

Relationship between Confidence on Sports and Satisfaction on Physical Education of Middle School Students Participating in Sport Activities

Jong-Sik Lim¹, Kwang-Sun Moon², Min-Yeong Kang³, Chun Ho Yang^{4*}

¹Department of Physical Education, Kunsan National University, 558 Daehak-ro, Gunsan-si, Jeollabuk-do, 54150, Korea; Sik1009@daum.net

²Department of Athletics, Kyunghee University, 54 Jowon-ro, Jangan-gu, Suwon-si, Gyeonggi-do, 16280, Korea; mks2212@hanmail.net

³Department of Physical Education, Yongin University, 134 Yongindaehak-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17092, Korea; code6726@gmail.com

⁴Department of Marine Sports, Hanseo University, 46 Hanseo 1-ro, Haemi-myeon, Seosan-si, Chungcheongnam-do, 31962, Korea; healthyang@hanseo.ac.kr

Abstract

Objectives: This study was conducted to identify the relationship between sport confidence and satisfaction on physical education class for middle school students who participated in sport activities. **Methods/Statistical Analysis:** Subjects in this study were students in middle schools located in Jeollabuk-do who participated in sport activities. A survey was conducted with 230 subjects and analyzed using exploratory factor analysis, reliability verification, correlation analysis, and multiple regression analysis. **Findings:** The following conclusions were derived. First of all, sport confidence and satisfaction with physical education class were positively correlated with sub-variables. Secondly, feature sport confidence, preference for competition, and status sport confidence positively influenced class contents, class methods, class environment, class effect, and physical education instructors. **Application / Improvement:** Feature sport confidence and status sport confidence positively influenced physical education instructors. The scope of this study was limited to middle school students who participated in sport activities. Therefore, a follow-up study is recommended to include more diverse subjects.

Keywords: Middle School Students, Physical Education, Satisfaction, Sport Activities, Sport Confidence

1. Introduction

As a part of social policies reflecting diverse and complicated social phenomena in modern society, sports are closely related to the lives of modern people. Most people participate in sport activities regardless of gender, age, and social class. Sport facilities, organizations, and the development of mass communication have made modern people more familiar with sports¹. Youth in Korea have fewer opportunities to build physical strength and mental power since the assigned hours for physical education were reduced in the revised academic curriculum².

It is important for young people to actively participate in sport activities because sport activities provide a solution to desire, dissatisfaction, anxiety, and tension³.

The adolescent period is when young individuals establish their criteria for self-consciousness and value judgments in addition to expanding their social perspectives. Therefore, this period is important for well-balanced development of the body and the cultivation of a social personality⁴. Adolescents are in a transition period where they experience various changes and further development of physical, mental, and social characteristics in preparation for their role as an adult. Learning or experi-

*Author for correspondence

ence during this period is a pivotal factor for developing personal characteristics and attitudes. Adolescents need to have opportunities to maintain seamless relationships with others through sport activities in addition to learning their roles and developing social skills⁵. One of the reasons why many countries encourage adolescents to participate in sports is that sports not only contribute to physical development but also serve as an important area of education supporting social, intellectual, emotional, and moral development. Therefore, sports are widely regarded as extremely valuable.

In fact, young people in Korea who need sport activities the most tend to stay at school for more than twelve hours a day due to academic curriculums specifically designed for college entrance. In addition, they invest a lot of time on academic learning including assignments from school and supplementary lessons. Therefore, it is realistically difficult for them to find time to participate in sport activities⁶, and they tend to lose opportunities to develop a positive attitude. In⁷, it insisted that adolescents are able to adjust well to school lives by participating in sport activities, while⁸ indicated that participating in sport activities eliminates anxiety and concerns and helps teenagers develop their potential. In⁹, it stated that participating in sport activities not only helps with the development of psychological and emotional stability but also with maintaining satisfying interpersonal relationships.

Rule compliance and sportsmanship experienced by participating in sport activities provide opportunities for adolescents to develop self-control. Additionally, the cooperation and role division necessary to participate in games tend to facilitate the formation of values and attitudes that develop respect towards others¹⁰. Furthermore, sport activities are an important part of education due to the formation of humanistic relationships through physical activities. Therefore, sport activities are very important for middle school students, who are growing mentally and physically.

Sport confidence is important not only for elite sport athletes but also for all participants. This type of confidence leads to better outcomes by improving the performance of humans in various situations. Sport confidence not only positively influences interest in sport activities, it also influences school life and helps adolescents perform well in class. Sport confidence refers to a belief in one's ability to control oneself in sport-related activities and to achieve one's pursuits. Sport confidence is an important

part of the motivation for selecting activities to participate in as well as the amount of effort exerted. Those with high confidence tend to trust their abilities and actively think and behave in a manner that helps them achieve what they want.

However, those without sport confidence are suspicious of their abilities and emphasize their weaknesses, resulting in them giving up easily. Confidence in physical and mental abilities determines how much an individual is able to develop their potential¹¹. Class satisfaction refers to the degree of concentration, passion, and favorable emotional attitude directed toward a class due to the satisfaction of internal and external desires by the class¹². For seamless learning by students, class satisfaction is necessary. Therefore, students should be provided with equal and fair opportunities to learn while actively participating in physical education classes to raise their interest and derive pleasure in class activities.

Adolescents participate in various sport activities in physical education class. If they are satisfied with the physical education class, they are more likely to continue participating in sport activities as grownups based on previous positive experiences¹³. However, if they fail to learn skills or develop a negative view of sport activities, it is difficult for them to continue participating in sport activities¹⁴. Satisfaction with physical education class is defined as the recognition of fulfillment due to the class¹⁵ and also refers to continued reliance on the class when circumstances meet the requirements of students including the relationship with peers or with instructors¹⁶. There was a significant difference in the satisfaction with physical education classes found in the study by¹⁷, which explored the preference for physical activities and satisfaction with physical education class in terms of the classroom, gender, and economic level. In¹⁸, it is indicated that there is higher satisfaction with school sport club classes compared to physical education classes in terms of gender, grade, and performance in physical education class.

Students participate in sport activities for various reasons. In order to derive class satisfaction, it is necessary to exert one's ability as much as possible and to gain pleasure from the process. Especially, an increase in concern and interest in physical education improves the satisfaction with physical education class and can become the foundation for life long physical activities for students. Therefore, studies dealing with physical education satisfaction based on sport confidence among middle school students are important. This study aims to analyze and

clarify the relationship between sport confidence and satisfaction with physical education and to demonstrate the importance of sport activities for middle school students. This study focuses on middle school students to emphasize the need to improve their sport confidence with healthy and transparent sport activities and to provide fundamental resources to help them gain satisfaction with physical education courses.

2. Research Methods

2.1 Subjects of the Research

This study selected students who participated in sport activities at middle schools located in Jeollabuk-do, Korea in 2016 as a sample. The quota sampling method was used to select 300 subjects. After collecting completed survey copies, copies without responses or incomplete answers were excluded. Final analysis was conducted on 230 copies after excluding 70 copies regarded as incomplete or poor responses. General characteristics of the research subjects are as follows in Table 1.

Table 1. General characteristics of research subjects

Variables	Classification	Frequency (n)	Percentage (%)
Gender	Male	140	60.8
	Female	90	39.2
Grade	1st grader	57	24.8
	2nd grader	69	30.0
	3rd grader	104	45.2
Items	Ball game	98	42.6
	Combat sports	80	34.8
	Individual events	52	22.6
	Total	230	100

2.2 Investigation Tools

The investigation tool used in this study was a survey. The survey comprised of three questions about the general characteristics of the research subjects, three items about sport confidence (twelve questions), and five items about satisfaction with physical education class (fifteen questions). The survey on sport confidence was modified and prepared according to the conditions of this study from a questionnaire developed by¹⁹ and used by²⁰ and²¹. The survey on satisfaction with physical education class was modified and prepared according to the conditions of this

study from a questionnaire used by²² and²³. Measurement options for the survey copies included 'score 1 for strongly disagree,' 'score 2 for disagree,' 'score 3 for neutral,' 'score 4 for agree,' and 'score 5 for strongly agree' using Likert criteria.

2.3 Validity and Reliability of Survey

In order to verify the validity of the survey, exploratory factor analysis was conducted. Factor extraction was applied with the major element analysis and orthogonal rotation varimax method. The eigenvalue was set to be higher than 1.0. In addition, only questions with factor loading values higher than 0.4 were selected. Reliability analysis was conducted using Cronbach's α coefficient, and only questions with values higher than 0.6 were used.

As shown in Table 2, the validity of sport confidence used in this study was extracted with three factors, namely, feature sport confidence, preference for competition, and status sport confidence. These factors had 56.745% of explanatory power for all variables. The unit matrix of Barlett was 910.421 ($p < .001$), and Kaiser–Meyer–Olkin (KMO) sample appropriateness was .776. Therefore, the selection of variables was appropriate. According to the results for internal consistency, the confidence level (Cronbach's α) was .744 for feature sport confidence followed by .774 for preference for competition, and .708 for status sport confidence.

As shown in Table 3, the validity of satisfaction with physical education class used in this study was extracted with five factors, namely, class contents, class method, class environment, class effect, and physical education instructors. These factors had 64.910% of explanatory power for all variables. The unit matrix of Bartlett was 1122.537 ($p < .001$), and the KMO sample appropriateness was .710. Therefore, the selection of variables was appropriate. According to the results for internal consistency, the confidence level (Cronbach's α) was .785 for class contents, followed by .749 for class method, .785 for class environment, .701 for class effect, and .798 for physical education instructors.

2.4 Data Process

Data collected according to the objective of this study consisted of 230 copies of the survey, excepting those with inappropriate responses. Statistical Package for the Social Sciences (SPSS 20.0) was used on the collected data to confirm the normal distribution, validity, and reli-

Table 2. Results of exploratory factor analysis of sport confidence

	Feature sport confidence	Preference in competition	Status sport confidence	h ²
Factor 1	-.125	.674	.497	.717
Factor 2	.340	.774	.073	.720
Factor 3	.194	.797	-.101	.683
Factor 4	.568	.258	.237	.445
Factor 5	.618	.183	-.146	.437
Factor 6	.674	.281	.397	.691
Factor 7	.528	-.030	.213	.425
Factor 8	.006	-.008	.748	.560
Factor 9	.310	.137	.520	.458
Factor 10	.399	.012	.642	.572
Factor 11	.074	.165	.752	.598
Factor 12	-.163	.136	.748	.604
Eigenvalue	4.208	1.397	1.205	
Variance%	35.067	11.640	10.038	
Cumu%	35.067	46.706	56.745	
Reliability	.744	.774	.708	

Kaiser-Meyer-Olkin=.776 Bartlett's Unit matrix ($\chi^2=910.421$, df=66, sig=.000)

Table 3. Result of exploratory factor analysis of satisfaction with physical education class

	Class contents	Class method	Class environment	Class effect	Physical education instructor	h ²
Factor 1	.011	.210	.740	-.021	.117	.606
Factor 2	.110	.039	.778	.123	.173	.664
Factor 3	.315	.005	.578	.106	.112	.623
Factor 4	.642	.014	.388	-.160	.042	.678
Factor 5	.698	.152	.017	.125	.296	.614
Factor 6	.107	.089	.134	.765	.051	.625
Factor 7	.350	.185	.191	.506	-.098	.639
Factor 8	.057	.134	-.102	.752	.229	.650
Factor 9	.117	.059	.171	.057	.832	.742
Factor 10	.015	.107	.232	.309	.683	.700
Factor 11	.347	.340	.091	-.304	.411	.585
Factor 12	.228	.670	.045	.219	-.044	.553
Factor 13	.289	.707	.025	.230	-.055	.640
Factor 14	.285	.733	.093	-.023	.146	.650
Factor 15	-.031	.846	.131	.140	.119	.767
Eigenvalue	4.441	1.672	1.434	1.240	1.150	
Variation%	29.607	11.148	9.557	8.264	7.334	
Cumu%	29.607	40.754	50.311	58.576	64.910	
Reliability	.785	.749	.785	.701	.798	

Kaiser-Meyer-Olkin=.710 Bartlett's Unit matrix ($\chi^2=1122.537$, df=105, sig=.000)

ability. Descriptive statistical analysis, exploratory factor analysis, and reliability analysis were conducted. The confidence level for each analysis was set to $p < .05$. In order to identify the relationship among variables, correlation analysis was conducted. Multiple regression analysis were also conducted to identify the influential power among variables.

3. Results

3.1 Correlation between Sport Confidence and Satisfaction with Physical Education

In order to identify the correlation between sport confidence and satisfaction with physical education in middle

Table 4. Correlation between sport confidence and satisfaction with physical education class

	A	B	C	D	E	F	G	H
A	-							
B	.348***	-						
C	.426***	.487***	-					
D	.416***	.443***	.563***	-				
E	.468***	.508***	.475***	.557***	-			
F	.469***	.415***	.426***	.342***	.505***	-		
G	.679***	.620***	.735***	.465***	.529***	.499***	-	
H	.507***	.326***	.569***	.561***	.561***	.480***	.467***	-

* $p < .05$, ** $p < .01$, *** $p < .001$

A: Feature sport confidence, B: Preference for competition, C: Status sport confidence, D: Class contents, E: Class method,

F: Class environment, G: Class effects, H: Physical education instructors

Table 5. Relationship between sport confidence and class contents

	B	SE	β	t	p	VIF
Constant	.205	.279		.736	.463	
Feature sport confidence	.200	.063	.182	3.192**	.002	1.262
Preference for competition	.209	.066	.188	3.173**	.002	1.354
Status sport confidence	.432	.067	.394	6.427***	.000	1.454

$R^2 = .381$, $F = 49.091$ ***

** $p < .01$, *** $p < .001$

Table 6. Relationship between sport confidence and class methods

	B	SE	β	t	p	VIF
Constant	1.439	.206		6.978***	.000	
Feature sport confidence	.221	.046	.271	4.760***	.000	1.262
Preference for competition	.258	.049	.313	5.299***	.000	1.354
Status sport confidence	.168	.050	.207	3.381***	.001	1.454

$R^2 = .384$, $F = 49.743$ ***

*** $p < .001$

school students who participated in sport activities, correlation analysis was conducted. As shown in Table 4, feature sport confidence was positively correlated with class contents ($r = .416$), class methods ($r = .468$), class environment ($r = .469$), class effect ($r = .679$), and physical education instructors ($r = .507$). Preference for competition was positively correlated with class contents ($r = .443$), class method ($r = .508$), class environment ($r = .415$), class effect ($r = .620$), and physical education instructors ($r = .326$). Status sport confidence was positively correlated with class contents ($r = .563$), class method ($r = .475$), class environment ($r = .426$), class effect ($r = .735$), and physical education instructors ($r = .569$).

3.2 Relationship between Sport Confidence and Satisfaction with Physical Education Class

3.2.1 Relationship between Sport Confidence and Class Contents

As shown in Table 5 sport confidence statistically and significantly influenced class contents ($F = 49.091$, $p < .001$), and the explanatory power was about 38.1 ($R^2 = .381$) for all the variables. According to the Beta value, which reflects the relative influential power of sport confidence

Table 7. Relationship between sport confidence and class environment

	B	SE	β	t	p	VIF
Constant	.960	.280		3.423***	.001	
Feature sport confidence	.330	.063	.314	5.233***	.000	1.262
Preference for competition	.228	.066	.214	3.438***	.001	1.354
Status sport competition	.198	.068	.188	2.922**	.004	1.454

$R^2=.317$, $F=36.895^{***}$

** $p<.01$, *** $p<.001$

Table 8. Relationship between sport confidence and class effect

	B	SE	β	t	p	VIF
Constant	-.832	.176		-4.741***	.000	
Feature sport confidence	.442	.040	.400	11.193***	.000	1.262
Preference for competition	.301	.041	.269	7.275***	.000	1.354
Status sport confidence	.478	.042	.434	11.299***	.000	1.454

$R^2=.758$, $F=249.196^{***}$

*** $p<.001$

on sport contents, there was a positive influence on feature sport confidence ($\beta=.182$, $p<.01$), preference for competition ($\beta=.188$, $p<.01$), and status sport confidence ($\beta=.394$, $p<.001$).

3.2.2 Relationship between Sport Confidence and Class Methods

As shown in Table 6, sport confidence statistically and significantly influenced class method ($F=49.743$, $p<.001$), and the explanatory power was about 38.4 ($R^2=.384$). According to the Beta value, which reflects the relative influential power of sport confidence on sport method, there was a positive influence on feature sport confidence ($\beta=.271$, $p<.001$), preference for competition ($\beta=.313$, $p<.001$), and status sport confidence ($\beta=.207$, $p<.001$).

3.2.3 Relationship between Sport Confidence and Class Environment

As shown in Table 7, sport confidence statistically and significantly influenced class environment ($F=36.895$, $p<.001$), and the explanatory power was about 31.7 ($R^2=.317$) for all the variables. According to the Beta value, which reflects the relative influential power of sport confidence on class environment, there was a positive influence on feature sport confidence ($\beta=.314$, $p<.001$), preference for competition ($\beta=.214$, $p<.001$), and status sport confidence ($\beta=.188$, $p<.01$).

3.2.4 Relationship between Sport Confidence and Class Effect

As shown in Table 8, sport confidence statistically and significantly influenced class effect ($F=249.196$, $p<.001$), and the explanatory power was about 75.8 ($R^2=.758$) for all the variables. According to the Beta value, which reflects the relative influential power of sport confidence on class effect, there was a positive influence on feature sport confidence ($\beta=.400$, $p<.001$), preference for competition ($\beta=.269$, $p<.001$), and status sport confidence ($\beta=.434$, $p<.001$).

3.2.5 Relationship between Sport Confidence and Physical Education Instructors

As shown in Table 9, sport confidence statistically and significantly influenced physical education instructors ($F=55.167$, $p<.001$), and the explanatory power was about 40.9 ($R^2=.409$) of all the variables. According to the Beta value, which reflects the relative power of sport confidence on physical education instructors, there was a positive influence on feature sport confidence ($\beta=.322$, $p<.001$) and status sport confidence ($\beta=.429$, $p<.001$).

4. Discussion

This study was conducted to clarify the relationship between sport confidence and satisfaction with physical

Table 9. Relationship between sport confidence and physical education instructors

	B	SE	β	t	p	VIF
constant	.734	.250		2.939**	.004	
Feature sport confidence	.324	.056	.322	5.770***	.000	1.262
Preference for competition	.005	.059	.005	.092	.927	1.354
Status sport confidence	.431	.060	.429	7.158***	.000	1.454

R²=.409, F=55.167******p*<.01, ****p*<.001

education in middle school students who participated in sport activities. The discussion based on the results is below.

The correlation between sport confidence and satisfaction with physical education class for middle school students who participated in sport activities was positive in all the sub-variables. This indicates that sport confidence and satisfaction with physical education class were closely related among middle school students who participated in sport activities. In other words, the higher the sport confidence was, the greater the satisfaction with physical education. For middle school students, there is a difference between sport confidence and normal confidence. Sport confidence is a special type of confidence in physical activities, in other words, sports. Therefore, the higher the sport confidence was, the higher the physical performance²⁴. The higher the physical performance was, the more satisfied the students were with physical education class. A positive relationship between sport confidence and satisfaction with physical education can be taken for granted from a certain perspective. According to²⁵, having the knowledge and skills needed to complete personal assignments leads to confidence. Therefore, a course to impart knowledge and skills related to physical activities is required for middle school students to improve their sport confidence. If physical education instructors make an effort to provide such a course for physical education, it is expected that a higher level of satisfaction will be derived from physical education class.

In this study, feature sport confidence, preference for competition, and status sport confidence were found to positively influence the class contents, class method, class environment, class effect, and physical education instructors. Feature sport confidence and status sport confidence positively influenced physical education instructors. Feature sport confidence refers to a student's recognition of the successful performance of sport

behaviors¹¹. Feature sport confidence seems to influence the certainty of successful performance of sport behaviors in normal periods¹¹. Feature sport confidence is the certainty of successful performance. Therefore, it seems to influence physical education instructors and also the methods, environment, and effect of physical education class. Preference for competition is the belief that the achievement of goals reflects the ability of students and successful performance¹¹. Preference for competition positively influences satisfaction with physical education. Therefore, physical education instructors are required to establish goals and a class environment that reflect the ability of the students as well as successful performance. They should also determine how to instruct students to reflect successful performance.

In²⁶ emphasized the importance of class method, class effect, and confidence since physical education was provided based on physical activities. In²⁷ indicated that physical activities were reflected in the use of facilities and tools, implying the influential power of the class environment. The factor that maximized the satisfaction with physical education class among middle school students that participate in sport activities has been confirmed to be sport confidence.

In this study, status sport confidence influenced satisfaction with physical education class. Status sport confidence is the certainty of successful performance in any circumstance while playing sports. Seen from the conceptual perspective, status sport confidence influences behavioral response and subjective results¹¹. Therefore, it supports the result that status sport confidence influences all aspects of satisfaction with physical education class.

In the course of providing physical education for students, it is necessary for the students to develop a conviction of successful performance in sport activities in order to improve concentration, passion, and a favorable view of the class as internal and external desires are

fulfilled. Improvement of sport confidence influences satisfaction with all aspects of physical education. Therefore, it is necessary to promote sport activities for middle school students and encourage them to participate in healthy and desirable sport activities.

5. Conclusion and Suggestions

This study was conducted to identify the relationship between sport confidence and satisfaction on physical education class for middle school students who participated in sport activities. Subjects in this study were students in middle schools located in Jeollabuk-do who participated in sport activities. A survey was conducted with 230 subjects and analyzed using exploratory factor analysis, reliability verification, correlation analysis, and multiple regression analysis. The following conclusions were derived.

First of all, sport confidence and satisfaction with physical education class were positively correlated with sub-variables. Secondly, feature sport confidence, preference for competition, and status sport confidence positively influenced class contents, class methods, class environment, class effect, and physical education instructors. Feature sport confidence and status sport confidence positively influenced physical education instructors. The scope of this study was limited to middle school students who participated in sport activities. Therefore, a follow-up study is recommended to include more diverse subjects.

6. Reference

1. Young SK, Seol KH. Influence of participation sports of parents on soccer player role socialization. *The Korea Contents Society*. 2011; 11(12):423-30.
2. Hee KC, Sung KW. The analysis between sports participation of adolescent and social network of a classroom. *Journal of Korean Sociology of Sport*. 2010; 23(1):45-67.
3. Muk KJ. The relationship between participation physical speciality and aptitude of middle school and adaptation of school life. *Korean Journal of Sports Science*. 2003; 12(2):105-16.
4. Young MT, Kyung PJ. The relationship of leisure attitude, motivation of leisure involvement, and leisure behaviors among adolescents. *Journal of Korean Sociology of Sport*. 2001; 14(2):399-410.
5. Tae KY. The effect of leisure sports activity participants on leisure and life satisfaction. *Journal of Sport and Leisure Studies*. 2008; 34(2):1491-501.
6. Hee KS. Youth sport model for youth at risk. *Korean Journal of Sport Pedagogy*. 2012; 19(2):27-43.
7. Young KS. Influence of leisure sports activity on school adaptation in adolescents. *Journal of leisure and recreation studies*. 1999; 34(1):115-23.
8. Jae KY. Investigate relationship between Big-5 factors of personality and leisure attitude in leisure sports activity. *Journal of coaching development*. 2006; 8(3):313-22.
9. Ha HS. How Sports education model affects the pleasure of physical activity and the social-relationship through a soccer class. *Journal of Korean Society for the Study of Physical Education*. 2010; 15(3):49-63.
10. Jang LB, Soul KH. The relationship between types of leisure activity and leisure satisfaction among college students. *Korean journal of physical education*. 1996; 35(4):4480-91.
11. Taeg SJ, Won YD, Eun JJ. A study on the effects of past performance and sport confidence in the golf performance. *Korean Society of Sport Psychology*. 2003; 14(3):29-41.
12. Guk JI, Sung HY, Hong JI. Comparison of the perception and satisfaction of technique-oriented approach and teaching games for understanding approach in badminton classes. *Journal of Korean Society for the Study of Physical Education*. 2011; 16(1):89-100.
13. Sook KN, Shick PY. An Analysis of the educational effect and class satisfaction according to the different domains of Physical Education. *Journal of P. E Sport Leisure Studies*. 2002; 9(1):11-28.
14. Hwa LY, Hee KT, Yoon PS, Ro CK. Predicting future intentions to participate in sport from attitudes and subjective norms of childhoods sport participation. *Korean Journal of Sport Science*. 2006; 17(3):103-12.
15. Hyeon PJ, Sook PN. The influence of intrinsic motivation on class satisfaction in physical education of middle school students. *Journal of Physical Education and Sports Science*. 2010; 26:39-47.
16. Hyun SK, Young HJ. The relationship among psychological learning environment, self-regulated learning, and exercise adherence in college ski and snow board class. *Journal of Sport and Leisure Studies*. 2010; 40(2):833-42.
17. Gyu CJ, Hwa LC. Preference of middle high school students on physical education activity and their satisfaction on physical education class. *The Journal of Institute of School Health & Physical Education*. 2013; 20(1):57-66.
18. Suk CJ, Heun LJ, Mi KH, Hayng JD, Kong KS. The Effects of Sports Club Participation in School Physical Education Classes. *The Korea Contents Society*. 2013; 13(11):913-23.
19. Vealey RS. Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology*. 1986; 8(3):222-46.

20. Oak CY, Hoon KJ. The effects of sport-confidence on competitive state anxiety and team performance in skaters. *The Korean Journal of Sport*. 2006; 4(2):179-90.
21. Won WJY, Eun LJ, Ki LS, Jin KB, Woong NC. The effect of sport - confidence level on attributional perceptions across male and female fencers. *Journal of Sport and Leisure Studies*. 2001; 16:553-66.
22. Min SS, Jin CO. The influence of middle school physical education teacher instruction type on class satisfaction of students. *The Korean Journal of Sport*. 2011; 9(2):245-53.
23. Su LA, Hoon KS. The effects of physical education specialist's Leadership on class satisfaction in elementary physical education class: The roles of empowerment. *Korean Journal of Sport Pedagogy*. 2011; 18(1):51-70.
24. Mcauley E. Modeling and self-efficacy: A test of Bandura's Model. *Journal of Sport Psychology*. 1985; 7(3):283-95.
25. Bandura A. Self-efficacy in human agency. *American Psychologist*. 1982; 37(2):122-47.
26. Kyu WB. A study of student's attitude on physical education learning in the middle and high school. Unpublished [Master's Dissertation]. Daegu University; 2002.
27. Young BE. The relationship cognition and satisfaction of physical Education class of middle school students. Unpublished [Master's Dissertation]. Kookmin University; 2005.