

THE RELATIONSHIP BETWEEN PARTICIPATION IN SCHOOL SPORTS CLUB AND EGO-RESILIENCE IN FEMALE MIDDLE SCHOOL STUDENTS

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Abstract

This study aims to clarify the differences in ego-resilience of female middle school students throughout the country of South Korea based on their participation in school sports clubs. To this end the study selected a total of 1187 students, composed of 602 girls who participated in school sports clubs and 585 girls who did not participate in it, using the random sampling method. The results can be summarized as follows. In the instances of participation, and the period of participation in school sports clubs, the study found statistically significant differences in all subordinate factors of ego-resilience in the subjects. Statistically significant differences were found in all the subordinate factors of ego-resilience, excluding the factor of positive thinking in, the areas of weekly participation, participation in competitions and the type of competitions participated in by the students who took part in the study. The research results imply that the participation of female middle school students in school sports clubs has a positive influence on the formation of their ego-resilience.

Keywords: Participation of female middle school students in school sport club, Ego-resilience.

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INTRODUCTION

During adolescence, people are more susceptible to stress than in any other stage of life. Adolescents experience sudden physical and mental (psychological) changes which can result in instability. This state of instability shows itself with greater conflicts and increasingly severe incidents of school violence. These factors along with the pressure of improving academic performance work in concert to increase the negative stress factors and obstacles to the growth of youth. For example, the leading cause of death in Korean adolescents aged between 13 and 19 is suicide, with 12.1% of adolescents admitting to feeling suicidal. There is a growing problem of emotional behaviors in adolescents considering that 5.2% of them find themselves in crisis situations of running away from home, violence and the interruption of their studies (Statistics Korea, 2014). These statistics are in sharp contrast to the patterns observed in most of the OECD countries. South Korea has demonstrated a steep increase in these problems over the past ten years (OECD, 2013). Some studies confirm that psychological experiences can vary from person to person and that no two people, being exposed to the same negative stressors, will respond in the same way (Kang & Lee, 2012). There is thus an increasing interest in the factors that will relieve the stress that adolescents experience. In particular, it is worth paying more attention to ego-resilience in a country like South Korea where the stress indicators perceived by adolescents are high (Jung, 2018). Ego-resilience is a state of producing good results even in the negative situations of adaptation and development process (Masten, 2001) and refers to the capacity of maintaining or improving psychological balance even in challenging circumstances (Block & Kremen, 1996). People with high ego-resilience reduce psychological distress by positively evaluating the external stimuli and environment in the stressful situations (Kim, 2010) and are not highly sensitive to stress or anxiety (Block & Kremen, 1996). Moreover, ego-resilience is related to the capacity of coping with stressful situations with flexibility (Luthar & Cicchetti, 2000) and varies in the course of a development stage or continuity of time rather than being a constant feature within an individual (Fine, 1991). In consideration of these characteristics of ego-resilience, there is a need to seek a way of reinforcing this quality in adolescents who are readily exposed to and are easily affected by stress when it arises. Ego-resilience is strengthened in the process of reducing the impact of risk under adversity and the despair of

an individual, of reducing the likelihood of negative chain reactions resulting from negative events, of improving self-esteem and self-efficacy through stable and supportive human relationships. It is strengthened through the process of experiencing positive opportunities (Rutter, 1987). It is believed that these mechanisms of ego-resilience can be experienced naturally in sporting activities. The experience of participating in voluntary and autonomous school sports clubs is expected to further enhance ego-resilience. It is because school sports club activities contribute to developing, not only students' health and physical strength, but also self-discipline, coping skills, and planning skills (Larson, Walker & Pearce, 2005; Graydon, 1997). Previous studies on physical activity and the development of ego-resilience reported that elementary school students who participated in swimming at least three times a week for four months showed a positive change in ego-resilience (Park, Kim & Jung, 2015). Other studies reported that participants in regular physical activities more than 3 times a week, showed significantly higher levels of vitality and optimism among the subordinate factors of ego-resilience compared to those who rarely or irregularly participated in physical activities (Lee, 2012). Being limited to the sphere of participation in school sports clubs and the development of ego-resilience (Kim & Lee, 2014), concluded that students who participated in school sports club activities experienced a decrease in deviant behaviors by reducing their aggression and strengthening their ego-resilience. In addition, the studies of Park & Jo (2014) show that participation in school sports clubs has had a positive influence on the ego-resilience of middle school students and contributed to a positive development in their attitudes towards physical education as a subject. These studies are significant in that they can be used as a resource to teach adolescents coping mechanisms when they are exposed to stressors where their psychological anxiety increases due to drastic changes and they are vulnerable to serious adaptation problems due to internal conflicts and confusion (Soh et al., 2014). Nonetheless, the reality is that there are fewer studies regarding the participation in schools sports club activities and ego-resilience development than those studying the crisis of mental health problems in adolescents. In this regard, it is vital to identify the influence that participation in school sports clubs have on the development of ego-resilience. This study was oriented only to female students, considering that more female students (50.0%) feel seriously stressed compared to

the number of male students (37.3%) in terms of the stress recognition level related to mental health of adolescents (Statistics Korea, 2009). Also female students experience more stress related to academic performance in terms of grades, careers, tests, and classes than male students (Kim, 2009). For the purpose of this, the research hypotheses were established as follows: Firstly, participation in school sports club activities will influence ego-resilience in female middle school students. Secondly, the period of participation in school sports club will influence ego-resilience of female middle school students. Thirdly, weekly participation in school sports clubs over the period of one year will influence ego-resilience of female middle school students. Fourthly, the frequency of participation in competitions of school sports clubs will influence ego-resilience in female middle school students. Fifthly, the type of participation in

competitions of school sports clubs will influence ego-resilience of female middle school students.

RESEARCH METHODOLOGY

Research participants

This study selected middle school girls from 5 schools from Jeonbuk, 2 from Chunbuk, 2 from Jeonnam, 2 from Chungnam, 2 from Gyeonggi, 1 from Gangwon, 1 from Jeju Island and 1 from Seoul as the subjects of the study. Among the 1230 questionnaires collected, 1187 questionnaires of the data were used for the final analysis, except for 43 questionnaires of the questionnaires that were not answered insincerely or were missing in the inspection items. The general characteristics of the subjects and their experience of participating in school sport club are as follows:

Table 1. Demographic features of research participants

Division	Frequency (N)	Percentage (%)
School year	1	29.5
	2	31.8
	3	38.7
Participation status	YES	50.7
	NO	49.3
Participation period	< 6 months	25.4
	6 - 12 months	24.4
	1 - 2 years	25.9
	> 3 years	24.3
Frequency of weekly participation over the previous year	Once	29.6
	2 - 3 times	33.4
	> 4 times	37
Frequency of participation in competitions	Once	26.2
	2-3 times	37.9
	> 4 times	35.9
Types of Competition	City/ county	26.4
	Provincial	41.5
	National	32.1

Research tool

This study used the Korean-type ego-resilience questionnaire of Kim & Kim, (2010). The questionnaire is composed of 5 factors, each factor dealing with different aspects of ego-resilience. The first factor looks at the subject's ability to expect smooth progression in dealing with difficult situations and to think positively in difficult situations. (10 questions) The second factor aims to determine whether the subjects can analyze a situation objectively and apply coping strategies to resolve matters at hand. (9 questions). The third factor measures affiliative behavior and whether the subjects are able to show positive concern for others and have positive interactions with them. (7 questions) The fourth factor measures the subjects' capacity to exercise self- control and adjust their emotions without losing control when faced with irritating events, or when situations don't go their way. (6 questions). The fifth factor measures autonomous behavior, which is the ability to control, plan and take action according to changing circumstances. (7 questions) Each question consists of a 5-point Likert scale (1 point: Strongly disagree, 5 points: Strongly agree) with a higher point being equal to a higher level of ego-resilience. As for the questions on individual features and level of experience of participation in school sports clubs, the content validity was secured by composing an expert group of 1 major professor and 3 PhDs. As for the variables of ego-resilience, an exploratory factor analysis and Cronbach's alpha coefficient were used to secure validity and reliability. According to the results, a total of 39

questions were divided into 5 factors; positive thinking (32.956%), problem solving (9.445%), autonomous behavior (8.720%), affiliative behavior (6.235%) and emotion control (5.840%). The cumulative dispersion turned out to be 63.196 % and the factor loading of each factor was above .05, with a level of reliability up to .819 - .937 being recorded.

2.3 Data processing methods

The collected questionnaires were coded on a computer and processed using the SPSS statistical program. First, the validity and reliability were analyzed using the exploratory factor analysis and Cronbach's a coefficient method based on the Varimax rotation. Secondly, with a view to investigate the difference in middle school female students' ego resilience according to the degree of their participation in school sports clubs, this study carried out independent t-test and A one-way ANOVA and the Scheffe test for post hoc verification.

RESULTS

Difference in ego-resilience of female middle school students according to status of participation in school sports club.

Hypothesis 1 of this study is "the experience of participation in school sports club will influence ego-resilience of female middle school students." The results of analysis of variance for verifying this fact show that participants in school sports clubs manifested significant differences in all factors by subordinate factors of ego-resilience as compared with others who do not participate in it. The results are shown in Table 2.

Table 2. Difference in ego-resilience of female middle school students according to status of participation in school sports club

Ego-resilience	Participation status (n=1187)		t	p
	YES (n=602)	NO (n=585)		
	Mean and standard deviation			
Positive thinking	37.19 ± 6.83	41.69 ± 5.64	-8.446	.000
Problem solving	29.57 ± 5.07	32.72 ± 5.71	-6.904	.000
Affiliative behavior	25.57 ± 4.42	27.81 ± 4.18	-6.303	.000
Emotion control	19.27 ± 4.25	21.33 ± 3.84	-6.167	.000
Autonomous behavior	23.48 ± 3.75	25.08 ± 4.55	-4.700	.000

Difference in ego-resilience of female middle school students according to period of participation in school sports clubs

As Table 4 shows, it turned out that there are significant differences in all subordinate factors of ego-resilience according to the period of participation in school sports clubs. To be specific, group D (M=42.36, SD=5.95) showed a significantly higher level in the factor of positive thinking as compared with group A (M=40.38, SD=5.85). In the factor of problem solving, group C (M=33.73, SD=5.48) and group D

(M=35.01, SD=5.54) manifested a significantly higher level than group A (M=30.87, SD=5.77) and group B (M=30.83, SD=4.37). The factor of affiliative behavior was significantly higher in group D (M=28.89, SD=4.55) than in group A (M=26.66, SD=4.07). In the factor of emotion control, group C (M=21.78, SD=4.16) and group D (M=22.76, SD=4.23) demonstrated a significantly higher level than group A (M=20.00, SD=3.32), and group D showed a significantly higher level than group B (M=20.61, SD=2.40). As for the factor of autonomous behavior, group D (M=26.68, SD=5.02) displayed a significantly higher level as compared with group A (M=23.68, SD=4.35).

Table 3. Difference in ego-resilience of female middle school students according to period of participation in school sports club

Ego-resilience	Participation period(n=602)				F value	p	Post-hoc
	A(n=153)	B(n=147)	C(n=156)	D(n=146)			
	Mean and standard deviation						
Positive thinking	40.38±5.85	41.42±4.58	42.87±5.36	42.36±5.95	3.877	.009	A<C
Problem solving	30.87±5.77	30.83±4.37	33.73±5.48	35.01±5.54	14.744	.000	A,B<C,D
Affiliative behavior	26.66±4.07	27.36±3.01	28.33±4.22	28.89±4.55	6.318	.000	A<D
Emotion control	20.00±3.32	20.61±2.40	21.78±4.16	22.76±4.23	12.141	.000	A<C,D B<D
Autonomous behavior	23.68±4.35	24.98±3.51	24.91±4.28	26.68±5.02	8.802	.000	A<D

A : less than 6 months B : 6 months – 12 months C : 1-2 years D : more than 3 years

Difference in ego-resilience of female middle school students according to frequency of participation in school sports clubs on a weekly basis.

As seen in Table 4, there were significant differences in all subordinate factors of ego-resilience, except the factor of positive thinking, based on weekly frequency of participation in school sports clubs. To be specific, there was no significant relation among group (M=40.94, SD=5.95), group B (M=41.76, SD=5.68) and group C (M=42.17, SD=5.36). In the factor of

problem solving, group C (M=33.89, SD=5.25) showed a significantly higher level than group A (M=30.88, SD=5.66). In the factor of affiliative behavior, group B (M=28.37, SD=4.00) and group C (M=28.32, SD=4.22) were significantly higher than group A (M=26.50, SD=4.06). In the factor of emotion control, group B (M=22.18, SD=3.75) and group C (M=21.94, SD=3.80) displayed a significantly higher level than group A (M=19.58, SD=3.42). As for the factor of autonomous behavior, group C (M=25.87, SD=4.82) was significantly higher than group A (M=24.21, SD=4.29).

Table 4. Difference in ego-resilience of female middle school students according to the frequency of participation in weekly school sports club activities.

Ego-resilience	Weekly participation frequency(n=602)	F value	p	Post-hoc
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	A(n=178)	B(n=201)	C(n=223)			
	Mean and standard deviation					
Positive thinking	40.94±5.95	41.76±5.68	42.17±5.36	1.498	.225	
Problem solving	30.88±5.66	32.90±5.94	33.89±5.25	9.181	.000	A<C
Affiliative behavior	26.50±4.06	28.37±4.00	28.32±4.22	7.607	.001	A<B,C
Emotion control	19.58±3.42	22.18±3.75	21.94±3.80	17.000	.000	A<B,C
Autonomous behavior	24.21±4.29	24.84±4.29	25.87±4.82	4.487	.012	A<C

A : Once B : 2 -3 times C More than 4 times

Difference in ego-resilience of female middle school students according to frequency of participation in school sports clubs

As Table 5 shows, it was possible to observe significant differences in all subordinate factors of ego-resilience except the factor of positive thinking according to frequency of participation in school sports clubs. To be specific, in the factor of positive thinking, no significant differences were observed among group A (M=41.74, SD=5.56), group B (M=41.00, SD=5.88), and group C (M=42.15, SD=5.53). In the factor of problem solving, group B (M=33.11, SD=5.57) and group C (M=34.63, SD=5.65)

showed a significantly higher level than group A (M=30.51, SD=5.11) In the factor of affiliative behavior, group B (M=28.34, SD=4.01) and group C (M=28.54, SD=4.45) manifested a significantly higher level than group A (M=26.69, SD=3.80). As for the factor of emotion control, group C (M=22.46, SD=3.88) had a significantly higher level than group A (M=20.29, SD=3.72) and group B (M=21.19, SD=3.54). Also in the factor of autonomous behavior, group C (M=26.38, SD=4.86) displayed a significantly higher level than group A (M=23.98, SD=4.05) and group B (M=24.77, SD=4.36).

Table 5. Difference in ego-resilience of female middle school students according to frequency of participation in school sports club activities.

Ego-resilience	Frequency of participation in competitions (n=602)			F value	P	Post-hoc
	A(n=158)	B(n=228)	C(n=216)			
	Mean and standard deviation					
Positive thinking	41.74±5.56	41.00±5.88	42.15±5.53	1.215	.298	
Problem solving	30.51±5.11	33.11±5.57	34.63±5.65	19.851	.000	A<B,C
Affiliative behavior	26.69±3.80	28.34±4.01	28.54±4.45	8.066	.000	A<B,C
Emotion control	20.29±3.72	21.19±3.54	22.46±3.88	11.498	.000	A,B<C
Autonomous behavior	23.98±4.05	24.77±4.36	26.38±4.86	10.407	.000	A,B<C

A : Once B : 2-3 times C : More than 4 times

Difference in ego-resilience of female middle school students according to the type of competitions school of sports clubs participated in.

As seen in Table 6, there were significant differences in all subordinate factors of ego-resilience, except the factor of positive thinking, according to the type of competitions of school sports clubs participated in. To be specific, in the factor of positive thinking, it turned out that there was no significant relation between group A (M=40.83, SD=5.83), group B(M=41.94, SD=4.98) and group C (M=42.01, SD=5.98). In the factor of problem solving, group C (M=35.64, SD=5.70) showed

a significantly higher level as compared with group A (M=29.34, SD=4.28) and group B (M=31.57, SD=4.79), while group B displayed a significantly higher level than group A. As for the factor of affiliative behavior, group C (M=29.29, SD=4.43) showed a significantly higher level than group A (M=25.36, SD=3.17) and group B (M=27.80, SD=3.64), while group B displayed a significantly higher level than group A. In the factor of emotion control, group C (M=22.65, SD=3.97) manifested a significantly elevated level than group A (M=19.37, SD=3.05) and group B (M=21.14, SD=3.54), while group B also showed a significantly higher level than group A.

In the factor of autonomous behavior, group C (M=26.00, SD=5.28) demonstrated a significantly higher level as

compared with group A (M=24.02, SD=4.07) and group B (M=24.70, SD=3.65).

Table 6. Difference in ego-resilience of female middle school students according to the type of school sports club competitions participated in.

Ego-resilience	Type of competition participated in (n=602)			F value	p	Post-hoc
	A(n=159)	B(n=250)	C(n=193)			
	Mean and standard deviation					
Positive thinking	40.83±5.83	41.94±4.98	42.01±5.98	1.475	.230	
Problem solving	29.34±4.28	31.57±4.79	35.64±5.70	49.852	.000	A<B<C
Affiliative behavior	25.36±3.17	27.80±3.64	29.29±4.43	30.017	.000	A<B<C
Emotion control	19.37±3.05	21.14±3.54	22.65±3.97	24.302	.000	A<B<C
Autonomous behavior	24.02±4.07	24.70±3.65	26.00±5.28	6.315	.002	A,B<C

A : Competitions of City and County B : Competitions of Province C : Nationwide competitions

DISCUSSIONS

The aim of this study was to investigate the differences in the ego-resilience of female middle school students throughout the country based on their participation in school sports clubs, the frequency of their participation per week, the frequency of their participation in and the type of competitions they participate in.

The specific discussions based on the results of the study can be summarized as follows:

Firstly, there were statistically significant differences in all subordinate factors of ego-resilience according to the status of participation in school sports clubs. This result shows that female middle school students' experience of participation in school sports club has an influence on the formation of positive ego-resilience. The studies of Kumpfer & Summerhays (2006) confirm that ego-resilience can be strengthened by expanding the opportunity for growth through frequent challenges, overcoming crises in the middle of these challenges, and gradually gaining a sense of belonging by engaging in group activities. Similar to the argument of Kumpfer & Summerhays (2006), Lee (2019) argues that middle school students by participating in school sports club can naturally strengthen their ego-resilience through overcoming physical and psychological bias, conflicts with club mates, disappointment with skill acquisition and psychological discouragement caused by unconscious comparison with others. Thus, the results of this study are supported by the general mechanisms of strengthening of ego-resilience, as shown by Kumpfer & Summerhays(2006), as well as concrete experience leading to ego-resilience reinforcement, as argued by Lee (2019). Moreover, the study of Kim & Lee (2014), explaining that participation in school sports clubs contributed to positive changes of ego-resilience by improving emotion control and interpersonal relationship skills, partially supports the results of this study. Also, the study of Park, Kim & Jung (2015) found that children who participated in swimming for 4 months in a row achieved progress in ego-resilience and were able to cope with situations, difficulties, psychological

pressures, negative emotional experiences. The fact that that they developed greater levels of ego-resilience through in-depth interactions with their teacher coincides with the results of this study, as well.

Secondly, the longer the period of participation in school sports clubs, the more statistically significant differences in all subordinate factors of ego-resilience were recorded. In general, female middle school students who participated in school sports club for more than 3 years showed a higher level in all subordinate factors of ego-resilience except the factor of positive thinking, as compared with other students who participated in it less than 6 months and 6-12 months. Nonetheless, there were no significant differences in ego-resilience between female middle school students whose period of participation reached more than 3 years and those who participated for 1-2 years. By and large, female middle school students who participated less than 6 months had the lowest score in all subordinate factors of ego-resilience. These results suggest that participation in club activities for more than one year is necessary to enhance the ego-resilience of female middle school students through participation in school sports clubs. The argument of Kim & Lee (2014) that the differences in ego-resilience by school year among high school students participating in school sports clubs can be attributed to the efficacy of having a longer period of participation and is in line with the results of this study. Likewise, the study of Min (2010) reviewing ego-resilience of students participating in Taekwondo training also reports that the training period influences all subordinate factors of ego-resilience. According to the study of Taylor et al. (2018), people aged between 18 and 65 who have a sedentary lifestyle have low ego-resilience, while those who constantly participate in relatively intensive exercises have high ego-resilience and strong mental health. Besides which, other studies(Lee, 2012; Lim, 2012) also confirm that the longer the period of participation in physical activities is, the higher the level of ego-resilience becomes. In this study, students who participated for 1-2 years showed a significantly higher level of positive thinking than those who participated less than 6 months. This is somewhat contrary to the findings of Park, Kim, & Jung (2015). They found that the thought processes of students did not show much improvement over time. The students who participated in swimming were not able to improve their level of creative problem solving skills to achieve the goals that they had set for themselves. Nevertheless, such differences can be interpreted

through this lens that the study was oriented only to elementary school students who participated in swimming for 4 months, so there is a big difference in the setting of the participation period between their study and this study. In addition, the fear of water may have had an impact on positive thinking of students in the lower grades considering the features of swimming.

Thirdly, as the frequency of participation in sports club activities increased per week, statistically greater significant differences were observed in all subordinate factors of ego-resilience except the factor of positive thinking. To be specific, in the factors of problem solving and autonomous behavior, female middle school students who participated more than 4 times a week showed greater significant differences than those who participated only once a week. In factors of affiliative behavior and emotion control, students who participated 2-3 times and more than 4 times displayed greater significant differences than those who participated only once a week. In particular, there were no great differences between all factors of ego-resilience except the factor of positive thinking of female school students who participated once a week (problem solving (30.88±5.66), affiliative behavior (26.50±4.06), emotion control (19.58±3.42), autonomous behavior (24.21±4.29)) and mean score by factor observed in those who did not participate in school sports club (problem solving (29.57 ± 5.07), affiliative behavior (25.57 ± 4.42), emotion control (19.27 ± 4.25), autonomous behavior (23.48 ± 3.75)). However, ego-resilience of female middle school students who participated 2-3 times and more than 4 times demonstrated a clearly higher mean score in all subordinate factors except the factor of positive thinking as compared with those who never participated or who participated only once a week. In conclusion, to strengthen ego-resilience through participation in school sports clubs, it is estimated that participation more than 2 times a week is required. The results of this study is partially supported by the study of Byun (2005) confirming that the group that participated in sports activities more than 2-3 times a week showed a higher level of ego-resilience than the group that participated only once a week, as well as the study of Kang (2008) verifying that children who participated more than 3 times a week displayed a statistically greater significant level in all subordinate factors of ego-resilience as compared with those with low weekly frequency of participation. Sports club activities provide an opportunity of constant failure and success and the results of effort are evidently visible. It is believed that one can attain skills, create close relationships with club mates and achieve individual growth according to the amount of one's exercise and participation. The study of Hauser & Allen (2006) proves that ego-resilience is strengthened by steady close exchanges, school performance, social competency reinforcement and developmental changes. Considering all arguments, it will be necessary to encourage students to continuously participate in sports club activities to strengthen their ego-resilience.

Fourthly, with a higher frequency of participation in school sports club competitions, statistically greater significant differences were observed in all subordinate factors of ego-resilience except the factor of positive thinking. To be specific, in the factors of problem solving and affiliative behavior, students who participated 2-3 times and more than 4 times manifested greater significant differences as compared with those who participated only once. In emotion control and autonomous behavior, students who participated more than 4 times showed greater significant differences than those who participated once and 2-3 times.

When one participates in sports competitions, one does not only have positive experiences, but also negative ones. For example, participants can feel a sense of accomplishment and joy but some serious conflicts can also happen with a counterpart or team members before/during/after the match due to an excessive competitive spirit. The problems of this conflict situation can be resolved when individual makes an effort to avoid being too emotional in speech and behavior and focuses on the game and is accompanied by a collective effort of displaying cohesion for achieving goals. It is estimated that

such individuals and the collective efforts accumulate as the frequency of participation in competitions increases and finally has a positive influence on reinforcement of ego-resilience. This is supported by the study of Hunter & Chandler (1999) confirming that ego-resilience is strengthened through the relationship with others in a new and relation-oriented situation. Likewise, according to the study of Lee, Kim, & Jang (2018), when research participants engaged in the Volleyball Unit of school sports clubs for 6 months and participated in their first volleyball competition, they showed some emotional behavior like swearing at counterparts who were senior to them. However, after participating in the Volleyball Unit for more than 1 year, they recognized how to behave themselves for the sakes of themselves and the team through volleyball training and competition experience of more than 3 times. This helped them to solve problematic situations wisely. This study is also partially supported by the result of the study of Lee (2015) showing that participants in league competitions manifested higher ego-resilience and empowerment than non-participants according to the results of an inquiry into ego-resilience and empowerment based on the experience of participation in league competitions of school sports clubs.

Fifthly, statistically significant differences were observed in all subordinate factors of ego-resilience except the factor of positive thinking as the frequency of participation in the higher rank competitions of school sports clubs. To be specific, students who participated in nationwide competitions show more significant differences in the factors of problem solving, affiliative behavior and emotion control than those who participated in the competitions of city and county only. Also, students who participated in competitions at provincial level display significant differences as compared with those who participated in competitions of city, or county level. In the factor of autonomous behavior, more significant differences are manifested in students who participated in nationwide competitions than those who participated in competitions at city, county, or provincial level.

In general, it is challenging for the average female student to participate in competitions of provincial or national school sports clubs. It may be possible to participate in these competitions only after long-term training with their colleagues. Therefore, female students might feel a sense of accomplishment and satisfaction when they participate in higher ranking competitions. Furthermore, considering that social interaction effects can be acquired through pride and self-esteem, self-confidence of being a player representing their school when participating in external competitions of school sports clubs, recognition from peers and teachers and positive results obtained through practicing with peers of similar abilities(Choi & Kim, 2017), the student's ego-resilience is estimated to be strengthened since the student's experience grows deeper as she participates in higher ranking competitions. However, it is presumed that positive experiences based on a sense of accomplishment, satisfaction, self-esteem and self-confidence is not the only factor which strengthens ego-resilience(Lee, Lee, & Song, 2020; Lee, 2012). It is believed that ego-resilience can be strengthened by overcoming frustration, anxiety, an inferiority complex, and conflicts with colleagues and injury while spending a lot of time in training in order to participate in higher ranking competitions(Lee, 2019).

CONCLUSION

At a time when interest in studies of ego-resilience reinforcement is on the rise due to emotional behavior problems arising in adolescence, this study intended to identify the influence of female middle school students' experience of participation in school sports clubs (the status of their participation in school sports clubs, participation period, the frequency of weekly participation for the previous year, frequency of participation in competitions and the type of competitions participated in) on ego-resilience. For the purpose of this, this study selected a total of 1187 female students composed of 602 girls who participated in school sports club and 585 girls who did not participate in it, based

on a questionnaire survey. This study carried out a frequency analysis, an exploratory factor analysis, a reliability analysis, a t-test, a one-way ANOVA. Based on Scheffé test for post-hoc verification, the following results were obtained.

Firstly, statistically significant differences have been observed in all subordinate factors of ego-resilience according to the status of their participation in school sports clubs. Secondly, statistically significant differences have been shown in all subordinate factors of ego-resilience as the period of participation in school sports club activities becomes longer. Thirdly, statistically significant differences have been manifested in all subordinate factors of ego-resilience except the factor of positive thinking as weekly frequency of participation in school sports club increases. Fourthly, statistically significant differences have been displayed in all subordinate factors of ego-resilience except the factor of positive thinking as frequency of participation in school sports club competitions rises. Fifthly, statistically significant differences have been demonstrated in all subordinate factors of ego-resilience except the factor of positive thinking as the level of participation in a higher rank competition of school sports club increases.

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