Examining the effect of sports participation motive on aggression

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ABSTRACT

This study aims to investigate the relationship between aggression and sports participation motives of Sports High School students in Adıyaman, Kahramanmaraş, and Malatya provinces in Turkey. 575 Sports High School students, including 385 males and 190 females, participated in our research. Surveys used to measure variables included a 30-item sports participation motivation scale a 30-item “aggression inventory”. Reliability and validity studies of the sport participation motive scale were done by Gill et al, and it was determined that Cronbach’s alpha coefficients were between 0.30 and 0.78 for the sub-dimensions. The Cronbach’s alpha internal consistency coefficient of the aggression scale was calculated as .83. According to our findings, there was a moderately positive relationship between assertiveness, which is the sub-dimension of aggression, and competition, and friends, which is the sub-dimension of the motivation to participate in sports. A moderately significant negative correlation was found with the sub-dimensions of aggression and entertainment, which is the sub-dimension of the motivation to participate in sports. A moderately significant positive relationship was found with destructive aggression, which is the sub-dimensions of aggression, and success and status, and competition, which are the sub-dimensions of participation in sports.

Keywords: Aggression, sports participation motive, sports high school students.

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INTRODUCTION

Many factors affect sports participation motivation. Studies on the motivation of individuals to participate in sports revealed that social gains such as skill development and learning, entertainment, physical fitness, making friends, and success motivation are the most important reasons for participation in sports (Sit and Lindner, 2006). Motivation is also defined as the internal and external stimulation state that pushes the individual towards a certain action and behavior (Gould et al., 2002).

The motivation of the athlete is one of the main factors affecting the performance of the athlete. In this direction, it is important for the trainers to have information about athlete motivation and to apply the motivation strategies that they will determine in their training and games. However, understanding and managing the athlete's motivation often involves a complex process (Schneider and Baker, 2006). It is a period of motivation that shows the excess, orientation and insistence of a person's effort to fulfill a goal (Robbins, 2003). Motivation helps individuals to taste their feelings of success and achieve individual satisfaction (Coleman and Barrie, 2000).

The athlete has to maintain not only his physical presence but also his social presence. There are many factors in sports competitions that affect participation in sports, continuity and performance. The reasons such as health, game, status or performance of individuals are important when choosing sports branches. Motivation is very important in the continuity of the sport and the success chart as well as focusing on the sports branches (Tiryaki, 2000).

Every year, many people participate in sports for different reasons. For this reason, the study of the motivation for participation in sports has emerged as an
important concept and a lot of researches have been conducted to identify the reasons that initially motivated individuals participating in sports and physical activity to participate in the activities and to reveal these reasons (Hausenblas et al., 2004).

The first trial study to determine the individual's motivation to participate in sports was examined by Aldermen, Wood, and Orlick in the 1970s. The main goals of Aldermen, Wood and Orlick were to reveal the main reasons that led to participation in sports. The first studies conducted to understand the motivation of individuals to participate in sports revealed that development and learning of talent, fun, physical robustness, socialization and success are the most important social and physical causes affecting the participation of individuals in sports (Gill et al., 1983).

Approximately 8000 young individuals (51% boys, 49% girls) participate in sports in and out of school in the United States. The fact that the number is so high has given rise to the idea of investigating the causes affecting interest in sports (Seefeldt, 1989).

Hellandsig (1998) has also concluded that defeats in all sports are achieved through the ambition of winning and successful results are achieved through friendship. It has been concluded that this reason affects the participation of individuals who play sports according to age, gender, and sports branches, for example, women participate in sports for average activities, and men participate in sports in order to win (Hellandsig, 1998).

Aggression is a hostile, hurtful, harrowing, and distressing/painful act of the individual against the opponent or the person in his/her daily life, purposely disrupting his/her work to become a winner (Bayram, 2012). Bandura (1973) refers to offensive behaviors as disruptive and damaging behaviors characterized as aggression in society. Anderson and Bushman (2002) stated that aggression is the totality of an individual's actions to harm another individual.

One of the most important reasons for aggressive behaviour in sports is the athlete's inhibition. Refer to this inhibition as blocking or preventing motives. According to the researcher, these motives often cause aggression when subjects such as dominance, power, recognition, prestige and excellence, which revolve around success that excels in sports, are blocked or inhibited. To achieve the highest benefit in such a situation, the coach and athlete must identify the source of the blocker together. Not using offensive energy for purpose is wasted energy for the athlete (Güner, 2006).

In almost all branches of sport, athletes exhibit a certain strength and robustness. This force is sometimes incorporated into aggression. In some sports, the expression of aggression is more, and in others, less. Branches such as wrestling, boxing, taekwondo, and football are the types of sports that have the most aggressive behaviors in terms of power and strength (Freedman et al., 1993). Destructive aggression is an act of aggression involving hostility that is not supported by society to harm the source it believes is damaging itself, in the intensity of self-restraint, frustration, grief, or mixed emotions (Koç and Büyükgöze Kavas, 2015). Passive aggression is applied in a planned way to remove any obstacles if the person has a stated purpose. Passive aggression can be done either planned or unplanned. In competitions, fame, prestige, success and earning money can be the main goals. The athlete can use aggression as a tool to achieve these goals. If he has achieved his goal by exhibiting aggressive behavior, aggressive behavior becomes stronger. This situation creates the impression that it will reach its purpose by showing aggression (Açağk, 2011).

This study aims to examine the relationship between the motivation for participation in sports and aggression and to fill a gap in the literature by guiding the trainers and physical education teachers to minimize the aggression situations of athletes before, during and after the competition while they are motivated in sports competitions.

MATERIALS AND METHODS

Research model

A relational screening model was used to examine the correlation between sports participation motives and aggressiveness of students studying in sports high schools. Relational screening model is a study system that aims to determine whether there is a co-variation between multiple factors or the level of this relationship, and not to give a cause-effect relationship at the same time but provide some clues in that direction, and provide useful results by understanding the situation in one variable and predicting another (Karasar, 2014).

Research group

This study aims to investigate the relationship between aggression and the motivation of Sports High School students in Adiyaman, Kahramanmaraş and Malatya provinces in Turkey. In the 2018-2019 academic year, a total of 575 athlete students studying in sports high schools located in the center of Adiyaman, Malatya, Kahramanmaraş province constitute the universe of this study. Students attending sports high school range in age from 16 to 20. A total of 575, 33% girls (190) and 67% boys (385) Sports High School students were included in the sample determined by random method.

Data collection

After considering the subject and purpose of the research
in detail, a quantitative approach was adopted and scales with structured measurement tools were used in the study since statistical data between independent variables and dependent variables were required. The advantages of scales are that they are low in cost, are strong in protecting the privacy of the people being investigated, reduce errors in situations such as bias and personal inclination, provide answers with consideration, and have high reach (Ekiz, 2015).

The most commonly used research method is quantitative research, in which the number of survey forms previously prepared are answered by determined participants (Nakip, 2008). Quantitative and descriptive research methods were used in this research. As a data collection tool, the survey technique was used. The survey is one of the most commonly used methods for collecting first-hand data. Information is obtained by asking questions verbally or in writing to the appropriate individuals in the sample determined from the main mass subject to the study. Its goal is to measure its ideas, knowledge level, demographics and behaviour (Tokol, 2010).

The scale forms reached 575 students. It took 15 to 20 minutes for the scales to be applied in our research. The scales were handed over to the students and they were asked to answer the scales carefully by making the necessary explanations under the supervision of the researcher. The filled scales were collected again by the researcher.

Data collection tools

Sports participation motive scale

Sports Participation Motive Scale developed by Gill et al. (1983) consists of 30 items and 8 sub-dimensions (Skill Development, Team Membership / Spirit, Fun, Friendship, Success/Status, Energy Spendure, Moving/Being Active and Competition) to explain the reasons of the individual's participation in sports. To reveal which reason is more effective in individuals' participation in sports and exercise, it is evaluated on a 3-scale scale as "Very Important (1)", "Less Important (2)" and "Not Important (3)". Since the items in the inventory are evaluated between “Very Important (1)” and “Not Important at all (3), the low scores obtained from the scale indicate that the motivation to participate in sports is important and the high scores are insignificant.

The reliability and validity studies of the original scale were done by Gill et al., and it was determined that Cronbach's alpha coefficients were between 0.78 (Success/Status) and 0.30 (Friendship) for the sub-dimensions. The reliability of PMQ with the test-retest method was found to be 0.68 (Gould et al., 1985). The validity and reliability study of the inventory was carried out at the summer sports school by Oyar, Aşçı, Çelebi and Mulazimoğlu and it was found to be 0.68 (Gould et al., 1985). The reliability of PMQ with the test-retest method was found to be between 0.61 (Skill Development) and 0.78 (Success/Status). Internal consistency from the total scale was found to be .86 (Oyar et al., 2001).

Aggression scale

The validity and reliability study of the Aggression Inventory used in this study was done and developed by İpek İlter (Kiper), and it consists of 30 items (Kiper, 1984). The inventory includes three subtests for destructive aggression, assertiveness, and passive aggression. Each subtest consists of 10 questions. The items related to destructive aggression are 1, 2, 3, 13, 14, 15, 22, 23, 24, 29. The items related to assertiveness are 4, 5, 6, 10, 11, 12, 19, 20, 21, 28. The items related to passive aggression are 7, 8, 9, 16, 17, 18, 25, 26, 27, 30. The instruments used in inventory are question form and answer paper. The questions are a 7-point Likert type, which ranges between the ends” it doesn't suit me at all “and” it suits me very much". Institutionally, in each subtest, the subject who answered each question “it suits me very much” gets 70 points and the subject who answered “it doesn't suit me at all” gets 10 points. The Cronbach alpha internal consistency coefficient for the entire inventory was calculated as .83.

Data analysis

SPSS Statistics 22.0” package program was used. Before proceeding with answering the research questions, the normal distribution of aggression and motivation levels at the level of all participant students was examined. The Pearson Moments Product Correlation Coefficient was used to test whether there was a significant correlation between sports participation and aggression levels of the participants who received sports training. The independent-sample t-test was used to determine whether participation in sport varies according to the gender category between motive and aggression. When applying the T-test, the relevant t-values were noted by taking into account the results of the Levene test.

RESULTS

Table 1 contains the gender distribution of Sports High School students who participated in the study. 190 females (33%) and 385 males (67%) were students who study in sports high schools.

Table 2 shows the mean and standard deviations of the Sports High School students participating in the study in
Table 1. Distribution of sports high school students by gender.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>190</td>
<td>33.0</td>
<td>33.0</td>
</tr>
<tr>
<td>Man</td>
<td>385</td>
<td>67.0</td>
<td>67.0</td>
</tr>
<tr>
<td>Total</td>
<td>575</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

terms of sub-dimensions of the sports participation motive. As seen in Table 2, among the sub-dimensions of the sports participation motive, the competition and movement and being active sub-dimensions have the highest averages. The lowest average has the sub-dimension of being success and status. Whether there is a significant difference between these mean scores is given in Table 4 with the t-test results.

In Table 3, when the aggression sub-dimensions of the sports high school students participating in the study are analyzed, the average and standard deviations are indicated. As shown in Table 3, the mean of assertiveness scores of the Sports High School students participating in the study was found to be the highest, while the mean of destructive aggression and passive aggression were lower than the mean of assertiveness points. Whether there is a significant difference between these mean scores is given in Table 4 with the t-test results.

Table 2. Descriptive statistics results of the sports high school students participating in the research regarding their scores on the sub-dimensions of the sports participation inventory.

<table>
<thead>
<tr>
<th>Success and status</th>
<th>Team spirit</th>
<th>Physical fitness</th>
<th>Entertainment</th>
<th>Be friends</th>
<th>Competition</th>
<th>Movement being active</th>
<th>Skill development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.85</td>
<td>4.23</td>
<td>2.10</td>
<td>4.46</td>
<td>3.45</td>
<td>5.54</td>
<td>5.51</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.63</td>
<td>1.41</td>
<td>.87</td>
<td>1.32</td>
<td>1.12</td>
<td>1.40</td>
<td>1.44</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.50</td>
<td>3.25</td>
<td>2.33</td>
<td>3.25</td>
<td>2.33</td>
<td>4.20</td>
<td>4.20</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.50</td>
<td>9.75</td>
<td>7.00</td>
<td>9.75</td>
<td>7.00</td>
<td>12.60</td>
<td>12.60</td>
</tr>
<tr>
<td>Percentiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>1.50</td>
<td>3.25</td>
<td>2.33</td>
<td>3.25</td>
<td>4.20</td>
<td>2.33</td>
<td>4.20</td>
</tr>
<tr>
<td>50</td>
<td>1.50</td>
<td>3.50</td>
<td>2.33</td>
<td>4.25</td>
<td>5.20</td>
<td>2.33</td>
<td>5.20</td>
</tr>
<tr>
<td>75</td>
<td>2.00</td>
<td>5.25</td>
<td>3.33</td>
<td>5.25</td>
<td>6.20</td>
<td>3.33</td>
<td>6.20</td>
</tr>
</tbody>
</table>

Table 4 shows the mean and standard deviations of the Sports High School students participating in the study in terms of motivation and aggression dimensions. As can be seen in Table 4, there was no statistically significant difference in the average gender participation scores of the sports high school students participating in the study compared to the male athletes even though female athletes were higher than male athletes (p > 0.05). As seen in Table 4, no significant difference was found among according to the aggression inventory of sports high school students who participated in the study (p > 0.05).

There was a moderately positive relationship between friend, assertiveness, which is the sub-dimension of aggression, and competition, which is the sub-dimension of sports participation motive. A moderate negative correlation was found between destructive aggression, which is a sub-dimensions of aggression, and enjoyment which is the sub-dimension of sports participation motive. A moderately significant positive correlation was found between destructive aggression, which is the sub-dimension of aggression, and success and status, which is the sub-dimension of sports participation motive, with a moderate level of positive direction. A moderately significant medium-positive relationship was found between destructive aggression, which is the sub-dimensions of aggression, and competition, which is the sub-dimension of sports participation motive. A positive and moderately significant relationship was found between success and status, which is the sub-dimension of the sport participation motivation, and competition, which is the sub-dimension of the sport participation motivation. Differences were found in other sub-dimensions of aggression and participation in sports, but no significant relationship was found in the differences.
DISCUSSION

In this study, no significant difference was found in aggression by gender. In studies carried out in this direction, there are many studies related to our research. Scharf (2000) conducted a study on a sample of 129 high school students to detect differences in aggression by gender. At the end of the study, it was found that verbal aggression did not differ by gender, while physical aggression was used more by men. Giles and Heyman (2005) studied a sample group of 41 people, 21 boys and 20 girls, and found that male students' aggression scores were higher than female students' aggression scores and that boys were more prone to aggressive behavior than girls in the study in which they examined the relationship between gender and the tendency to aggression in adolescents.

Martinovic et al. (2011) found statistically significant differences between girls and boys in their study on 706 students. The motivations of male students were found to be higher compared to female students. A positive and moderately significant relationship was found between success and status, which is the sub-dimension of the sport participation motive, and competition, which is the sub-dimension of the sport participation motive. There was no statistically significant difference in the other sub-dimensions of the sports participation motive. Some studies support and do not support this study. Ilhan and Gencer (2013) did not find any significant difference in the sub-dimensions of “success/status, physical fitness/energy spending, team membership/spirit, friend, fun, competition, skill development, and movement/being active” in their study conducted in Ankara province for “determining the motivation of participation of students attending inter-high school badminton competitions”. In another study, a statistically significant difference was found in favor of female students in team 47 membership/spirit and entertainment sub-dimensions in the results of students on the participation motive scale according to gender variable (Bozkurt, 2014).

There was a moderately positive relationship between assertiveness, which is the sub-dimension of aggression, and competition, which is the sub-dimensions of the sports participation motive. According to this result, we can say that individuals engaged in sports do not hesitate to participate in sports competitions due to their aggressive nature.

There was a moderately positive relationship between assertiveness, which is the sub-dimension of aggression and being friends, which is a sub-dimensions of the sports participation motive. There are many studies in the literature that support our study. In their study, Williams and Warchal (1981) concluded that people with high aggressive scores showed better and functional skills in friendship relationships. Ani (1989) conducted a study on the effects of students studying at university on dominant self-states and some personal qualities on self-standing, assertiveness, and level of compliance. According to the study result, the average assertiveness score of male students was higher than that of female students. It is assumed that assertive individuals can easily form friendships because they do not experience communication difficulties. A moderately significant positive relationship was found between destructive and destructive aggression, which are the sub-dimensions of aggression, and success status and competition, which are the sub-dimension of sports participation motive. Some studies support this result in the literature. In a study conducted on teachers in Turkey, it was found that teachers who participate in regular sports display better overall mental health than those who do not play sports. Terry and Jackson (1985) explained the advantages and disadvantages of individuals in any interaction with the theory of social change. The individual will want to win as much as he can, to be defeated as little as possible. In other words, when the athlete breaks the rules, if the benefit is more than harm, the athlete will reinforce the aggressive behavior to win the competition. For this reason, it is possible to see offensive behavior in competitions even if it is prevented by the rules of the game with penalties. Leith (1977) found that losers in competitions use aggression significantly both in excess and within the rules. Violence is not about being prevented; rather can be considered an attempt to intimidate and a threat to accomplish. Even if it is thought that students who play sports will have lower levels of destructive aggression than students who do not play sports, research has shown the opposite. Students who do sports are physically stronger than students who do not do sports. They can face pressure from their peers to use this power when necessary with the robustness of force. When athlete students encounter situations that are not good in competitions, they are led to the belief that anything can be done to win. Assuming that they have more than the winning ambition given by their age, they can engage in aggressive behavior (Gökççek, 2015). According to Weinberg and Gould (2018), athletes are often more aggressive when they are defeated, when they perceive that the competition is poorly managed, when they are surprised, physically suffered and perform under their capacity. In another study, it was found that interpersonal sensitivity, anger and hostility sub-dimensions of teachers who do sports are more positive than teachers who do not do sports (Barut and Demir, 2020).

It can be assumed that aggression in sports is usually caused by being hindered. This hindrance occurs as a result of the high level of motives such as success, gaining power, recognition, prestige, superiority and dominance in the opponent. The various situational factors experienced in the sports environment (the result
of the match) can cause aggressive behavior during the competition by raising the obstacle.

CONCLUSION

When the results of the research are analyzed, a moderately significant positive relationship was found between aggression, which is the sub-dimension of aggression, and competition, which is the sub-dimension of sports participation motive. A moderately significant positive relationship was found between assertiveness, which is the sub-dimension of aggression and being friends, which is the sub-dimension of sports participation motive. There was a moderate positive correlation between destructive aggression, which is the sub-dimension of aggression, and competition, success, and status, which are the sub-dimensions of sports participation motive. A moderate negative correlation was found between destructive aggression, which is the sub-dimension of aggression, and entertainment, which is the sub-dimension of sports participation motive. In our study, differences between the sub-dimensions of aggression and the sub-dimensions of sports participation motive were given. Although there were differences in the other sub-dimensions not given in our study, no significance was found.

RECOMMENDATIONS

1) This study examined the relationship between motivation and aggression in sports. This study was applied to Sports High School students. This type of study can be deepened by applied to young age groups, amateur, and professional athletes.
2) While the coaches and managers are preparing for the competitions, the athletes who will participate in the competition can be informed by the experts on sports participation and aggression.
3) It could be explained why the sport is performed and how the athlete should fight against the difficulties by consulting with guidance teachers in all schools.
4) Seminars could be organized by experts to increase self-efficacy and motivation by providing necessary opportunities to students interested in sports branches and sports activities, and if necessary, one-on-one meetings should be held.

REFERENCES