

# Relationships between the Physical Education Course Sportsmanship Behaviors with Tendency to Violence and Empathetic Ability (Note 1)

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Received: March 9, 2017

Accepted: March 30, 2017

Online Published: April 12, 2017

doi:10.5539/jel.v6n3p169

URL: <http://doi.org/10.5539/jel.v6n3p169>

## Abstract

The aim of this study is to examine relationship between the physical education course sportsmanship behaviors, tendency to violence, and empathetic ability for elementary school students. The sample of study consists of randomly selected 919 elementary school students attending state schools in the province of Erzincan in 2013-2014 academic year. "Physical Education Course Sportsmanship Behavior Scale" (PECSBS), "Scale of tendency to violence" and "the scale of Empathetic ability for children" were used in the study. Reliability and validity tests of the scales were done. The scores the students obtained in the scales were reexamined in accordance with independent variables such as their grade level, gender and the type of sports they are interested in most. And relationship between the values of scales was tested. For the assessment of the data, SPSS 15 and LISREL 8.7 programs were employed. In conclusion, physical education course sportsmanship behaviors display a significantly negative relation with tendency to violence and a significantly positive relation with empathetic ability for elementary school students. It is concluded that these relations should be paid attention, measures should be taken and programs should be in place to reduce the tendency to violence and grow empathetic ability in physical education course programs.

**Keywords:** physical education course, sportsmanship behaviors, tendency to violence, empathetic ability

## 1. Introduction

The sportsmanship (sportsmanship) concept which is used to express ethical ideals in sports is defined in various ways from different points of view. Shields and Bredemeier (1995) define sportsmanship as the virtue of adjusting the competitive game motivation under the light of ethical objectives. Sportsmanship involves attributes such as integrity, patience, self-control, fairness, forgiveness, generosity and politeness (Keating, 2007). Definitions regarding the content of sportsmanship are generally associated with concrete behaviors, which is the case observed in scale studies conducted on sportsmanship. Factor investigations made to understand sportsmanship better showed that sportsmanship has various dimensions. For example, Vallerand, Briere, Blanchard, and Provencher (1997) structured sportsmanship in 5 dimensions in the scale they developed. These are (1) *respect for rules and officials*, (2) *respect for opponents*, (3) *respect for social conventions*, (4) *respect for one's full commitment toward sport participation*, and (5) *a negative approach toward sportsmanship*. On the other hand, in a study which uses the same scale, number of dimensions of the scale was reduced and number of dimensions regarding the negative aspect was increased (Stornes & Bru, 2002). Another research mentioned two dimensions for sportsmanship, namely prosocial and antisocial behaviors (Hassandra, Bekian, & Sakellariou, 2007). In all these studies, sportsmanship is investigated mainly on subjects from sportive environment. However, the sportsmanship concept should be handled with a different point of view for students in schools in educational environment. For example, while behaviors of a leading team against the opponent such as mocking or humiliating ones are not observed in sportive environment, these can be often observed in physical education and sports courses in schools. From this point of view, physical education course sportsmanship behaviors scale developed by Koç (2013) has a special place. The scale by Koç (2013) consists of two elements, namely realization of positive behaviors and avoidance negative behaviors.

Some studies on sportsmanship show that degree of sportsmanship reduces in older ages and higher grades (Tasi & Fung, 2005; Shields, La Voi, Bredemeier, & Power, 2007). While some studies focusing on the gender factor state that sportsmanship degree of girls surpasses that of boys (Tasi & Fung, 2005), some other studies stated that no

significant difference is present (Shields et al., 2007; Miller, Roberts, & Ommundsen, 2004). It has been demonstrated that sportsmanship of students and athletes may vary according to the branch and type in which they display activity (Lee, Whitehead, & Ntoumanis, 2007; Esentürk, İlhan, & Çelik, 2015).

A physical education course takes an important part in elementary school students' sports activities. Therefore, it's especially important to make the students acquire essential sportsmanship behaviors. In advance of giving them these essential habits, it's necessary to reveal the personal traits related to these behaviors.

Sportsmanship behaviors in physical education lessons are thought to be closely related to some personal traits of students. First of all, it is required to investigate with which personal traits of students sportsmanship behaviors are associated, and programs should be prepared accordingly. Tendency to violence is among important personal traits which are considered to be associated with sportsmanship. "Avoid violence" is one of the eight principles stated by International Society of Sportsmanship to develop sportsmanship (Keating, 2007). This principle suggests the thought that tendency to violence predicts sportsmanship. Some studies pointed out the negative relationship of aggression trait, which is thought to be close to tendency to violence, with sportsmanship (Koç & Güllü, 2017; Stornes & Ommundsen, 2004). There is a positive and meaningful relation between students' aggression levels and violence tendency levels. Taşkesen's (2011) findings regarding high school students' stating that the relationship of violence tendency and aggression levels has a real correlation is in line with the previous statement.

In a WHO report (Krug, Dahlberg, Mercy, Anthony, & Rafael, 2002, p. 5), violence is defined as

*"The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation."*

Within the sports context, violence is defined as behaviors against the rules displayed by athletes against their opponents, referees and team mates driven by psychological, physiological, biological and environmental factors (Arıpınar & Donuk, 2011).

Empathy is another personal trait which is considered to have a close relationship with sportsmanship (Balçıkanlı & Yıldırım, 2011). Empathy is the reaction of an individual to sadness and discomfort of another person at time of witnessing such. Empathetic thought reflects concern and sensibility to others (Culotta-Hackenberg, 2002). Borke (1982) deems empathy as the first step of interpersonal interaction and communication. According to Moller (2000), empathy requires an individual to behave sensibly to others' feeling, and recognize, understand and interpret them. Understanding others' feelings before they tell this is the core of empathy.

Empathy is among the significant developmental tasks during childhood. Children who can recognize what others feel and who can establish empathy with them better are seen to be more capable of being social in their relations with their friends and teachers. Children with strong empathetic abilities tend to be less aggressive and be more capable of displaying social behaviors such as solidarity and cooperation. Empathetic children are more successful both at school and at work (Denham & Holt, 1993). Studies on empathy showed that mainly girls are more empathetic in general (Davis, 1996; Yüksel, 2009; Mc Devitt, Lennon, & Kopriva, 1991) and empathetic ability increases as age advances (Körükçü, 2004).

Human beings are full of energy, yet this may have harmful consequences. Sportive games and rules play an important role in discharging and controlling this energy safely. For the party who loses itself and its temper in sportive games based on competition is expected to lose the game, therefore researchers claim that sports eliminates behaviors such as aggression and violence (Şahin, 2003). Although this is not observed in sports arenas, individuals who have been nurtured in a good way will demonstrate this positive conduct. Indeed, England aimed to raise a generation with high moral values through sports and sportsmanship in the 19th century and partly succeeded (Yıldırım, 2004). Kağıtçıbaşı (2011) underlined the importance of empathy in reducing aggression and suggested that improving empathy would prevent aggressive behaviors. In the same way, Derman (2011) emphasized a negative significant relationship between aggression and empathy and stated that aggression level of 10 and 11 years old children decreased as a result of an empathy training program.

Balçıkanlı and Yıldırım (2011) suggested that empathy is an ability which should also be gained to athletes and that an empathy training program would improve their empathetic abilities. Furthermore, the need for starting empathy education at earlier ages so as to affect moral behaviors of athletes positively is emphasized.

In some programs that aim to improve sportsmanship behaviors, practices that enhance empathetic ability are included. For example, Rudd and Stoll (1998) recommend usage of known expressions such as "what would you feel if this happened to you" in terms of empathy improvement. Besides, Perry, Clough, and Crust (2013) suggest that empathetic ability is an important step of sportsmanship.

The aim of this study is to examine the relationship between the physical education course sportsmanship behaviors, tendency to violence and empathetic ability for elementary school students.

## 2. Method

In this section, information related to the research model, the study group, research instruments, data analysis is given.

### 2.1 Research Model

The survey model was used in this research. The survey model is a research approach aiming to describe the case existing now or how it existed in the past. The individual or object that are subject to research as well as how they were attempted to be defined in their circumstances. No effort was shown to affect or change them in any way (Karasar, 2003). It describes the attitudes, opinions, behaviors, or characteristics of the population (Creswell, 2012). “Physical Education Course Sportsmanship Behavior Scale” (PECSBS) developed by Koç (2013) for elementary school students, “Scale of tendency to violence” developed by (Turkish Republic, Prime Ministry, General Directorate of Family Research, 1998), “the scale of empathetic ability for children” developed by (Yüksel, 2003) and a survey which includes some features of students (grade, gender and the type of sports they are interested in most) were used in the study. The types of sports they are interested in are mostly grouped as individually competing sports (like wrestling, taekwondo, etc.), team sports played with ball (like football, handball, etc.) and physically non-contact sports (like volleyball, badminton, etc.).

### 2.2 The Study Group

The sample of study consists of randomly selected 919 elementary school students attending state schools in the province of Erzincan in 2013-2014 academic year (453 females and 466 males). Required permissions were obtained from the Ministry of National Education.

### 2.3 Research Instruments

#### 2.3.1 Physical Education Course Sportsmanship Behavior Scale (PECSBS)

PECSBS consists of 22 items and two subscales. The first subscale consisting of 11 items is related to the “Realization of Positive Behavior (RPB)” while the second subscale which is composed of 11 items concerns “Avoidance from Negative Behavior (ANB)”. PECSBS was scored on a 5-point Likert scale with “never” (1) and “always” (5) serving as end points. ANB subscale items were reverse scored. The total score obtained in the scale was assessed as “Total Sportsmanship Behavior (TSB)”. The RPB subscale can be exemplified by the item “I apologize from my opponent when I get nervous and break the rules of the game during the physical education course” and ANB subscale can be exemplified by the item “I make fun of the members of the rival team whenever I win against them during the physical education course”. The minimum score which can be obtained from the scale is 22 (average 1) and the maximum score is 110 (average 5). The maximum and minimum points that can be obtained separately from the ANB subscale and the RPB subscale are 11 (average 1) and 55 (average 5) respectively. The students’ average scores increase in parallel with their sportsmanship.

#### 2.3.2 Violence Tendency Scale

The scale has 20 statements and the responses provided for these statements are arranged according to the 4-point Likert scale. All the assessments are done by giving 4 points to “totally relevant” and 1 point to “completely irrelevant” answers. All the statements in the scale are unilateral. Accordingly, a higher score from the scale means higher violence tendency and a lower score means lower tendency of violence (Taşkesen, 2011).

#### 2.3.3 The Scale of Empathetic Ability for Children

“The scale of empathetic ability for children” was originally developed by Bryant (1982). This scale was adapted into Turkish by Yüksel (2003). The scale is applied to 7-13 years old children, consists of 20 items and has a single-factor structure. A “Yes” or “No” answer can be provided to each item. The score range that a child can get from this scale is 0-20 (Yüksel, 2003).

### 2.4 Data Analysis

Reliability and validity tests of the scales were done. The scores the students obtained in the scales were reexamined in accordance with independent variables such as their grade, gender, and the type of sports they are interested in most. Besides, the relationship between the values of scales was tested. The obtained data were checked for parametric analysis or non-parametric analysis (kurtosis, skewness, scatter and histogram graph). In addition, the equality of group variances is examined (Levene F test). ANOVA, Tukey and Pearson Correlation tests were applied to parametric analyzes of normal distribution. Mann Whitney U and Kruskal Wallis tests were

applied to nonparametric analyzes for data not showing normal distribution. For the assessment of the data, SPSS 15 and LISREL 8,7 programs were employed.

### 3. Results

In this section, the general purpose of the research, and results acquired from the analyses of sub-problems created in accordance with this purpose are included.

At the end of the EFA analyses of the “PECSBS”, results showed that two-factor structure of the scale was emerged in its original form. Results of the Confirmatory Factor Analysis (CFA) of PECSBS suggested the following values: RMSEA=.057, CFI=.95, GFI=.94 and NNFI=.95. As a result of CFA which was conducted to test the factor structure, consistency values were found to be admissible. No items were excluded. Reliability of Cronbach Alpha internal consistency of the scale (TSB) was .87. In terms of subscale, ANB value was .78 and for RPB was .79. It was found that the scale was valid, reliable and it could be used.

At the end of the EFA analyses of the “Violence Tendency Scale”, results showed that the items in the scale (2nd, 7th, 9th, 12th and 20th ones were excluded) were accumulated on a single factor of 15 items. The results of Confirmatory Factor Analysis (CFA) suggested the following values: RMSEA=0.072, GFI=0.93, NNFI=0.94 and CFI=.95. Because of CFA, which was conducted to test the factor structure, consistency values were found to be admissible. Reliability of Cronbach Alpha internal consistency of the scale was .85.

Of the scale of Empathetic ability for children, EFA analysis wasn't conducted since 2 choices (right/wrong) were used. Reliability of Cronbach Alpha internal consistency of the scale (TSB) was .71.

Significant differences were found in physical education course sportsmanship behaviors (ANB, RPB, and TSB), tendency to violence, and empathetic ability in terms of grades ( $p<0.01$ ). All scale values were found to be negatively affected for students with higher grade levels. Results showed a significant decrease in sportsmanship behaviors and empathetic ability after the 5<sup>th</sup> grade, and a significant increase in violent tendencies was observed as well (Table 1).

Table 1. The comparison of students' average scores of scales in terms of their grade levels (One-way ANOVA)

Factor	Grade	N	$\bar{X}$	SD	F	p	Tukey T.
Avoidance from Negative Behavior	5	234	4.50	.57	6.03	.000	*(5>6)
	6	280	4.35	.60			** (5>7)
	7	228	4.28	.62			** (5>8)
	8	177	4.30	.61			
Realization of Positive Behavior	5	234	4.35	.59	9.88	.000	** (5>6)
	6	280	4.14	.66			** (5>7)
	7	228	4.06	.65			** (5>8)
	8	177	4.06	.68			
Total Sportsmanship Behavior	5	234	4.42	.49	11.17	.000	** (5>6)
	6	280	4.24	.53			** (5>7)
	7	228	4.17	.53			** (5>8)
	8	177	4.18	.55			
Tendency to Violence	5	234	1.88	.43	7.37	.000	*(5<7)
	6	280	1.93	.43			** (5<8)
	7	228	2.00	.49			** (6<8)
	8	177	2.08	.49			
Empathetic Ability	5	234	14.07	3.14	4.44	.004	** (5>6)
	6	280	13.08	3.17			*(5>7)
	7	228	13.18	3.31			
	8	177	13.49	3.64			

\*  $p<0.05$ , \*\*  $p<0.01$ .

Significant differences were determined in physical education course sportsmanship behaviors (ANB, RPB, and TSB), tendency to violence, and empathetic ability in terms of gender ( $p < 0.01$ ). All scale values were found to be lower for male students (Table 2). The results also showed that females have higher sportsmanship behavior and empathetic ability and lesser violent tendencies than their male counter parts.

Table 2. The comparison of students' average scores of scales in terms of their gender (Mann Whitney U)

Factor	Group	N	Min	Max	Median	Mean Rank	U	p
Avoidance from Negative Behavior	Female	453	2.18	5.00	4.64	550.74	64445.000	.000**
	Male	466	2.00	5.00	4.27	371.79		
Realization of Positive Behavior	Female	453	2.36	5.00	4.36	499.89	87478.500	.000**
	Male	466	2.00	5.00	4.18	421.22		
Total Sportsmanship Behavior	Female	453	2.55	5.00	4.50	533.84	72100.000	.000**
	Male	466	2.50	5.00	4.23	388.22		
Tendency to Violence	Female	453	1.04	3.56	1.84	424.05	89264.000	.000**
	Male	466	1.00	3.52	1.96	494.95		
Empathetic Ability	Female	453	4	20	15.00	542.10	68356.000	.000**
	Male	466	4	20	12.00	380.19		

\*\*  $p < 0.01$ .

Significant differences were determined in physical education course sportsmanship behaviors (ANB, RPB, and TSB), tendency to violence, and empathetic ability in terms of type of sports they are interested in most ( $p < 0.01$ ). The paired comparison by Mann Whitney U test showed that all scale values were found to be negatively affected for individual sports and besides, students which were interested in physically non-contact sports showed more sportsmanship behaviors, had more empathetic ability and showed low tendency to violence compared to students that are interested in other types of sports (Table 3).

Table 3. The comparison of students' average scores of scales in terms of their type of sports they are interested in Most (Kruskal Wallis)

Factor	Type of Sports <sup>a</sup>	N	Min	Max	Median	Mean Rank	Chi-Square	p	Mann Whitney U
Avoidance from Negative Behavior	1	47	2.82	5.00	4.27	364.40	43.656	.006**	**(1<3), **(2<3)
	2	495	2.00	5.00	4.45	417.46			
	3	377	2.18	5.00	4.64	527.77			
Realization of Positive Behavior	1	47	2.45	5.00	4.09	365.22	10.310	.000**	*(1<3),
	2	495	2.00	5.00	4.27	449.49			
	3	377	2.00	5.00	4.36	485.62			
Total Sportsmanship Behavior	1	47	2.77	5.00	4.09	357.66	27.595	.000**	**(1<3), **(2<3)
	2	495	2.50	5.00	4.27	430.25			
	3	377	2.50	5.00	4.45	511.81			
Tendency to Violence	1	47	1.40	3.52	2.16	574.04	13.853	.001**	*(1>2), **(1>3)
	2	495	1.00	3.56	1.92	470.86			
	3	377	1.04	3.44	1.88	431.53			
Empathetic Ability	1	47	7	18	11.00	337.43	54.410	.000**	**(1<3), **(2<3)
	2	495	4	20	13.00	414.92			
	3	377	4	20	15.00	534.47			

\*  $p < 0.05$  \*\*  $p < 0.01$  (<sup>a</sup> 1=Individually competing sports, 2=Team sports played with ball, 3=Physically non-contact sports).

Sportsmanship behavior levels (ANB, RPB, and TSB) of the students were shown to display negative significant relation with tendency to violence ( $r=-.41$ ;  $p<0.01$ ), and positively significant relation with empathetic ability ( $r=.46$ ;  $p<0.01$ ). Besides, tendency to violence levels of the students displayed a significantly negative relation with empathetic ability ( $r=-.30$ ;  $p<0.01$ ) (Table 4).

Table 4. Relationships of the physical education course sportsmanship behaviors with tendency to violence and empathetic ability (Pearson)

Factor	1	2	3	4	5
1. Avoidance from Negative Behavior	-	.43**	.83**	-.42**	.42**
2. Realization of Positive Behavior		-	.86**	-.27**	.36**
3. Total Sportsmanship Behavior			-	-.41**	.46**
4. Tendency to Violence				-	-.30**
5. Empathetic Ability					-

\*\*  $p<0.01$ .

#### 4. Discussions and Conclusion

Significant differences were determined in physical education course sportsmanship behaviors (ANB, RPB, and TSB), tendency to violence, and empathetic ability in terms of all independent variables. All scale scores were found to be negatively affected for students with higher grade levels, for males and for students interested in individual sports.

##### 4.1 Differences in Sportmanship Behaviors, Tendency to Violence, and Empathetic Ability according to Grade Levels

Results showed a significant decrease in sportsmanship behaviors and empathetic ability, and a significant increase in violent tendency after the 5<sup>th</sup> grade. In the study in which Koç (2013) developed this scale, sportsmanship levels of secondary school were found to be lower for those with higher grades (Koç, 2013). Furthermore, another study with the same scale involving secondary and high school female students displayed a significantly decreasing sportsmanship level for students with higher grades (Koç & Tamer, 2016). In their study involving high school students Esentürk, İlhan, and Çelik (2015) used the same scale and found that sportsmanship level decreases significantly as age advances. A study by Tasi and Fung (2005) on sportsmanship orientation of high school basketball and volleyball students found that older students attach less importance to sportsmanship compared to younger ones. Besides, young female students attach the highest level of importance to sportsmanship. On the other hand, in their study on the determinative role of personal attitudes and the social effect in displaying lower level of sportsmanship conduct, Shields et al. (2007) could not find a significant difference among sportsmanship conducts of grade 5-8 students. However, the sportsmanship level reduced at higher grades. These results were in parallel with findings of this study (Table 1).

A literature review did not return any study on differentiation of violence tendency by grade. However, some researchers concluded that aggression, which is closely related to violence tendency, increases as age advances (Donat Bacıoğlu & Özdemir, 2012). While Öz (2007) could not find a significant difference between aggression levels of grade 4 and 5 students, Yasankul (2007) found that aggression tendency of grade 5 students surpasses that of grade 4 students. Besides, Derman (2011) discovered that aggression score of grade 11 students is significantly higher than that of grade 10 students. Causes of worsening of sportsmanship and violence as age advances are mainly explained by the social learning model (Nucci & Young-Shim, 2005). An individual's environment affects his/her development in all aspects.

Although a significant difference among grades is present in terms of empathy, findings showed a higher empathy level among grade 5 students compared to grade 6 and 7 students contrary to expectations. A literature review reveals varied results. For example, in a study involving students with ages ranging between nine and twelve, Kalliopuska (1983) determined that empathy improves as age advances (cited by: Körikçi, 2004). On the other hand, another study involving grade 6-8 students did not display a significant difference of empathy tendency of students by grade (Rehber, 2007). Similarly, in another study with the same scale involving grade 4 and 5 students, a significant difference of empathetic ability of students by grade could not be observed (Küçükkaragöz, Akay, &

Canbulat, 2011). These conflicting results bring to the mind that empathy improvement could be supported by longer-term studies.

#### *4.2 Differences in Sportmanship Behaviors, Tendency to Violence, and Emphathetic Ability according to Gender*

The results also showed that females have higher sportmanship, lesser violent tendencies and higher empathy compared to their male counter parts. Only a few number of studies is present investigating the effect of gender on sportmanship. In their study, Esentürk, İlhan, and Çelik (2015) stated a significantly higher level of sportmanship conduct for female students compared to males. Similarly, Topan (2011) revealed that females display sportmanship behaviors in a more sensibly way compared to males in winning and losing situations. A study by Tasi and Fung (2005) on sportmanship orientation of high school basketball and volleyball students exhibited that young female students attach the highest level of importance to sportmanship, yet some other contrariwise studies are present. A significant difference in sportmanship behaviors by grade could not be found neither by Miller et al. (2004) among competing young football players nor by Shields et al. (2007) among grade 5-8 students. Giles and Heyman (2005) determined that boys display a higher level of aggression tendency compared to girls. A study by Kırımoğlu, Parlak, Dereceli, and Kepoğlu (2008) on participation of high school students in sportive activities found a significant difference between aggression levels of females and males. In their study involving secondary school students, Akandere, Baştuğ, and Güler (2009) failed to find a significant relation between ethical judgement and the gender variable. However, ethical judgement level of females was found to be higher than that of males. Bettencourt and Miller (1996) detected effects of the gender on aggression and found that males display a higher level of physical aggression (cited by: Güner, 2007). In their study involving 8-11 and 15 years old subjects, Bjorkqvist, Lagerspetz, and Kaukiainen (1992) discovered that males display more physical aggression compared to females. In their separate studies, Duncan (1999), Nixon (1997), Campano and Munakata (2004), Amedahe and Owusu-Banahene (2007) revealed that males display more aggressive behaviors and generally like to use more physical force compared to females. Yet some other studies exist suggesting the contrary regarding aggression. For example, Hatunoğlu (1994), Karataş (2005), Güner (2006), and Ağlamaz (2006) reported that gender does not influence aggressive behaviors and also Silberman and Snarey's (1993) findings are consistent with the notion that there is no natural gender difference in moral reasoning development. Besides, another study involving physical education department undergraduate students found a significantly higher level of aggression level for females compared to males (Çetin, Gezer, Yıldız, & Yıldız, 2013). Despite conflicting results are obtained in studies, according to Weiss and Bredemeier (1990), the underlying cause for displaying more adverse sportmanship conduct by males compared to females is that the acceptance of aggression of males in the society is more compared to that of females. As to studies investigating the relation between empathy and gender, Çetin and Aytar (2012) investigated empathy levels of grade 4 students using the same scale and obtained a higher empathy average for females (13.50) compared to males (12.10). In their study involving university students, Hasta and Güler (2013) found a higher level of empathetic tendency for females compared to males. Some other studies found females to be more empathetic than males (Myry & Helkama, 2001; Kalliopuska, 1991; Park, Schepp, Jang, & Koo, 2006; Watson, Biderman, & Sawrie, 1994). Based on method of raising children, females are expected to be more empathetic than males. Girls are directed by their environment to be more adaptable and understanding, which is counted among causes that facilitate girls' displaying empathy (Yüksel, 2009; Rehber, 2007).

#### *4.3 Differences in Sportmanship Behaviors, Tendency to Violence, and Emphathetic Ability according to Type of Sports*

The results showed that students interested in physically non-contact sports displayed a higher level of sportmanship and empathetic ability as well as lower tendency to violence compared to students interested in other types of sports. A literature review supported the findings of this study in that sportmanship has been differentiated for students and athletes according to branch and type of sports they engage in. Indeed, studies show that sportmanship behaviors of high school students interested in team sports without physical non-contact are better compared to those engaged in other sports branches (Koç & Güllü, 2017), sportmanship levels of people engaged in individual sports are poorer (Lee et al., 2007); and sportmanship values of high school students interested in volleyball (physically non-contact sports) are significantly better than those interested in football (physically contact sports) (Esentürk, İlhan, & Çelik, 2015). As to violence tendency, Koç and Güllü (2017) found that high school students interested in team sports without physical contact are less aggressive than those interested in other sports branches. Koruç and Bayar (1990) and Güner (2006) found that players of individual sports are more aggressive than those engaged in team sports and Lee et al. (2007) discovered that those engaged in individual sports have a more negative ethical decision taking attitude compared to those engaged in team sports Nixon (1997) determined that general aggressive behaviors of

university students vary by the branch of sports. Students engaged in sports with contact displayed a higher level of general aggression and toughness. Bloom and Smith (1996) argued that high levels of physical contact in sports adversely affect the players' ethical judgement. A study involving students participating in interuniversity competitions revealed a higher score of legitimizing aggression in sports for players engaged in sports branches with collision (rugby, ice hockey, and football) compared to those engaged in sports branches with (volleyball) and without contact (basketball). The reason for perception of aggression as normal by athletes is indicated to be observation of such during their socialization process and recognizing team norms and atmosphere (Tucker & Parks, 2001). Tanriverdi (2012) argued that associating violence acts encountered in sportive competitions with actions including violence within the structure of sports branches is incorrect and exemplified sports branches including mostly violent actions such as boxing, karate and taekwondo which contain less violence acts during competitions compared to other team sports. As a matter of fact, another study by Akandere et al. (2009) involving secondary school students reported that ethical judgement levels of such students did not show a significant difference by sports branch they engage in. The underlying cause for these varying results was suggested to be the effect of social environment in the social learning theory (Nucci & Young-Shim, 2005). The social environment is thought to have the ability of both teaching violence, and teaching and supporting sportsmanship. Besides, a study on empathy levels of football, basketball and handball players found significantly different levels of emotional empathy among players from different sports branches whereas a significant difference could not be found in their cognitive empathy levels (Certel, Bahadır, & Sönmez, 2013). Given that these three sports branches fall in the same category of the current study, the structure of sports done influences empathy.

#### *4.4 The Relationship among Sportsmanship Behavior, Violence Tendency, and Empathetic Ability*

Sportsmanship behavior of the students were found to display a significantly negative relation with their tendency to violence ( $r=-.41$ ;  $p<0.01$ ), a significantly positive relation with empathetic ability ( $r=.46$ ;  $p<0.01$ ). Besides, tendency to violence of the students displayed a significantly negative relation with empathetic ability ( $r=-.30$ ;  $p<0.01$ ).

The close relationship of violence tendency with sportsmanship which is pointed out by International Society of Sportsmanship (Keating, 2007) is also proved by this study. Although it is hard to pass a definite judgement due to insufficient number of studies on the subject, findings from different studies support our argument. Results of some studies on the relationship between aggression, which is directly associated with violence tendency, and sportsmanship suggest a negative relationship. To illustrate, in their study involving 14-16 years old handball players, Stornes and Ommundsen (2004) found a positive relationship between negative sportsmanship behaviors and aggression of players. In their study involving high school students, Koç and Güllü (2017) found a strong and significant negative relation between the level of aggression and sportsmanship both for males and females. Besides, Hasta and Güler (2013) and Derman (2011) found a negative relation between empathy and aggression with ( $r=-.31$ ) and ( $r=-.32$ ) respectively, and these results were very close to our results ( $r=-.30$ ;  $p<0.01$ ), confirming the close relation between aggression and violence tendency. Similarly, Rehber (2007) found that aggression level of secondary school students with lower empathetic tendency is higher. Derman (2011) managed to reduce aggression levels of 10 and 11 years old children by means of an empathy training program. For this reason, programs which develop the empathy character should be included in activities conducted during physical education lessons that aim to develop sportsmanship. The effect of empathy on adaptation to social norms oriented to social behaviors is proved by some other studies (Davis, 1996). Indeed, Perry et al. (2013) stated that helping children in developing empathy against their team mates and opponents through assigning weak roles to participants (such as playing in weak teams) during their education is an important step for sportsmanship. In their study involving professional footballers, Balçıkanlı and Yıldırım (2011) detected an increase in sportsmanship values as empathetic thinking levels of athletes rise. Empathy is among the significant developmental tasks during childhood. Children who can recognize what others feel and who can establish empathy with them better are seen to be more capable of being social in their relations with their friends and teachers. Children with strong empathetic abilities tend to be less aggressive and be more capable of displaying social behaviors such as solidarity and cooperation. Empathetic children are more successful both at school and at work (Denham & Holt, 1993). In order to eliminate the conception of "winning at all costs" which is one of the most important justification of orientation to violence, it is argued that highlighting entertainment and self-development aspects by physical education teachers during activities more often would contribute to reducing adverse sportsmanship behaviors.

In conclusion, physical education course sportsmanship behaviors display a significantly negative relation with tendency to violence and a significantly positive relation with empathetic ability for elementary school students. It is concluded that these relations should be paid attention, measures should be taken and programs should be in

place to reduce the tendency to violence and grow empathetic ability in physical education course programs. Furthermore, lower scale scores were obtained for students with higher grades, for males and for those dealing with individual sports. The causes of impairment of sportsmanship and violence that arise as age advances should be handled in a more detailed way and required recommendations should be delivered. Studying on the effect of type of sports on behaviors in a more detailed manner would be helpful.

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## Note

Note 1. This study was presented at the INTE 2015, International Conference on New Horizons in Education (10-12 June), Barcelona/Spain.

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