 395 were completed and returned, in which the author chose 385 samples to do data analysis. The data analysis was performed according to two general objectives including finding out the problems existing in the current table tennis club including general information regarding qualities(venue facilities, coaches level, consume price, service, advertisement). The data analysis was performed according to two general objectives including finding out the problems existing in the current table tennis club including general information regarding qualities(venue facilities, coaches level, consume price, service, advertisement); and (ii) motivation for participation ( ( improving skills, fitness, communication, leisure, achievement), and finally suggest practitioners or organization on how to improve table tennis club of universities in Chongqing management and development.

Table 6 Analysis Results of Hypotheses Testing

Hypothesis	Results
H1: Qualities have a significant influence on table tennis club	Accepted
performance.	
H2: The motivations for participation have a significant effect on	Accepted
table tennis club performance.	

Table 6 summarized the results of testing hypotheses. First, the findings from this study also revealed those venue facilities, coaches' level, consumer prices, service quality. The results from hypothesis test also reveal significant relationships between the qualities have a significant influence on the number of members of the table tennis club.

Second, the findings also revealed strong relationships between the motivations for participation have significant effect on the number of members of the table tennis club. From the findings, researcher could summarize that the qualities of university table tennis clubs seriously affect the benefits of table tennis clubs, and then affect the progress and development of the clubs. Among the many factors, the qualities of coaches, including technical level, teaching experience and service equality are very important factors.

Finally, the results from hypothesis tests revealed significant relationships between the qualities have a significant influence on the number of members of table tennis club; significant relationships between the motivations for participation have significant effect on the number of members of table tennis club.

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