

Araştırma Makalesi

**GENÇ YÜZÜCÜLERDE SALDIRGANLIK DÜZEYİNİN
SEDANTERLERLE KARŞILAŞTIRILMASI**

**COMPARISON OF AGGRESSIVENESS LEVEL IN YOUNG
SWIMMERS WITH SEDENTERS**

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Genç Yüzücülerde Saldırganlık Düzeyinin Sedanterlerle Karşılaştırılması

ÖZ

İnsan saldırganlığı farklı insanlar için farklı anlamlara gelir. Zorlayıcı davranışlar spor dünyasında, siyasi arenada ve iş dünyasında sıklıkla saldırganlıkla eş anlamlı olarak kullanılmaktadır. Bu çalışma, yüzücüler ile hareketsiz yaşam tarzına sahip kişilerin saldırganlık düzeyleri arasında bir fark olup olmadığını araştırmayı amaçlamaktadır. Çalışmaya tamamı Kahramanmaraş ilinde yaşayan 141 genç gönüllü katıldı. Bunlardan 36 kız ve 34 erkek yüzücülerden, 34 kız ve 37 erkek ise spor yapmayanlardan oluşmuştur. Araştırmada demografik bilgilerin yanı sıra saldırganlık düzeylerini belirlemek amacıyla Buss ve Warren (2000) tarafından geliştirilen 34 maddelik Saldırganlık Ölçeği kullanılmıştır. Çalışma sonuçları yüzücüler ile sedanterlerin fiziksel saldırganlık, sözel saldırganlık ve düşmanca puanları arasında istatistiksel olarak anlamlı bir fark olduğunu gösterdi ($p<0,05$). Öfke ve dolaylı saldırganlık alt boyutlarında ise fark anlamlı bulunmamıştır ($p>0,05$). Çalışmada yüzme sporunun saldırganlık eğilimi düzeyini azalttığı belirlendi. Ayrıca yüzmenin genç kadın ve erkeklerde saldırganlık düzeyini azalttığı belirlendi.

Anahtar Kelimeler: Saldırganlık, yüzücüler, spor, düşmanlık, sporcular

Comparison of Aggressiveness Level in Young Swimmers with Sedenters

ABSTRACT

Human aggression means different things to different people. Coercive behaviors are often used synonymously with aggressiveness in the sports world, political arena, and business community. This study aims to investigate whether there is a difference between aggression levels of swimmers and people who have a sedentary lifestyle. 141 young volunteers who all live in the city of Kahramanmaraş participated in the study. Of them, 36 girls and 34 boys swimmers, and 34 girls and 37 boys don't play sports. A 34-item Aggression Scale developed by Buss and Warren (2000) was used in the study to determine demographic information as well as levels of aggression. Results showed statistically significant difference between swimmers and sedentary's *physical aggression*, *verbal aggression* and *hostile* scores ($p<0.05$). The difference was not significant for *anger* and *indirect aggression* sub-dimensions ($p> 0.05$). The study has revealed that swimming sports reduce the level of aggression tendency. Also, it was determined that swimming reduces the level of aggression in young women and men.

Keywords: Aggression, swimmers, sport, hostility, athletes

INTRODUCTION

Human aggression means different things to different people. Coercive behaviors are often used synonymously with aggressiveness in the sports world, political arena, and business community¹. Aggression in social psychology is usually defined as any behavior intended to harm a person who does not want to be harmed². Geen, (2001)³ thinks that aggressiveness, which is a repulsive stimulus that is transmitted from one person to another as an anticipation of harm or intent to harm, motivates the other person to avoid this warning. Aggression is not just an act of hurting others. It is also a special cognitive structure with a strong motivational basis in which complex emotional states and mental life are all involved. Aggression defined as behavior that is intended to cause direct harm to another individual^{2,4,5}. Besides, aggression can be defined as deliberate behavior intended to harm another person^{6,7}. Hostile aggression occurs as a reaction to some provocations designed to be a thoughtless act in the past, anger-triggered and motivated to cause the most damage to the target⁶.

Current definitions of aggression in sports have a tendency to reflect the definitions of the main issues in psychology. For example, aggression is "hurting or injuring yourself or another person psychologically or physically"^{2,6}. Lorenz, (1966)⁸ thinks that the aggressive energy accumulation increases to a certain point if it is not released by some secure means and this increase can suddenly lead to aggressive attacks. These include examples of acts of violence and aggression against opponents (individually or as a group), against coaches, spectators, or fans (individually or as a group) and violence or aggression towards coaches, family and police. These acts point to the concept of violence in sports during training, during or after the competition^{9,10}.

The type of sport played is totally related to the involvement of aggressive behaviors¹¹⁻¹³. In other words, aggression reflects the form of violence in the sport itself^{13,14}. For example, footballers are generally more aggressive because of violence in the nature of sports, such as tripping up, pushing, running and blocking other players¹⁴. Similarly, sportsmen participating in basketball, karate, and kicking sports exhibit more physical violence and aggression due to violence in the nature of these sports¹⁵. From this point forth, the athlete who is too aggressive in the sport he/she plays is likely to be more aggressive in athletic or non-athletic competitions. In addition, men who act aggressively in their lives are similarly enthusiastic about sports that require aggression and violence. For example, in the working class American men there is an interest in the prototypical attractiveness of virility-oriented masculinity and interest in various eastern sports¹⁶. On the contrary, those who do sports such as table tennis and swimming which require less physical contact tend to exhibit less physical aggression, but tend to exhibit more psychological and verbal aggression¹⁵.

This study aims to investigate whether there is a difference between aggression levels of swimmers and people who have a sedentary lifestyle. Guilbert, (2006)¹⁵ notes that people who play sports such as table tennis and swimming tend to have less physical aggression. In this respect, our hypothesis is that those who do swimming are less aggressive than those who do not.

MATERIAL AND METHODS

Participants

Participants of this research are 141 volunteer young people (swimmers: 36 females and 34 males while sedanters: 34 females and 37 males who have sedentary lifestyle) from Kahramanmaras. The average age of the girls was determined as 17.48 ± 2.44 , while that of the males was 17.29 ± 1.88 .

Ethical statement

The research was conducted in a swimming pool at Kahramanmaras. The study was approved by Kahramanmaras Sutcu Imam University Ethics Advisory Commission on 21.03.2018, Session No: 2018/06, Decision No: 23, in accordance with the 1964 World Medical Association (WMA) Helsinki Declaration, which was amended in October 2013 in the 64th General Assembly of the WMA. Written informed consent was obtained from the participants.

Measurement of Aggression

Aggression inventory was used to determine the level of aggression of the individuals studied in the study. This inventory developed by Buss and Perry (1992)¹⁷ and composed of five subscales. The scale consisted of 29 items and the five-point Likert scale was as follows: (1) not suitable for my character, to very suitable for my character and (5) fully suitable for my character. Scores taken from the inventory are generally assessed by considering each component separately. The high score the inventory indicates that the individual has aggressive behavior for that factor. This inventory was adapted to Turkish by Demirtas-Madran, (2012)¹⁸ and the alpha coefficient in the internal consistency study was calculated as 0,85. For this study, the Cronbach alpha value of the scale was found to be 0.91.

Statistical Analyses

IBM Corp. (2013) IBM SPSS Statistics for Windows, Version 22.0. (IBM Corp., Armonk, NY.) package program was used for the statistical analysis of the data obtained in the study. Normality tests were performed to test the suitability of the data to normal distribution. For data sets with no normal distribution, the standardized kurtosis and skewness values proposed by Tabachnick and Fidell, (2007)¹⁹ were examined and it was determined that their values did not exceed $z \pm 3.29$. The next step, that is, Kolmogorov-Smirnov test was applied for the normal distribution of the data and it was determined that the data was not suitable for the normal distribution. Therefore, Mann-Whitney U test was applied for significance tests. The alpha level for statistical significance was set at $p \leq 0.05$.

RESULTS

Tables 1. Mann Whitney-U Test Results of Swimmer and Sedanter's Aggression Questionnaire Scores

Aggression Questionnaire subscales	Samples	N	Mean Rank	Sum of Ranks	U	Z	p	Cohen's r
Physical aggression	Swimmers	70	46.38	3246.5	761.5	-7.114	0.001*	0.6
	Sedanters	71	95.27	6764.5				
Verbal aggression	Swimmers	70	52.13	3649	1164	-5.457	0.001*	0.46
	Sedanters	71	89.61	6362				
Anger	Swimmers	70	65.26	4568.5	2083.5	-1.659	0.097	0.14
	Sedanters	71	76.65	5442.5				
Hostile	Swimmers	70	63.71	4459.5	1974.5	-2.109	0.035*	0.18
	Sedanters	71	78.19	5551.5				
Indirect aggression	Swimmers	70	64.55	4518.5	2033.5	-1.866	0.062	0.15
	Sedanters	71	77.36	5492.5				

$p < 0.05^*$

As shown in Table 1, physical aggression scores, one of the sub-dimensions of the aggression scale, were found to be lower in swimmers than in sedanters, and Cohen's $r = 0.6$ was determined ($U = 761.5$, $z = -7.114$, $p < 0.01$). According to Cohen, this effect size was rated as a "large effect" (Cohen, 1992). Verbal aggression scores in swimmers were lower than in sedanters, Cohen $r = 0.46$ ($U = 1164$, $z = -5.457$, $p < 0.01$), and this effect size was evaluated as a "medium effect". The hostility subscale was lower in swimmers than in sedanters and the differences were statistically significant ($U = 1974.5$, $z = -2.109$, $p < 0.05$). The difference was not found significant in the anger and indirect aggression subscales ($p > 0.05$).

DISCUSSION

The study has revealed that there was a significant difference between the scores of sub-scales of aggression scale, that the scores of physical aggression sub-scale, one of the sub-scales of aggression scale, were lower in swimmers than sedanters, that the scores of hostility sub-scale were lower in swimmers than sedanters and that there was a statistically significant difference. There was no significant difference for verbal aggression, anger, and indirect aggression sub-scales. These results support our hypothesis. It can be said that aggression in sports generally results from frustration. This frustration occurs as a result of preventing motivations such as being successful, gaining power, recognition, prestige, superiority and dominance. Various situational factors (result of the encounter) experienced in the sports environment can increase frustration and cause aggressive behavior. For example; Leith (1977)²¹ found that losers used both more and extra aggression significantly than winners. Rather than being a reaction to frustration, violence can be considered as an attempt to intimidate and intimidate people in terms of achieving success²². In some sports, particularly in contact sports, aggression for athletes may be attractive, or participation in contact sports may spread aggression²³.

Besides, in some sports like wrestling, it was seen that the athletes were prone to verbal aggression before the competition started. Tamborini et al. (2008)²⁴ determined that wrestlers tend to verbal aggression when they are angry or when they want to have fun²⁵. The results of Parul's, (2014)²⁵ study and the results of our study show similarities. They found out that worry about sports aggression and sports competition

was more in basketball players than in handball players. In his study on 240 athletes, Güner (2006)²⁶ could not find a significant difference between the aggression scores of male athletes and the aggression scores of female athletes, but he found that players who played individual sports were more aggressive than players who played team sports. In a study examining the sports participation levels of high school students, there was a difference in the aggression of men and women, but no difference between genders could be determined according to whether they do sports or not²⁷. In a study, Kinney at al. (2001)²⁸ it was found that participants' genders are associated with verbal aggression and anger, but the differences in the perceived characteristic aggressiveness of adult male athletes are often inconsistent and small compared to those that cannot be athletes. In our study, the level of aggression in swimmers was found to be lower than that of those who have sedentary lifestyles. When the results of other studies on aggression in sports are evaluated together with the results obtained in our study, it is understood that different aggression levels are seen in those who perform different sports. As a result, this study determined that swimming reduces the level of aggression in young women and men and swimmer women have lower aggression levels than men. The study was applied to the young people who do and do not do sports only in one city. Furthermore, the number of subjects participating in the research is limited. There is a need for further research in the future to support the results of this research. Because this research was applied only to young people who did swimming assessments were made in this direction, and in the future studies, comparison of other sports branches can provide a wide range of data on the violence in sports and can produce comprehensive evaluations.

The study has revealed that swimming sports reduce the level of aggression tendency. Also, it was determined that swimming reduces the level of aggression in young women and men.

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