



A Study of Basketball Course Teaching Quality, Sports Enjoyment, and Learning Satisfaction in College Students

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Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/AJESS/2017/39751

Editor(s):

(1) Bayram-Jacobs, Durdane, Department of Science Education of Radboud University, Netherlands.

Reviewers:

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(2) Yüksel Savucu, Firat University, Turkey.

Complete Peer review History: <http://prh.sdiarticle3.com/review-history/23358>

Original Research Article

Received 29th November 2017

Accepted 15th February 2018

Published 27th February 2018

ABSTRACT

The purpose of this study is to analyze the college students perceived of teaching quality, sports enjoyment, and both influences on learning satisfaction with the basketball course. In this study, eight university students as the research object; adopt the random-sampling method, a total 1026 effective questionnaires were collected. The effective questionnaires used descriptive statistics and partial least squares (PLS), this studied have the following findings: 1. the quality of teaching is "teachers have professional skills" as the highest. 2. the sports enjoyment is "it can improve health" as the highest. 3. the learning satisfaction is "the technical ability of the teacher " as the highest. 4. The teaching quality has a positive effect on the sports enjoyment and the learning satisfaction. In addition, sports enjoyment has a mediating effect. According to the above findings, this study not only to make recommendations for the implementation basketball teaching of the university, but also for future researchers give research reference.

Keywords: Teaching qualities; sports enjoyment; learning satisfaction; basketball course; and perception.

1. INTRODUCTION

In school physical education (PE), basketball course has always been a favourite activity for students. Especially from junior middle school to college, students can often play basketball games on physical education courses. At the university stage, it is almost the last stage for students to learn. At this stage, students' physical and psychological development is maturing, and they also have preliminary judgement for social affairs. The goal of a good quality PE curriculum is to teach students to acquire the skills needed for sports, to experience the fun of activities and to cultivate regular exercise habits in their daily lives [1]. Therefore, the university to the construction and teacher education, and declares the hardware sound, in addition, how to provide university students with high-quality education service quality, enhance the competitive ability of the students, is not to be ignored issues for the university. According to the research finding, the curriculum of school physical education potentially provides students with opportunities for sports activities and teaches them skills and knowledge needed to establish and maintain an activity lifestyle [2]. And some researchers found that the enjoyment of PE is the most effective way to promote teenagers' physical activities [3,4]. The enjoyment is an important component of students' positive attitude to PE, but also to the sports teacher in the teaching of important targets [5], is considered when the connection with physical activity studies, sports enjoyment is an important variable. Because to understand the students to participate in the activities of physical enjoyment, and the relationship between other psychological variables and fun, can help researchers and practitioners of sports intervention strategies to design more effective learning [3], and according to the study pointed out that the relationship between sports enjoyment and learning satisfaction [6]. Therefore, understanding learning satisfaction is an important reference to measuring the success of teachers' teaching and curriculum implementation. Not only that it can also measure whether the quality of teaching is good or not. Based on the above analysis, the purpose of this study takes elective basketball college students as objects to understand the effects of teaching quality and sports enjoyment on their learning satisfaction, and hope that the research results can provide references to the implementation of college PE.

2. LITERATURE REVIEW

2.1 Teaching Quality

In the school teaching environment, teachers and students will have the most direct interaction, the key role of teachers and enhance the quality of education, quality education and teachers' teaching quality control need to rely on the site to ensure that the primary task of teaching and create more good teaching quality. The teaching quality of the range is very wide, not for the meaning of teaching quality by students' performance have to difference, Lawn (1991) think that the teaching quality is a kind of non-self-evident, the concept of context-based [7]. Marsh (1991) sums up nine teaching quality indicators: (1) the organization ability, (2) clear mouth, (3) learning value, (4) score, (5) student achievement, (6) working class, (7) the classroom discussion, (8) individual tutoring, (9) teachers' enthusiasm and extensive content analysis [8]. Dwyer and Stufflebeam (1996) pointed out those eight indicators of teaching quality: (1) teaching method with flexibility, suitable conditions and assessment of the, (2) with the teaching theme, teaching plan and learning activities consistent ability, (3) effective communication of teaching objectives, (4) with professional teaching knowledge and enthusiasm, (5) actively promoting learning experience through the interaction of teachers and students, (6) attitude of students with respect to clear, (7) give feedback as the teaching direction of guided learning and provide the basis for improving teaching, (8) appropriate and fair assessment and classification [9]. In recent years, the "PBZ service quality model" has been widely introduced into the campus as an indicator of students' evaluation of teaching. Parasurman, Zeithaml and Berry (1985) advocate that the service quality is compared to the standard of service expected by the customer and the level of service that is actually felt [10]. Parasurman, Zeithaml and Berry (1988) to develop a set of measurement standards for service quality scale, scale of five dimensions is as follows [11]: (1) tangibles: refers to the tangible items that are used in the service process, the part of the entity that the customer can see, including the physical facilities and the department of the service staff, (2) reliability: refers to the service performance can reach the ability, that is correct and reliable ability to conduct the agreed service, (3) responsiveness: refers to help customers solve problems quickly and provide customers with immediate demand, (4) assurance has the

service personnel required to perform services of knowledge, ability and manners to achieve full service, and can stimulate customer confidence, (5) empathy: means to provide special care and attention to the customer. In the study of sport and service quality, the following five dimensions are defined as the following [12,13]: (1) tangibles: sports venues, equipment and environment are used by students, (2) reliability: students can learn the correct knowledge and sports skills, (3) responsiveness: teachers can help students to solve problems and needs, (4) assurance: the teacher is able to conduct friendly attitude of teaching, let the students have a sense of security in the learning, and can obtain good results, (5) empathy: teachers can give special care to students, especially those who need special guidance.

2.2 Sport Enjoyment

Sports enjoyment can be described as: "A positive emotional state that expresses a general feeling of exercise experience, such as happiness, preference, and pleasure [14,15]. Therefore, sports fun should be the pleasure and joy of the sports participants in the process of movement. From the goal of physical education, fun also plays an important role. The goal of physical education is the following five points [16]: (1) sports skills: learn all kinds of activities, improve sports skills, and enjoy the fun of the activities themselves, (2) regular participation: regular participation in the activities can maintain the skills and the health of the body, (3) physical fitness: training physical fitness and health have a great contribution to the development of fun life, (4) active knowledge: it is important to understand the importance of physical education and the relationship between health and happiness, (5) attitude: students' attitudes toward physical education and activities for the successful completion of their feelings, they will affect the day after in words the students know the benefits of sports, can have fun in sports. Scanlan and Lewthwaite (1986), according to related research, divided the sports enjoyment into four quadrants, the four quadrants of which delineated the fun of sports [17]: 1. Quadrant I (Achievement-Intrinsic): Predictive on individual ability and Control of perception, such as understanding and proficiency. 2. Achievement-Extrinsic: Predictive perceptions of individual ability and control, derived from others, such as positive social evaluation and socially sanctioned athletic achievement. 3. Quadrant III(Non-achievement-Intrinsic): Predicts a sense of

excitement about (a) physical activity and action, such as sensation, stress release, action, and pleasure, and (b) for example competition exciting. 4. Quadrant IV (Non-Achievement-Extrinsic): predictive of the situation of non-performing individuals, for example, with close peers and adults have a positive interaction, around and share with each other sports experience. Hashim, Grove, and Whipp (2008) developed the Sports Fun Scale for Adolescent Physical Education [18]. Following a validated factor analysis, they divided the scale into four factors according to the pleasure study of Scanlan and Lewthwaite study [17]. However, after exploratory factor analysis, six factors were formed, and 14 items were deleted. After the confirmatory factor analysis, these six factors were identified as self-referent competency, other-referent competency, activity-generated excitement, teacher-generated excitement, peer interaction and parental appeal. Carraro, Young, and Robazza, (2008) to 5934 Italian students as the object, analysis of physical activity enjoyment scale validity, results showed that there were significant differences in different gender and age in the fun, women with age, to feel the fun activities significantly decreased [19]. Hashim, Grove, and Whipp (2008) study west of Australia 481 middle school students as the object, analyzes the relationship between physical education and physical activities, fun and sports exercise habit strength model, the structural equation model was found between men and women, and no significant differences exist, the most important thing is to find physical education the fun is to engage in physical activity of youth media [20].

2.3 Learning Satisfaction

Satisfaction is usually used in the study of consumer behaviour. In recent years, this concept has been widely used in teaching to understand the students' learning effectiveness. That learning satisfaction is a sense or attitude towards learning activities. The satisfaction of this activity is due to students' interest in learning activities or their desire and needs in the learning process. Therefore, learning satisfaction can be used to explain the motivation of students' participation in learning activities and the results of participation in learning [21]. The factors that influence students' learning satisfaction can be divided into two categories, one is the intrinsic factor of students, that is, motivation factors, such as learning achievement, teachers and classmates' recognition, learning itself and so on.

The other is the factors other than the students themselves, such as the learning environment, the interpersonal relationship, and the administrative measures of the school and so on. If there is an incentive factor, it will make students feel satisfied, otherwise, they will be dissatisfied. If there are health factors, students will feel satisfied, otherwise, they will feel unhappy [22]. As a result, the students' learning satisfaction is related to the intrinsic factors of the students and the external learning environment. Research has demonstrated that students' satisfaction in physical activities during college years has long-term results for constructing their leisure patterns and behaviour later in life [23]. The study pointed out that the students participate in sports in the University during the period of satisfaction, will enhance the physiological and psychological and social wellbeing [24]. Therefore, the satisfaction of sports participation not only promotes the physical and mental development of the students but also shows that this participation is an important driving force for the establishment of long-term exercise habits [25]. In the study of teacher's self-efficacy of Pan (2014), learning satisfaction was divided into two factors including teaching implementation and learning effect. Teaching implementation refers to the teachers' teaching skills and attitudes [26]. In the study of Chen and Stotlar 's physical education, learning satisfaction is divided into five factors [27]: (1) quality of teachers which refers to the teachers' teaching attitudes and techniques; (2) quality of administration which refers to the attitudes and behaviors of faculty and convenience of utilizing equipment; (3) the programs factor includes time of classes, competence of faculty and evaluations; (4) facilities measures students' satisfaction with characteristics such as lights, air conditioning and activity spaces; and (5) the social relations factor refers to the development of sportsmanship, communication skills and team work.

2.4 Hypothesis

Chen and Stotlar (2012) indicated that some other factors might influence the relationship between learning motivation and learning satisfaction. These factors include quality of teaching, peer relationships, quality of administrative procedures, and facilities [27]. Tessier et al. (2010) also indicated that teachers' teaching style could have a positive effect on students' psychological satisfaction in physical education. Learning achievement is the key

reason for students' learning satisfaction [28]. Wang and Sugiyama (2011) examined the relationship between health status and satisfaction with PE lessons in college students. Result found that that the changes in health status significantly correlated with satisfaction with PE lessons, and indicated that satisfaction with PE course was significantly related to enjoyment [6]. Yang (2013) explore the degree of sports enjoyment and learning satisfaction when children are involved in physical education class, a result found that competition process, sports ability, and social support of sports enjoyment reached significance in the prediction of learning satisfaction [29].

- H1. The quality of teaching has a positive influence on the enjoyment of the students to learn basketball.
- H2. The quality of teaching has a positive influence on the learning satisfaction of the students to learn basketball.
- H3. The students' sports enjoyment of basketball has a positive influence on the learning satisfaction.

3. METHODS

3.1 Subject and Sampling

The subject of this study is to select basketball courses students in the college. The researchers consider their own limitations, so just select eight universities are the scope of the study. According to the statistics, about 1100 students are selected to take basketball courses in eight universities, so the researchers use the time of the students to take a questionnaire survey. Before the survey is carried out, the researchers will tell the students the purpose of the study will not affect their academic achievement. A survey from November to December 2017, a total of 1026 effective questionnaires were collected, and the effective questionnaire rate was 93.27%.

3.2 Questionnaire

In this study, the questionnaire is divided into four parts, the first is the teaching quality scale, this part of the scale consisted of 25 items, based on the Parasuraman, Zeithaml and Berry [10,11] developed service quality scale, and refer to teaching quality research [4,5,6,12,13] to comply. The second part is the "sports enjoyment scale". There are 23 questions in this part of the scale. It mainly refers to the definition of sports enjoyment in Scanlan and Simons [14], and Garn and Cochran [30] to develop the

physical education enjoyment scale. The third part is the "learning satisfaction scale". There are 33 questions in this part of the scale. It mainly refers to learning satisfaction research [22-26] to comply. Above three scales used a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. The fourth part is the student's background changes, including gender, grade, and study department.

3.3 Data Analysis

In this study, frequency distribution and percentage were used to analyze the background variables of students, and the distribution of students' teaching quality, sports enjoyment and learning satisfaction. Warp PLS 5 statistical software was used to test reliability and validity of the scale and analyzed with the partial least squares (PLS) statistical method. The contents of the reliability and validity analysis of related scales in models can be divided into the following as item reliability, convergent validity and discriminant validity. In measuring the reliability of the item, this study will be detected by composite reliability (CR) and Cronbach's alpha coefficient. According to Fornell and Larcker [31] and Nunnally and Bernstein [32], the verification standard for the value of CR and Cronbach's alpha shall be equal to or greater than that of .70. The convergent validity, according to Hair, Black, Babin, and Anderson's suggestion, factor loading must be greater than .50, and the average variances extracted (AVE) must be greater than .50 [33].

4. RESULTS

4.1 Students Profile

Among the effective questionnaires collected in this study, there are 554 males (54%) and 472 (46%) for female. In term of grade, there are 360 (35.1%) is a freshman, 250 (24.4%) is sophomore, and 416 (40.5%) is junior. In students' study, there are 360 (35.1%) in business, 184 (17.9%) is management, 172 (16.8%) is industrial, cultural communication is 126 (12.3%), and the education is 184 (17.9%). There are 400 people regular doing basketball (39%), however, most students are not having habit engage in recreational sports.

4.2 Reliability and Validity of Scale

4.2.1 Basketball course teaching quality scale

From the results of Table 1, the reliability of this scale each factor CR and Cronbach's Alpha

coefficient is greater than .70, so the reliability is good. In terms of validity, the factor loading of each item is greater than .50, and greater AVE than .70, its show that scale has a good convergent validity.

4.2.2 Sports enjoyment scale

From the results of Table 2, the reliability of this scale each factor CR and Cronbach's Alpha coefficient is greater than .70, so the reliability is good. In terms of validity, the factor loading of each item is greater than .50, and greater AVE than .70, its show that scale has a good convergent validity.

4.2.3 Learning satisfaction scale

From the results of Table 3, the reliability of this scale each factor CR and Cronbach's Alpha coefficient is greater than .70, so the reliability is good. In terms of validity, the factor loading of each item is greater than .50, and AVE greater than .60, its show that scale has a good convergent validity.

4.3 Analysis of Teaching Qualities, Sports Enjoyment, and Learning Satisfaction

4.3.1 Teaching quality

The results of the analysis show that the best first five items of the students' response to the quality of teaching are: teachers have professional skills, the space is suitable, the teacher will pay attention to the safety of the students at any time, the result of the skill measurement, and teacher has a rich knowledge of professional sports. As a whole, the students' response tends to be between ordinary and satisfactory.

4.3.2 Sport enjoyment

The results of the analysis show that the best first five items of the students' response to the sports enjoyment are: it can improve health, can interact with your classmates, increase the opportunity for me to compete with others, the quantity of the equipment is sufficient, and the position of the trash can. As a whole, the students' response tends to be between ordinary and satisfactory.

Table 1. Basketball course teaching quality scale

Latent variables	Items	Mean	SD	Factor loading	CR	Cronbach's alpha	AVE
Tangibles	1. Space is suitable.	4.04	.96	.82	.94	.92	.76
	6. Site equipment is suitable.	3.91	1.02	.84			
	11. The equipment is suitable.	3.88	.98	.84			
	16. The equipment of the basketball court is suitable.	3.75	1.07	.81			
	21. The rest area of the basketball court is suitable.	3.65	1.09	.77			
Reliability	2. Teachers have professional skills.	4.06	.93	.84	.95	.92	.79
	7. Teacher has a rich knowledge of professional sports	3.94	.94	.87			
	12. Teachers have good teaching attitude.	3.83	.97	.87			
	17. Teachers can create a good teaching atmosphere.	3.81	1	.89			
Responsiveness	22. Teachers' teaching evaluation is objective and impartial.	3.77	.96	.84	.95	.93	.77
	3. The teacher can deal with the opinions of the student's reaction quickly.	3.92	.97	.85			
	8. The teacher will immediately give students instruction.	3.87	.99	.85			
	13. The teacher can put the student's advice into the course teaching.	3.74	1.01	.86			
	18. The teacher can adjust the teaching content according to the students' learning situation.	3.79	1.04	.88			
Assurance	23. Teachers can design a variety of learning methods to meet the needs of the students.	3.71	1.02	.83	.94	.92	.75
	4. Basketball skills are progress.	3.73	1.13	.77			
	9. The physical fitness is improved.	3.75	1.07	.83			
	14. Promote interpersonal relationships.	3.71	1.03	.85			
Empathy	19. Enjoy the fun of basketball.	3.94	1.08	.80	.94	.92	.77
	24. The curriculum planning is systematic.	3.75	1.02	.84			
	5. The teacher will take the initiative to care for the students' learning situation.	3.87	1.02	.87			
	10. The teacher has a good interaction with his classmates.	3.83	1.02	.88			
	15. The teacher can listen to the student's advice.	3.73	1.03	.86			
20. The teacher will carry out individual tutoring for the students who are not good at learning.		3.75	.99	.79			
	25. The teacher will pay attention to the safety of the students at any time.	3.95	.1	.83			

Table 2. Sports enjoyment scale

Latent variables	Items	Mean	SD	Factor loading	CR	Cronbach's Alpha	AVE
Sport benefits	1. It can improve health.	4.12	.93	.81	.95	.93	.78
	6. It can promote the sound of the mind.	3.90	1.04	.83			
	11.Can learn basketball skills and knowledge.	3.96	1	.86			
	16.Can release the stress of the body and mind.	3.82	1.09	.87			
	21.Can improve the fitness of the body.	3.83	1.06	.85			
Peer interaction	2.Can interact with your classmates.	4.04	.97	.81	.93	.91	.78
	7.Let me have a chance to get to know other students.	3.81	1.04	.81			
	12. Let me have the opportunity to promote the friendship among my classmates.	3.85	.99	.87			
	17. The opportunity to team work with your classmates.	3.75	1.06	.83			
Class atmosphere	3. It makes me feel free.	3.87	1.10	.82	.95	.94	.80
	8. It can release the stress of the body and mind.	3.88	1.18	.85			
	13. It makes me feel happy.	3.81	1.09	.89			
	18. It feels very exciting.	3.71	1.05	.88			
	22. Try new things.	3.84	1.04	.85			
Exercise performance	4. Provide the opportunity for self-challenge.	3.91	1.06	.84	.95	.93	.80
	9. I can show my swimming ability.	3.62	1.12	.86			
	14. There's a chance to show yourself.	3.69	1.06	.87			
	19. I have the ability to fight against others.	3.55	1.09	.84			
	23. Because I can perform better than the other students.	3.51	1.14	.81			
Competitive Enjoyment	5.Can compete with my classmates.	3.82	1.05	.82	.94	.92	.81
	10. Enjoy the joy of victory.	3.64	1.08	.87			
	15.Can win other students.	3.52	1.08	.83			
	20. The feeling of competing with the students.	3.64	1.08	.87			

Table 3. Learning satisfaction scale

Latent variables	Items	Mean	SD	Factor loading	CR	Cronbach's Alpha	AVE
Teacher teaching	1. The professional knowledge of the teacher.	3.89	1.01	.83	.94	.94	.74
	7. The seriousness of teachers' teaching.	3.85	1	.88			
	13. The technical ability of the teacher.	3.96	.92	.84			
	19. The result of the skill measurement.	3.67	1.09	.83			
	25. A demonstration of a teacher's action.	3.81	1.04	.81			
	30. Teachers' teaching attitude.	3.76	1.07	.83			
Course content	33. The interaction between teachers and students.	3.66	1.07	.79	.94	.92	.80
	2. Teaching curriculum planning content.	3.77	.95	.88			
	8. The number of weeks in the course is arranged.	3.69	1.06	.83			
	14. The arrangement of learning goals.	3.87	1	.82			
Learning result	20. The arrangement of teaching progress.	3.73	1.02	.79	.95	.94	.76
	3. Learn the interest in basketball.	3.76	1.07	.85			
	9. Improve my physical strength.	3.78	1.03	.84			
	15. Learn professional skills in basketball.	3.83	1.03	.84			
	21. Let me get a sense of achievement.	3.58	1.16	.81			
	26. Improve my sports knowledge.	3.84	1.06	.83			
Course equipment	31. Increase my sports skills.	3.72	1.08	.84	.95	.94	.75
	4. The quantity of the equipment is sufficient.	3.81	.99	.85			
	10. The quality of the equipment is good.	3.76	1.03	.84			
	16. The basketball court has enough space.	3.81	1.05	.85			
	22. The number of basketball courts is sufficient.	3.56	1.12	.82			
	27. The safety of the court.	3.77	1.04	.82			
Peer relationship	32. The number and equipment of the class.	3.76	1.05	.84	.93	.91	.74
	5. Increase the opportunity for my classmates and my classmates to practice each other.	3.83	.98	.87			
	11. Increase the opportunity for me to compete with others.	3.60	1.04	.83			
	17. Improve the feelings between me and my classmates.	3.74	1.06	.85			
	23. I can enjoy the sports skills of my classmates.	3.76	1.03	.78			
Environmental hygiene.	28. I can let me know the personality of my classmates.	3.63	1.08	.78	.90	.86	.65
	6. The position of the trash can.	3.83	1.65	.45*			
	12. The quality of the court.	3.66	1.07	.81			
	18. The air quality of the court.	3.54	1.13	.81			
	24. The environment is clean and tidy.	3.56	1.13	.81			
	29. The environmental hygiene.	3.56	1.11	.81			

4.3.3 Learning satisfaction

The results of the analysis show that the best first five items of the students' response to the learning satisfaction are: the technical ability of the teacher, the professional knowledge of the teacher, the arrangement of learning goals, the seriousness of teachers' teaching, and Improve my sports knowledge. As a whole, the students' response tends to be between ordinary and satisfactory.

4.4 Structural Model Analysis

PLS statistics are used to analyze the structural model. When the standardized path coefficient is statistically significant and is consistent with the expected direction of the research hypothesis, it indicates that the research hypothesis is supported. The results of path coefficients and R^2 values between potential variables can show the degree of adaptation between structural models and empirical data. Therefore, the higher the R^2 value, the explanatory power of models is better [31,32,33]. The results show that the teaching quality has a positive effect on sports enjoyment ($B1=.84$, $p<.01$), the explanatory power reached 69% ($R^2=.69$); teaching quality ($B2=.47$, $p<.01$) and sport enjoyment ($B3=.49$, $p<.01$) on learning satisfaction also have positive effects. The explanatory power reached 84% ($R^2=.84$).

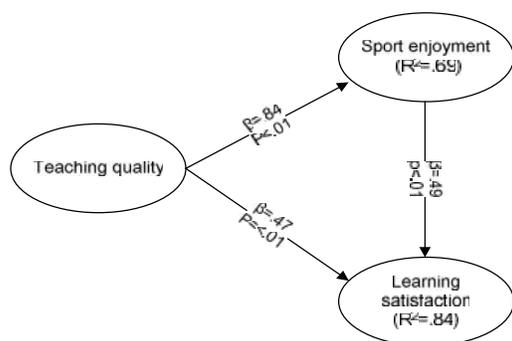


Fig. 1. Structural model

5. DISCUSSION AND CONCLUSION

5.1 Discussion

The results of the analysis show that in the students' teaching quality of basketball course is between ordinary and satisfaction between the students in teacher professional skills and appropriate space is satisfied. In addition, it is

also found that students are satisfied with facilities and equipment suitable, teachers will always pay attention to student safety and teachers have rich professional sports knowledge. The result of the above analysis is that the students are close to satisfaction and clearly show that teachers need to improve their teaching. Moreover, students are satisfied with facilities and equipment and teachers' professional skills. In fact, teachers' basketball skills and their professional skills are necessary, which is also in line with teaching requirements, and is also consistent with previous research results [8,9,12,13].

In terms of sports enjoyment, the analysis results show that junior middle school students are satisfied with the fun of basketball class with improving physical health and interacting with their classmates. In addition, the enjoyment of basketball skills such as learning skills and knowledge, providing self-challenge opportunities, and promoting psychological perfection is also close to satisfaction. Therefore, from the above analysis, it is obvious that students' interest in basketball lessons is positive because it can improve physical health, interact with students, and learn basketball skills and knowledge. In addition, compared with previous swimming class teaching and physical education research results, can find that the biggest sports fun that students believe is physical interest and peer interaction interests. The results of this study are consistent with the above results [16-20].

In the learning satisfaction, the results of the analysis show that the students' learning satisfaction is common in basketball course and satisfaction between the teachers' technical ability and teachers' professional knowledge, improve my exercise knowledge and teaching as the highest degree of serious. From the above results, the students' satisfaction with "teacher teaching" is the highest for the teaching of swimming. Compared with previous research on teaching satisfaction [22,23,24,27], it can be found that students are most satisfied with teaching in terms of "teacher teaching", so as to find teachers' intentions in teaching.

In the aspect of structure model, the analysis found that teaching quality, sports enjoyment and learning satisfaction three factors have causal relationship exists, the teaching quality has a positive effect on sports enjoyment when students feel that basketball teaching quality is

higher, they feel the sports enjoyment is also higher. Moreover, when students feel the high quality of teaching in basketball classes and the high "sports enjoyment" they experience in lessons, they have higher learning satisfaction. The results of the above study support the study of related teaching satisfaction [6,27,28,29].

5.2 Conclusion

On the teaching quality, basketball sports enjoyment and learning satisfaction, the students' answer is between generations to satisfaction. Among them, the quality of "teacher's professional skills" is the most important factor for students to improve their physical health, and the satisfaction with teachers' technical ability is the highest. The analysis found that teaching quality, sports enjoyment and learning satisfaction three factors have causal relationship exists, the teaching quality has a positive effect on sports enjoyment when students feel that basketball teaching quality is higher, they feel sport enjoyment will be higher. Moreover, when students experience the high quality of basketball teaching and the high sports enjoyment in the course, their learning satisfaction will also be higher.

5.3 Implication

5.3.1 For improve teaching quality

In the teaching of teachers, the teachers should carry out individual tutoring for the students who need help. Curriculum planning is systematic, teachers can listen to students' advice, and teachers should be able to design a variety of learning methods to meet the needs of the students. Therefore, teachers should explain to students the reasons for basketball learning and their influence on individuals, so that they cannot get rid of their psychological exclusion and, more importantly, enable them to develop lifelong exercise habits.

5.3.2 For improve sport enjoyment

Overall, students' interest in basketball lessons is also close to satisfaction. Obviously, teachers are very attentive in teaching implementation, causing students to feel the joy of learning. But there are still some areas for improvement. The researchers found that they mostly focused on sports performance because they didn't give students too many opportunities to show themselves. Problems like this all appear on the best basketball players, so the teacher may give

the opportunity to work as an assistant and ensure that they can give high scores to help basketball teaching. In addition, teachers can also handle group basketball competitions and give rewards to students with good results in order to improve the enjoyment of the course.

5.3.3 For improve learning satisfaction

In the field of learning satisfaction, we can find that no item is satisfied, and at least is only close to satisfaction, so there are many places to improve. Among them, the most important thing to improve site equipment and environmental hygiene, especially for drinking water quality, clean environment and rest area. In addition, in the improvement of equipment, the investment involved in the capital is not an immediate improvement. Because a large number of students produce such a situation, so we can adjust the implementation of the curriculum, do not go to work at too much time at a certain time, so that most people will not use the equipment at the same time.

5.3.4 For future researcher

Due to the limitation of the researcher's ability, we only take the college basketball elective course as the object, so no matter the subjects and sports items have limitations. First, it is suggested that future researchers can make a comparison of different sports to find out whether there will be differences. Secondly, in the aspect of sampling, eight universities are the main research area in the study. Therefore, it is suggested that the following researchers can expand the number of subjects and schools, to completely understand students' learning situation in basketball teaching. In addition, after studying variables, it is suggested that the following researchers can add the factors of behavioural variables, and to better understand the effect of basketball learning on their behaviour. For example, in the future, it will not be able to engage in basketball or other recreational activities.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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