

## **Fan passion and behavioral loyalty in professional sports:**

### **Does social media use help or hurt fan loyalty?**

#### **Abstract**

Sports fandom is deeply ingrained in American society. This study focuses on the relationship between fan passion and behavioral loyalty and explores the role of social media use in shaping this connection. It yields four key findings that contribute to the existing literature. First, in alignment with prior studies, we affirm a positive impact of fan passion on behavioral loyalty towards professional sports. Our second finding reveals no causal relationship between fan passion and social media use in our specific context. Third, we observe an overall negative effect of social media use on fans' behavioral loyalty when not accounting for passion. Lastly, when considering the fan passion-loyalty relationship holistically, social media use moderates this connection by enhancing the influence of fan passion. We discuss the theoretical and practical implications of these findings at the intersection of psychology and marketing to add to our understanding and guidance for sports and leisure organizations.

**Keywords:** Fan Passion, Behavioral Loyalty, Social Media Use, Fan Engagement, Professional Sports

## 1 | INTRODUCTION

Loyalty is a frequent title topic in *Psychology & Marketing*, including over three dozen in this journal alone, including 18 since 2015. However, little research has examined the psychological role of passion (Vallerand et al. 2003; Wakefield 2016) in driving loyalty, albeit scant consideration has been given consumer love (Hernandez-Ortega & Ferreira 2021; Torres, Augusto & Neves 2022) in this and other journals (c.f., Yim, Tse & Chan 2008). At the same time, loyalty has been studied in relationship to social media use (Ozuem et al. 2021; Ozer et al. 2022), but not in relationship with the driving force of passion. Left unknown to researchers is (1) the power of passion on loyalty, (2) passion’s causal or correlational influence on social media use, and (3) the potential direct or moderating effects of social media use on loyalty. Our primary contribution challenges the notion that passion *causes* people to engage in relevant social media use and subsequently enhances loyalty. We study these relationships in the context of sports fans across a dozen professional teams among over 7,000 respondents in a series of field studies.

Engaging in sports as a fan is ingrained in the fabric of American society. Three-quarters of Americans are fans of a professional sports team (Gough 2023). Sports fans have an interest in and actively follow a sport, team, and/or athlete (Wann et al., 2001). From a psychological standpoint, passionate sports fans have “a strong inclination toward an activity [sport] that people like, that they find important, and in which they invest time and energy” (Vallerand et al., 2003, p.757). As such, fan passion reflects one’s psychological commitment and enthusiasm for a particular sports team, athlete, or overall sport, important to marketers of the same.

Sports fans can be differentiated by the degree of fan loyalty (Stewart et al., 2003). Fan loyalty contains two dimensions including behavioral loyalty and attitudinal loyalty. Behavioral loyalty represents behaviors or actions in support of a team (Bauer et al., 2008; Homburg & Giering,

1999). Attitudinal loyalty relates to the psychological commitment to a sports team (Bauer et al., 2008; Beatty & Kahle, 1988). We focus on behavioral loyalty; that is, the observable actions that demonstrate dedication and commitment by attending games and purchasing season tickets that directly contributes to the success and sustainability of teams and sports organizations.

With respect to social media, individuals share immediate reactions to key moments in the game, creating a vibrant online conversation to share emotions and experiences. The prevailing assumption is that passion or engagement with the brand or team causes social media use (Stavros et al. 2014; Wakefield 2016), supported by research showing passion—social media associations and correlations (O’Hallam et al. 2019; Okazaki et al. 2019; Pourazad, Stocchi & Pare 2020; Wang et al. 2021). However, care has not been taken to empirically examine the causal passion→social media relationship accounting for potential confounders.

## 2 | BACKGROUND AND THEORETICAL FRAMEWORK

Table 1 reviews sports fan research related to social media including the method, main findings and research focus. This research stream illustrates the interest in social media use in the context of sports fans while the methods used denote the lack of econometric modeling to examine causality.

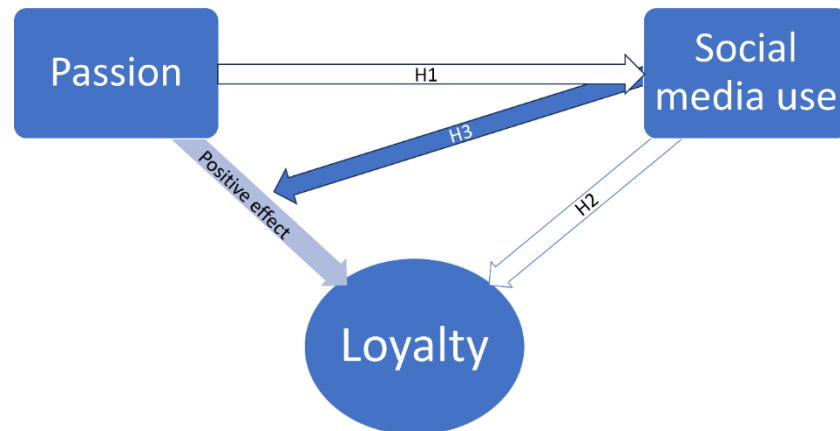
**Table 1.** Related Research on Social Media Use

<b>Study</b>	<b>Method</b>	<b>Main Findings</b>	<b>Focus</b>
Walsh et al. (2013)	Quantitative analysis using individual survey	Social media use of fans may have a positive impact on a sport brand's image	Social media branding effects
Moyer et al. (2015)	Quantitative analysis using online individual survey	There is a positive relationship between fans’ sports-team identification and their Facebook usage	Social media branding effects
Popp et al. (2017)	Quantitative analysis with linear regressions	Changes in the number of Twitter followers and Facebook likes of a football team are not associated with the football team attendance	Social media engagement and outcomes
Vale and Fernandes (2018)	Quantitative analysis using online and	The need for information, empowerment, and brand love are the	Social media engagement

Wang and Zhou (2015)	offline individual survey Quantitative analysis using ANOVA	main motivations for fans engaging with sport clubs on Facebook Sports organizations can leverage social media platforms to foster meaningful connections with fans by sharing information and promoting their products	Social media engagement
Warren (2016)	Quantitative analysis using online individual survey	Across professional, collegiate, and minor league sports, top-performing sales professionals have a higher frequency of utilizing social media platforms to understand the needs of their customers, compared to baseline ticket sales representatives.	Implementation of social media strategies
Jurisch et al. (2014)	Comparative analysis using rating data based on five-point Likert scale	Compared to the official websites of the 2013 top-four UEFA (Union of European Football Associations) teams, official websites of other teams have lost importance relative to social media and mobile channels	Social media engagement
Kim and Kim (2019)	Quantitative analysis using online individual survey	Frequent usage of social media for college sports among students is positively correlated with the development of group identity and collective self-esteem	Social media engagement and outcomes
Lim et al. (2015)	Quantitative analysis using individual survey	Social presence and channel commitment mediate the relationship between social media engagement and sports channel loyalty	Social media engagement and outcomes
Nisar et al. (2018)	Quantitative analysis using ANOVA	Greater customer interactivity of a sport club through social media can increase the sport club's spectatorship but is unrelated to its performance in the tournament	Social media engagement and outcomes
Wang (2013)	Quantitative analysis using online individual survey	Social identity, utilitarian, self-efficacy, and self-esteem maintenance are positively associated with one's intention to use social media while viewing mediated sports	Antecedents of social media engagement
Cocco et al. (2023)	Quantitative analysis with linear regressions	Substantial relationships exist among the NIL (Name, Image, Likeness) value on social media and factors such as competition level, university brand, and posting frequency	Social media branding effects

Unlike these studies, we provide insight into behavior by investigating the causal relationships between social media use related to fan passion and behavioral loyalty. Figure 1 illustrates our empirical framework.

**Figure 1 Empirical Framework**



## 2.1 | Passion and behavior

We draw upon the passion and behavior framework developed by Wakefield (2016) derived from the work in the field of psychology by Vallerand et al. (2003). Compared to related concepts such as involvement (Zaichkowsky, 1985), social identification (Mael & Ashforth, 1992), and relationship quality (Kim et al., 2011), passion is a better predictor of sports consumption and relevant social media behaviors (Wakefield, 2016). When questioned about the activities they are truly passionate about, hold in high regard, and dedicate their time and love to, individuals often mention team sports and leisure activities as their top choices (Philippe et al., 2010; Vallerand et al., 2003). Accordingly, the passion concept includes the extent to which an activity occupies one's *heart* (i.e., labels the activity as a passion), one's *mind* (i.e., values the activity), and one's *body*

(i.e., invests time and energy in the activity) (Vallerand et al., 2003; Wakefield, 2016). Wakefield (2016) also develops a fourth element to represent the extent to which an activity occupies one's *soul* (i.e., one believes life is incomplete without the activity). In short, passion resides deep within the soul, is situated at the core of the mind, is felt within the heart, and is expressed through the actions of the body. Notably, passion is an individual determinant of relevant behavior and differs from corollary concepts such as group identification (Mael & Ashforth, 1992; Wakefield & Wakefield 2023).

In individual and team sports, passion leads to positive affect during game participation (Vallerand et al., 2003; Vallerand et al., 2006). In individual sport/leisure participation, such as swimmers and skiers, the passion for their respective activities is closely linked to their love for the pursuit, their recognition of its value, and the amount of time they invest in it (Mageau et al., 2009). And in team sports and fan classification, the factors of affection towards the activity, time devoted to it, its significance in their lives, and passion for the pursuit consistently categorize individuals into (dis)passionate groups, which in turn predict their feelings (e.g., attitudinal loyalty) and behaviors (e.g., behavioral loyalty) (Vallerand et al., 2003, 2010).

## **2.2 | The role of social media use**

While we affirm the clear link between passion and loyalty, the causal relationships with social media use are unclear. Examining such relationships is necessary for several reasons. Investigating the relationship with passion helps us understand why fans engage with social media in the first place. If social media use is not caused by fan passion but is merely a by-product as part of one's ordinary social media use, we gain theoretical insights into the underlying motivations and drivers behind social media behavior. Understanding the causal relationship between social media use and behavioral loyalty is crucial for identifying the true impact of social media on fan behaviors such

as purchasing and attending games/events. It would allow researchers and businesses to determine whether increased social media use directly leads to higher behavioral loyalty or if other factors might influence the relationship. Such insights can guide the development of more effective strategies by targeting specific mechanisms or leveraging specific aspects of social media platforms (Li et al., 2021).

We expect fan passion to positively influence relevant social media use. Passion fuels social media use because of the strong emotional connection (e.g., heart and soul) with the team. When individuals feel passionate about a team, they are more inclined to engage actively with content and discussions on social media platforms (Khan, 2017; Oh & Syn, 2015; Wakefield & Wakefield, 2016). The deep emotional investment drives fans to seek out information, share thoughts and opinions, and connect with like-minded individuals. Fan passion should motivate fans to use social media to express and connect with their team-related interests. Taken together, we posit the following:

H<sub>1</sub>: Fan passion has a positive effect on related social media use.

Behavioral loyalty (attending games and purchasing season tickets) can be affected by social media use in positive and negative ways. On the one hand, social media platforms provide an immediate and easily accessible channel for teams and organizations to share information, updates, and announcements regarding games, events, and ticket availability. Actively following teams on social media and the resulting timely and convenient access to the information may increase the likelihood of fans attending events and purchasing tickets. Also, from a social influence perspective, social media platforms foster a sense of community and enable fans to engage directly with fellow fans. When fans post about positive experiences, share photos, or

express excitement, this acts as social proof to influence other fans' behavior and motivate them to follow suit (Stavros et al., 2014; Williams & Chinn, 2010).

On the other hand, social media use can negatively influence loyalty. First, social media platforms provide a virtual environment for fans to engage with favorite teams and fellow fans. This virtual engagement, combined with game broadcasts, may create a sense of satisfaction and connection that substitutes the need for physical attendance at games/events. Some fans may become content with following the team's updates, interacting online, and consuming digital content, leading to reduced motivation to attend games/events in person. Also, social media platforms increasingly provide options for live streaming, allowing fans to experience the game remotely (Breese et al., 2020). Such convenience can be beneficial for fans unable to attend in real life (IRL) but can reduce the urgency and motivation to attend in person, leading to lower behavioral loyalty including (season) ticket purchases. More importantly, recent research shows that social media can be a breeding ground for negativity and toxic behavior (e.g., George et al., 2021; Horner et al., 2021; Kim et al., 2019). As a result, fans may encounter online conflicts, trolling, or negative interactions with other fans, which can create a hostile or unwelcoming environment. Such negative experiences can diminish enthusiasm and willingness to attend, especially if they fear encountering similar behaviors in person. Therefore, combined, we propose the following two competing hypotheses:

H<sub>2a</sub>: Social media use has a positive effect on behavioral loyalty.

H<sub>2b</sub>: Social media use has a negative effect on behavioral loyalty.

Whether or not social media use accelerates or decelerates behavioral loyalty, we expect social media use promotes (positively moderates) the effect of passion on attending games and having season tickets. Though limited, prior work finds social media positively moderates the



influence of (entrepreneurial) passion on behavioral intentions (Al Halbusi, Soto-Acosta & Popa 2022). Other work finds social media platforms moderate attitudinal liking and subsequent evaluations (Wade et al. 2020). In the same way in the context of fans, as passion increases toward the home team, increased social media use (viz., interaction with the team's social media accounts and interacting with others regarding the home team) should propel attendance and season ticket purchase. Thus,

H3: Social media use will positively moderate the effect of fan passion on behavioral loyalty.

### **3 | METHOD**

#### **3.1 / Data**

We collected data for the present study by working with a national sports research company in the United States. Individual data were collected among fans of twelve AHL (American Hockey League) teams using each team's database of registered users provided by the company. These users are season ticket holders, single-game buyers, and/or other consumers who voluntarily signed up to receive emails from the corresponding teams to which they identified and demonstrated a connection as registered, addressable fans. Each team sent an online survey to 25,000 registered users at each team, proportionately representing season ticket holders, individual game buyers and all other registered users. Of the 300,000 surveys distributed, a total of 10,133 (3.38%) complete individual-level observations were received. We cleaned the dataset to remove missing data and obtained 7,325 usable observations<sup>1</sup> for subsequent analyses (see Tables 2 and 3 below for the demographic characteristics of our dataset).

---

<sup>1</sup> The 7,325 usable observations reflects the exclusion of zip code areas with fewer than 5 observations. We controlled for zip code fixed effects as detailed in the following models.

### 3.2 | Variables and measures

The present study has three major variables: fan passion, behavioral loyalty, and social media use. To measure fan passion, this study adopted the scale items Wakefield (2016) developed to measure the passion of fans of sports teams. Users obtained through the team database were asked to indicate the extent of their passion for the team on 0-100 slider scales representing devoting one's heart, mind, body, and soul, respectively (items 1-4 below).

1. When it comes to the [team name], I have:  
“No Passion” (0) to “Ultimate Passion” (100)
2. During the season, to what degree do the [team name] occupy your mind?  
The [team name] is:  
“Never on my mind” (0) to “Always on my mind” (100)
3. During the season, how much do you prioritize your time so that you can follow the [team name]?  
“None” (0) to “Completely” (100)]
4. When it comes to how you feel about the [team name] in your life:  
“I can't live without the [team name].  
“*Strongly Disagree*” (0) to “*Strongly Agree*” (100)]

We averaged the scores of the four items to represent the overall passion of a fan toward the team. Behavioral loyalty includes attending games and purchasing season tickets. Each user provided the number of regular season games attended and whether or not the user held a ticket plan for the current season. For social media use, each user was asked to specify a score, ranging from 0 (“*not at all*”) to 100 (“*all the games*”), representing the user's overall social media usage for following the team's official social media accounts. Following the team's official social media

accounts afford the opportunity to read, post, share, comment, and/or engage with content and with other fans of the team. We also asked each user to indicate each of the individual social media platforms followed, including Facebook, Twitter (X), Instagram, Snapchat, YouTube, and TikTok. Each response was recorded using a dummy (no/yes, 0,1) variable. The measures capture social media use in terms of overall time and duration but also allows for differentiating and aggregating the use across social media platforms. Apart from the focal variables, we included other demographic variables detailed in Table 2 below. Table 3 summarizes the descriptive statistics and correlations.

**Table 2. Variable Description and Measures**

<b>Variable</b>	<b>Description</b>	<b>Measure</b>
Fan Passion	The extent to which a fan feels passionate about the focal team	Averaging of four scale items ranging from 0 to 100
Season Tickets	Whether or not a fan holds a ticket plan for the current season	“1” (yes); “0” (no)
Games Attended	The number of regular season games a fan attended	Games
Social Media Use	The extent to which a fan uses social media for following the team on official social media accounts	One scale item ranging from 0 to 100
Social Media Channel	Whether or not a fan follows the team on a particular social media platform	Dummy (no/yes)
Distance	The distance between a fan’s location of residence and the stadium of the fan’s home team	Miles
Age	The age of the fan based on year of birth	Years
Gender	The gender of the fan	“1” (male); “0” (female)
Marital Status	The marital status of the fan when registered	“1” (married); “2” (widowed); “3” (divorced); “4” (separated); “5” (never married)
Number of Children	The number of children 18 or under living in the fan’s household when registered	“0” (0); “1” (1); “2” (2); “3” (3); “4” (4); “5” (5); “6” (more than 5)
Residence status	The residence status of the fan	“1” (homeowner); “2” (renter); “3” (dependent); “4” (homeowner & renter)
Zip Code	The zip code of the residence area of the fan	N/A

Income

The household income of the fan

“0” (0-10k); “1” (10-25k); “2” (25-49k); “3” (50-74k); “4” (75-99k); “5” (100-124k); “6” (125-149k); “7” (150k or more)

**Table 3.** Descriptive Statistics and Correlations (obs. 7,325)

	Min	Max	Mean	SD	ST	GA	SM	FP	DIS	AGE	GEN	MS	IN	CHI	RS
ST	0	1	0.42	0.49	1										
GA	0	34	10.3	10.4	0.65	1									
SM	0	1	0.59	0.37	0.15	0.27	1								
FP	0	1	0.80	0.20	0.27	0.39	0.46	1							
DIS	0.23	8415.9	99.5	343.0	-0.01	-0.01	0.01	0.02	1						
AGE	17	79	45.7	12.9	0.20	0.17	-0.20	0.01	-0.01	1					
GEN	0	1	0.59	0.49	-0.01	-0.01	-0.11	-0.05	0.04	0.11	1				
MS	1	5	2.11	1.64	-0.05	-0.01	0.10	0.05	-0.01	-0.38	-0.09	1			
IN	0	7	3.88	2.40	0.07	0.03	-0.03	-0.06	0.03	0.02	0.16	-0.25	1		
CHI	0	5	0.82	1.11	-0.13	-0.15	0.03	-0.02	-0.01	-0.22	0.01	-0.23	0.13	1	
RS	1	4	1.32	0.62	-0.07	-0.04	0.11	0.06	0.01	-0.34	-0.06	0.41	-0.20	-0.07	1

ST: Season Tickets; GA: Games Attended; SM: Social Media Use; FP: Fan Passion; DIS: Distance; AGE: Age; GEN: Gender; MS: Marital Status; IN: Income; CHI: Number of Children; RS: Residence Status  
 Fan Passion and Social Media Use are both scaled to have a range from 0 to 1. Correlations with Distance are in ln().

## 4 | MODELS, ESTIMATION APPROACHES AND RESULTS

### 4.1 | Effect of fan passion on social media use

To analyze the causal effect of fan passion on social media use, we estimate models with the following specification:

$$Social\ Media_{itz} = \beta_0 + \beta_1 Passion_{itz} + X_{itz}\Omega_1 + \zeta_z + \lambda_t + \varepsilon_{itz} \quad (1)$$

where  $Social\ Media_{itz}$  is the dependent variable that measures the social media use by a fan,  $i$ , of a team,  $t$ , living in a zip code area of  $z$ . The social media coverage only includes specific content related to the home team,  $t$ . We estimated equation (1) for the first continuous measure of social media use and (2) for a set of specific platforms, including Facebook, Twitter, Instagram, Snapchat, YouTube, and TikTok.

$Passion_{itz}$  is our main explanatory variable that gauges the level of passion for the home team possessed by the same fan,  $i$ . In all regressions, we control for a set of individual covariates,  $X_{itz}$ , including age, gender, marital status, number of children, residence status, and income fixed effects.  $\zeta_z$  and  $\lambda_t$  denote zip code fixed effects and team fixed effects, respectively.  $\varepsilon_{itz}$  is the error term. In all regressions, we cluster the standard errors at the team-by-age level to account for the correlation in social media use among fans of the same team and who are in the same age cell.

Our main coefficient of interest is  $\beta_1$ , which captures the effect of passion on the social media use of a fan. The OLS (ordinary least-squares) estimate of  $\beta_1$ , however, could be endogenous. We argue that there could be two sources of endogeneity. First, there could be inverse causality in the sense that a fan could become more passionate about the home team due to a higher level of social media use. Second, there could exist unobserved variables that are simultaneously correlated with passion and social media use. Such unobserved variables could include the personal characteristics of fans. For example, an energetic fan is likely to be more passionate about the home team as well as use social media more frequently. Under such circumstances, the OLS estimate of  $\beta_1$  is endogenous and does not present a causal link between passion and social media use.

To address the potential endogeneity problem, we implement an instrumental variables (IV) approach in which we instrument passion with the distance between a fan's location of residence

and the arena of the fan’s home team. The validity of this IV approach relies on two assumptions. First, the distance measure should negatively correlate with a fan’s passion. We demonstrate the strong correlation between the distance measure and passion later in Table 4 by showing the first-stage results obtained from the 2SLS (two-stage least squares) estimation. Our first-stage results indicate that more passionate fans live closer to the stadium of their home team, on average. Second, the IV should satisfy the exclusion restriction assumption that addresses that the instrumental variable impacts the dependent variable only through the endogenous variable of interest. In our setting, this suggests that the distance measure should only affect social media use through passion. While the exclusion restriction assumption is technically not provable, we argue that it is valid because the distance between a fan’s residence location and the arena of the home team should not be correlated with whether the individual uses social media or not through any channel other than the fan’s passion towards the home team.

Table 4 below presents the estimated effect of passion on social media use. The dependent variable gauges the level of overall social media use without distinguishing among different social media platforms. All regressions include a full set of individual controls, team fixed effects, and zip code fixed effects. Column 1 in Table 4 contains the OLS estimate of passion on social media use. The estimate indicates that the passion of a fan is strongly and positively associated with overall social media use ( $\beta=0.886$ ,  $p<0.01$ ). The result suggests that a one-unit increase in passion correlates with an overall social media usage increase of about 0.89 units.

**Table 4.** The Effect of Passion on Overall Social Media Use among Fans

	(1) Social Media (OLS)	(2) Passion (2SLS - First Stage)	(3) Social Media (2SLS - Second Stage)
Passion	0.886*** (0.020)	- -	0.743 (0.474)
Distance		0.005*** (0.002)	

F-Statistic	-	12.20	-
Individual Controls	N	Y	Y
Team Fixed Effects	N	N	Y
Zip Code Fixed Effects	N	N	Y
Observations	7,325	7,325	7,325

*Passion* and *Social Media* both scaled to have a range from 0 to 1. *Distance* is the logarithm of the distance between a fan's residence and the supported team's home stadium. Individual controls include age, gender, marital status, number of children, residence status, and income fixed effects. Standard errors are clustered at the team-by-age level and reported in parentheses (\*\*\* Sig. at  $p < 0.01$ ; \*\* Sig. at  $p < 0.05$ ; \* sig. at  $p < 0.10$ ).

As discussed earlier, the OLS estimate is likely biased due to the potential endogeneity problem. We implement an IV strategy and obtain the unbiased coefficient from 2SLS estimations. Column 2 in Table 4 reports the first stage estimate. The coefficient ( $\beta=0.005$ ,  $p<0.01$ ) suggests a very strong and positive correlation between the instrument, the distance between a fan's residence location and the supported team's home stadium, and passion. We also report the F-statistic for the instrument at the bottom of the table. The F-statistic is larger than 10, confirming the strong correlation between the instrument and the endogenous regressor. Column 3 presents the second stage results. Different from the OLS estimate, the 2SLS estimate is statistically insignificant ( $\beta=0.743$ , ns), suggesting there is no causal effect of passion on overall social media use among fans when we do not distinguish among various social media platforms and applications. The different results obtained from the OLS and 2SLS estimations demonstrate that the endogeneity problem shall not be neglected and appeal implementing the correct methodology when investigating the casual link between social media use and fan passion.

To further understand whether fan passion has heterogeneous effects among different social media platforms, we separately examine various platforms using the IV approach. Table 5 exhibits the 2SLS estimates for six different platforms (Facebook, Twitter, Instagram, Snapchat, YouTube, and TikTok). In Table 5, dependent variables are dummy variables that indicate whether a fan uses

the corresponding social media platform. Standard errors are clustered at the team-by-age level in all regressions.

**Table 5.** The Effect of Passion on Social Media Use by Platform

	(1)	(2)	(3)	(4)	(5)	(6)
	Facebook	Twitter	Instagram	Snapchat	YouTube	TikTok
<b>Panel A: OLS Estimates</b>						
Passion	0.579*** (0.028)	0.351*** (0.025)	0.440*** (0.027)	0.079*** (0.012)	0.254*** (0.017)	0.119*** (0.013)
<b>Panel B: 2SLS Estimates</b>						
Passion	1.394** (0.661)	-0.408 (0.619)	0.857 (0.655)	0.473 (0.325)	0.569 (0.453)	0.386 (0.354)
Individual Controls	Y	Y	Y	Y	Y	Y
Team Fixed Effects	Y	Y	Y	Y	Y	Y
Zip Code Fixed Effects	Y	Y	Y	Y	Y	Y
Observations	7,325	7,325	7,325	7,325	7,325	7,325

The dependent variables are indicators of the use of *Facebook*, *Twitter*, *Instagram*, *Snapchat*, *YouTube*, and *TikTok*, respectively. Individual controls include age, gender, marital status, number of children, residence status, and income fixed effects. Standard errors are clustered at the team-by-age level and reported in parentheses (\*\*\* Sig. at  $p < 0.01$ ; \*\* Sig. at  $p < 0.05$ ; \* sig. at  $p < 0.10$ ).

Panel A of Table 5 presents the simple correlations between fan passion and the use of a specific social media platform. In all six regressions, we find a significant and positive association between passion and social media use (by platform). The results suggest that a fan's passion is most strongly correlated with usage of Facebook ( $\beta=0.579$ ,  $p<0.01$ ) but least correlated with the usage of Snapchat ( $\beta=0.079$ ,  $p<0.01$ ). The IV regression results reported in Panel B, however, again show considerable deviations from the OLS estimates. The coefficients of passion are substantially different in both magnitude and statistical significance. In 5 out of the 6 regressions, we find no significant effect of passion on social media use. Specifically, among these six different platforms, the 2SLS estimates indicate that a fan's passion has no impact on his/her use of Twitter (X), Instagram, Snapchat, YouTube, or TikTok. Interestingly, the most significant coefficient is again found for Facebook ( $\beta=1.394$ ,  $p<0.05$ ).



Taken together, our findings suggest that passion toward the supported team has no causal effect on overall social media use, or specifically the use of Twitter (X), Instagram, Snapchat, YouTube, or TikTok. The only strong impact of passion we find is on the use of Facebook among fans.  $H_1$  is therefore not supported.

#### 4.2 | Effect of fan passion and social media use on behavioral loyalty

Next, we investigate the effect of social media use on behavioral loyalty to the home teams. To examine the moderating effect of social media use on the passion  $\rightarrow$  loyalty relationship, we added a passion-social media use interaction term to examine the role of overall social media use in adjusting the effect of passion on loyalty. The OLS model specification is as follows.

$$Loyalty_{itz} = \alpha_0 + \alpha_1 Passion_{itz} + \alpha_2 Social\ Media_{itz} + \alpha_3 Passion_{itz} * Social\ Media_{itz} + X_{itz}\Omega_2 + \zeta_z + \lambda_t + v_{itz} \quad (2)$$

In equation (2), all subscript notations mirror those in equation (1).  $Loyalty_{itz}$  are two dependent variables representing whether a fan has a ticket plan for the current season and how many games the fan attended in the current season. We analyzed these two outcomes separately. In our specification, we include a full set of individual controls, as well as team and zip code fixed effects.  $v_{itz}$  represents the error term. We cluster standard errors at the team-by-age level in all regressions. Notably, the coefficient of  $\alpha_3$  captures the effect of the interaction between passion and social media use. To be more specific,  $\alpha_3$  denotes the change in the impact of passion on loyalty when social media use increases by one unit; and vice versa. On the other hand,  $\alpha_1$  gauges the impact of passion on loyalty when social media use takes a value of zero. Correspondingly,  $\alpha_2$  captures the impact of social media use on loyalty when passion takes a value of zero.

One could be concerned that the OLS estimate for passion obtained from equation (2) is endogenous mainly due to unobserved individual confounders. This is less concerning in our

setting due to the subtle fact that the two dependent variables by definition capture the primary consumption ability of a fan. To be more specific, our two outcome variables—the holding of a ticket plan and the total number of games attended in the current season—reflect household economic status.<sup>2</sup> Therefore, we can alleviate the endogeneity stemming from household economic conditions by controlling the income fixed effects.

On the other hand, unobserved personal characteristics, such as personality or family background, could also drive the results, although it is unclear what specific type of personal characteristics or family background would simultaneously correlate with passion and the level of consumption related to watching games in person. We still endeavor, however, to palliate the concern raised by potentially unobserved personality or family background by controlling for a rich set of individual covariates. Arguably, among these covariates, an individual's marital status and total number of children could proportionally capture the lifestyle characteristics. Meanwhile, income fixed effects function as proxies for family background. In addition, in all regressions, we include zip code fixed effects and team fixed effects to eliminate the mean differences in behavioral loyalty across fan groups by team and living area. This helps alleviate the concern of unobserved individual confounders because fans supporting the same team and/or living in the same zip code area are likely to have similar personal characteristics and family backgrounds.

Table 6 presents the main results obtained from estimating equation (2). We start our analysis with the least conservative specification where we do not include any controls in the

---

<sup>2</sup> One might also be concerned with potential reverse causality. This should not be a threat to our identification because passion is predetermined before the existence of our outcomes, especially in the case of season ticket purchases. The causality is less likely to be in the opposite direction. Even if reverse causation, the coefficient of passion in equation (2) should be dominated by the effect of passion on the outcome variables but not the reversed effect.

regression. We extend our analysis by adding individual-level controls, as well as team and zip code fixed effects gradually. All standard errors are clustered at the team-by-age level.

**Table 6.** The Effect of Passion on Loyalty - Role of Social Media Use

	(1)	(2)	(3)	(4)	(5)	(6)
	Games Attended	Games Attended	Games Attended	Season Tickets	Season Tickets	Season Tickets
Passion	13.559*** (0.816)	12.006*** (0.800)	12.119*** (0.858)	0.546*** (0.040)	0.464*** (0.041)	0.495*** (0.044)
Social media	-5.738*** (1.162)	-5.232*** (1.135)	-4.911*** (1.199)	-0.166*** (0.062)	-0.155** (0.060)	-0.144** (0.063)
Social media * Passion	11.008*** (1.457)	12.375*** (1.399)	11.697*** (1.455)	0.266*** (0.074)	0.352*** (0.071)	0.331*** (0.073)
Individual Controls	N	Y	Y	N	Y	Y
Team Fixed Effects	N	N	Y	N	N	Y
Zip Code Fixed Effects	N	N	Y	N	N	Y
Observations	7,167	7,167	7,167	7,325	7,325	7,325

*Passion* and *Social Media* both scaled to have a range from 0 to 1. Individual controls include age, gender, marital status, number of children, residence status, and income fixed effects. Standard errors are clustered at the team-by-age level and reported in parentheses (\*\*\* Sig. at  $p < 0.01$ ; \*\* Sig. at  $p < 0.05$ ; \* sig. at  $p < 0.10$ ).

Column 1 in Table 6 reports the estimated effect of passion on a fan's behavioral loyalty to the home team. The results ( $\beta=13.559$ ,  $p<0.01$ ) suggest that when a fan does not browse content correlated with the home team on social media (i.e., *Social Media* = 0), a 1 point (on a 100-point scale) increase in passion leads to about 0.135 more games attended by the individual. Similarly, the coefficient of social media use ( $\beta=-5.738$ ,  $p<0.01$ ) shows that when passion is not included in the function (i.e.,  $\alpha_2$  takes a value of zero), a higher level of social media use causes the fan to attend fewer games in the stadium. The coefficient of the interaction term ( $\beta=11.008$ ,  $p<0.01$ ) indicates that social media use functions as a moderator when considering the effect of passion on a fan's loyalty,

Next, in column 2, we include a full set of controls to account for potential confounders at the individual level. The coefficient remains intact. In column 3, we additionally add team fixed

effects and zip code fixed effects to capture mean differences in the outcomes across fan groups of different teams and who live in the same area. The inference again remains unaltered. We repeat the same analysis using the indicator of ticket plan purchase as the measure of loyalty of a fan. Columns 4 through 6 exhibit the results. The findings are consistent with those reported in columns 1 through 3. Most importantly, we find no changes in the results regardless of the specifications we employ.

Therefore, taken together, we confirm that passion has a positive and significant effect on behavioral loyalty. However, without passion towards the team, social media use has a negative effect on behavioral loyalty, supporting H<sub>2b</sub>. Meanwhile, the greater the passion toward the team, social media use is a moderator that considerably amplifies the effect of passion, supporting H<sub>3</sub>. The findings are very robust across different specifications. Consequently, the results suggest that personal characteristics, including economic status, personality, family background, as well as the common characteristics possessed by specific fan groups, do not drive the results. Further, social media use does not have an independent causal effect on loyalty, refuting H<sub>2a</sub>.

## **5 | IMPLICATIONS AND CONCLUSION**

This study examines the role of social media use in the fan passion-loyalty relationship in professional sports and has four major findings. One, consistent with prior literature, we confirm a positive impact of fan passion on behavioral loyalty in professional sports. Two, surprisingly and interestingly, we find no causal relationship between fan passion and social media use in our context. Three, social media use has an overall negative effect on behavioral loyalty when passion is not considered. Four, considering the fan passion-loyalty relationship as a whole, social media use positively moderates the relationship to strengthen the influence of fan passion. Accordingly, our study holds several implications for research and practice.

First, our study contributes to passion and behavior theory by confirming a positive and strong impact of fan passion on behavioral loyalty in professional sports. This contributes to our understanding of the role of passion, strengthens existing fan engagement theories, and helps advance loyalty theories (Harmeling et al., 2017; Kim et al., 2021). Additionally, it provides a key practical implication. Since passion so strongly predicts season ticket purchases and individual ticket purchases, independent of demographics most often used in lead scoring systems, teams can design segmented marketing campaigns dependent upon passion levels. In other words, teams should use the four items measuring fan passion (viz., Wakefield 2016) as a primary component of lead scoring systems. Further, creating engaging fan experiences to enhance fan passion will build strong emotional connections between fans and the team. In turn, the team can foster and leverage fan passion for cultivating loyal fan bases, ultimately driving revenue growth.

Second, unlike prior research and theory suggesting a positive relationship between passion and social media use, our study suggests that the relationship is not supported in professional sports, at least for most types of social media (X/Twitter, Instagram, Snapchat, TikTok, YouTube). Given the prevalence and established patterns of social media use among adults, the results imply that passion for the team may bring a fan's focus to the team's social media channels but does little to influence the magnitude of social media use. That is, individuals will spend commensurate effort whether a fan or not a fan, but if fans, then they divert social media use in favor of the team. Apart from the potential reverse causality and unobserved variables issues discussed earlier, another plausible explanation is that research has suggested that for married fans, social media is more likely to offer a sense of community and belonging (Penney, 2015). Also, in professional sports, clubs and teams tend to offer family-oriented sports events or activities (Funk et al., 2001). These indicate that fan passion may only cause increasing social media use among certain demographic

groups. We suggest that future research with different empirical settings and data could further explore the effect of passion on social media use to confirm and/or complement our findings.

Third, our finding of the negative effect of social media use on behavioral loyalty, to some extent, challenges the assumptions that increased engagement on social media platforms positively influences fan behavior and loyalty (e.g., Kim & Kim, 2020; Nisar & Whitehead, 2016). It implies that fans who spend more time on social media following the team, absent passion for the team, are unlikely to attend games. Considering that the onset of sports gambling has corresponded with more individuals engaging in online gambling (via betting apps such as DraftKings and FanDuel) and interacting on social media to follow team and player performance without necessarily following a favorite/home team (see Sirola et al., 2021), this finding highlights the need for a more nuanced understanding of the complex dynamics between social media use, fan behavior, and loyalty.

The negative linkage identifies boundary conditions within which the relationship between social media use and fan behavioral loyalty operates. It suggests that other factors, such as specific individual characteristics, types of social media activities, or contextual factors, may moderate the relationship. Future research could contribute to this potential new theoretical framework by providing insights into the conditions under which social media use would hinder or perhaps serve as a virtual substitute for behavioral loyalty. It would also help researchers and practitioners identify potential pitfalls and mitigate the negative consequences of social media use by aligning strategies with theoretical insights.

Fourth, our study further contributes to passion and behavior theory by identifying a boundary condition where the effect of fans' passion on behavioral loyalty is amplified by social media use. As the passion of fans intensifies with greater social media engagement, behavioral

loyalty (purchasing season tickets and attendance) is augmented. This finding advances the existing theoretical framework and contributes to the theoretical understanding of fan engagement, social influence, and the role of technology in shaping behaviors (Bhagat & Kim, 2023; Maruping et al., 2017). It implies that given the advances of increased connectivity, real-time updates, emotional support, and amplified fan voice enabled by social media platforms combined with passionate fans, versus less passionate fan groups, would be more likely to enhance behavioral loyalty and drive revenue growth. Organizations can cultivate a larger and more loyal fan base by leveraging the amplifying effect of social media use. This may include designing interactive campaigns, creating engaging social media content, and integrating social media platforms into offline experiences for passionate fans. Companies such as Influence Mobile (fan rewards program), InCrowd Sports (personalized fan experiences using behavioral data), and StellarAlgo (focus on engaging non-attending fans) can assist teams seeking to ramp up passion and loyalty via social media. Further research can also be inspired to explore additional moderators, mediators, or contextual factors with both behavioral and attitudinal loyalty as the outcomes.

In conclusion, in contrast to prior studies lacking breadth across teams and fan groups, this study among over 7,000 fans and 13 teams finds that fan passion does not have a causal effect on team-related social media use and that social media use does not have a causal effect on behavioral loyalty. Instead, social media use positively moderates the passion→loyalty relationship, providing proper boundary conditions for when and how passion and social media interact to enhance loyalty.

## **Acknowledgment**

This research was conducted without the support of any external funds or grants.

## **Declaration of interests**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.



## References

- Ballouli, K., & Hutchinson, M. (2010). Digital-Branding and Social-Media Strategies for Professional Athletes, Sports Teams, and Leagues: An Interview with Digital Royalty's Amy Martin. *International Journal of Sport Communication*, 3, 4, 395-401.
- Bauer, H. H., Stokburger-Sauer, N. E., & Exler, S. (2008). Brand Image and Fan Loyalty in Professional Team Sport: A Refined Model and Empirical Assessment. *Journal of Sport Management*, 22, 2, 205-226.
- Beatty, S. E., & Kahle, L. R. (1988). Alternative Hierarchies of the Attitude Behavior Relationship: The Impact of Brand Commitment and Habit. *Journal of the Academy of Marketing Science*, 16, 1-10.
- Bhagat, S., & Kim, D. J. (2023). Examining Users' News Sharing Behaviour on Social Media: Role of Perception of Online Civic Engagement and Dual Social Influences. *Behaviour & Information Technology*, 42, 8, 1-22.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. V. (2013). Digital Business Strategy: Toward a Next Generation of Insights. *MIS Quarterly*, 37, 2, 471-482.
- Breese, J. L., Fox, M. A., & Vaidyanathan, G. (2020). Live Music Performances and the Internet of Things. *Issues in Information Systems*, 21, 3, 179-188.
- Cocco, A. R., Kunkel, T., & Baker, B. J. (2023). The Influence of Personal Branding and Institutional Factors on the Name, Image, and Likeness Value of Collegiate Athletes' Social Media Posts. *Journal of Sport Management*, 1, 1-12.
- Crumlish, C., & Malone, E. (2009). *Designing Social Interfaces: Principles, Patterns, and Practices for Improving the User Experience*. O'Reilly Media, Inc.
- Fan, W., & Gordon, M. D. (2014). The Power of Social Media Analytics. *Communications of the ACM*, 57, 6, 74-81.
- Funk, D. C., Mahony, D. F., Nakazawa, M., & Hirakawa, S. (2001). Development of the Sport Interest Inventory (SII): Implications for Measuring Unique Consumer Motives at Team Sporting Events. *International Journal of Sports Marketing and Sponsorship*, 3, 3, 38-63.
- George, J., Gerhart, N., & Torres, R. (2021). Uncovering the Truth about Fake News: A Research Model Grounded in Multi-Disciplinary Literature. *Journal of Management Information Systems*, 38, 4, 1067-1094.
- Gough, C. (2023). Share of Sports Fans in the United States as of April 2023. May 4. *Statista.com*.
- Harmeling, C. M., Moffett, J. W., Arnold, M. J., & Carlson, B. D. (2017). Toward A Theory of Customer Engagement Marketing. *Journal of the Academy of Marketing Science*, 45, 312-335.
- Hazari, S. (2018). Investigating Social Media Consumption, Sports Enthusiasm, and Gender on Sponsorship Outcomes in the Context of Rio Olympics. *International Journal of Sports Marketing and Sponsorship*, 19, 4, 396-414.

- Homburg, C., & Giering, A. (1999). *The Measurement of Brand Satisfaction and Brand Loyalty*. In F-R. Esch (Ed.), *Modern Brand Management: Fundamentals, New Approaches, Implementations* (pp. 1089–1100). Wiesbaden, Germany: Gabler.
- Horner, C. G., Galletta, D., Crawford, J., & Shirsat, A. (2021). Emotions: The Unexplored Fuel of Fake News on Social Media. *Journal of Management Information Systems*, 38, 4, 1039-1066.
- Jurisch, M., Krcmar, H., Scholl, H. J., Wang, K., Wang, Y., Woods, G., ... & Yao, Y. (2014). *Digital and Social Media in Pro Sports: Analysis of the 2013 UEFA Top Four*. In 2014 47th Hawaii International Conference on System Sciences. IEEE.
- Kane, G. C., Alavi, M., Labianca, G. (Joe), & Borgatti, S. P. (2014). What's Different about Social Media Networks? A Framework and Research Agenda. *MIS Quarterly*, 38, 1, 275–304.
- Khan, M. L. (2017). Social Media Engagement: What Motivates User Participation and Consumption on YouTube? *Computers in Human Behavior*, 66, 236-247.
- Kim, B., & Kim, Y. (2019). Growing as Social Beings: How Social Media Use for College Sports is Associated with College Students' Group Identity and Collective Self-Esteem. *Computers in Human Behavior*, 97, 241-249.
- Kim, M., & Kim, J. (2020). How Does A Celebrity Make Fans Happy? Interaction between Celebrities and Fans in the Social Media Context. *Computers in Human Behavior*, 111, 106419.
- Kim, A. Moravec, P. L., & Dennis, A. R. (2019). Combating Fake News on Social Media with Source Ratings: The Effects of User and Expert Reputation Ratings. *Journal of Management Information Systems*, 36, 3, 931-968.
- Kim, J. J., Steinhoff, L., & Palmatier, R.W. (2021). An Emerging Theory of Loyalty Program Dynamics. *Journal of the Academy of Marketing Science*, 49, 71-95.
- Kim, Y., Trail, G., & Ko, Y. (2011). The Influence of Relationship Quality on Sport Consumption Behaviors: An Empirical Examination of the Relationship Quality Framework. *Journal of Sport Management*, 25, 6, 576–592.
- Li, F., Larimo, J., & Leonidou, L. C. (2021). Social Media Marketing Strategy: Definition, Conceptualization, Taxonomy, Validation, and Future Agenda. *Journal of the Academy of Marketing Science*, 49, 51-70.
- Lim, J. S., Hwang, Y., Kim, S., & Biocca, F. A. (2015). How Social Media Engagement Leads to Sports Channel Loyalty: Mediating Roles of Social Presence and Channel Commitment. *Computers in Human Behavior*, 46, 158-167.
- Mael, F., & Ashforth, B. E. (1992). Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification. *Journal of Organizational Behavior*, 13, 103–123.
- Mageau, G. A., Vallerand, R. J., Charest, J., Salvy, S., Lacaille, N., Bouffard, T., & Richard, K. (2009). On the Development of Harmonious and Obsessive Passion: The Role of Autonomy Support, Activity Valuation, and Identity Processes. *Journal of Personality*, 77, 3, 601–646.
- Maruping, L. M., Bala, H., Venkatesh, V., & Brown, S. A. (2017). Going Beyond Intention: Integrating Behavioral Expectation into the Unified Theory of Acceptance and Use of

- Technology. *Journal of the Association for Information Science and Technology*, 68, 3, 623-637.
- Moyer, C., Pokrywczynski, J., & Griffin, R. J. (2015). The Relationship of Fans' Sports-Team Identification and Facebook Usage to Purchase of Team Products. *Journal of Sports Media*, 10, 1, 31-49.
- Newman, T., Peck, J., & Wilhide, B. (2017). *Social Media in Sport Marketing*. Routledge.
- Nisar, T. M., Prabhakar, G., & Patil, P. P. (2018). Sports Clubs' Use of Social Media to Increase Spectator Interest. *International Journal of Information Management*, 43, 188-195.
- Nisar, T. M., & Whitehead, C. (2016). Brand Interactions and Social Media: Enhancing User Loyalty through Social Networking Sites. *Computers in Human Behavior*, 62, 743-753.
- Penney, J. (2015). Social Media and Symbolic Action: Exploring Participation in the Facebook Red Equal Sign Profile Picture Campaign. *Journal of Computer-Mediated Communication*, 20, 1, 52-66.
- Philippe, F., Vallerand, R. J., Houliort, N., Lavigne, G. L., & Donahue, E. G. (2010). Passion for An Activity and Quality of Interpersonal Relationships: The Mediating Role of Emotions. *Journal of Personality and Social Psychology*, 98, 917-932.
- Popp, N., McEvoy, C., & Watanabe, N. (2017). Do College Athletics Marketers Convert Social Media Growth into Ticket Sales? *International Journal of Sports Marketing and Sponsorship*, 18, 2, 212-227.
- Oh, S., & Syn, S. Y. (2015). Motivations for Sharing Information and Social Support in Social Media: A Comparative Analysis of Facebook, Twitter, Delicious, YouTube, and Flickr. *Journal of the Association for Information Science and Technology*, 66, 10, 2045-2060.
- Sirola, A., Savela, N., Savolainen, I., Kaakinen, M., & Oksanen, A. (2021). The Role of Virtual Communities in Gambling and Gaming Behaviors: A Systematic Review. *Journal of Gambling Studies*, 37, 1, 165-187.
- Smith, A., Graetz, B., & Westerbeek, H. (2008). Sport Sponsorship, Team Support and Purchase Intentions. *Journal of Marketing Communications*, 14, 5, 387-404.
- Stavros, C., Meng, M. D., Westberg, K., & Farrelly, F. (2014). Understanding Fan Motivation for Interacting on Social Media. *Sport Management Review*, 17, 4, 455-469.
- Stewart, B., Smith, A., & Nicholson, M. (2003). Sport Consumer Typologies: A Critical Review. *Sport Marketing Quarterly*, 12, 4, 206-216.
- Tafesse, W., & Wien, A. (2018). Using Message Strategy to Drive Consumer Behavioral Engagement on Social Media. *Journal of Consumer Marketing*, 35, 3, 241-253.
- Tallon, P. P. (2007). A Process-Oriented Perspective on the Alignment of Information Technology and Business Strategy. *Journal of Management Information Systems*, 24, 3, 227-268.
- Vale, L., & Fernandes, T. (2018). Social Media and Sports: Driving Fan Engagement with Football Clubs on Facebook. *Journal of Strategic Marketing*, 26, 1, 37-55.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C. F., Leonard, M., & Gagne, M. (2003). Les passions de l'âme: On Obsessive and Harmonious Passion. *Journal of Personality and Social Psychology*, 85, 756-767.

- Vallerand, R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the Role of Passion in Burnout: A Process Model. *Journal of Personality*, 78, 1, 289–312.
- Vallerand, R. J., Rousseau, F. L., Grouzet, M. E. F., Dumais, A., Greniere, S., & Blanchard, C. M. (2006). Passion in Sport: A Look at Determinants and Affective Experiences. *Journal of Sport & Exercise Psychology*, 28, 454–478.
- Venkataraman, S., & Das, R. (2013). The Influence of Corporate Social Media on Firm Level Strategic Decision Making: A Preliminary Exploration. *International Journal of E-Business Research*, 9, 1, 1-20.
- Wakefield, K. (2016). Using Fan Passion to Predict Attendance, Media Consumption and Social Media Behaviors. *Journal of Sport Management*, 30, 3, 229-247.
- Wakefield, R., & Wakefield, K. (2016). Social Media Network Behavior: A Study of User Passion and Affect. *The Journal of Strategic Information Systems*, 25, 2, 140-156.
- Walsh, P., Clavio, G., Lovell, M. D., & Blaszk, M. (2013). Differences in Event Brand Personality Between Social Media Users and Non-Users. *Sport Marketing Quarterly*, 22, 4, 214-223.
- Wang, X. (2013). Applying the Integrative Model of Behavioral Prediction and Attitude Functions in the Context of Social Media Use while Viewing Mediated Sports. *Computers in Human Behavior*, 29, 4, 1538-1545.
- Wang, Y., & Zhou, S. (2015). How Do Sports Organizations Use Social Media to Build Relationships? A Content Analysis of NBA Clubs' Twitter Use. *International Journal of Sport Communication*, 8, 2, 133-148.
- Wann, D. L., Melnick, M. J., Russell, G. W., & Pease, D. G. (2001). *Sport Fans: The Psychology and Social Impact of Spectators*. New York: Routledge.
- Warren, C. (2016). Social Media and Outbound Ticket Sales: Examining Social Media Strategies Among Top-Performing Salespeople. *Journal of Applied Sport Management*, 8, 4, 49-62.
- Williams, J., & Chinn, S. J. (2010). Meeting Relationship-Marketing Goals through Social Media: A Conceptual Model for Sport Marketers. *International Journal of Sport Communication*, 3, 4, 422-437.
- Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *The Journal of Consumer Research*, 12, 3, 341–352.