Bryant University HONORS THESIS

More Than Just a Game? The Impact of Athletic Team Performances of Advertisement Appeal

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ABSTRACT

The goal of this study was to determine the effects that an athletic team's performance may have on the ways in which their fans view advertisements. Conducted using a 2 (game: basketball vs. baseball) x 2 (outcome: win vs. loss) x 2 (score: blowout vs. close game) experimental study created within Qualtrics, we set out to determine how the type of game, outcome, and score may all affect advertisement appeal. Using clips from a Celtics vs Lakers game as well as a Red Sox vs Yankees game, we created short video clips that were designed to replicate the experience of watching a live broadcast of a sporting event. The 170 college-aged participants were then asked to complete a short survey which was used to gauge their feelings towards 3 different advertisements which were shown after the sports clip. Using this data, we were able to find an interesting relationship between the type of game, how the game type affected each participant's perception of a positive score or outcome, and finally, how these perceptions influenced advertisement appeal among viewers. This study provided crucial information to sports marketers which may be used to determine how to best allocate their advertising budget during major sporting events.

INTRODUCTION

Sports marketing is a field that has grown increasingly prevalent over the past decades. Watch any major sporting event today and you will see the degree to which athletics and advertising have become intertwined. Stadiums cover their walls with sponsored messages, jerseys are adorned with company and brand logos, and any televised event is sure to spare plenty of time for the highest bidder to broadcast their newest video advertisement. For instance, in 2023, Fox Sports raked in nearly \$600 million from Super Bowl advertising revenue alone (Rizzo, 2023). Therefore, as major sporting events such as the Superbowl, World Series, or NBA Finals continue to grow into their own corporate entities, it is crucial for advertisers to understand how they can receive the most bang for their buck in terms of generating positive attitudes towards, and perceptions of, their advertisements.

The interaction between sports and advertising is one which has been studied extensively. Specifically, athlete endorsements have been studied by countless researchers to understand how an endorsement from these figures may impact the attitudes and purchasing behavior of consumers. Furthermore, significant research has already been conducted on the impact that brand sponsorship of an entire event may have on audience and consumer perceptions. However, despite the plethora of research which has been conducted on sports marketing, little research has been done to determine how team performances may impact the attitudes of viewers. With the rise of social media, individual teams have become brands in themselves with their live performances directly impacting their reputation, popularity, and recognition (Watkins, 2014). Additionally, through social media and the rise of streaming platforms, live sports broadcasts have become far more accessible to the public, resulting in a direct increase to average viewership across all major sporting events (Sannith, 2023). Therefore, considering that the sports advertising market is expected to reach \$599 billion by 2025, it is crucial that more research is conducted to better understand this relationship between performance and consumer attitudes (Khumar and Bhalla, 2021).

Building from this idea, it is also important to consider the unique ability of sporting events to elicit highly emotional responses from their viewers, emotional responses which may result in

a spillover effect once the broadcast switches over to advertisements (Lee et al., 2018). Take the 2022 World Cup for example. Approximately 1.5 billion people tuned in to watch Lionel Messi and Argentina triumph over the French. It was a game that kept viewers on the edge of their seats, a six-goal thriller that went all the way to extra time and eventually penalty kicks. It is interesting to consider how this emotional rollercoaster of a final may have impacted how viewers perceive advertisements following the game, especially considering that some companies paid over \$1 million for a time slot during the final (Rizzo, 2023). This dynamic is even more relevant to companies like Adidas who spent nearly \$350 million to become FIFA's official World Cup sponsor until 2030 (Bryan, 2013). When so much capital is being invested into these events, it is crucial to understand how the emotional impact of these events may impact advertisement effectiveness.

Considering this information, this study was conducted with three main objectives in mind. The first was to determine how the type of sport may influence the appeal of advertisements viewed during a television broadcast. The goal here was to determine if certain sports may naturally elicit more positive attitudes from their viewers. The second objective was to determine how the outcome of a sports game may impact the way viewers perceive advertisements. For instance, if a fan watched their favorite basketball team lose, we hoped to determine whether they would then view advertisements in a more negative light. The third and final objective was to determine how the score would impact advertisement appeal. Specifically, we chose to study the impact of a blowout loss or win versus the impact of a loss or win in a close game. With these three objectives, we sought to determine which environment would create the most positive attitudes towards advertisements among viewers. Furthermore, we hoped to understand how this information could be applied to improve the effectiveness of sports marketing campaigns. With this information, advertisers would be able to target specific games or even certain times during games in which emotional investment may be high. This would allow advertisers to make use of the spillover effect, the goal being that positive emotions experienced by viewers while watching the game would result in more favorable attitude towards their advertisements.

REVIEW OF LITERATURE

Spillover Effect

The foundation of this study relies heavily on a psychological theory known most commonly as the spillover or carry-over effect. As the name suggests, this effect occurs when emotions that may be elicited from a previous event or stimuli spill or carry over to affect one's perceptions of a separate stimuli (Lee, 2016). This is a relationship which has been studied extensively to determine how the spillover effect may impact everything from economics to advertising. For instance, Lenner et al. (2004) studied the relationship between consumer purchasing behavior and unrelated previous events which had been designed to elicit either a positive or negative response from participants. In Lenner's study, participants were shown 1 of 3 video clips designed to elicit feelings of disgust, sadness, or, in the case of the control group, neutrality. Participants had each been given a highlighter before this study and were then asked whether they would like to keep the highlighter or trade it for cash which increased steadily over 28 times. Each participant would have to decide at which monetary amount they would be willing to trade in their highlighter. Lenner and her team determined that disgust resulted in lower selling prices while sadness produced the opposite effect and resulted in higher selling prices on average. This study is a clear example of how even unrelated stimuli have the potential to impact each other through the spillover effect. However, to truly understand the importance that the spillover effect may have in the sports marketing world, we must consider the ways in which this effect can affect advertisements in particular. For example, it has been found that banner ads, or advertisements that are placed adjacent to or below any given media source, directly impact the perceptions that individuals may have of the websites which host these ads (Chaturvedi et al., 2012). It was found that banner ads which were determined to be unfavorable resulted in participants viewing the host website in a more unfavorable light. Likewise, banner ads which elicited more favorable emotions from participants were positively correlated to more positive attitudes towards the host website (Chaturvedi et al., 2012).

Spillover Effect in Sports

The spillover effect can also be seen in a sports context and has been shown to be even stronger when the two stimuli are directly related. In particular, a strong correlation has been found to exist between sport performance and fans' devotion to their team. In a study of college aged basketball fans, participants were asked a series of questions used to determine their willingness to associate with a team following either a win or loss (Bizman & Yinon, 2002). Following a win nearly all participants, regardless of their previous levels of affiliation to their team, showed an increase in their association levels while a loss resulted in a significantly lower degree of affiliation for nearly all participants. Only fans who reported high levels of team affiliation before the game reported similar levels following a loss (Bizman & Yinon, 2002). Building from this idea, it has been determined that a strong positive correlation exists between core product quality (team performance, player performance, etc.) and the emotions of fans. In a study of fans of the Iranian Premier League, a positive team performance was directly correlated to feelings of happiness and excitement. Similarly, a negative team performance resulted in feelings of sadness and fear among fans. These emotions were also determined to have a direct relationship with purchasing behavior as fans who exhibited negative emotions such as sadness reported being less likely to purchase tickets in the future (Foroughi et al., 2016). Studies like these highlight the undeniable ability of sports to elicit strong emotional responses that can affect viewer perception and purchasing behavior, therefore, given what we already know about the spillover effect, we can begin to investigate how these emotional responses may affect sports marketing campaigns as well (Foroughi et al., 2016; Bizman & Yinon, 2002).

How the Spillover Effect Impacts Sports Marketing

Now that we have an understanding of the spillover effect and how it may influence the perceptions of individuals across stimuli, we can begin to analyze how this relationship may present itself in the sports marketing industry. In a study of Korean baseball teams, it was found that postseason success directly influenced fan perceptions of each team's corporate sponsors. Fans of teams who succeeded in the postseason were found to view their sponsors in a far more favorable light. Furthermore, for teams who had incorporated their sponsors name into their own this correlation was even more pronounced, thus highlighting the

importance of proximity on the strength of the spillover effect (Sung et al., 2016). Likewise, poor team performances have been found to affect trust levels among fans of sponsorships. Participants who were exposed to a loss reported far lower degrees of trust in sponsors than those who made up the win condition (Yuan et al., 2019). Furthermore, participants who witnessed their team lose reported lower levels of trust than those in the control conditions in which no performance was viewed at all. This presented the idea that, when shown during a loss of a consumer's favorite team, advertisements may have a more negative effect on brand perception than if the advertisement was never shown at all (Yuan et al., 2019). Additionally, this relationship was shown to be stronger among "active" fans than "passive" fans. This again highlights the idea that one's degree of team affiliation may be crucial in determining the strength of the spillover effect, however, presents information that conflicts with the findings of Bizman and Yinon (Yuan et al., 2019; Bizman & Yinon, 2002). Similar to the findings of Sung et al., (2016), Lee et al., (2018) found a strong correlation between a sport team's performance and the advertisement attitudes of their fans. Specifically, they determined that the outcome of a game (either win or loss) was correlated to "significant carry-over effects on the evaluative judgments to commercials". Participants within the "win" condition reported far more favorable attitudes towards the advertisement than those within the "loss" condition (Lee et al., 2018). Studies like these highlight that team performance can have a major impact on the ways in which viewers perceive advertisements, therefore, more research is required in order to determine how advertisers may utilize this relationship in order to increase ad effectiveness.

Research Goals

By analyzing these studies to determine where additional research could be necessary, three research objectives were created to serve as the foundation for this study. The first was to determine how the outcome of a sports game may impact a viewer's attitudes towards an advertisement. This will directly build off the research of Lee et al., (2018) and Sung et al., (2016), while also providing additional data with which one may further support or contradict their findings. Secondly, we hoped to determine how the severity of a win or loss may affect a viewer's attitudes towards a given advertisement. This information was largely lacking from

the research of Lee et al., (2018) which only consisted of a win and loss condition. Furthermore, this data will build upon the research of Sung et al., (2016), Foroughi et al., (2016), and Bizman & Yinon, (2002) who did not consider how the severity of a success or failure may have impacted the emotions of their participants. The final goal of this study was to determine how this relationship may differ across sports with varying speeds of play. Can the same correlation between performance and emotions really be applied when comparing sports as fundamentally different as baseball and basketball (Bizman & Yinon, 2002; Sung et al., 2016)? With these goals in mind, we hope to provide crucial insights to the sports marketing industry that advertisers may use in order to maximize their ad effectiveness.

HYPOTHESES

This study was conducted with two hypotheses which were formed through the analysis of other sources and determined to be areas which could be improved or expanded upon. These hypotheses were created with the three research objectives in mind.

- Hypothesis 1: If the desired team wins (Celtics or Red Sox) then the final score of the game (blowout or close game) will not affect the participant's attitudes towards the advertisements.
- Hypothesis 2: If the desired team loses (Celtics or Red Sox) then a close game will result in more favorable advertisement attitude among participants than a blowout.

METHODOLOGY

The study conducted was a 2 (game: basketball vs. baseball) x 2 (outcome: win vs. loss) x 2 (score: blowout vs. close game) experimental study which consisted of 8 different conditions. 170 college aged men and women from Bryant University participated in the study and each participant was shown 1 of the 8 conditions completely at random. The survey was created using Qualtrics while the data was analyzed using a combination of Microsoft Excel and IBM's SPSS.

Independent Variable 1: Game

The first independent variable was game. Participants were shown a short sports clip from either a basketball or baseball game. If the participant received 1 of the 4 baseball conditions, they were shown a clip from a Red Sox vs Yankees game of 1:30 in duration. If the participant received 1 of the 4 basketball conditions, they were instead shown a clip from a Celtics vs Lakers game which was also 1:30 in duration. Basketball and Baseball were chosen due to differences in speed of play. Basketball is a fast paced, high scoring game while baseball is low scoring and considered to be much slower paced. Both clips were played without sound to decrease the effect of confounding variables. Additionally, before the clips began to play, the participants were told to imagine themselves as an avid Boston sports fan. This was done in order to decrease the effect of any bias if some of the participants supported teams from other cities while also ensuring that either the Celtic or Red Sox were the "desired team" in each condition.

Independent Variable 2: Outcome

The second independent variable was outcome. Following the short sports clip participants were shown a black screen which contained the final score of the game they had just watched. Each sport (basketball and baseball) had 2 win conditions as well as 2 loss conditions.

Independent Variable 3: Score

The third independent variable was score. This variable studied how the severity of a win or loss would affect advertisement appeal. Once again, the scorecard, which was played following the sports clip, was used to manipulate this variable. A close game for basketball was shown as either a win or loss of 2 points whereas a blowout game was shown as a win or loss of 20 points. For baseball, a close game was either a win or loss of 1 run while a blowout game was a win or loss of 7 runs. The figures below are four examples of the scorecards that participants were shown to more clearly demonstrate how the independent variables of outcome and score were manipulated.



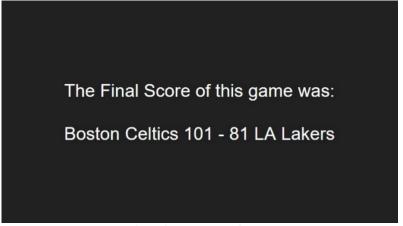


Figure 2 - Celtics Win in a Blowout Game

The Final Score of this game was: Boston Red Sox 1 - 2 New York Yankees

Figure 3 - Red Sox Loss in a Close Game

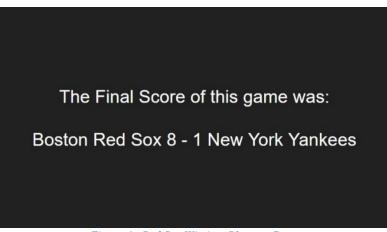


Figure 4 - Red Sox Win in a Blowout Game

Advertisements

After each participant had been shown the final score, they were then shown a series of 3 advertisements. Their advertisements consisted of a New Balance ad for their line of Fresh Foam shoes, a Door Dash ad for their new subscription service, and a Fitbit ad for their new line of smart watches. These advertisements were chosen as they were all able to be played without sound. As with the sport clips, this decision was made to decrease the possibility of any confounding variables affecting the data.

Question Format

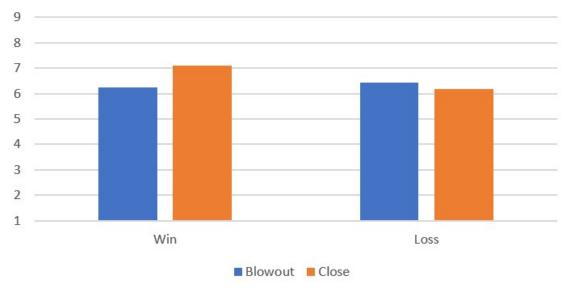
Once each participant had watched the sports clip and advertisements in their entirety, they were asked a short series of questions that were used to gauge their attitude towards the ads. Their questions were formatted using a 9-point Likert scale and asked participants to rate each advertisement from bad to good, non-informative to very informative, and etc. The data collected from these questions served as the dependent variable.

RESULTS

A 2 (game: basketball vs. baseball) x 2 (outcome: win vs. loss) x 2 (score: blowout vs. close game) ANOVA was performed on attitude toward ad as the dependent variable. The analysis revealed a marginally significant effect of game (F(1, 160) = 3.60, p = .05), but no significant effects of outcome (F(1, 160) = .83, p = .36) and score (F(1, 160) = .00, p = .95). No other two-way interaction effects were found (game x outcome, F(1, 160) = .00, p = .95; game x

score, F(1, 160) = .1.44, p = .23; outcome x score, F(1, 160) = .02, p = .864). A three-way interaction of game, outcome, and score on attitude toward ad was not significant (F(1, 160) = 2.50, p = .11).

Next, I conducted two separate analyses to examine the outcome-score interaction within the basketball and baseball conditions. Within the basketball condition, a two-way interaction between outcome and score was not significant (F(1, 81) = 1.34, p = .25). Contrasts showed that participants who had blow-out win and close win outcomes reported equally favorable attitude toward the ad ($M_{blowout} = 6.25$ versus $M_{close} = 6.44$; t(40) = -.26, p = .39). However, participants who had blow-out loss reported *more* favorable, marginally significant, attitude toward the ad than those who had close loss ($M_{blowout} = 7.10$ versus $M_{close} = 6.19$; t(41) = 1.43, p = .07).







Within the baseball condition, a two-way interaction between outcome and score was not significant (F(1, 79) = 1.18, p = .28). Contrasts showed that participants who had blow-out win, and close win outcomes reported equally favorable attitude toward the ad ($M_{blowout} = 6.98$)

versus $M_{close} = 6.93$; t(36) = .08, p = .46). However, participants who had blow-out loss reported *less* favorable, marginally significant, attitude toward the ad than those who had close loss (M_{blowout} = 6.81 versus M_{close} = 7.65; t(43) = -1.43, p = .07).

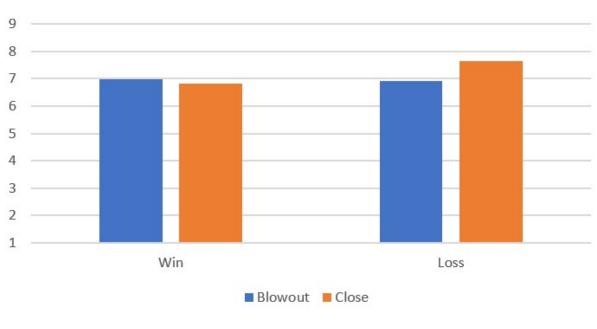




Figure 6 - Baseball Results

DISCUSSION

Both hypothesis 1 and hypothesis 2 are partially supported. For baseball, hypothesis 1 would be supported. We found that, for baseball, a win for the desired team resulted in no significant effect towards advertisement appeal (6.98 for a blowout win vs 6.93 for a close win). However, for basketball, hypothesis 1 would not be supported. Participants in the basketball conditions reported more positive advertisement attitudes for a win in a close game than a win in a blowout game (6.44 for a close win vs 6.25 for a blowout win). The same relationship can be applied to hypothesis 2. For baseball, hypothesis 2 is also supported as, when the Red Sox lost, participants in the close game condition reported more positive advertisement attitudes than those in the blowout game condition (6.81 for a blowout loss vs 7.65 for a close loss). However, for basketball hypothesis 2 would not be supported. When the Celtics lost, participants in the close game conditions reported more, marginally significant, negative

attitudes towards the advertisements than those in the blowout game condition (6.19 for a close loss vs 7.10 for a blowout loss).

Despite the fact that neither hypothesis was entirely supported, this relationship is extremely interesting when considering how these differences may arise. While more research must be conducted to understand the true nature of this relationship, one likely cause could be the dramatic difference in speed of play between basketball and baseball. For basketball, games are far more likely to go "down to the wire" due to its high scoring and fast paced nature. Therefore, basketball may be more likely to elicit feelings of suspense among its viewers. Suspense has already been shown to result in higher emotional investment from participants in studies regarding both video games and film (Lehne & Koelsch, 2015; Frome & Smuts, 2004). Furthermore, when used in advertisements, suspense has been shown to be strongly correlated with greater emotional investment from the consumer (Alwitt, 2002). Finally, it should also be considered that, when studying college football games, a significant relationship was found correlating a close game to greater feelings of suspense among fans (Knobloch-Westerwick et al., 2009). Therefore, given that the spillover effect appears to be stronger with increased emotional investment, and the ability of a close game to elicit suspense, a highly emotional response, among viewers, it could be likely that the suspenseful nature of basketball is the reason for the relationship found in this study (Knobloch-Westerwick et al., 2009; Lehne & Koelsch, 2015; Frome & Smuts, 2004; Yuan et al., 2019). Whether it is via win or loss, the suspense of a close game creates such a strong emotional investment by fans that they may view advertisements either more positively or negatively depending on the final outcome.

For baseball it is very likely that the same degree of suspense does not exist. Baseball, unlike basketball, involves much lower scoring (Liu et al., 2020). Furthermore, the rotation of teams during innings results in a game that is much slower paced and less likely to go "down to the wire". Therefore, as the relationship between suspense and emotional investment may not exist in baseball, at least not to the same degree as basketball, watching their favorite team lose in a blowout fashion may be more devastating than a loss in a close game, thus resulting

in more negative advertisement attitudes. However, it is once again important to note that this potential explanation is only a theory. More research must be conducted to determine if this is the root cause for the relationship found in this study.

RECOMMENDATIONS FOR FUTURE RESEARCH

The information provided by this study is crucial for advertisers looking to maximize the efficiency and effectiveness of their sports marketing campaigns. Advertisers should use this information and the relationships found to determine during which games they should purchase airtime. However, there is still an abundant amount of research that must be completed to understand the true nature of the relationship found in this study. One suggestion would be to replicate this study in a more realistic game scenario, similar to the study conducted by Bizman & Yinon (2002). One issue with this study could be the lack of emotional investment from the participants. While steps were taken in order to counteract this, such as instructing participants to imagine themselves as an avid Boston sports fan, the only way to truly replicate the emotional impact of a sporting event is to have participants view the event live. However, this study design would come with its own issues, such as a greater likelihood for confounding variables as well as a lack of control over game outcome and score. Another option for future researchers would be to conduct this study with a wider range of sports. If the nature of the games themselves and their ability or lack thereof to generate suspense could be the cause of the relationship observed in this study, then more sports should be compared, each with varying degrees of speed of play. This type of research will help to further the findings of this study, thus providing advertisers with the necessary information they need to strategically plan their sports marketing campaigns to account for game, outcome, and score.

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