


Research Article

Relationship between Team Identification and Aggression among Medical Students at King Saud University in Riyadh, Saudi Arabia; A Cross-Sectional Study

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Abstract

Objective: To discuss the relationship between aggression and team identification among sports fans of the Saudi Pro League (SPL) in the Kingdom of Saudi Arabia

Methods: In this cross-sectional study, we used an anonymous self-administered questionnaire. Answering the questionnaire is considered consent from the participants to participate in the survey. Our population is the medical students at King Saud University in Riyadh, Saudi Arabia. The attached questionnaire form was distributed in the form of online-based copies through Email and WhatsApp. The form was filled out by medical students from both sexes. There was a section in the questionnaire measuring the sports fandom of the participant and another one for the team identification level. Also, a section about the level of aggressiveness was provided to measure its association with team identification. The aggressiveness was compared between low and high levels of team identification.

Results: A total of 340 participants were included in the analysis. The gender distribution showed that 46.8% (159 individuals) were female, and 53.2% (181 individuals) were male. The mean age was 21.69 years, and the middle value (median) was 22.00 years, with a standard deviation of 1.474. Range spanned 9 years, from 18 to 27 years. Correlation tests revealed a strong correlation between the Sport Fandom Score and the Team identification score ($r = 0.842$, $p < 0.01$). The correlation between the Sport Fandom Score and the Combined Aggression score was moderate and positive ($r = 0.241$, $p < 0.01$), and the correlation between the Team identification score and Combined Aggression score ($r = 0.221$, $p < 0.01$).

Conclusion: Our findings suggest the presence of a correlation between fans of sports or clubs and aggression. Aggression increases with increasing team and sports fandom.

Keywords: Saudi Pro League (SPL); Aggression; Team identification; Sports fandom; Football

Introduction

Saudi Pro League (SPL) is the most significant men's football match in Asia [1]. Recently, the Public Investment Fund (PIF) of the Kingdom of Saudi Arabia acquired local football clubs, including Al Hilal, Al-Ittihad Club (Jeddah), and Al-Nassr FC. The PIF is aggressively pursuing European football

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talent with hefty fees and wages, with the goal of elevating the SPL to the top ten leagues in the world [2]. Recently, it has been reported that the degree of psychological attachment a sports fan feels towards his or her preferred team is known as “team identification” [3]. However, an association between psychological health and team identification has garnered more attention [4]. Furthermore, researchers observed a positive relationship between team identification and social psychological health because team identification fosters social relationships, which improve well-being [5]. Moreover, recent literature concluded that people who identify with a sports team tend to have stronger social connections, which can lead to better mental and emotional health, and this might be attributed to the fact that team identification can give people a sense of belonging, community, and purpose. It can also provide them with opportunities to socialize with other fans, celebrate victories, and cope with losses [5-7]. Previously, researchers investigated the hypothesis that there are elements that influence team identification. This study contributes significantly to a better understanding of team identification. Team identification interests these researchers since it is a powerful predictor of sports fan consumption. According to the findings of these studies, persons who are strongly identified with a team are more likely to attend games, pay more for tickets, and spend more money on merchandise [8-10]. Furthermore, psychologists have long been interested in the aggression of sports fans. A piece of this interest has been on the subject of whether fans are more aggressive than nonfans when attending a sporting event [11]. Besides, there is a growing body of research that suggests a link between aggression and team identification. Recent studies have found that people who are highly identified with their favorite teams are more likely to engage in aggressive behavior [12, 13]. Correspondingly, there are many reasons why people become fans of sports teams. Some people are motivated by the vicarious achievement of feeling proud and successful by association with a winning team. Others are drawn to the aesthetics of the sport or the excitement of competition. Still, others find that sports teams provide a sense of escape from the everyday grind or an opportunity to connect with family and friends [14-16]. A study by Fink et al. (2002) reported nine psychological factors that can lead to team identification, including vicarious achievement, aesthetics, drama, escape, family, knowledge acquisition, appreciation of physical talents, social connection, and physical attraction [14]. In our study, we aim to discuss the relationship between aggression and team identification in sports fans of SPL in the Kingdom of Saudi Arabia.

Materials and Methods

In this cross-sectional study, we used an anonymous self-administered questionnaire. Answering the questionnaire is considered consent from the participants to participate in

the survey. Thus, the following statement, “Completion of the following questionnaire was taken as an indication of your consent to participate,” was written on the top of the questionnaire sheet. The minimum sample size was calculated to be 305 using raosoft.com, where the margin error is 5%, the level of confidence is 95%, the population size is 1469, and the response distribution is 50%. Our population is the medical students at King Saud University in Riyadh, Saudi Arabia. The attached questionnaire form was distributed in the form of online-based copies through Email and WhatsApp. The use of this convenient sampling technique allowed us to reach the required number of participants. The form was filled out by medical students from both sexes. There was a section in the questionnaire measuring the sports fandom of the participant and another one for the team identification level. Also, a section about the level of aggressiveness was provided to measure its association with team identification. The aggressiveness was compared between low and high levels of team identification.

Study Design

Quantitative, cross-sectional

Study Duration

24 months

Study Setting

The study will take place in the College of Medicine at King Saud University, Riyadh, Saudi Arabia.

Target Population / Sample Size (with sample size formula)

Medical students at King Saud University in Riyadh, Saudi Arabia. The sample size was calculated through the following sample size calculator website: raosoft.com

Inclusion Criteria

Medical students at King Saud University

Exclusion Criteria

Non-medical student and/or not studying at King Saud University

Study Variables

Sports fandom, team identification level, aggressiveness,

Ethical Considerations

Ethical approval for the study was sought from the Institutional Review Board at King Saud University, College of Medicine, Riyadh, Saudi Arabia. A web link was created and shared with the chosen sample. The nature and purpose of the study, the primary investigator’s contact information, and an explanation of the confidentiality and data anonymity policy were provided. Consent to participate was obtained by clicking on the informed-consent link. After reading

the informed consent statement, the participants must click on “agree” to access the study’s survey. The survey takes approximately 4 minutes to complete.

Data Collection / Data Source

Permission to use the questionnaire was sought from the authors by email; please find the attached correspondence among the sent requirements.

Statistical Analysis

Data was analyzed using SPSS 24.0 version statistical software. Descriptive statistics (mean, standard deviation, frequencies, and percentages) were used to describe the quantitative and categorical variables. Bivariate statistical analysis was carried out using appropriate (chi-square, student t-test, one-way analysis of variance, and Pearson’s correlation) statistical tests based on the type of study and outcome variables. A p-value of <0.05 and 95% CI was used to report the statistical significance and precision of the results.

Results

Demographic characteristics

A total of 340 participants were included in the analysis. The gender distribution showed that 46.8% (159 individuals) were female, and 53.2% (181 individuals) were male. The mean age was 21.69 years, and the middle value (median) was 22.00 years, with a standard deviation of 1.474. Range spanned 9 years, from 18 to 27 years. (Table. 1)

In terms of the year of medical school, participants were distributed as follows: 15.3% (52 individuals) in the 1st year, 20.6% (70 individuals) in the 2nd year, 24.4% (83 individuals) in the 3rd year, 26.5% (90 individuals) in the 4th year, and 13.2% (45 individuals) in the 5th year. Marital status indicated that 98.5% (335 individuals) were single, while 1.2% (4 individuals) were married, and 0.3% (1 individual) were divorced. The participants' original places of residence were predominantly from Riyadh province, accounting for 96.5% (328 individuals). Smaller percentages originated from other regions: 1.5% (5 individuals) from Almadina Al-Munawarrah, 0.9% (3 individuals) from the Eastern province, 0.6% (2 individuals) from Aseer, 0.3% each (1 individual) from Makkah Al-Mukarramah, Qassim. In terms of Saudi football team support, 48.8% (166 individuals) favored Hilal, followed by 33.8% (115 individuals) who supported no team. Other teams received varying levels of support: Alnasr had 8.2% (28 individuals), Al-Ittihad had 4.1% (14 individuals), Al-Shabab had 0.9% (3 individuals), Ahly had 2.9% (10 individuals), and the remaining teams each had 0.3% (1 individual).

The correlation analysis

The correlation analysis was performed to examine

Table 1: Demographic characteristics

		Frequency	Percent
Gender			
	Female	159	46.8
	Male	181	53.2
	Total	340	100
Year of Medical school			
	1st	52	15.3
	2nd	70	20.6
	3rd	83	24.4
	4th	90	26.5
	5th	45	13.2
	Total	340	100
Marital status			
	Divorced	1	0.3
	Married	4	1.2
	Single	335	98.5
	Total	340	100
Where do you originally live?			
	Almadina Al-Munawarrah	5	1.5
	Aseer	2	0.6
	Eastern province	3	0.9
	Makkah Al-Mukarramah	1	0.3
	Qassim	1	0.3
	Riyadh province	328	96.5
	Total	340	100
What Saudi football team do you support?			
	Ahly	10	2.9
	Al Batin	1	0.3
	Al Riyadh FC	1	0.3
	Al-Fayha	1	0.3
	Al-Ittihad	14	4.1
	Al-Shabab	3	0.9
	Alittifaq	1	0.3
	Alnasr	28	8.2
	Hilal	166	48.8
	None	115	33.8
	Total	340	100

the relationships between three variables: Sport Fandom Score, Team identification score, and Combined Aggression score. The Pearson correlation coefficients and Spearman's rho coefficients were calculated to assess the strength and direction of these relationships.

For the Pearson correlations, the following results were obtained:

The correlation between the Sport Fandom Score and the Team identification score was strong and positive ($r = 0.842$, $p < 0.01$).

The correlation between the Sport Fandom Score and the Combined Aggression score was moderate and positive ($r = 0.241$, $p < 0.01$).

The correlation between the Team identification score and the Combined Aggression score was moderate and positive ($r = 0.221$, $p < 0.01$).

These findings suggest significant associations among the variables. Specifically, higher Sport Fandom Scores were correlated with higher Team identification scores and moderately higher Combined Aggression scores. Similarly, higher Team identification scores were correlated with moderately higher Combined Aggression scores.

The nonparametric Spearman's rho coefficients yielded similar results:

The correlation between the Sport Fandom Score and the Team identification score was strong and positive ($\rho = 0.827$, $p < 0.01$).

The correlation between the Sport Fandom Score and the Combined Aggression score was moderate and positive ($\rho = 0.244$, $p < 0.01$).

The correlation between the Team identification score and the Combined Aggression score was moderate and positive ($\rho = 0.199$, $p < 0.01$).

Discussion

Our correlation analysis of data from 340 medical school students in the Kingdom of Saudi Arabia was performed to examine the relationships between three variables: Sport Fandom Score, Team identification score, and Combined Aggression score. The Pearson correlation coefficients and Spearman's rho coefficients were calculated to assess the strength and direction of these relationships. The findings suggest that there are significant associations between the three variables. People with higher Sport Fandom Scores also tend to have higher Team identification scores and moderately higher Combined Aggression Scores. Similarly, people with higher Team identification scores also tend to have moderately higher Combined Aggression Scores.

Our study is in agreement with the study that team

identification is positively associated with fan self-reported aggression, as well as levels of sports fandom. In addition, team identification will be positively associated with perceptions of the appropriateness of physical and verbal aggression among sports fans [12]. In addition, a study that team identity predicted a readiness to engage in verbally hostile aggression, which was consistent with predictions. Moreover, previous research indicated that the level of team identification was related to aggressiveness at young sporting events [17, 18]. Besides, the findings of a study conducted that viewers still have hostile cognitions towards opponents of their favorite teams, with implications for lowering fan aggressiveness and future study options highlighted [19]. Furthermore, a study reported that individuals with higher trait aggression are more prone to participate in aggressive behaviors, according to research conducted outside of the sports area [20]. On the other hand, a study reported that there is no substantial association between sports fandom and characteristic aggression [21]. However, highly identified fans report higher degrees of anger and instrumental aggressiveness than low identification fans [22], and this might be attributed to two reasons, including [1] the role of team follower is an important component of strongly identified fans' social identities [2] The team's performance is extremely important to the fans' sense of self-worth [23, 24]. On the other hand, team identification might have a beneficial effect on social psychological health [15]. A study summarized that Team identification and social psychological health are likely to be positively correlated because team identification can lead to important social connections, which can, in turn, promote well-being [25]. Moreover, a study on 204 college students found that identification with a local sports team was positively correlated with total social well-being, but mere fandom and identification with a distant team were not. Additional analysis revealed that identification with a local team was a significant predictor of social integration and social coherence, but not social acceptance, social contribution, or social actualization [26]. Another study used the Team Identification -Social Psychological Health Model (TISPM) and hypothesized that social well-being would be a) positively related to identification with a local sports team, b) not related to identification with a distant team, and c) not related to mere sport fandom, concluded that belonging to a sports team promotes social relationships, which in turn promote well-being [16, 27]. Furthermore, a study reported that team identification is linked to lower levels of weariness and disengagement, and this might be attributed to the increase in social support and greater levels of group self-efficacy [28].

In conclusion, the findings of this study suggest that there is a significant positive association between team identification, sports fandom, and aggression. This is consistent with previous research, which has shown that highly identified

fans are more likely to engage in aggressive behaviors, both verbally and physically. On the other hand, the study also found that team identification was positively associated with social psychological health. This is likely because team identification can lead to important social connections, which can, in turn, promote well-being.

Limitations

This study had a few limitations. First, it was conducted on a relatively small sample of medical school students in Saudi Arabia. It is possible that the findings would be different if the study were conducted on a larger and more diverse sample. Second, the study used self-report measures of team identification and aggression. These measures are subject to bias, and it is possible that the participants were not always accurate in their responses.

Conclusion

The findings of this study suggest that team identification may be a risk factor for aggression. However, it is important to note that team identification can also have positive benefits for social and psychological health. Future research should examine the relationship between team identification and aggression in a larger and more diverse sample. Researchers should also use more objective measures of aggression, such as observational data or physiological measures

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