



EVALUATING AGGRESSION LEVELS OF SPORT SPECTATORS

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Abstract:

The aim of this study was to examine the aggressiveness levels of the individuals who are in different sports branches and who define themselves as spectators of those sports according to different parameters. Research group of the study is composed of 696 people who live in Ankara and define themselves as spectators of a sports branch. The aggression scale developed by Buss and Perry (1992) was used in the research. The scale is a 5-point Likert-type scale consisting of 29 items. The normal distribution of the data was examined by Skewness (.417) and Kurtosis (.576) tests and normal distribution of the data was determined. In this context, in the analysis of the data, the independent t-test and One Way Anova test were used as parametric tests. Also, the reliability of the data was determined by Cronbach Alpha internal consistency .822. As a result, a rate of aggression of sports spectators has been found in the middle and higher levels. The highest level of aggression sports spectators were found in combat sports and football branches. In addition, the aggressiveness levels of male spectators are higher than those of female spectators. Also, the highest level Sub-Dimension of sports spectators were found in physical aggression Sub-Dimension.

Keywords: sports, spectators, aggression

1. Introduction

Human is a social creature and tries to get in contact and interaction with others. In this sense, a person is expected to develop harmonious and healthy relationships with the society. On the contrary, some people do not present this behavior and take an aggressive stance. In this context, aggressiveness seems to be a problem spreading

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worldwide (Madran et al., 2014). Although there are many reasons of this problem such as social, psychological and economical, exactly determining what it is challenging and, in this situation, makes it difficult to define the concept of aggressiveness.

Because aggressiveness is an abstract concept and each scientific field brings different definitions, many comments and definitions have been made for aggressiveness. In this sense, if a general and understandable definition should be made, aggressiveness can be defined as movements which aim to harm a living creature. Moreover, Deptula and Cohen defined it as attacking or harming someone. Calhoun (1981) defined the power used to harm something or someone as aggressiveness. In addition, aggressiveness can be defined in many different ways. Instinct theories accept aggressiveness as a result of inborn aggressive instincts. Lorenz (1983) stated that aggressiveness has the same function for human. According to him, aggressiveness is a dangerous instinct that is waiting to come out and that already exists in humans to protect the species. Social theories prefer to explain aggressiveness by grounding it on the learning (Bostan and Kılıçgil, 2008; Özmen, 2004). When concept of aggressiveness is to be mentioned, a physical intervention comes to the mind but it is not only a physical intervention but also verbally or emotionally acts. Buss (1961) classified aggressiveness under three dimensions:

- Physical or Verbal Aggressiveness;
- Active or Passive Aggressiveness;
- Direct or Indirect Aggressiveness.

While pushing, oppressing, tugging, beating or biting are shown as example for physical aggressiveness, psychologically aggrieving or harming someone by verbal communication is called verbal aggressiveness. Active aggressiveness is a goal-directed behavior which is used to abuse or hurt victim. Passive aggressiveness is hindering someone from reaching his goals instead of destroying someone in contrast to active aggressiveness. Direct aggressiveness means sending harmful stimulus to others to provoke or tempt them while indirect aggressiveness means sending harmful stimulus to others with indirect ways (Buss, 1961).

It has been found that aggressiveness has negative correlation with social problem solving and harmony in social relationships (Crick and Grotpeter, 1995; Deluty, 1979; Nicki, 1996) and positive significant correlation with social anxiety. Moreover, aggressiveness has been found to have positive relationship with suicidal behavior (Brown et al., 1982), narcissistic tendency (Bushman and Baumueister, 1998, Cavuşoglu, 2017), antisocial personality disorder (Algül et al., 2009), substance-use disorders (Tani et al., 2001) and alcohol usage (Denson et al., 2007). Additionally, aggressiveness has negative relationship with empathy (Kaukiainen et al., 1999) self-confidence and emotional intelligence.

Sport has been a concept which has a great social effect on the society as well as being game in developing processes. Especially football is the most watched and popular sport in the world because its effect is more than the other sports. Football, like many other countries, has become an important and effective concept in Turkey (Kuru and Var, 2009; Yılmaz et al., 2017).

The number of researches about sports spectators or supporters is very high and this number is increasing day by day. In the literature, there are many studies on this subject (Türksoy et al., 2003; Kılıçgil, 2003; Öğüt Eker, 2010; Türkmen et al., 2013; Tasmeektepligil et al, 2014).

In this context, the concepts of sport and aggression are in contradiction with the basic philosophy of sport but they are emerging as concepts that are considered together today. The aim of this study was to examine the aggressiveness levels of the individuals who are in different sports branches and who define themselves as spectators of those sports according to different parameters.

2. Material and Methods

2.1 Research Group

Research group of the study is composed of 696 people who live in Ankara and define themselves as spectators of a sports branch. A purposeful sampling model was chosen as the sampling model in the study. The demographic information of the individuals in the study group is given in Table 1.

Table 1: Demographic Characteristics of the Participants

		N	%
Branch	Football	351	50.4
	Basketball	75	10.8
	Volleyball	84	12.1
	Combat sports	60	8.6
	Others	126	18.1
Sex	Man	420	60.3
	Women	276	39.7
Age	18-28	579	83.2
	29-39	81	11.6
	40 and above	36	5.2
Education	High school	160	23
	University	506	72.7
	Postgraduate education	30	4.3
Monthly Income	0-300 \$	318	45.7
	301-700 \$	215	30.9
	701- 1200 \$	91	13.1
	1201 \$ and above	72	10.3
Active Sports	Yes	444	63.8
	No	252	36.2

2.2 Data collection tool

The aggression scale developed by Buss and Perry (1992) was used in the research. The scale is a 5-point Likert-type scale consisting of 29 items. The scale aims to measure four different dimensions of aggression, physical aggression, verbal aggression, hostility and anger. Physical aggression subscale, 9 questions related to physical attack to others; verbal aggression subscale, 5 questions involving verbal abuse of others; anger subscale,

7 questions aiming to measure the emotional dimension of aggression; the hostility subscale contains 8 questions aiming at measuring the cognitive dimension of aggression.

2.3 Analysis of Data

In the analysis of the data, SPSS program was used. The normal distribution of the data was examined by Skewness (.417) and Kurtosis (.576) tests and normal distribution of the data was determined (George and Mallery, 2010). In this context, in the analysis of the data, the independent t-test and One Way Anova test were used as parametric tests. Also, the reliability of the data was determined by Cronbach Alpha internal consistency .822. According to Özdamar (1999), the value above .81 is interpreted as a high level of reliability. In this sense, it has been established that the reliability of the data was proven.

3. Findings

In this section, the statistical processes are presented in the form of the resulting tables and texts.

Table 2: Total and Sub-dimension Scores of the Participants

Aggression Scale	N	X	S.d.	Skewness	Kurtosis
Physical Aggression	696	24.45	6.42	.417	.576
Anger	696	20.80	4.37		
Hostility	696	22.68	5.13		
Verbal Aggression	696	15.40	3.22		
Total Point	696	83.26	16.21		

As a result of the statistical process according to the opinions of the sports spectators, the average value of the total score was determined as 83.26. The highest score of aggression to be taken from the scale is 145 in total. When sub-dimensions were examined according to the opinions of sports spectators, the sub-dimension with the highest value was determined as physical aggressiveness and the sub-dimension with the lowest value was determined as verbal aggression.

Table 3: Participants' Opinions According to Gender

	Gender	N	X	S.d.	Sig.	**Difference
Physical Aggression	Man	420	25.41	6.30	.000*	1>2
	Woman	276	22.98	6.32		
Anger	Man	420	20.85	4.38	.699	-
	Woman	276	20.72	4.36		
Hostility	Man	420	23.26	5.51	.000*	1>2
	Woman	276	21.80	4.36		
Verbal Aggression	Man	420	15.45	3.13	.631	-
	Woman	276	15.33	3.37		
Total Point	Man	420	84.84	16.23	.002*	1>2
	Woman	276	80.87	15.90		

As a result of the statistical procedures performed, in the total points according to the sex variable and in the aggression and hostility sub-dimensions of men, higher levels of aggression compared to women were determined.

Table 4: Participants' opinions according to Sport Branches

Sub Dimensions	Branch	N	X	P*	**Difference
Physical Aggression	Football	696	25.07	.001*	1>3,5 4>3,5
	Basketball		23.56		
	Volleyball		22.85		
	Combat S.		26.40		
	Others		23.38		
Anger	Football	696	20.91	.496	-
	Basketball		20.06		
	Volleyball		20.71		
	Combat S.		21.36		
	Others		20.75		
Hostility	Football	696	23.05	.113	-
	Basketball		21.80		
	Volleyball		22.19		
	Combat S.		23.43		
	Others		22.15		
Verbal Aggression	Football	696	23.05	.465	-
	Basketball		21.80		
	Volleyball		22.19		
	Combat S.		23.43		
	Others		22.15		
Total Point	Football	696	84.52	.010*	1>2,3 4>2,3,5
	Basketball		79.96		
	Volleyball		80.50		
	Combat S.		87.48		
	Others		81.57		

In addition, statistically significant differences were found between basketball and volleyball spectators in favor of Football spectators. Moreover, according to the opinions of combat sports spectators, a statistically significant difference was found in favor of defense sports between basketball volleyball and spectators opinions of other branches.

According to the statistical analysis carried out with regard to sport branches, there was a statistically significant difference in physical aggression between football and volleyball and other sports in favor of football spectators' opinions. Moreover, statistically significant difference was observed in physical aggression between combat sports spectators' opinion volleyball and other sport branches in favor of combat sports. There was no significant difference between spectators' opinions in accordance with anger, hostility and verbal aggression variables.

Table 5: Participants' Opinions According to Age

Sub Dimensions	Age	N	X	P*	**Difference
Physical aggression	18-28	696	24.66	.003*	1,2>3
	29-39		24.64		
	40 and Above		20.91		
Anger	18-28	696	21.08	.000*	1,2>3
	29-39		20.00		
	40 and Above		18.22		
Hostility	18-28	696	23.23	.009*	1,2>3
	29-39		22.75		
	40 and Above		20.22		
Verbal aggression	18-28	696	15.53	.044*	1>3
	29-39		14.93		
	40 and Above		14.38		
Total Point	18-28	696	83.99	.001*	1,2>3
	29-39		82.38		
	40 and Above		73.63		

As a result of statistical analysis according to age variable, there was a significant difference between age 40 and above and age 18-28 and age 29-39 in favor of age 40 and above.

As a result of statistical analysis according to age variable, there was a significant differences in physical aggression, anger, hostility and verbal aggression between age 40 and above and age group 18-28 and age group 29-39 in favor of age 40 and above.

As a result of the statistical process performed according to the education variable, no statistically significant difference was found in the total poverty, physical aggression, anger, hostility and verbal aggression sub-dimensions.

Table 6: Participants' Opinions According to Monthly Income

Sub Dimensions	Monthly Income	N	X	P*	**Difference
Physical aggression	0-300 \$	696	24.30	.885	-
	301-700 \$		24.77		
	701-1200 \$		24.32		
	1201 \$ - Above		24.30		
Anger	0-300 \$	696	21.11	.095	1>3
	301-700 \$		20.86		
	701-1200 \$		19.83		
	1201 \$ - Above		20.52		
Hostility	0-300 \$	696	22.65	.718	-
	301-700 \$		22.86		
	701-1200 \$		22.16		
	1201 \$ - Above		22.90		
Verbal aggression	0-300 \$	696	15.33	.352	-
	301-700 \$		15.67		
	701-1200 \$		14.98		
	1201 \$ - Above		15.48		
Total Points	0-300 \$	696	83.28	.497	-
	301-700 \$		84.24		

	701-1200 \$		81.13		
	1201 \$ - Above		82.97		

According to the statistical analysis carried out with respect to income level, statistically significant difference was observed in total scores as well as physical aggression, hostility and verbal aggression. However, there was a statistically significant difference between income level 0-300 \$ and income level 701-1200 \$ in favor of 0-300 \$ income level.

As a result of the statistical procedures performed according to the variables of actively participation to a sport, there was no statistically significant difference in the total ages, physical aggression, anger, hostility and verbal aggression subscales.

4. Discussion and Conclusion

Mean value of total score according to statistical analysis of sport spectators' opinions was found 83.26. The highest value of the questionnaire is 145. Sub-dimensions are evaluated according to the spectators' view; the highest value belongs to physical aggressiveness (24.45) while the lowest belongs to verbal aggressiveness (15.40).

Men surpassed women in total scores and physical aggressiveness and also hostility sub-dimension. Erşan et al. (2009) observed a higher devastating aggressiveness in men than women. In this sense, our study is in parallel with that of Erşan et al. (2009). Tutkun et al. (2010) presented no significant difference between men and women athletes in terms of aggressiveness level. This situation may have resulted from limited subject numbers.

According to the results of statistical analysis for sport branch variable, total score was 84.524 for football and it was followed by basketball (79.96), volleyball (80.50), which means statistical difference in favor of football spectators. A statistically significant difference was found for combat sports (87.48) compared to basketball, volleyball and other sports (81.57). In terms of branch variable, there was a significant difference between football (25.07) and volleyball (22.85) and other sports (23.85) concerning physical sub-dimension variable. Moreover, there was a significant difference between combat sports (26,40) and volleyball (22.85) and other sports (23,38). According to branch variable, there were no difference spectators' opinions in anger, hostility and verbal aggressiveness sub-dimensions. Tutkun et al. (2010) stated that scores of individual sport athletes were higher than team sport athletes and there was a significant difference between the groups. In this sense, there are similarities between mentioned and our study.

As a result of statistical analysis according to age variable, there was a significant difference between age 40 and above (73.63) and age 18-28 (83.99) and age 29-39 (82.38). Significant difference was found between age 18-28 and age 29-39 in terms of physical aggressiveness, anger, hostility and verbal aggressiveness sub-dimensions as a result of statistical analysis carried out according to age variable. Oproiu (2013) stated that aggressiveness level gradually increases till puberty and it start decreasing after

puberty. In that study, it was suggested that while maturity increases aggressiveness decreases so there is a similarity between this and our studies.

As a result of statistical analysis carried out education variable, there was no statistically significant difference in total score, physical aggressiveness, anger, hostility and verbal aggressiveness sub-dimensions. Uyar (2011) found no significant difference between education level and aggressive behaviors of football spectators. Bahadır (2006) suggested that the higher education level people have the lower aggression level they have in a study applied to fans of Konyaspor. Kurtiç (2006) suggested that lower education level of the football spectator led to an increase in actual participation to the facts. Kılıçgil (2003) indicated that people who have low level of education and socioeconomic situation are more aptness to violence. In this sense, our study has no similarity with above-mentioned studies. The reason of the difference can result from limitedness of above-mentioned studies where only football spectators were examined.

As a result of statistical analysis carried out according to income level of the spectators, there was no significant difference in total scores as well as physical aggressiveness, hostility and verbal aggressiveness sub-dimensions. However, there was a significant difference between those with 0-300 \$ income and those with 701-1200 \$. Yıldız et al. (2007) found a negative correlation between income and aggressiveness levels of the people in their study. Thus, it can be inferred that income levels of the people affect their personality and behaviors. In this context, the study of Yıldız et al. (2007) supports our findings. Tiryaki (1996) demonstrated that there is no difference between aggressiveness scores between the subjects according to their income levels. In this sense, there is a difference between the study of Tiryaki (1996) and this study.

As a result of statistical analysis carried out according to active sport participation, statistically significant difference was found in total scores as well as physical aggressiveness, anger, hostility and verbal aggressiveness sub-dimensions. In a study which examined difference in aggressiveness levels between students who perform a sport and who do not perform any sport and studying at middle school, Yıldız (2009) found no significant difference between two groups. This result is similar to ours. In contrast, in a study applied to university students, Yurttaş (2016) found that sport performing students presented significantly higher values in the questionnaire than those who do not perform any sport. In this sense, there is difference between in this study and others. This situation may have resulted from the fact that mean value of the subjects' ages in Yurttaş (2016)'s study was lower.

As a result, a rate of aggression of sports spectators has been found in the middle and higher levels. The highest level of aggression sports spectators were found in combat sports and football branches. In addition, the aggressiveness levels of male spectators are higher than those of female spectators. Also, the highest level Sub-Dimension of sports spectators were found in physical aggression subscale.

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