

Fans' Responses to the National Basketball Association's (NBA) Pilot Jersey Sponsorship Program: An Experimental Approach

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Abstract. During the 2017–18 season, the National Basketball Association (NBA) began a three-year pilot program to allow corporate sponsors' logo patches on game jerseys. Considering this, there is little evidence on how international and domestic NBA fans would respond to this new initiative. Accordingly, we conducted an online experiment to investigate the effects of market-, team-, manufacturer-, and individual-related factors on fans' perceptions toward various potential NBA jersey sponsors. We developed 180 fictitious press releases that informed participants about their favorite team coming to terms on a sponsorship deal with a specific corporation. This resulted in the creation of 360 graphic renderings of sponsored NBA team jerseys as research stimuli. We utilized a crowdsourcing platform to collect the data ($N=621$). Overall, our findings provide useful and actionable insights for managers to understand what may impact fans' reactions to the NBA's new pilot sponsorship program.

Keywords: National basketball association (NBA), jersey sponsorship, marketing, branding

1. Introduction

The sponsorship of athletes' and teams' jerseys is considered one of the prime branding assets that a corporation can attain (Smith, 2016). A sponsors' logo on the team jersey can help firms to increase brand exposure and can also provide opportunities for these parties to use it as a platform for brand activations. Given the amount of exposure opportunity to massive audiences around the globe, jersey sponsorship comes with a high price tag. For instance, F.C. Barcelona, one of the most prominent La Liga clubs from Spain, signed a jersey sponsorship deal with Japanese e-commerce firm, Rakuten, worth \$58

million a year (BBC, 2016). Likewise, Manchester United, an English Premier League club, signed a record seven-year deal with Chevrolet in 2014, which is worth \$80 million a year (Smith, 2016).

While placing a corporation's logo on jerseys is a common sponsorship inventory in soccer, professional sports leagues in North America have not yet capitalized on such monetary benefits, in the manner of clubs in Europe. Notwithstanding, in 2016, the National Basketball Association (NBA) Board of Governors approved the three-year pilot program to allow all NBA teams to sell jersey sponsorships, in which players would sport corporate logos on their uniforms beginning in the 2017-18 season (Garcia, 2016). The NBA's decision to allow jersey sponsors is the first among the four major leagues (i.e., National Football League [NFL], Major League Baseball [MLB], National Hockey League [NHL],

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Table 1
List of NBA teams, their jersey sponsors, and location of sponsor's headquarters

Team	Sponsor	Sponsor's Headquarters	Amount per year (if disclosed)
Atlanta Hawks	Sharecare	Atlanta, GA	–
Boston Celtics	General Electric	Boston, MA	\$8M
Brooklyn Nets	Infor	New York City, NY	\$8M
Charlotte Hornets	Lending Tree	Charlotte, NC	–
Cleveland Cavaliers	Goodyear	Akron, OH	\$7–10M
Denver Nuggets	Western Union	Englewood, CO	–
Detroit Pistons	Flagstar Bank	Troy, MI	–
Golden State Warriors	Rakuten	Tokyo, Japan	\$20M
Los Angeles Clippers	Bumble	Austin, TX	\$7M
Los Angeles Lakers	Wish	San Francisco, CA	\$12–14M
Miami Heat	Ultimate Software	Weston, FL	–
Milwaukee Bucks	Harley-Davidson	Milwaukee, WI	–
Orlando Magic	Disney	Orlando, FL	–
Minnesota Timberwolves	Fitbit	San Francisco, CA	–
New Orleans Pelicans	Zatarain's	New Orleans, LA	–
New York Knicks	Squarespace	New York City, NY	–
Philadelphia 76ers	Stubhub	San Francisco, CA	\$5M
Sacramento Kings	Blue Diamond Almonds	Sacramento, CA	\$5M
Toronto Raptors	Sun Life	Toronto, Canada	–
Utah Jazz	Qualtrics	Provo, UT	\$4M

Note. As of May 23, 2018, ten teams still do not have jersey sponsors. Sources: Kutz (2017); Lombardo (2018).

and NBA) in North American professional sports history.

Each team is responsible for selling the inventory and the logo will appear on the front right of the game jerseys, opposite the logo of the official manufacturer of NBA game apparel, Nike. The patches will measure 2½-by-2½ inches. To note, before Nike became the official manufacturer of the NBA, no manufacturer logo had previously appeared on NBA uniforms. It remains interesting to examine if the presence of the Nike “swoosh” on the uniform may also affect sponsor evaluations.

Having a brand logo on jerseys certainly brings additional revenue for each team. According to the NBA's authorization of jersey advertising, teams will retain 50 percent of the revenue generated by their individual patches, with the other 50 percent being shared equally among the league's 30 teams (Lefton & Lombardo, 2016). Such a revenue sharing program will help smaller market teams (e.g., the Milwaukee Bucks, New Orleans Pelicans, Utah Jazz) to gain more than the face value for their patch. Industry experts have estimated that the patch inventory may cost between \$1 million and \$10 million per year, depending on the team's market size and popularity (Lefton & Lombardo, 2016). For instance, the Philadelphia 76ers became the first NBA team to sign a jersey sponsorship deal with StubHub, which is reported to be worth \$15 million over three years (Rovell, 2016). The Golden State Warriors, who won

their fifth NBA Championship in the 2016-17 season and most recently their second-straight and sixth title following the 2017-18 season, agreed to the league's largest jersey sponsor deal with Japanese e-commerce company, Rakuten. This agreement is reported to be worth more than \$20 million per year, surpassing previous projections (Brown, 2017).

While it seems apparent that teams will earn more money from this “pilot program,” it remains unknown what factors would affect how fans may respond to jersey sponsors, as this will be a novel instance for NBA fans. More notably, it is important for marketers to have empirical evidence directly from consumers to understand what influences the valuation of jersey sponsors. Given that there are still teams that do not have a jersey sponsor in the first year of its pilot program (see Table 1), findings of this study will provide practical insights from the consumer's perspective. Therefore, the purpose of this study is to provide empirical evidence on how fans would respond to jersey sponsors by incorporating various market- (i.e., market size, brand prominence), manufacturer- (presence/absence of Nike logo), team- (i.e., team's playoff status), and individual-related (i.e., domestic/international, team identification level) factors.

1.1. Hypothesis development

From a theoretical standpoint, Gwinner's (1997) image transfer model provides a useful framework to

Table 2
Demographics of obtained sample

Characteristic	Frequency	Percent
Origin		
Domestic (U.S.)	335	53.9%
International	286	46.1%
Gender		
Male	441	71.0%
Female	180	29.0%
Ethnicity		
Caucasian or White	312	50.2%
Asian or Pacific Islander	211	34.0%
Hispanic or Latino	38	6.1%
Black or African American	32	5.2%
Two or more races	13	2.1%
Native American or American Indian	11	1.8%
Other	4	0.6%
Age		
<32 years	355	57.2%
≥32 years	266	42.8%

108 understand how jersey sponsors might be perceived
 109 by fans. The basic premise of the model is that spon-
 110 sors want to tap into positive images and loyalty
 111 associated with a sponsee (e.g., team) by pairing its
 112 brand with the property. Through sponsorship, spon-
 113 sors expect positive emotions and attitudes affiliated
 114 with the team to carry over to them. Among differ-
 115 ent sponsorship inventories, jersey sponsorship offers
 116 more direct exposure opportunities than other inven-
 117 tories (e.g., LED billboards) that may well go beyond
 118 a game. For instance, brands can appear in highlight
 119 videos, promotional videos, player interviews, and
 120 photographs on both traditional and social media.
 121 Therefore, one could expect that positive image trans-
 122 fer will occur through repeated exposure among fans
 123 of the team.

1.1.1. Performance

124 Extensive research in sponsorship has shown var-
 125 ious antecedents and boundary conditions that either
 126 facilitate or impede transfer of images. From the
 127 image transfer perspective, we can speculate that
 128 teams with strong performance will help facilitate
 129 image transfer. Strong performance of a team will
 130 likely prompt fans to bask-in-reflected-glory (BIRG;
 131 Cialdini et al., 1976), which will likely heighten pos-
 132 itive image transfer between the team and sponsor.
 133 Empirical study by Ngan and her colleagues (2011)
 134 also found a direct positive effect of a team's suc-
 135 cess on the purchase intent of a sponsor. As such, it
 136 is reasonable to expect that the team's success (e.g.,
 137 measured via advancing into the playoffs) will have
 138 a positive impact on jersey sponsor evaluations.
 139

1.1.2. Team identification

140 Based on the literature, one individual factor that
 141 will have robust impact on sponsor evaluation is
 142 fans' level of identification with the team (Gwin-
 143 ner & Swanson, 2003; Meenaghan, 2000). Fans who
 144 have a strong allegiance with the team might have
 145 more favorable evaluations toward the sponsor than
 146 fans who are less attached to the team (Gwinner &
 147 Swanson, 2003). Put simply, the closer fans identify
 148 themselves with the team, the more favorable evalua-
 149 tions they will have toward the sponsor (Meenaghan,
 150 2000). In line with previous research, we also
 151 expect that fans' level of identification with the team
 152 will augment positive evaluations toward the jersey
 153 sponsor.
 154

1.1.3. Market size

155 From a practical standpoint, it seems reasonable
 156 to expect that teams in large markets might be val-
 157 ued more positively than teams in small markets.
 158 This speculation is based on the sponsorship practice
 159 that a sponsor's value is determined by its potential
 160 reach and exposure. Given that jersey sponsors will
 161 have more prominent exposure opportunities than
 162 other on-site sponsor inventories, the chances are
 163 high that the jersey sponsor will be exposed via high-
 164 light videos, interviews, and photos in local media.
 165 Thus, teams located in larger markets might have
 166 greater exposure opportunities than teams in smaller
 167 markets. However, it remains undetermined whether
 168 consumers' perceptions toward their team's sponsor
 169 will be a function of the team's geographic market
 170 size. Thus, the current study seeks to extend extant
 171 literature by investigating the impact of market size
 172 on jersey sponsor evaluation.
 173

1.1.4. Sponsor brand prominence

174 In addition, the present study considers brand
 175 prominence as another relevant factor in the research
 176 model. At the time of writing, NBA jersey spon-
 177 sors range from relatively lesser known brands (e.g.,
 178 Qualtrics' Cancer Charity) to more prominent brands
 179 like Fortune 500 companies (e.g., General Electric).
 180 While some researchers have examined "perceived"
 181 brand prominence as a positive predictor of sponsor
 182 evaluation (Han, Nunes, & Drèze, 2010; Wake-
 183 field & Bennett, 2010), little is known whether the
 184 sponsoring brand's actual prominence will impact
 185 sponsor evaluation. That is, do prominent brands
 186 (e.g., Fortune 500 companies) receive more favor-
 187 able responses than less prominent brands (e.g.,
 188 non-Fortune 500 companies)? In order to provide
 189

Table 3
Analysis of covariance (ANCOVA) results for brand indicators

Source	B_{Pdiff}					B_{Fdiff}					B_{att}					B_{awr}					B_C				
	M_1	M_2	F	p	η_p^2	M_1	M_2	F	p	η_p^2	M_1	M_2	F	p	η_p^2	M_1	M_2	F	p	η_p^2	M_1	M_2	F	p	η_p^2
Origin	0.42	0.35	0.29	0.59	***	0.31	0.48	2.47	0.12	***	4.81	5.42	52.03	***	0.08	4.37	4.88	12.88	***	0.02	4.87	5.40	43.71	***	0.07
Team market size	0.42	0.35	0.30	0.59	***	0.34	0.45	0.88	0.35	***	5.07	5.15	0.77	0.38	***	4.55	4.71	1.03	0.31	***	5.10	5.17	0.68	0.41	***
Team playoff status	0.40	0.37	0.04	0.83	***	0.35	0.44	0.69	0.41	***	5.04	5.18	2.29	0.13	***	4.51	4.74	2.24	0.14	***	5.07	5.20	2.29	0.13	***
TI	0.32	0.45	0.96	0.33	***	0.37	0.42	0.21	0.65	***	5.39	4.83	45.94	***	0.07	4.82	4.30	7.78	0.01	0.01	5.38	4.89	38.75	***	0.06
Brand prominence	0.19	0.58	10.14	***	0.02	0.30	0.49	3.44	0.06	0.01	5.38	4.84	40.91	***	0.06	4.83	4.42	8.33	***	0.01	5.43	4.83	56.76	***	0.09
Logo	0.52	0.25	4.77	0.03	0.01	0.43	0.36	0.37	0.54	***	5.16	5.07	1.12	0.29	***	4.69	4.56	0.93	0.34	***	5.16	5.11	0.49	0.49	***
Brand prominence \times Logo			1.41	0.24	***			5.84	0.02	0.01			0.11	0.74	***			2.18	0.14	***			0.01	0.93	***
Covariate																									
Gender	0.40	0.37	0.03	0.85	***	0.30	0.49	2.43	0.12	***	5.12	5.10	0.08	0.78	***	4.76	4.49	3.11	0.08	0.01	5.18	5.09	1.01	0.32	***
Model R^2			0.03					0.02					0.19					0.06					0.20		

Note. *** = <0.001. Origin: 1 = domestic, 2 = international; Team market size: 1 = large market, 2 = small market; Team playoff status: 1 = playoff-team, 2 = non-playoff team; TI: 1 = avid fan, 2 = casual fan; Brand prominence: 1 = high, 2 = low; Logo: 1 = present, 2 = absent; Gender: 1 = male, 2 = female.

an answer to this question, we manipulated sponsor prominence in this study by selecting brands from Fortune 500 and non-Fortune 500 corporations as research stimuli.

1.1.5. *Manufacturer logo*

From the start of the 2017-18 season, the jersey sponsor's logo will appear next to the apparel manufacturer logo (i.e., Nike's "swoosh" logo). However, it remains unknown whether such a heuristic cue (i.e., the "swoosh" logo) can influence consumers' perception of sponsors. In the licensed merchandise consumption context, scholars have found that heuristic cues, such as a brand or manufacturer logo, has a significant impact on increasing product evaluation and purchase intent (Kwak, Kwon, & Lim, 2015; Kwon, Kim, & Mondello, 2008). In particular, Kim et al. (2008) found that consumers had more positive attitudes toward licensed apparel when the product had a Nike logo compared to other products bearing different logos. As such, we propose that having a manufacturer's logo (i.e., Nike) on the jersey will have a positive carryover effect such that consumers will view the sponsor in a more favorable way than when the manufacturer's logo is absent. We expect that Nike's swoosh logo will serve as a heuristic cue (Kwak et al., 2015) to signal high perceived value of the sponsoring brand.

1.1.6. *Fan origin*

In addition, the present study considers fans origin – domestic versus international audiences. Considering the international reach of the NBA, it is worth exploring how fans from different origins respond to jersey sponsors. While no previous studies inform the direction of this hypothesis, we believe findings of this study will provide useful insights on how consumers from different markets respond to this pilot program. Therefore, we measured respondents' origin (domestic and international) and included it in the research model.

1.2. *Contributions*

The current study makes several contributions to the field. First, multiple factors are simultaneously considered in an effort to encompass various forces that might affect fans' perceptions toward jersey sponsors. Thus, findings of our study will provide initial evidence on how NBA fans respond to jersey sponsors. Second, our study advances the marketing research methodology by producing an

experiment that allows each participant to respond to a graphic rendering of their favorite team's jersey. This customized procedure allows researchers to avoid alternative hypotheses, which can be derived from participants answering questions that are irrelevant to them (e.g., inquires unrelated to the fans' favorite teams) or findings that are limited to one or simply a handful of specific fanbases (e.g., only fans of the Detroit Pistons). In addition, utilizing actual companies as sponsors in the research stimuli further enhances the external and ecological validity of our study. Therefore, our study aims to demonstrate how experimental research can aid in providing practitioners with data-driven, actionable evidence to inform their marketing operations.

2. *Methodology*

2.1. *Subjects and design*

The current study utilized a 2 (*manufacturer logo*: present, absent) \times 2 (*sponsor prominence*: high, low) between-subjects design. We determined the necessary sample size in order to achieve power conditions ($1 - \beta = 0.80$, $\alpha = 0.05$, medium effect size) using G*Power, a program that enables researchers the ability to compute requisite statistical power for various analyses (Faul, Erdfelder, Buchner, & Lang, 2009). Thus, to satisfy these requirements, we needed approximately 270 participants. Data collection occurred prior to the 2017–18 NBA season. A total of 621 self-identified NBA fans ($M_{age} = 32.03$ years, $SD = 10.06$) participated in this study. Subjects were recruited from Amazon Mechanical Turk (MTurk) and were compensated \$0.50 for their participation. Table 2 provides the demographic characteristics of our sample.

2.2. *Stimuli and procedure*

The present experiment was conducted online through Qualtrics Survey Software. Subjects were informed that they would be participating in a study about their favorite NBA team. Subjects first provided their informed consent and indicated if they were above the age of 18 and if they were fans of the NBA. Individuals who did not meet these criteria were unable to partake in our experiment. Subjects then designated their favorite NBA team and were randomly assigned to view an article about a corporation sponsoring their favorite team's jerseys.

Table 4
Analysis of covariance (ANCOVA) results for purchase behaviors

Source	PI_{br}					PI_{jsty}				
	M_1	M_2	F	p	η_p^2	M_1	M_2	F	p	η_p^2
Origin	4.29	5.08	51.29	***	0.08	4.82	5.51	49.45	***	0.08
Team market size	4.62	4.75	1.00	0.32	***	5.16	5.16	***	0.96	***
Team playoff status	4.65	4.72	0.39	0.54	***	5.13	5.19	0.32	0.57	***
TI	5.08	4.28	54.48	***	0.08	5.76	4.56	152.24	***	0.20
Brand prominence	4.95	4.42	23.95	***	0.04	5.17	5.16	0.01	0.93	***
Logo	4.68	4.69	0.01	0.93	***	5.16	5.17	0.01	0.94	***
Brand prominence \times logo			0.64	0.43	***			0.26	0.61	***
Covariate										
Gender	4.78	4.59	2.63	0.11	***	5.14	5.19	0.18	0.67	***
Model R^2			0.18					0.25		

Note. *** = <0.001. Origin: 1 = domestic, 2 = international; Team market size: 1 = large market, 2 = small market; Team playoff status: 1 = playoff-team, 2 = non-playoff team; TI: 1 = avid fan, 2 = casual fan; Brand prominence: 1 = high, 2 = low; Logo: 1 = present, 2 = absent; Gender: 1 = male, 2 = female.

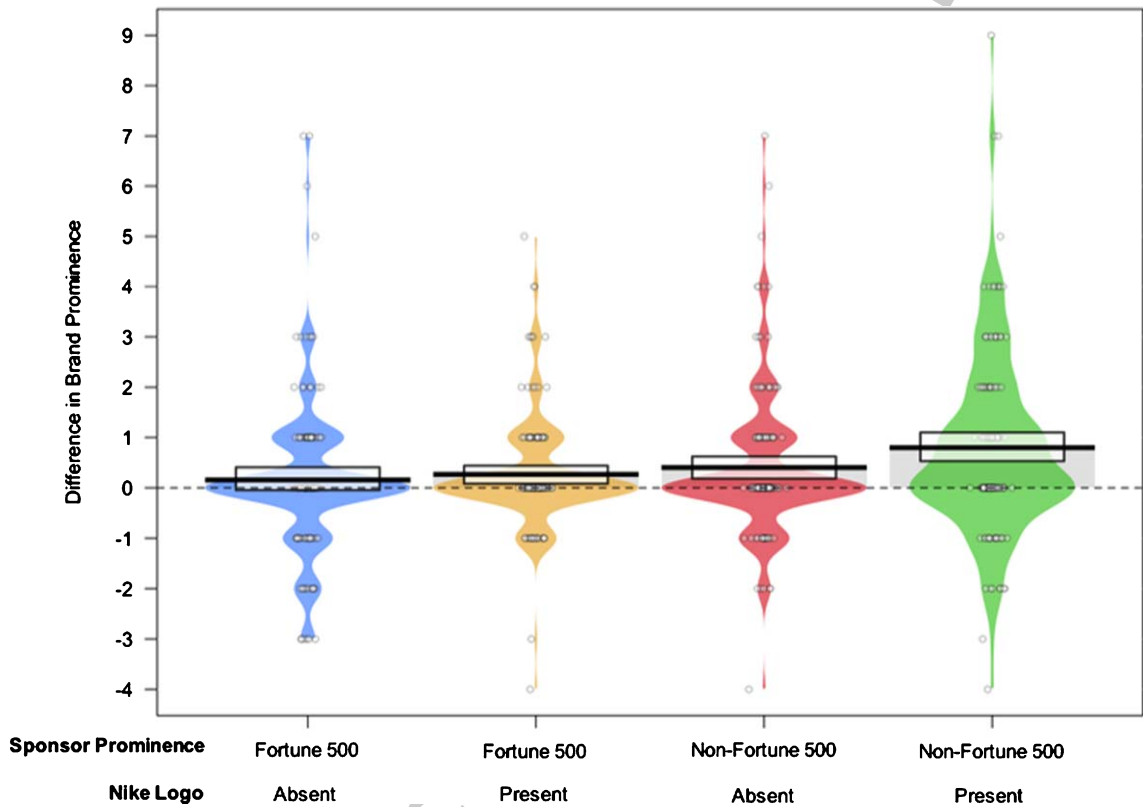


Fig. 1. Pirateplot displaying group comparisons for differences in brand prominence. The black horizontal bars display the group means, the circular points symbolize the raw data, the colored beans represent smoothed density, and the grey rectangle provides 95% Bayesian Highest Density Intervals (HDIs; see Phillips, 2017 for a description of pirateplots).

284 Prior to viewing the article, subjects provided an
 285 assessment of perceived brand prominence and favor-
 286 ability toward the potential sponsor. To enhance the
 287 plausibility of the sponsorship deal, the researchers
 288 generated fictitious articles from a reputable news
 289 source (i.e., the Associated Press) reporting that the
 290 participants' identified team had struck a deal with a

specific corporation to place a sponsorship patch on
 team jerseys. The stimuli for the current study were
 developed using Adobe Photoshop Creative Cloud®.
 Potential sponsors for the jerseys were selected from
 a pool of Fortune 500 (high sponsor prominence) and
 non-Fortune 500 (low sponsor prominence) corpora-
 tions. Two companies were chosen from the airline

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(Delta, Spirit), automotive (Ford, Panoz), and technology (Intel, Corsair) industries to reflect the varying levels of sponsorship prominence. Based on these categories, a total of 180 articles were created for the experiment.

A graphic rendering of the jersey, with the manufacturer logo (Nike) randomly present or absent, was then displayed to subjects. A total of 360 possible graphic renderings of NBA team jerseys were created. All participants were exposed to the home jersey of their identified teams. Appendices A and B contain samples of the articles and jersey stimuli used in the current study. Following this, subjects were asked to complete a randomized battery of measures and were again asked about the perceived brand prominence and favorability regarding the manipulated sponsor. After responding to these questionnaires, subjects were debriefed and thanked for their contribution. Finally, they were then provided a code to receive compensation for their participation.

2.3. Measures

The current study utilized a series of established measures from prior research, each responded to with a 7-point scale. These measures were modified to the subject's favorite team and manipulated sponsor where appropriate, to gauge several principal variables, those being: *team identification* (TI; Wann & Branscombe, 1990), *brand prominence* (BP; Han, Nunes, & Drèze, 2010), *brand favorability* (BF; Spalding, Cole, & Fayer, 2009), *brand attitude* (B_{att}; Janssen, Franssen, Wulff, & Reijmersdal, 2016; van Noort & Willemsen, 2012), *brand awareness* (B_{awr}; Yoo & Donthu, 2001), *brand credibility* (B_C; Newell & Goldsmith, 2001), and *purchase intent* of both the sponsoring brand and team jersey (PI_{br} and PI_{jsy}; Dodds, Monroe, & Grewal, 1991; Moon, Chadee, & Tikoo, 2008; Sweeney, Soutar, & Johnson, 1999). These measures and their respective reliabilities are listed in Appendix C.

3. Results

3.1. Data analysis

We performed a series of analyses of covariance (ANCOVAs), using gender as a covariate, in order to examine the effects of our independent variables. We explored the impact of the subject's origin, play-off status of the identified team, market size of the

identified team, and the fans' team identification levels. We conducted a median split on scores on the team identification measure ($Mdn = 5.00$) to categorize subjects as either avid ($n = 313$; $M = 5.56$, $SD = 0.49$) or casual fans ($n = 308$; $M = 4.15$, $SD = 0.68$). The two groups of fans were significantly different from each other based on the results of a Welch-corrected ANOVA on group means obtained from the team identification measure, $F(1, 556.25) = 862.40$, $p < 0.001$, $d = 2.38$.

3.2. Main effects

3.2.1. Brand measures

As reported in Table 3, the results from the ANCOVAs for the effects of the aforementioned variables on the brand measures revealed that international consumers provided significantly higher ratings of brand attitude, awareness, and credibility than domestic consumers. This was also the case for more avid fans of the team in comparison to more casual NBA fans, as well as subjects presented highly prominent brands compared to those exposed to less prominent ones. In addition, brand prominence scores significantly increased for subjects exposed to sponsors of higher prominence than those presented less prominent brands. Furthermore, subjects who viewed the manufacturer logo of Nike on their favorite team's jersey experienced a higher change in brand prominence ratings compared to those who did not see the logo.

3.2.2. Purchase intent

Our investigation of purchase intent, illustrated in Table 4, yielded significant differences between international and domestic consumers such that international consumers were more likely to purchase both a sponsoring brand's products/services and the corresponding team jersey sponsored by the same entity. Additionally, avid fans also displayed these same differences when contrasted against casual fans. Our analyses also revealed significant differences in the purchase intention of a sponsoring brand's products/services between subjects shown brands of high prominence compared to those presented less prominent brands. To note, team market size and playoff status did not play a significant role in any of the brand measures or purchase behaviors. Ultimately, inspection of the covariate gender differences yielded no significant variations between males and females on any of the outcomes.

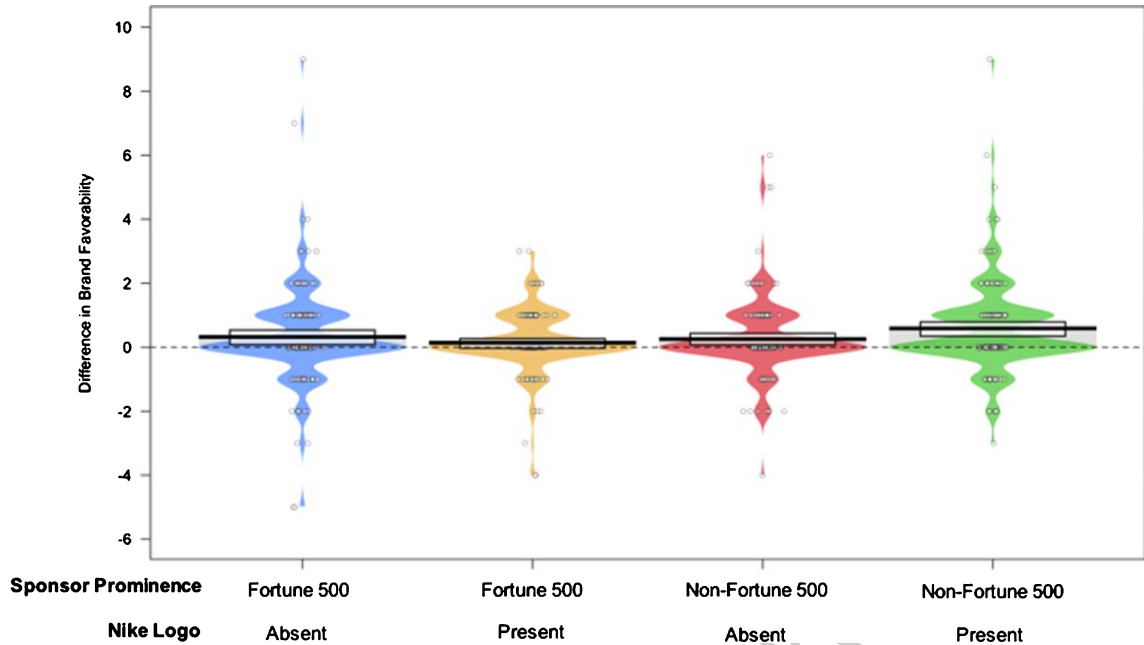


Fig. 2. Piratplot displaying group comparisons for differences in brand favorability.

3.3. Interaction effect and group differences

3.3.1. Brand prominence

While the overall brand prominence \times logo interaction term was only significant for brand favorability, review of the *post-hoc* tests using Tukey's Honestly Significant Difference (HSD) test revealed additional differences per group for several outcomes. Specifically, fans presented sponsored jerseys of less prominent brands with the manufacturer logo exhibited a significantly higher change in brand prominence ratings than those shown jerseys including highly prominent brands both with ($MD = 0.53, p = 0.01, 95\% \text{ CI } [0.09, 0.97]$) and without ($MD = 0.64, p = 0.001, 95\% \text{ CI } [0.21, 1.07]$) the Nike manufacturer logo. Figure 1 depicts these results.

3.3.2. Brand favorability

With respect to changes in brand favorability (see Fig. 2 for a summary), fans exposed to jerseys sponsored by brands of low prominence with the manufacturer logo experienced greater changes than those presented jerseys with highly prominent sponsoring brands with the manufacturer logo ($MD = 0.45, p = 0.02, 95\% \text{ CI } [0.06, 0.84]$).

3.3.3. Brand attitudes and credibility

Subjects presented jerseys with sponsors of high prominence with the manufacturer logo offered significantly higher brand attitudes and ratings of credibility than those shown jerseys with brands of low prominence both with ($MD_{Batt} = 0.51, p < 0.001, 95\% \text{ CI } [0.18, 0.84]$; $MD_{BC} = 0.51, p < 0.001, 95\% \text{ CI } [0.20, 0.81]$) and without ($MD_{Batt} = 0.68, p < 0.001, 95\% \text{ CI } [0.35, 1.02]$; $MD_{BC} = 0.71, p < 0.001, 95\% \text{ CI } [0.39, 1.02]$) the Nike manufacturer logo. These differences between low prominent brands both with ($MD_{Batt} = 0.40, p = 0.01, 95\% \text{ CI } [0.08, 0.72]$; $MD_{BC} = 0.51, p < 0.001, 95\% \text{ CI } [0.20, 0.81]$) and without ($MD_{Batt} = 0.57, p < 0.001, 95\% \text{ CI } [0.25, 0.90]$; $MD_{BC} = 0.60, p < 0.001, 95\% \text{ CI } [0.29, 0.91]$) the manufacturer logo were also evident when compared to fans presented such highly prominent brand sponsored jerseys without the Nike logo. Figure 3 provides a graph of these results.

3.3.4. Brand awareness

In addition, fans shown sponsored jerseys with brands of lower prominence without the Nike logo reported lower brand awareness than subjects who observed jerseys with highly prominent brand sponsors both with ($MD = -0.59, p = 0.02, 95\% \text{ CI } [-1.12,$

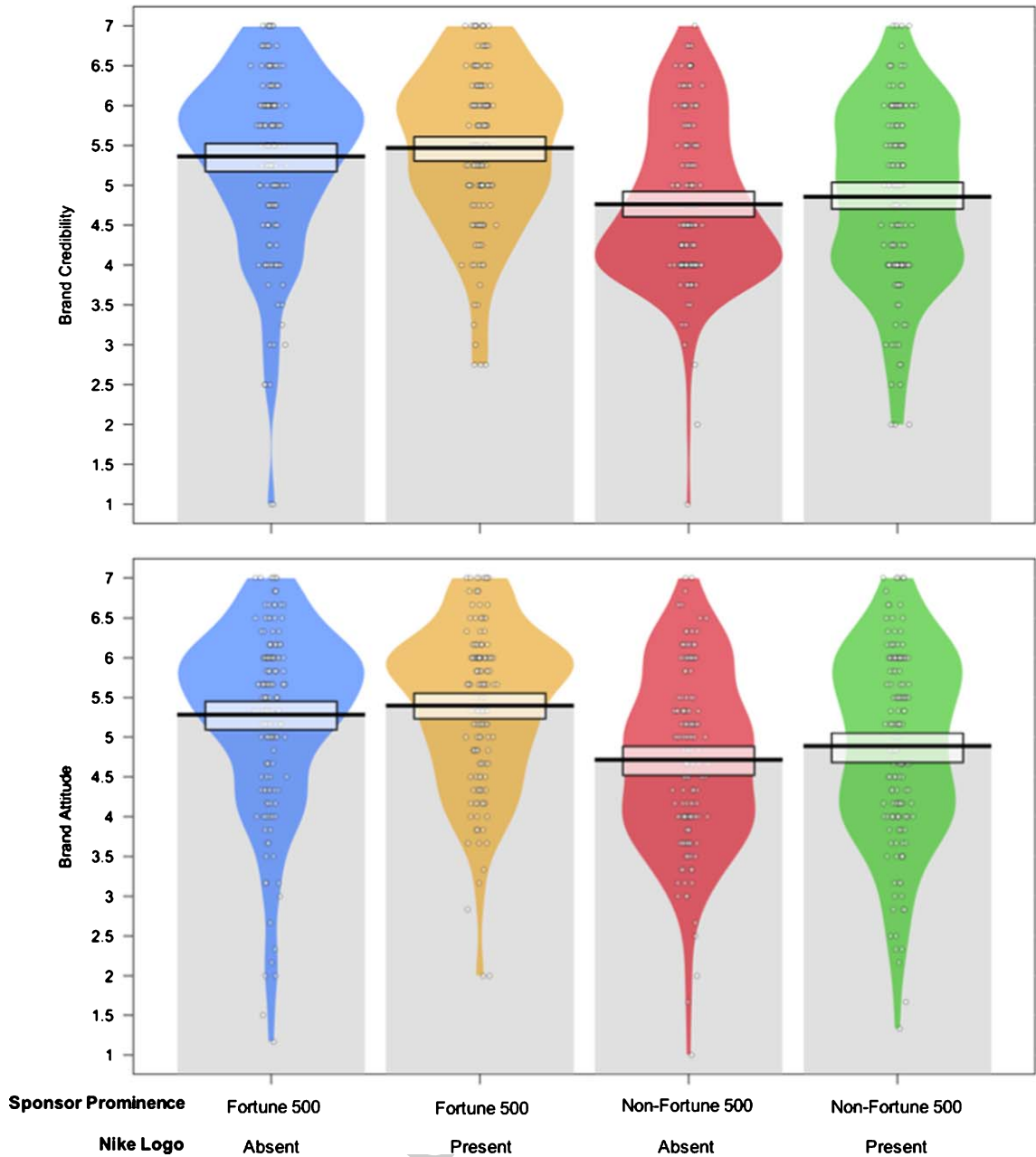


Fig. 3. Piratplot displaying group comparisons for brand attitude and credibility.

441 -0.06]) and without ($MD = -0.63, p = 0.01, 95\% \text{ CI}$
 442 $[-1.14, -0.11]$) the manufacturer logo (see Fig. 4).

443 3.3.5. Purchase intent

444 Lastly, fans who were shown jerseys with
 445 highly prominent sponsoring brands both includ-
 446 ing ($MD = 0.45, p = 0.04, 95\% \text{ CI } [0.02, 0.88]$) and
 447 excluding ($MD = 0.48, p = 0.02, 95\% \text{ CI } [0.07, 0.90]$)

the Nike manufacturer logo expressed a greater will-
 448 ingness to purchase that brand's products/services
 449 than individuals exposed to jerseys of less promi-
 450 nent sponsors with the Nike logo. These differences
 451 between subjects presented highly prominent spon-
 452 soring brands with ($MD = 0.60, p = 0.003, 95\% \text{ CI}$
 453 $[0.16, 1.03]$) and without ($MD = 0.63, p = 0.001, 95\%$
 454 $\text{CI } [0.20, 1.05]$) the manufacturer logo were identical
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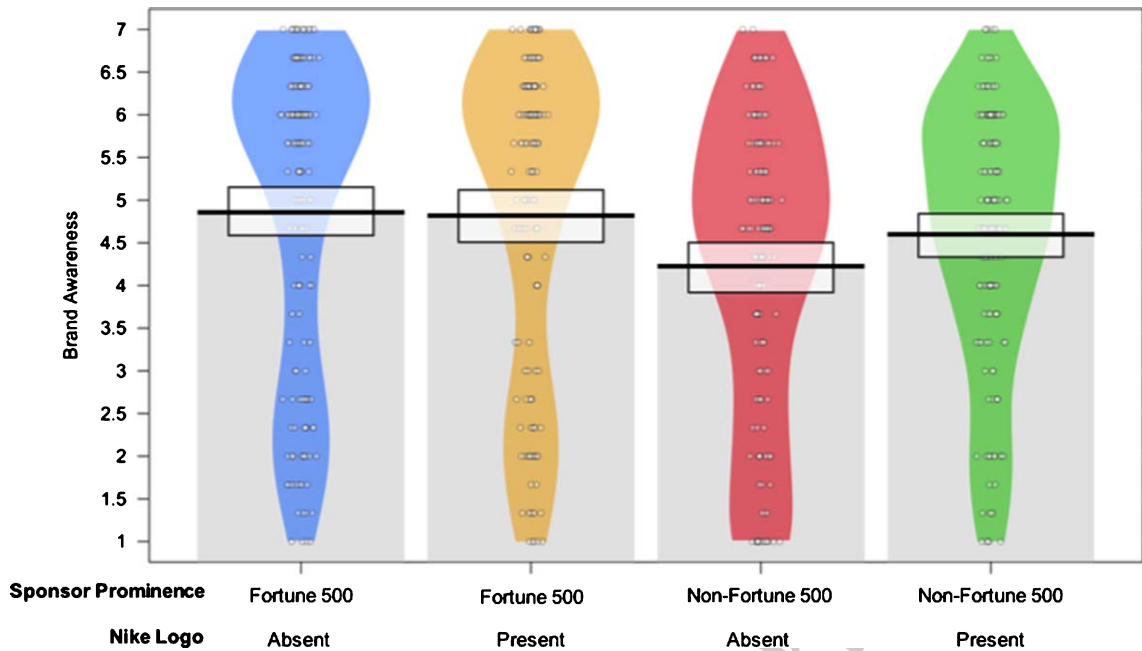


Fig. 4. Piratplot displaying group comparisons for brand awareness.

456 when juxtaposed against fans shown jerseys with
 457 brands of low prominence without the Nike logo.
 458 Figure 5 provides a visual illustration of these
 459 results.

460 4. Discussion

461 The NBA has become the first of the “Big Four”
 462 professional leagues in the United States to adopt jer-
 463 sey sponsorship via their three-year pilot program.
 464 Twenty out of the 30 teams have secured a sponsor
 465 in the first year of its pilot program. While there is
 466 little doubt that the jersey sponsorship program will
 467 bring in additional revenue for teams, it is indefinite
 468 what factors will influence how fans respond to jer-
 469 sey sponsors. In order to provide empirical evidence
 470 from a consumer perspective, the current study uti-
 471 lized an online experiment to assess which market-,
 472 team-, manufacturer-, and individual-factors affect
 473 fans’ perceptions toward potential sponsors of their
 474 favorite teams. We developed 180 press releases and
 475 360 graphic renderings of jerseys with hypotheti-
 476 cal sponsors as research stimuli and collected data
 477 from NBA fans ($N=621$) through a popular crowd-
 478 sourcing panel (i.e., Amazon Mechanical Turk). Our

findings provide useful evidence for decision mak-
 479 ers to understand which aspects may meaningfully
 480 impact fans’ reactions to the NBA’s new sponsorship
 481 pilot program.
 482

Consistent with our expectation and previous
 483 research, our results indicated that avid fans showed
 484 more favorable responses on all measures than casual
 485 fans. It is not surprising that fans who feel more
 486 attached to the team are more positive toward the jer-
 487 sey sponsor than the less attached fans. This is in line
 488 with previous sponsorship research that team identi-
 489 fication is an important antecedent to key sponsorship
 490 outcomes (e.g., sponsor recognition, attitude toward
 491 the sponsor, sponsor patronage; Gwinner & Swanson,
 492 2003; Meenaghan, 2000).
 493

In terms of the origin of fans, international NBA
 494 fans showed more positive responses than domestic
 495 fans on brand attitude, brand awareness, brand credi-
 496 bility, and purchase intentions. It was interesting to
 497 see a significant difference in the origin of fans, given
 498 that international NBA fans showed greater accep-
 499 tance towards the jersey sponsor than the domestic
 500 fans. While we speculate that cultural differences may
 501 exist on how sports fans perceive corporate sponsors
 502 on jerseys, future research should attempt to pinpoint
 503 other conditions regarding why such differences may
 504

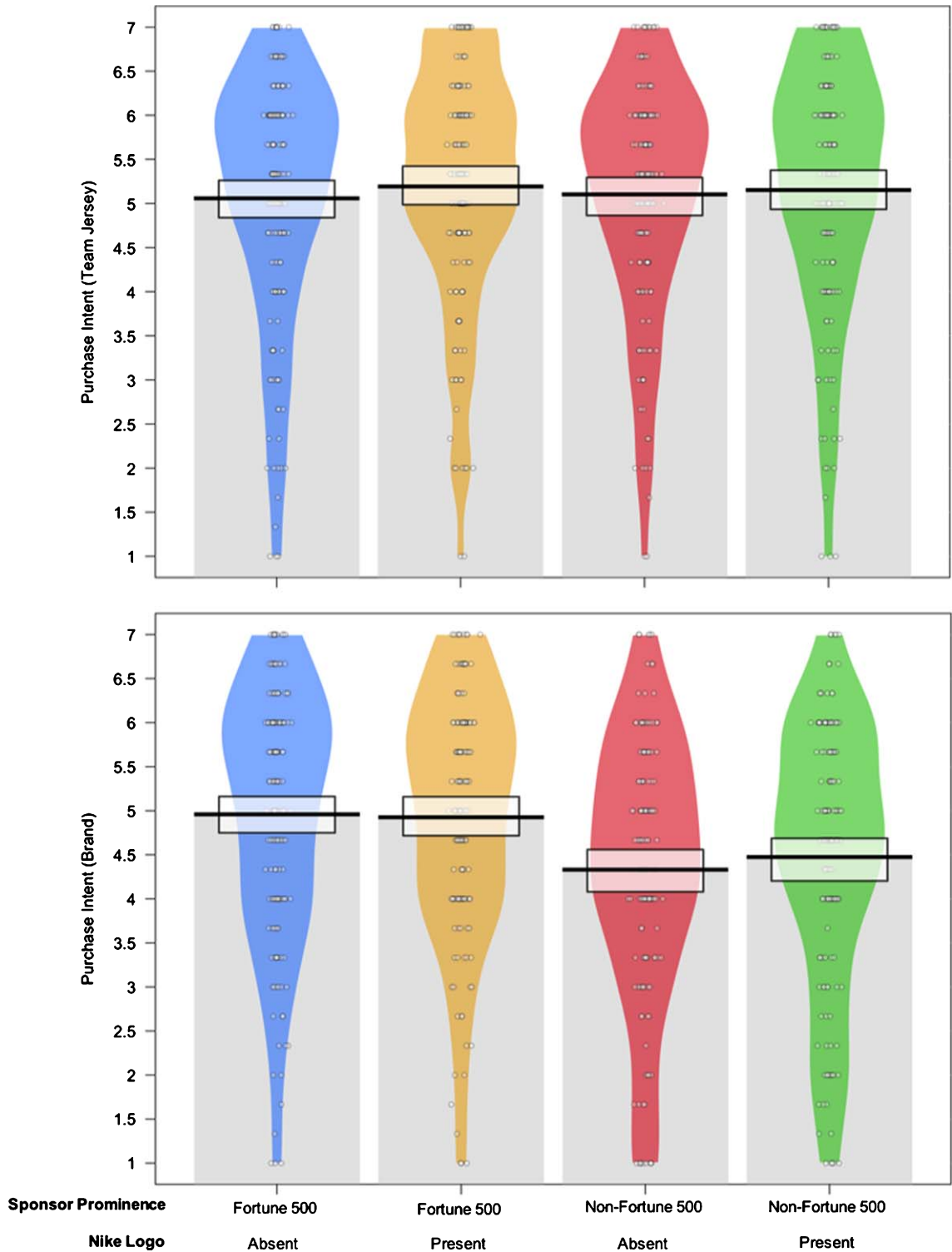


Fig. 5. Piratplot displaying group comparisons for purchase intent of team jerseys and the manipulated sponsoring brand's product/services.

505 occur (e.g., frequent exposure to sponsors through
506 other global sports, such as soccer). Furthermore,
507 more research should be conducted to identify if there
508 is a difference among key international markets for
509 the league.

510 Market-related factors showed mixed results. The
511 teams' market size had little effect on the perception
512 toward the sponsor. However, a sponsoring brand's
513 prominence had a significant impact on all outcome
514 measures. If the sponsoring brand was a Fortune 500
515 company (e.g., Intel), fans reported greater levels of
516 brand awareness, attitude, and credibility. Fans also
517 showed higher levels of purchase intention when the
518 sponsoring brand is a Fortune 500 company. It was
519 also interesting that when a non-Fortune 500 corpo-
520 ration (e.g., Panoz) was presented as a jersey sponsor,
521 there were meaningful changes in self-reported brand
522 prominence and brand credibility. This suggests that
523 non-Fortune 500 companies can benefit from spon-
524 soring an NBA team, as it can help increase the fans'
525 perception of the brand's importance and credibility.
526 We show that this boosting effect is more prevalent
527 among non-Fortune 500 brands. Marketers may find
528 this result noteworthy as a single exposure to the
529 research stimuli had an immediate boosting impact
530 among lesser known brands. By simply pairing its
531 brand with an NBA team's uniform, the sponsor was
532 able to significantly increase their brand perception.

533 Another factor that we considered was whether
534 the presence (or absence) of the manufacturer's logo
535 (Nike) had any impact on sponsor perceptions. As
536 noted earlier, we manipulated this variable since the
537 league's pilot program allowed the manufacturer logo
538 to appear on the front of jersey for the first time.
539 We sought to explore if having a "swoosh" logo on
540 the uniform affects fans' responses to a sponsor. We
541 found that the presence of Nike's "swoosh" had a
542 significant impact on increasing the reported brand
543 prominence. However, this result was not evident
544 among the other outcome measures. This specific
545 finding shows that Nike's logo on the jersey can have
546 an uplifting effect for sponsors looking to increase
547 their brand reputation. Therefore, the "swoosh" logo
548 can be a leveraging point for corporate partnership
549 managers from teams, with the evidence from our
550 findings that co-branding with Nike's logo enhances
551 brand reputation. Our findings also have implications
552 for apparel brands, as well as other sports leagues on
553 assessing the value of such partnerships, as having a
554 manufacturer logo printed on the uniform may add
555 more value to sponsors.

556 Our findings also showed that a team's success
557 (i.e., quantified by advancing into the playoffs) in
558 the previous season did not have any significant
559 impact on our outcome measures. While fluctuat-
560 ing team performance is a unique aspect in sports
561 marketing and analytics, our findings suggest that a
562 team's playoff status had no effect on sponsorship-
563 related outcomes. Rather, team identification may
564 play a more prominent role in this relationship. In
565 fact, Ngan et al. (2011) found that a team's win or
566 loss had no effect on purchase intention of spon-
567 sors among highly identified fans. Likewise, future
568 research might consider examining the interaction
569 among team performance and team identification on
570 sponsor evaluation. In addition, future research might
571 operationalize a team's success differently (e.g.,
572 cumulative winning percentage in recent seasons) to
573 revisit the relationship between team performance
574 and sponsor evaluation.

575 Overall, our study provides novel, empirical evi-
576 dence on how NBA fans respond to jersey sponsors.
577 By conducting an online experiment employing hypo-
578 theoretical scenarios and graphic renderings of jerseys
579 bearing a sponsor patch as research stimuli, the
580 findings of our study shed actionable insights that prac-
581 titioners can use to determine precisely how fans may
582 respond to specific market-, team-, manufacturer-, and
583 individual-related factors. While the purpose of this
584 study was to manipulate the sponsoring brand's promi-
585 nence, we also acknowledge that adding a condition
586 with a jersey that did not bear a patch would provide
587 additional information on whether sponsoring a team's
588 jersey adds value to the sponsor. Future studies might
589 include stimuli that present jerseys without a spon-
590 sor's patch as a control condition. Another interesting
591 avenue for future research would be to examine the
592 value of a corporation that sponsors multiple teams in
593 different leagues and regions. For instance, Rakuten
594 sponsors jerseys for both La Liga's F.C. Barcelona
595 and the NBA's Golden State Warriors. It would be
596 interesting to examine whether having multiple jersey
597 sponsorships impacts consumers' perceptions toward
598 the sponsor. In doing so, future research may bet-
599 ter inform the domain of professional sports, as well
600 as existing literature on how prospective endeavors
601 to implement pilot sponsorship programs in other
602 sports leagues (e.g., the NFL, NHL, MLB) may affect
603 fans. All things considered, we hope the present
604 study stimulates further research efforts to expand our
605 understanding of jersey sponsors from consumers'
606 perspectives.

References

- 607
- 608 BBC, 2016, Barcelona signs sponsorship deal with Rakuten.
609 [online] Available at: <http://www.bbc.com/news/business-38003752>
610
- 611 Brown, M., 2017, Inside the Golden State Warriors' \$60 million
612 jersey patch deal with Rakuten. *Forbes*. [online] Available at:
613 <https://www.forbes.com/sites/maurybrown/2017/11/27/insid>
614 [e-the-golden-state-warriors-record-60-million-jersey-patch-](https://www.forbes.com/sites/maurybrown/2017/11/27/insid)
615 [deal-with-rakuten/](https://www.forbes.com/sites/maurybrown/2017/11/27/insid)
- 616 Cialdini, R.B., Borden, R.J., Thorne, A., Walker, M.R., Freeman,
617 S. & Sloan, L.R., 1976, Basking in reflected glory: Three
618 (football) field studies, *Journal of Personality and Social*
619 *Psychology*, 34(3), 366-375.
- 620 Dodds, W.B., Monroe, K.B. & Grewal, D., 1991, Effects of price,
621 brand, and store information on buyers' product evaluations,
622 *Journal of Marketing Research*, 28(3), 307-319.
- 623 Faul, F., Erdfelder, E., Buchner, A. & Lang, A.G., 2009, Statisti-
624 cal power analyses using G* Power 3.1: Tests for correlation
625 and regression analyses, *Behavior Research Methods*, 41(4),
626 1149-1160.
- 627 Garcia, A., 2016, NBA becomes first major US sports league
628 to allow ads on jerseys. [online] Available at: <http://money.cnn.com/2016/04/15/news/nba-jerseys-corporate-sponsors/>
629
- 630 Gwinner, K. & Swanson, S.R., 2003, A model of fan identification:
631 Antecedents and sponsorship outcomes, *Journal of Services*
632 *Marketing*, 17(3), 275-294.
- 633 Han, Y.J., Nunes, J.C. & Drèze, X., 2010, Signaling status with
634 luxury goods: The role of brand prominence, *Journal of Mar-*
635 *keting*, 74(4), 15-30.
- 636 Janssen, L., Fransen, M.L., Wulff, R. & Reijmersdal, E.A., 2016,
637 Brand placement disclosure effects on persuasion: The moder-
638 ating role of consumer self-control. *Journal of Consumer*
639 *Behaviour*, 15(6), 503-515.
- 640 Kutz, S., 2017, 19 NBA teams have now sold ad space on
641 their jerseys. Available at: [https://www.marketwatch.com/](https://www.marketwatch.com/story/this-company-will-pay-the-golden-state-warriors-20-million-a-year-for-an-ad-on-its-jerseys-2017-09-12)
642 [story/this-company-will-pay-the-golden-state-warriors-20-](https://www.marketwatch.com/story/this-company-will-pay-the-golden-state-warriors-20-million-a-year-for-an-ad-on-its-jerseys-2017-09-12)
643 [million-a-year-for-an-ad-on-its-jerseys-2017-09-12](https://www.marketwatch.com/story/this-company-will-pay-the-golden-state-warriors-20-million-a-year-for-an-ad-on-its-jerseys-2017-09-12)
- 644 Kwak, D.H., Kwon, Y. & Lim, C., 2015, Licensing a sports brand:
645 Effects of team brand cue, identification, and performance
646 priming on multidimensional values and purchase intentions,
647 *Journal of Product & Brand Management*, 24(3), 198-210.
- 648 Kwon, H.H., Kim, H. & Mondello, M., 2008, Does a manufacturer
649 matter in co-branding? The influence of a manufacturer brand
650 on sport team licensed apparel, *Sport Marketing Quarterly*,
651 17(3), 163-172.
- 652 Lefton, T. & Lombardo, J., 2016, Will jersey ads bring big bucks?
653 [online] Available at: [http://m.sportsbusinessdaily.com/Jour](http://m.sportsbusinessdaily.com/Journal/Issues/2016/04/25/Leagues-and-Governing-Bodies/NBA-jersey-ads.aspx?)
654 [nal/Issues/2016/04/25/Leagues-and-Governing-Bodies/NBA-](http://m.sportsbusinessdaily.com/Journal/Issues/2016/04/25/Leagues-and-Governing-Bodies/NBA-jersey-ads.aspx?)
655 [jersey-ads.aspx?](http://m.sportsbusinessdaily.com/Journal/Issues/2016/04/25/Leagues-and-Governing-Bodies/NBA-jersey-ads.aspx?)
- Lombardo, J., 2018, Dating app Bumble inks \$20 million jersey
656 sponsorship with NBA team. [online] Available at: [https://](https://www.bizjournals.com/austin/news/2018/03/06/bumble-20-million-nba-la-clippers-jersey-sponsor.html)
657 [www.bizjournals.com/austin/news/2018/03/06/bumble-20-](https://www.bizjournals.com/austin/news/2018/03/06/bumble-20-million-nba-la-clippers-jersey-sponsor.html)
658 [million-nba-la-clippers-jersey-sponsor.html](https://www.bizjournals.com/austin/news/2018/03/06/bumble-20-million-nba-la-clippers-jersey-sponsor.html)
659
- Moon, J., Chadee, D. & Tikoo, S., 2008, Culture, product type,
660 and price influences on consumer purchase intention to buy
661 personalized products online, *Journal of Business Research*,
662 61(1), 31-39.
663
- Newell, S.J. & Goldsmith, R.E., 2001, The development of a scale
664 to measure perceived corporate credibility, *Journal of Busi-*
665 *ness Research*, 52(3), 235-247.
666
- Ngan, H.M., Prendergast, G.P. & Tsang, A.S., 2011, Linking
667 sports sponsorship with purchase intentions: Team perform-
668 ance, stars, and the moderating role of team identification,
669 *European Journal of Marketing*, 45(4), 551-566.
670
- Phillips, N., 2017, yarr package guide [Computer software]. R
671 package version 0.1.5. [online] Available at: [https://cran.r-](https://cran.r-project.org/web/packages/yarr/vignettes/guide.html)
672 [project.org/web/packages/yarr/vignettes/guide.html](https://cran.r-project.org/web/packages/yarr/vignettes/guide.html)
673
- Rovell, D., 2016, 76ers sell first NBA jersey ad. [online]
674 Available at: [http://www.espn.com/nba/story/_/id/15559477/](http://www.espn.com/nba/story/_/id/15559477/philadelphia-76ers-sell-first-nba-jersey-advertisement-stubhub)
675 [philadelphia-76ers-sell-first-nba-jersey-advertisement-](http://www.espn.com/nba/story/_/id/15559477/philadelphia-76ers-sell-first-nba-jersey-advertisement-stubhub)
676 [stubhub](http://www.espn.com/nba/story/_/id/15559477/philadelphia-76ers-sell-first-nba-jersey-advertisement-stubhub)
677
- Smith, C., 2016, The most valuable sponsorship deals in
678 soccer. [online] Available at: [https://www.forbes.com/](https://www.forbes.com/sites/chris-smith/2016/05/11/the-most-valuable-sponsorship-deals-in-soccer/#7308139c59e0)
679 [sites/chris-smith/2016/05/11/the-most-valuable-sponsorship-](https://www.forbes.com/sites/chris-smith/2016/05/11/the-most-valuable-sponsorship-deals-in-soccer/#7308139c59e0)
680 [deals-in-soccer/#7308139c59e0](https://www.forbes.com/sites/chris-smith/2016/05/11/the-most-valuable-sponsorship-deals-in-soccer/#7308139c59e0)
681
- Spalding, L., Cole, S. & Fayer, A., 2009, How rich-media video
682 technology boosts branding goals, *Journal of Advertising*
683 *Research*, 49(3), 285-292.
684
- Sweeney, J.C., Soutar, G.N. & Johnson, L.W., 1999, The role of
685 perceived risk in the quality-value relationship: A study in a
686 retail environment, *Journal of Retailing*, 75(1), 77-105.
687
- Van Noort, G. & Willemsen, L.M., 2012, Online damage control:
688 The effects of proactive versus reactive webcare interven-
689 tions in consumer-generated and brand-generated platforms.
690 *Journal of Interactive Marketing*, 26(3), 131-140.
691
- Wakefield, K.L. & Bennett, G., 2010, Affective intensity and spon-
692 sor identification, *Journal of Advertising*, 39(3), 99-111.
693
- Wann, D.L. & Branscombe, N.R., 1990, Die-hard and fair-weather
694 fans: Effects of identification on BIRGing and CORFing ten-
695 dencies, *Journal of Sport and Social Issues*, 14(2), 103-117.
696
- Yoo, B. & Donthu, N., 2001, Developing and validating a multi-
697 dimensional consumer-based brand equity scale. *Journal of*
698 *Business Research*, 52(1), 1-14.
699

Appendix A. Sample associated press article

AP**THE BIG STORY**

Golden State Warriors to land jersey sponsorship deal with Intel Corporation

By [ASSOCIATED PRESS](#)

OAKLAND (AP) – The Golden State Warriors have struck a deal with Intel Corporation, a major Fortune 500 company, to put a sponsorship logo on all player uniforms.

Intel will have its logo appear on the front of all Warriors jerseys beginning in the 2017-18 NBA season. Intel's patch will measure approximately 2½-by-2½ inches and will be included on all jerseys sold at Warriors home games, online on various sites, and in stores. The deal is expected to be mutually beneficial for both parties.

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701

Appendix B. Sample graphic rendering of jersey stimuli



Uncorrected
Proof

702	Appendix C. Measures used in the experiment		
703	Team Identification (TI), $\alpha = 0.83$ (adapted from Wann & Branscombe, 1990)		
704			
705	1. How important to you is it that the (identified team name) win?		
706			
707	2. How strongly do you see yourself as a fan of the (identified team name)?		
708			
709	3. How strongly do your friends see you as a fan of the (identified team name)?		
710			
711	4. During the season, how closely do you follow the (identified team name) via ANY of the following?		
712			
713	a) in person or on television		
714	b) on the radio		
715	c) television news		
716	d) through applications on your smartphone, tablet, or computer		
717	e) online sports site or blog		
718			
719	5. How important is being a fan of the (identified team name) to you?		
720			
721	6. How much do you dislike the greatest rivals of the (identified team name)?		
722			
723	7. How often do you display the name or logo of the (identified team name) at your place of work, where you live, in your car, on your cell phone, on your laptop, or on your clothing?		
724			
725			
726			
727	Brand Prominence (B_P), $\alpha = 0.90$ (reliability assessment includes subjects' responses before and after exposure to stimuli; adapted from Han, Nunes, & Dreze, 2010)		
728			
729			
730			
731	1. How prominent is (manipulated sponsor name) as a brand?		
732			
733	Brand Favorability (B_F), $\alpha = 0.88$ (reliability assessment includes subjects' responses before and after exposure to stimuli; adapted from Spalding, Cole, & Fayer, 2009)		
734			
735			
736			
737	1. How would you describe your overall opinion about (manipulated sponsor name)?		
738			
739	Brand Attitude (B_{att}), $\alpha = 0.94$ (Janssen, Fransen, Wulff, & Reijmersdal, 2016; Van Noort & Willemsen, 2012)		
740			
741			
742	1. I believe (manipulated sponsor name) is good.		
743	2. I believe (manipulated sponsor name) is trustworthy.		
744			
		3. I believe (manipulated sponsor name) is respectable.	745
			746
		4. I believe (manipulated sponsor name) is of high quality.	747
			748
		5. I believe (manipulated sponsor name) is interesting.	749
			750
		6. I believe (manipulated sponsor name) is relevant.	751
		Brand Awareness (B_{aur}), $\alpha = 0.93$ (Yoo & Donthu, 2001)	752
			753
		1. I am aware of (manipulated sponsor name).	754
		2. I can recognize (manipulated sponsor name).	755
		3. Some characteristics of (manipulated sponsor name) come to mind quickly.	756
			757
		Brand Credibility (B_C), $\alpha = 0.89$ (adapted from Newell & Goldsmith, 2001)	758
			759
		1. (Manipulated sponsor name) is sincere.	760
		2. (Manipulated sponsor name) is an expert in their field.	761
		3. (Manipulated sponsor name) is honest	762
		4. (Manipulated sponsor name) is experienced.	763
			764
		Purchase Intent of Brand (PI_{br}), $\alpha = 0.89$ (adapted from Dodds et al., 1991; Moon et al., 2008; Sweeney et al., 1999)	765
			766
			767
		1. I will purchase (product/service) from (manipulated sponsor name).	768
			769
		2. I would recommend (manipulated sponsor name) to my friends, family, peers, and/or colleagues.	770
			771
		3. There is a strong likelihood that I would purchase (product) from (manipulated sponsor name).	772
			773
		Purchase Intent of Jersey (PI_{jsy}), $\alpha = 0.93$ (adapted from Dodds, Monroe, & Grewal, 1991; Moon, Chadee, & Tikoo, 2008; Sweeney, Soutar, & Johnson, 1999)	774
			775
			776
			777
		1. I will purchase a (identified team name) jersey.	778
			779
		2. I would recommend a (identified team name) jersey to my friends, family, and/or colleagues.	780
			781
		3. There is a strong likelihood that I would purchase a (identified team name) jersey.	782