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Does Football Fans' Violence Influence Match Attendance?

Summary

Even if it is a generally known (or suspected) correlation, there is little proof of the negative impact of violence on sports spectators' attitudes and eagerness to spend money on tickets and other forms of consumption. The most well-known research, by Giulianotti and Robertson (2004), proves this correlation, but scant research has been done on the issue from the marketing and economic point of view. The goal of this paper is twofold. It contributes to the theory of consumer behaviour, showing the unexpected evidence of a weak or non-existent relationship between these factors. In this area, results show that fans' behaviour is far from rational. This paper may also have significance for club managers, as attendance levels affect a club's income on every match day through two channels: the revenue from ticket sales and the TV rights for the match sold to the TV network. Of course, the economic approach is only one of many dimensions. The author is aware of the damaging effect of aggressive behaviour, but in this case he focuses on the purely economic relationship.

Key words: sports economics, marketing, measurement model, violence, attendance.

JEL codes: M31, Z29

Introduction

Unlike other factors that are more directly connected to economics, like consumption, violence is usually approached from a more sociological point of view. When analyzing literature about violence in sport market, one can conclude that the research approaches to the topic encompass different fields, such as sociology, psychology, law, sport studies, public health, and journalism. Fields et al. (2007) examine hazing, brawling, and foul play in sports in existing articles with the purpose of showing that these three forms of violence should "be examined as interrelated examples of interpersonal violence and sports-related violence" (Fields et al. 2007, p. 367).

Elias (1971 and 1976) demonstrates the existence of violence in ancient games and competitions. Bourdieu (1980) shows the different forms of violence that may be observed in competitive sporting events (physical violence, verbal violence, psychological violence, and cheating). This has been widely researched through literature (Brohm 1993; Defrance 2000). Guilbert (2004) looks at the different forms and levels of violence that appear in different sports.

A study researching the case of Israeli football violence from an urban ecology standpoint demonstrates that besides the structural characteristics of the social system, which is affected by urban ecology and by the surroundings that teams operate and that affect spectator violence, the violence level of the fans is influenced by the violence level of the players. In the same research, four sociological explanations on how violence is systematically related to both the team's urban ecology and sports ecology are presented as possible reasons and triggers for violent behavior: "First, teams representing communities of subordinate ethnic minorities are more violent than others. Second, teams competing in higher level (professional) divisions and teams at either the bottom or top of their division (high levels of competition) are more violent. Third, teams characterized by violent players are more likely to have violent spectators. Finally, the causal relation between player and spectator violence is asymmetric: players affect spectators' violence but not vice versa" (Semyonov & Farbstein 1989, p. 50). The goal of this paper is to research and analyze the violence factor in a similar way to the research by Semyonov and Farbstein. However, the difference is that the current research seeks to test the violence factor from an economic point of view.

Previous Research on Violence in Sport

Few authors have tried to measure the violence factor; see Table 1 for a summary of the methodology. There are studies that deal strictly with sports violence and different approaches that researchers have used to study it. The development of research on sport violence began with studies seeking the factors that influence violence. Researchers then created models that tried to predict violence. More recently, scholarship has been offering a deeper understanding of types of violence and explaining different forms of such violence in this specific market.

Semyonov and Farbstein (1989) have used quantitative secondary research to study the influence of urban ecology (community size) and sport ecology (league structure) on player and spectator violence. Mustonen's (1996) research has studied violence in ice hockey in Canada and Finland to find the motives of the crowd in attending an ice-hockey match, where there is a high level of on-ice and off-ice violence. In a different approach in the study of sports violence, Guilbert (2004) examined forms and levels of violence in eight different sports to demonstrate that forms of violence differ depending on the sport. The idea of testing what is considered violence before testing levels of violence was inspired by Guilbert's article and was implemented in the design of the questionnaire for the current research.

Researchers initially characterized the audience as passive. With the advance of technology, from media text through books, newspapers and magazines to video games and TV, many articles have studied the influences of the content transmitted to the helpless audience, which is held captive by new forms of media like the internet. The shift from thinking about the audience as passive audience to active ones occurred thanks to new British cultural studies such as that by Hall (1980), which studied the type of audience involvement in terms of four aspects:

- (i) The role of encoding and decoding from the vantage point of television production.
- (ii) The process of television production as a series of codes and signs that are constructed in order to relay specific messages.
- (iii) The role that television production plays in encouraging a “preferred meaning or reading” and the issue of misreading signs.
- (iv) Finally, he presents three types of codes — dominant or hegemonic, professional, and negotiated — and shows how they affect the viewer’s connotative meaning.

Table 1
Comparison of the methodologies used in research on the violence factor

Author (year)	Topic	Construct	Method	Questionnaire type	Factors	Number of items
(Semyonov & Farbstein 1989)	Influence of urban ecology and sport ecology on player and spectator violence	Violence	Quantitative	Existing records	Community size League structure	3
(Mustonen 1996)	Violence in ice hockey in Canada and Finland	Violence	Quantitative	Questionnaire	Reasons for their attendance at the game Group size Recent history of fighting	30
Guilbert (2004)	Forms and levels of violence in 8 different sports	Violence	Quantitative	Questionnaire	Characterization of violence Attitude toward violence Rules Safety	7

Source: own research.

To better understand this factor, it is useful to examine data on attendance and audience. Data on occupancy rates across Europe show that the stadiums in England have a 96% occupancy, which is the highest on the continent, followed by Germany with 92% and the Netherlands with 87%. Next is Belgium with 74%, and Spain and France close with 68% and 67% respectively. Italy sits toward the bottom of the list with 55%, and Portugal comes in last with an attendance rate of 26% (Schnater 2016). The occupancy rate in Israel is 44.5% (Daskal 2016).

Sumida et al. (2014) present a study of sports fans’ attitudes for which the basis of measurement was the team loyalty factor. From a wider perspective one can claim that using just one factor is not enough to fully represent the attitude as there are other factors that influence it. On the positive side, it is clear that the loyalty factor was thoroughly covered from different angles, and the sample is large. These two positive points were taken into consideration

Table 2**Comparison of the methodologies used in studies with attendance as a factor**

Author (year)	Topic	Construct	Method	Questionnaire type	Factors	Number of items
Sumida et al. (2014)	Team loyalty and attitude toward spectating behavior	Attitude	Quantitative	Questionnaire	Loyalty Attitudes toward spectating behavior Intention to re-attend	8
(Greenwell 2001)	The influence of spectator sports facilities on customer satisfaction and profitability	Attitude	Quantitative	Questionnaire	Perceptions of the core product Physical facility Service personnel Customer satisfaction Team identification	44
Shank & Beasley (1998)	Understanding the involvement construct	Cognitive	Qualitative	Depth interviews	Involvement Media habits Attendance Participation in sports	8
(Laverie & Arnett 2000)	Model of fan behavior development	Behavioral	Quantitative	Questionnaire	Situational involvement Enduring involvement Attachment Satisfaction Attendance	46

Source: own compilation.

while designing the research for this paper. A more extensive measurement was done by Greenwell (2001) for a paper dealing with levels of demand for sport. The attitude in this case was based on attendance and audience factors. Two important aspects of Greenwell's research methods were implemented in the current study even though Greenwell's study covered a relatively small sample. The first one is the self-report method and the second is the randomness of the participants, as these aspects are widely used in attitude research. Shank and Beasley (1998) suggested a scale to measure sports fan involvement constructs to better understand sports fans. They found two aspects of involvement: cognitive and affective. These aspects relate to viewing sports on television, reading about sports in magazines and newspapers, attending sporting events, and participating in sports. Laverie and Arnett (2000) opted for a combination of two main factors measuring the behavioral construct used in the previous studies: attendance and fan identity, which in other research was referred

to as loyalty in broader terms. The researchers used multiple self-reporting items to collect their data, and they used existing inventories of items from previous studies. The use of multiple items enabled the authors to test the suggested model, but because the sample was formed from a narrow set of participants who were fans of women's basketball at a large university, there were probably other factors influencing the behavior that originated in the characteristics of this population. This fact could be a problem when the model is applied to another population. Thus in designing the tool used in the research discussed in this paper, which encompasses greater participant diversity, more items were used to measure the factors under study. This was to compensate for the limitation of ignoring other factors that can affect fan behavior.

Research methods

The Israeli football league was officially established in 1931, but its beginnings date back to 1928, when the Israeli Football Association (IFA) was created. In the first season nine teams competed and the champions were the British police team. Since then, changes have been made to the league format, and today the top Israeli league competition is called Ligat Winner, or Ligat HaAl. Fourteen teams take part in a league system with three rounds and a total of 36 match days. The winner is the one standing on the top of the table at the end of the season. Apart from the league matches, two more cup competitions are played: the Toto Cup at the beginning of the season and the State Cup (Gvia HaMedina) played over the season in a knockout system. The league winner gets a place in the second round of qualification to the UEFA Champions League competition. The winner of the State Cup, as well as the teams finishing the league in second and third place, gets a place in the second round of qualification to the UEFA Europa League.

The clubs chosen for this research are the ones that won a league title (championship) over the past ten years (2005-2015): Maccabi Tel Aviv FC (three championships, in the 2012/2013, 2013/2014, 2014/2015 seasons), Maccabi Haifa FC (three, 2005/2006, 2008/2009, 2010/2011), Beitar Jerusalem FC (two, 2006/2007, 2007/2008), Hapoel Tel Aviv FC (one, 2009/2010), and Ironi Kiryat Shemona FC (one, 2011/2012).

Due to the lack of a proven structure of the population of Israeli football fans, the reference data were obtained from a survey performed by an Israeli economics magazine regarding Israeli sports fans in general (Daskal 2015). The statistics from that study show that 70% of the fans are male, the predominant age of a fan is 35, 45% of fans are between 25 and 45 years old, and 72% have an education higher than high school. Regarding religion, 46% are secular, 43% religious at some level, and 11% are in the 'other' category. In terms of economic status, 47% are above average, 20% are average, and 33% are below average. Despite this spread, the average amount a regular fan (not avid or fanatic) spends on team-related items (tickets, TV sports channels, merchandising, and travel expenses) stands at 1,030 NIS per year, while an avid or fanatic fan spends 2,022 NIS per year, almost twice as much as a regular fan. The same study shows that 82% of the regular fans attend matches at

the stadium twice a year at most, while 59% of the fanatic fans attend matches at the stadium at least once every two months (Daskal 2015).

For the current research the fan's supported team was chosen as the leading variable. Only the statistics of the teams eligible for this study were included. The structure is based on match attendance.

Table 3

Comparison of fan division by teams in previous studies and this study

Team	Study 1	Study 2	This Study
Maccabi Haifa	38.4%	39.7%	37.7%
Maccabi Tel Aviv	21.6%	27.2%	24.1%
Beitar Jerusalem	18.4%	16.9%	20%
Hapoel Tel Aviv	18.2%	12.8%	15.9%
Ironi Kiryat Shemona	3.4%	3.4%	2.3%

Source: own compilation based on: Sports (n.d.); Editors (2015).

Table 3 shows that between studies 1 and 2 there were not a lot of differences in the breakdown of fans by team between previous research and the current research. The differences that appear between the percentages in the previous studies and the author's study stem from the fact that in the previous studies the percentages of fans of each team were calculated by factoring in attendance, while in the author's study the percentages were calculated from data collected in the survey with a specific question: "Which one is your favorite team"?

As seen above, each factor can be measured in different ways and through different items. The choice of method depends on the goal of the research. For the purposes of this study, the method used was a combination of previous methods, employed with the hope that with this method it would be possible to achieve a more accurate and deeper understanding of the relation between violence and attendance.

The questionnaire used was part of larger study that was designed to measure the attitude constructs along with six other factors and some additional demographic data. All were measured through a self-report method. Attendance and audience were considered connected, so they were measured along with five items; the violence factor was measured with eighteen items; and there were eight items that gathered demographic information from the participants. Finally, one question asked for the participant's favorite team from a list of five teams.

In this research an explicit process was implemented (Maio & Haddock 2010). Two methods that were originally developed with the purpose of measuring attitudes are the Thurstone scale and the Likert scale. The questionnaire used in this study was designed and written in Hebrew because the target population was football fans living in Israel. After the questionnaire was finalized, it was translated into English for the publication. Before the research was conducted, the tool was tested on twelve participants.

An online survey was conducted using an online survey platform (Google Forms), and the link to the questionnaire was published on Facebook and several internet forums. A total of 1,264 responses were received, of which 158 (12.5%) were discarded due to several errors or incomplete forms. Thus the final number of respondents was 1,106 (87.5% of all questionnaires received).

The data were collected through the questionnaire over a period of approximately four months, during the last phases of the Israeli league's 2015/2016 season. It must be specified that because the research was planned and conducted before the end of the playoffs, it was not possible to include the league champion, Hapoel Be'er Sheva, which did not win a championship during the ten years before this study.

Results

By asking a question about types of violence that can influence the decision to attend a match at a stadium and comparing it to the three constructs, the author checked, for each construct, if what fans considered to be violence would cause them to stop attending matches. This question was an expansion of some questions addressing different types of violence that were part of a larger study. The analysis was done with a T-Test for three attitudinal constructs. The cognitive construct showed a stronger connection for those who answered no (meaning they would continue attending matches despite the violence) than for those who answered yes, meaning that this type of violence would cause them not to attend matches.

Table 4
T-Test of violence and attendance factors

Factor 1	Construct	Mean for no	Means for yes	Difference	T-Test Significance
Would this type of violence cause you not to attend more matches	Cognitive	3.8317	3.2187	0.613	0.0001
	Affective	4.1299	3.5581	0.5718	0.0001
	Behavior	2.9365	2.5460	0.3905	0.0001

Source: as in Table 1.

Similar to the cognitive construct, the affective construct shows a stronger connection for those who answered no than for those who answered yes. In the behavior it also shows a stronger connection for those who answered no than for those who answered yes (see details in Table 4, the bolded numbers are bigger than the others and show stronger connection as explained in the text). The data prove that what the fans consider to be violence will not cause them to stop going to matches. Moreover, the fans who will continue to attend matches despite violence have a stronger attitude than the fans who will stop attending because of violence.

Table 5**T-Test for the attitude constructs and the motives that will cause fans to stop attending matches at the stadium**

Factor 1	Construct	Mean for no	Means for yes	Difference	T-Test Significance
Violence	Cognitive	3.8491	3.3993	0.4498	0.0001
	Affective	4.1490	3.7199	0.4291	0.0001
	Behavior	2.9417	2.6748	0.2669	0.0001
The Level of the football match	Cognitive	3.8597	3.4427	0.417	0.0001
	Affective	4.1615	3.7569	0.4046	0.0001
	Behavior	2.9572	2.6834	0.2738	0.0001
High ticket price	Behavior	2.9219	2.8004	0.1215	0.014

Source: as in Table 1.

By asking the question about reasons that may cause fans to hesitate to buy season tickets and regularly attend team games and comparing it to the three constructs, the research tested the relationship between the attitude of the fan and the motives that would cause the fan to stop attending matches at the stadium. The option of “violence” was significant for the three constructs: the connection with the cognitive, affective, and behavioral constructs for those fans who chose this option as a reason to stop attending matches at the stadium was weaker than for those for whom this was not a reason to stop attending matches (see details in Table 5, the bolded numbers are bigger than the others and show stronger connection as explained in the text). The interpretation is that the level of violence will have a smaller effect on the decision to attend a match by a fan with a stronger attitude compared to one with a weaker attitude.

The second option, the level of the football match, was also significant for the three constructs. The connection to the cognitive, affective, and behavioral constructs for the fans who chose this option as a reason to stop going to the stadium showed weaker results than those for whom this was not a reason to stop attending matches (see details in Table 5). The conclusion is that fans with a stronger attitude are less affected by the level of the football match than fans with a weaker attitude.

The third possible reason to stop attending matches at the stadium was the high ticket prices. For this option, significant results were obtained only for the behavioral construct. For the fans who chose this option as a reason to stop going to the stadium, the results were weaker than for fans for whom this was not a reason to stop attending matches (see details in table 3.2). This means that the fans whose behavioral construct of the attitude is stronger are more affected by ticket prices than fans with a weaker attitude. The other two options, lack of public transport to the stadium and lack of parking places at the stadium, did not garner significant results. Comparing these three reasons to stop attending matches shows that the results are quite similar, meaning that the different reasons affect fans in a similar way when it comes to attendance.

Conclusions

From the results presented above for the two factors used in this study, the author reached the conclusion that fans with a stronger attitude will continue to buy tickets and attend matches even if violence is present. Moreover, a stronger attitude toward the team will lead to greater attendance, fans will buy more individual tickets during a season if they have a stronger attitude, and what individual fans consider to be violence will not stop them from continuing to attend matches even if there is such violence. This conclusion runs counter to the conclusion reached by Giulianotti and Robertson (2004), who state that the presence of violence has a negative influence on attendance, meaning that the violence factor causes attendance to drop. Semyonov and Farbstein (1989) demonstrates that besides the structural characteristics of the social system, which is affected by urban ecology and by the surroundings that teams operate and that affect spectator violence, the violence level of the fans is influenced by the violence level of the players. In the same research, four sociological explanations on how violence is systematically related to both the team's urban ecology and sports ecology are presented as possible reasons and triggers for violent behavior. This study shows that even when there is violence, when the attitude of the fans is strong, they will continue attending matches despite the violence. The results of this article can be also explained as some types of violence are perceived different when they occur in a sport event than in other environments. Guilbert (2004) concluded that because of the legitimization of violence in football, verbal violence was not noted even though it existed. Based on the conclusions reached in this article, it is recommended that clubs focus on their efforts to overcome violence by reinforcing the fans' attitude so they continue to attend matches despite the presence of violence. Of course the perfect solution would be to eliminate the violence phenomenon from football. Consequently, the author suggests building on the ideas presented here and more deeply studying possible ways to minimize violence and how to achieve this, and then analyzing how the eradication of violence will affect attendance.

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Czy przemoc kibiców piłki nożnej wpływa na frekwencję na meczach?

Streszczenie

Mimo iż na ogół się wie (lub podejrzewa) o takiej korelacji, to jednak istnieje niewiele dowodów na negatywny wpływ przemyca na postawy widzów na imprezach sportowych i na chęć wydania pieniędzy na bilety i inne formy konsumpcji. Najbardziej znane badania Giulianotti i Robertsona (2004) dowodzą istnienia tej korelacji, niewiele jednak jest badań na ten temat z marketingowego i ekonomicznego punktu widzenia. Cel artykułu jest dwójakiego rodzaju. Wnosi on wkład w teorię zachowań konsumentów, wykazując nieoczekiwany dowód na słaby lub w ogóle brak związku między tymi czynnikami. W tej mierze wyniki pokazują, że zachowanie kibiców dalekie jest od racjonalnego. Artykuł może też mieć znaczenie dla kierownictwa klubów sportowych, ponieważ poziomy frekwencji wpływają na dochody klubów każdego dnia meczowego, pochodzące z dwóch kanałów: wpływy ze sprzedaży biletów i praw do transmisji telewizyjnych meczu sprzedanego sieci TV. Oczywiście, podejście ekonomiczne jest zaledwie jednym z wielu wymiarów.

Autor zdaje sobie sprawę ze szkodliwego wpływu agresywnych zachowań, lecz w tym przypadku koncentruje się na czysto ekonomicznym związku.

Słowa kluczowe: ekonomika sportu, marketing, model pomiaru, przemoc, frekwencja.

Kody JEL: M31, Z29

Влияет ли насилие со стороны футбольных болельщиков на посещаемость матчей?

Резюме

Даже если в общем осознается (или подозревается) такая связь, нет достаточных доказательств отрицательного воздействия насилия на отношение зрителей спортивных соревнований и желание выдавать деньги на билеты и другие формы потребления. Наиболее известные исследования, проведенные Джульянотти и Робертсоном (Giulianotti и Robertson) (2004), доказывают существование такой корреляции, однако объем исследований по этой проблеме с маркетинговой и экономической точки зрения невелик. Цель настоящей статьи двойная. Она вносит лепту в теорию поведения потребителей, указывая неожиданное доказательство слабой или вообще отсутствие связи между этими факторами. В этом отношении результаты показывают, что поведение болельщиков далекое от рационального. Разработка может тоже иметь значение для менеджеров спортклубов, так как уровни посещаемости влияют на доходы клуба по всем дням, в которых проводятся матчи, в двухканальном режиме: поступления от продажи билетов и прав на трансляцию по ТВ матча, проданного телевизионной сети. Конечно, экономический подход – лишь одно из многих измерений. Автор отдает себе отчет в разрушительных последствиях агрессивного поведения, но в этом случае он сосредоточивает свое внимание на чисто экономической связи.

Ключевые слова: экономика спорта, маркетинг, модель измерения, насилие, посещаемость.

Коды JEL: M31, Z29

Artykuł zaakceptowany do druku w kwietniu 2018 roku

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