Original Article

The relationship among social media consumption, team identification, and behavioral intentions

PARK, JAE-AHM[1]; DITTMORE STEPHEN W.[1]
[1] Department of Health, Human Performance and Recreation, University of Arkansas, USA

Abstract:
This study examined the relationship among social media consumption, team identification, word-of-mouth intention, and attendance intention. By analyzing a total of 146 undergraduate students, this study revealed the following insights. First, social media consumption directly affects team identification and word-of-mouth intention. Second, team identification directly affects word-of-mouth intention and attendance intention. Third, social media consumption affects word-of-mouth intention and attendance intention, mediated by team identification. These results expand the use of social media in the marketing and research field upon prior studies of social media and team identification in sport. The most important contribution of this study was to provide the evidence that social media consumption can affect behavioral intention directly and indirectly with team identification as a mediating factor. Thus, this study suggests the way that social media can be used not only for information distribution but also for driving more revenue by stimulating fans' team identification and intentions.
Key words: Social Media, Team Identification, word-of-mouth, attendance intention.

Introduction

Social media now plays a significant role in people's lives worldwide. Nearly 1.2 billion people representing 82% of the online population over the world are on social media and almost 64% of them connect it at least once a day (Dreyer, 2012; Nielsen, 2014). According to Nielsen (2014), people particularly like to talk about sports on social media. As evidence of this, the largest number of messages created in 2013 focused on a singular event occurred during Super Bowl XLVI, with 26 million messages generated. Naturally, to capture and attract these sports fans' attention, many sport organizations, as well as collegiate athletics departments, use social media for their marketing strategies. Consequently, the popularity of social media in sports has also drawn researchers' attention and numerous researches have hypothesized the potential influence of social media over users' attitudes, intentions, and behaviors (Moreno, Kota, Schoohs, & Whitehill, 2013). Previous studies have suggested interesting and important possible relationships between social media and team identification that could widen the adoption of social media in sports. In other word, social media consumption could increase the level of team identification (Gau, James, & Kim, 2009; Gray & Wert Gray, 2012; Matsuoka, Chelladurai, & Harada, 2003; Smith, Smith, & Sanderson, 2012). Trail, Anderson, and Fink (2000) defined identification as "an orientation of the self in regard to other objects including a person or group that result in feelings or sentiments of close attachment" (p. 165-166). In this sense, team identification can be explained as the psychological link between fans and sports teams by extension of one's identity into sports teams (Trail et al., 2000; Trail, Fink, & Anderson, 2003; Wann & Branscombe, 1993). The development of team identification is specifically involved team awareness that is activated by socialization processes through friends, family, and media (Funk & James, 2001; Kenyon, 1969; Tajfel, 1982). Tajfel (1982) mentioned that awareness of membership is related to process of team identification. In addition, based on Funk and James's (2001) Psychological Continuum Model (PCM), team awareness initiates the process to allegiance referring a loyal (or committed) fan of the sport team, which is analogous to fans that have high level of team identification. Therefore, team awareness is considered as the key factor developing team identification. Since social media increases team awareness (Shirky, 2011), it would be logical that social media consumption would develop team identification.

Moreover, there are more evidences indicating the relationship between media consumption and team identification (Gau et al., 2009; Smith et al., 2012). Gau et al. (2009) analyzed a total of 750 spectators from three baseball and three softball games. They found that a group of individuals with high team identification indicated higher levels of media consumption through the print, television, and Internet than the low team identification group. Smith et al. (2012) studied the effect of social media consumption, in particular, on team identification. They examined how sports fans engage on social media focusing on the use of hashtags during the 2012 College World Series Final. Hashtags allows users to create and follow a specific discussion and issues by

Corresponding Author PARK JAE-AHM, E-mail: jaeahmpark@gmail.com

----

prefixing a key word with '#' symbol (Kwak, Lee, Park, & Moon, 2010). Smith et al. (2012) captured and analyzed approximately 9,600 messages containing hashtag and identified five categories of hashtag use from sports fans such as hashtags, calling the game, cheering and encouragement, celebration, and jeers. They concluded the use of hashtags makes sports fans identify with teams and five categories of hashtag use that they found falls in line with the tenets and concepts of social-identity theory and team identification.

Meanwhile, this team identification is found to affect behavioral intention (Gray & Wert Gray, 2012; Matsuoka et al., 2003). Behavioral intention has been regarded as a reliable predictor of actual behavior (Grewal, Krishnan, Baker, & Robin, 1998; Kwon, Trail, & James, 2007). Matsuoka et al. (2003) analyzed 1,256 spectators from professional soccer league and found that team identification is significantly related to intention to attend the game. Recently, Gray and Wert Gray (2012) analyzed a total of 300 undergraduate students from eight business classes and found a direct effect of team identification on behavioral intentions such as in-person attendance intention, media-based attendance intention, purchase of team merchandise intention, and word-of-mouth intention. Furthermore, based on Phang, Zhang, and Sutanto (2013), behavioral intention is directly related to social media consumption as well. They suggested that the participation in posting and reading reviews and discussing the certain products with other users on social media raises consumers' interest in the product, in turn, it enhances consumption intention.

Therefore, based on the details above, the purpose of this study is to examine the relationship among social media consumption, team identification, and behavioral intentions including word-of-mouth intention and attendance intention by testing a hypothesized research model (Figure 1) and research hypotheses. Particularly, the current study specifically included word-of-mouth intention and attendance intention since these are considered as one of strongest factors affecting potential consumers that have not experienced the service yet and profit in sports teams (Mangold & Faulds, 2009; Saha, 2009).

RH1: Social media consumption will affect team identification
RH2: Social media consumption will affect word-of-mouth intention
RH3: Social media consumption will affect attendance intention
RH4: Team identification will affect word-of-mouth intention
RH5: Team identification will affect attendance intention
RH6: There will be mediating effect of team identification on the relationship between social media consumption and word-of-mouth intention
RH7: There will be mediating effect of team identification on the relationship between social media consumption and attendance intention
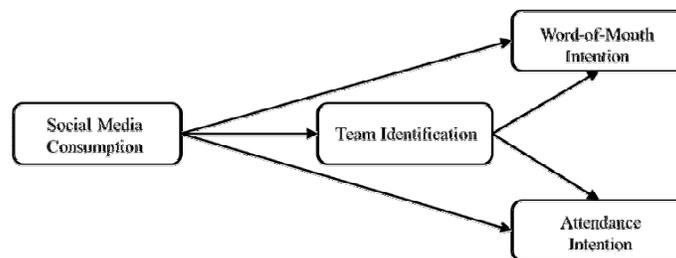

Fig. 1. Proposed structural model

Material & methods
Participants

A total of 320 undergraduate students from University of Arkansas were invited to participate in the online survey through email. By using the convenient sampling method, an email that has the hyperlink of the online survey was sent to selected students. The survey was administered March 19, 2014 through March 23, 2014. One hundred fifty-nine participants responded to the online survey, a response rate of 49.7%. Of the 159 surveys gathered, 13 were discarded owing to having missing values through the listwise deletion method. Therefore, finally, a total of 146 surveys were analyzed for this study. Of the research participants, males accounted for 47.3% (*n* = 69) and females accounted for 52.7% (*n* = 77). The greatest number of age group was 21 (37.0%) followed by 20 (30.8%) and 22 (12.3%). A majority of participants identified Arkansas as their hometown (*n* = 75, 51.4%). Approximately 93.8% (*n* = 137) of participants had past experience of attending the school teams' game.

Measurement

A questionnaire packet contained three sections including team identification, word-of-mouth intention, and social media consumption. The eight items for team identification were drawn and modified from Wann and Branscombe's (1993) Sport Spectator Identification Scale (SSIS). Items were assessed on a 5-point Likert-scale from 1 (strongly disagree) to 5 (strongly agree). The SSIS showed high levels of reliability, with a Cronbach's alpha of .91 (Wann & Branscombe, 1993). In this study, we measured the level of identification toward school

332 ---

JPES ®   www.efsupit.ro

----

teams. Items were measured on a 5-point Likert-scale from 1 (strongly disagree) to 5 (strongly agree). The four items for word-of-mouth intention were drawn from Kim, Byon, Yu, Zhang, and Kim's study (2013). Kim et al.'s study (2013) indicated high reliability, with Cronbach's alpha greater than .85. The items for attendance intention were blended from Sumino and Harada's study (2004) and Kim, Byon, Yu, Zhang, and Kim's study (2013). Both studies indicated high reliability, with a Cronbach's alpha greater than .81. The current study assessed the level of word-of-mouth intention and attendance intention toward school teams. Items were measured on a 5-point Likert-scale from 1 (strongly disagree) to 5 (strongly agree). Social media consumption was measured by three items asking the frequency using sport teams' official social media accounts. Items were assessed on a 5-point Likert-scale from 1 (never) to 5 (very frequently). All items were reviewed through discussion with scholars with expertise in sport online consumption, especially social media, to ensure the content validity.

Data Analysis
        Data were analyzed using AMOS version 20.0 and SPSS version 20.0 for Windows. Following the two-step approach for Structural Equation Modeling (SEM; Anderson & Gerbing, 1988), a Confirmatory Factor Analysis (CFA) was conducted first to examine the psychometric properties of the proposed measurement model then structural equation modeling was conducted to test proposed model and the effect of motivations on social media consumption. The reliability was evaluated based on Cronbach's alpha (>.60) (Bagozzi & Yi, 1988; Schuessler, 1971). Discriminant validity was assessed based on Anderson and Gerbing's (1988) suggestion that if the confidence interval (±two standard errors) around the correlation estimate between the two factors does not include 1.0, the measure is regarded as having adequate discriminant validity. The overall model fit was assessed by the following fit indices: χ^2/df (<5.0), the root mean square error of approximation (RMSEA) (<.08), the standardized root mean squared residual (SRMR) (<.08), and the comparative fit index (CFI) (>.90; Hair, Black, Babin, & Anderson, 2010). A bootstrapping procedure with 5,000 bootstrap samples and 95% confidence interval (CI) was conducted to test the proposed mediation effect of team identification (Zhao, Lynch, & Chen, 2010).

Results
Confirmatory Factor Analysis
        There were no extreme values of skewness and kurtosis exceeding 3.0 (Chou & Bentler, 1995). All of the values of Cronbach's alpha (from .86 to .92) were above the recommended cutoff criteria (Bagozzi & Yi, 1988; Schuessler, 1971). The confidence interval (±two standard errors) around the correlation estimate between the two factors did not include 1.0 (Anderson & Gerbing, 1988). In addition, there were no interfactor correlations exceeding the .85 cut-off value (Table 1; Kline, 2005). The CFA with a maximum likelihood estimation revealed that the overall measurement model fit the data well (χ^2 = 145,555 p < .001, χ^2/df = 2.348, CFI = .95, RMSEA = .09, and SRMR = .08). Although RMSEA was slightly higher than Hair, Black, Babin, and Anderson's suggestion (2010) (>.08), it is still acceptable level based on Song (2012). Four items had the standardized loadings below the suggested .70 threshold (Nunnally & Bernstein, 1994). Nevertheless, items were retained since previous studies suggested that they are theoretically relevant to their respective constructs (e.g., Kim et al., 2013; Sumino & Harada, 2004; Wann & Branscombe, 1993).

Table 1. Interfactor correlations

	Team Identification	Word-of-Mouth Intention	Attendance Intention
Team Identification	1.00		
Word-of-Mouth Intention	.656*	1.00	
Attendance Intention	.814*	.634*	1.00
M	3.92	3.63	4.13
SD	.88	1.00	.92

*p < .001

Structural Equation Modeling
        The overall structural model indicated good fit to the data (χ^2 = 163.373, p < .001, χ^2/df = 2.224, CFI = .95, RMSEA = .09, and SRMR = .08). The structural equation modeling revealed that social media consumption affects team identification (β = .51, p < .001) and word-of-mouth intention (β = .40, p < .001) directly. However, there was no direct effect of social media consumption on attendance intention (β = .07, p > .05). Next, team identification affects word-of-mouth intention (β = .41, p < .001) and attendance intention (β = .91, p < .001). In addition, social media consumption affects word-of-mouth intention (β = .21, p < .001) and attendance intention (β = .47, p < .001) mediated by team identification (Table 2).

-- 333

Table 2. Summary of Structural Equation Modeling

Direct Effect	β		
Social media use → Team identification	.51*		
Social media use → Word-of-mouth intention	.40*		
Social media use → Attendance Intention	.07		
Team identification → Word-of-mouth intention	.41*		
Team identification → Attendance Intention	.91*		
Indirect Effect	β	95% CI	
		LL	UL
Social media use → Team identification → Word-of-mouth intention	.21*	.11	.33
Social media use → Team identification → Attendance Intention	.47*	.34	.59

p<.001, LL= lower limit, UL=Upper limit

Discussion

The current study focused on examining the relationship among social media consumption, team identification, word-of-mouth intention, and attendance intention (Figure 1). Consistent with theoretical expectations, all the hypotheses were supported except for the third hypothesis. Research hypothesis three assumed that social media consumption will affect attendance intention directly. Nevertheless, social media consumption only had indirect effect on attendance intention mediated by team identification while social media consumption had a significant influence on word-of-mouth intention both directly and indirectly with team identification as mediator. It is an opposite result to Phang, Zhang, and Sutanto (2013) who found a direct effect of social media use on consumption intention. This difference may come from the unique feature of the sports. Since the core product of spectator sports is intangible, inconsistent, and perishable (Milne, & McDonald, 1999), there could be more mediators or moderators on the relationship between social media consumption and attendance intention.

Particularly, the mediating effect of team identification that was identified by this study could be applied to further studies and marketing strategies since team identification is related to many psychological factors such as satisfaction and perceived value (Bodet & Bernache-Assollant, 2011; Hunt, Bristol, & Bashaw, 1999; Sutton, McDonald, Milne, & Cimperman, 1997; Wann & Branscombe, 1990). For example, Kwon et al., (2007) examined the relationship among team identification, perceived value, and intention to purchase team-licensed products. In their study, team identification alone did not affect the purchase intention. Only mediated by the perceived value, team identification could predict purchase intention. Suh, Ahn, and Pedersen (2013) found the effect of team identification on e-service quality, satisfaction, and revisit intention focusing on the sports websites. Moreover, previous studies have also found a positive impact of team identification on actual attendance (Fisher & Wakefield, 1998; Laverie & Arnett, 2000; Murrell & Dietz, 1992). Therefore, future research could combine these factors, such as perceived value, e-service quality, and satisfaction, with team identification to improve the explanatory power of the models presented in this study.

In term of practical implications, according to Choi and Kim (2014), self-presentation is positively related to brand-related word-of-mouth on social media and the effect of self-presentation on word-of-mouth is stronger for men than for women. Based on the self-presentation theory (Baumeister, & Hutton, 1987), the evaluative presence of other people is related to self-presentation. Thus, we recommend reinforcing interaction between user and organization or between users to increase self-presentation and word-of-mouth.

Ruiz-Mafe, Martí-Parreño, and Sanz-Blas (2014) also emphasized the importance of user-organization interactions. They found user attitude is considered as a key factor to increasing loyalty to organizations' social media accounts. Providing valuable information and increasing user-organization interactions would develop user attitude, loyalty, and word-of-mouth as well. In addition, based on Kerwin (2011), 82% of users unsubscribe to organizations' social media as the information was not interesting or was published too often. Therefore, it will be more effective providing unique information and contents on social media that cannot be found on other media (e.g., television, radio, or website). In sports teams' social media, it could be the story behind the game or athletes' daily life. Meanwhile, although the result of this study indicated that social media consumption is positively related to team identification, inappropriate comments on social media from athletes or organizers could decrease the team identification as Fink, Parker, Brett, and Higgins (2009) found that unscrupulous acts by athletes off the field of play can impact levels of team identification. As many athletes use social media and sometimes made an issue with unscrupulous comments on social media (Belson, 2012; Pilon, 2012), sport marketers or teams need to have a social media regulation or policy toward the teams and athletes within guarantying freedom of expression. There are several limitations to the current work that should be considered. First, a total of 320 undergraduate students from single university were selected to participate in the survey by using convenient sampling method. Thus, future studies need to include a wider sample through random

334 --

JPES ®   www.efsupit.ro

----

sampling. Secondly, we did not select one specific social media. Since each social media could have different features, researchers would examine the different effect of media consumption among various type of social media.

Conclusions

This study examined the relationship among social media consumption, team identification, word-of-mouth intention, and attendance intention. Through the Structural Equation Modeling (SEM), this study observed the following: First, social media consumption affects team identification and word-of-mouth intention directly. Second, team identification affects word-of-mouth intention and attendance intention directly. Third, social media consumption affects word-of-mouth intention and attendance intention mediated by team identification. This data will expand the use of social media in marketing and research field upon prior studies of social media and team identification in sport. The most important contribution of this study was to provide the evidence that social media consumption can affect the behavioral intention directly and indirectly with team identification as mediator. Thus, this study suggests the way that social media can be used not only for information distribution but also for driving more revenue by stimulating fans' team identification and intentions.

References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103, 411-423.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the Academy of Marketing Science. 16(1), 74-94.

Baumeister, R. F., Hutton, D. G. (1987). Self-presentation theory: Self-construction and audience pleading. In B. Mullen & G. R. Goethals (eds.), Theories of Group Behavior (pp. 71-87), New York: Springer-Verlag.

Belson, K. (2012, July 30). Swiss athlete sent home for Twitter remark. The New York Times. Retrieved from http://www.nytimes.com/2012/07/31/sports/olympics/swiss-soccer-player-michel-morganella-sent-home-for-twitter-remark.html?_r=0

Bodet, G., & Bernache Assollant, I. (2011). Consumer loyalty in sport spectatorship services: The relationships with consumer satisfaction and team identification. Psychology & Marketing, 28(8), 781-802.

Choi, J., & Kim, Y. (2014). The moderating effects of gender and number of friends on the relationship between self-presentation and brand-related word-of-mouth on Facebook. Personality and Individual Differences, 68, 1-5.

Chou, C.-P., & Bentler, P. M. (1995). Estimates and tests in structural equation modeling. In R. H. Hoyle (Ed.), Structural equation modeling: Concepts, issues, and applications (pp. 37-55). CA: Sage.

Dreyer, K. (2012, January 3). People spent 6.7 billion hours on social networks in October. Comscore. Retrieved from http://www.comscore.com/Insights/Data-Mine/People-Spent-6.7-Billion-Hours-on-Social-Networks-in-October

Fink, J. S., Parker, H. M., Brett, M., & Higgins, J. (2009). Off-field behavior of athletes and team identification: Using social identity theory and balance theory to explain fan reactions. Journal of Sport Management, 23(2), 142-155.

Fisher, R. J., & Wakefield, K. (1998). Factors leading to group identification: A field study of winners and losers. Psychology & Marketing, 15(1), 23-40.

Funk, D.C.,& James, J.(2001).The psychological continuum model: A conceptual framework for understanding an individual's psychological connection to sport.Sport Management Review,4(2),119-150

Gau, L. S., James, J. D., & Kim, J. C. (2009). Effects of team identification on motives, behavior outcomes, and perceived service quality. Asian Journal of Management and Humanity Sciences, 4(2-3), 76-90.

Gray, G. T., & Wert Gray, S. (2012). Customer retention in sports organization marketing: examining the impact of team identification and satisfaction with team performance. International Journal of Consumer Studies, 36(3), 275-281.

Grewal, D., Krishnan, R., Baker, J., & Robin, N. (1998). The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions. Journal of Retailing, 74(3), 331–352.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). NJ: Prentice-Hall.

Hunt, K. A., Bristol, T., & Bashaw, R. E. (1999). A conceptual approach to classifying sports fans. Journal of Services Marketing, 13(6), 439-452.

Kenyon, K. W. (1969). The sea otter in the eastern pacific ocean. North American Fauna, 68(3), 1–352.

Kerwin, A. (2011). Why fans un-friend your brand on Facebook. Advertising Age, 82(33), C-6.

Kim, S.,Byon, K.,Yu, J., Zhang, J., & Kim, C.(2013).Social motivations and consumption behavior of spectators attending a Formula One motor-racing event. Social Behavior and Personality, 41(8),1359-1378.

Kline, R. B. (2005). Principles and practice of structural equation modeling (2nd ed.). New York: Guilford.

-- 335

Kwak, H., Lee, C., Park, H., & Moon, S. (2010, April). What is Twitter, a social network or a news media?. In Proceedings of the 19th international conference on World Wide Web (pp. 591-600). ACM.

Kwon, H. H., Trail, G., & James, J. D. (2007). The mediating role of perceived value: Team identification and purchase intention of team-licensed apparel. Journal of Sport Management, 21(4), 540-554.

Laverie, D. A., & Arnett, D. B. (2000). Factors affecting fan attendance: The influence of identity salience and satisfaction. Journal of leisure Research, 32(2), 225-246.

Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. Business Horizons, 52(4), 357-365.

Matsuoka, H., Chelladurai, P., & Harada, M. (2003). Direct and interaction effects of team identification and satisfaction on intention to attend games. Sport Marketing Quarterly, 12(4), 244-253.

Milne, G. R., & McDonald, M. A. (1999). Sport marketing: Managing the exchange process. MA: Jones & Bartlett Learning.

Moreno, M. A., Kota, R., Schoohs, S., & Whitehill, J. M. (2013). The Facebook influence model: A concept mapping approach. Cyberpsychology, Behavior & Social Networking, 16(7), 504-511.

Murrell, A. J., & Dietz, B. (1992). Fan support of sport teams: The effect of a common group identity. Journal of Sport & Exercise Psychology, 14(1), 28-39.

Nielsen (2014). The Digital Consumer Report 2014 Nielsen. Nielsen. Retrieved from http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2014%20Reports/the-digital-consumer-report-feb-2014.pdf

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York: McGraw-Hill.

Phang, C., Zhang, C., & Sutanto, J. (2013). The influence of user interaction and participation in social media on the consumption intention of niche products. Information & Management, 50(8), 661-672.

Pilon, M. (2012, July 25). Twitter comment costs Greek athlete spot in Olympics. The New York Times. Retrieved from http://www.nytimes.com/2012/07/26/sports/olympics/twitter-comment-costs-greek-athlete-spot-in-olympics.html

Ruiz-Mafe, C., Martí-Parreño, J., & Sanz-Blas, S. (2014). Key drivers of consumer loyalty to Facebook fan pages. Online Information Review, 38(3), 362-380.

Saha, G. C. (2009). Service quality, satisfaction, and behavioural intentions: A study of low-cost airline carriers in Thailand. Managing Service Quality, 19(3), 350-372.

Schuessler, K. (1971). Analyzing social data: A statistical orientation. New York: Houghton Mifflin.

Shirky, C. (2011). The political power of social media: technology, the public sphere, and political change. Foreign Affairs, 90(1), 28–41.

Smith, L. R., Smith, K. D., & Sanderson, J. (2012). Identity in Twitter's hashtag culture: A sport-media-consumption case study. International Journal of Sport Communication, 5(4), 539-557.

Song, J. (2012). Statistical analysis methods for SPSS/AMOS. Seoul: 21st Century Book.

Suh, Y. I., Ahn, T. S., & Pedersen, P. M. (2013). Examining the effects of team identification, e-service quality (e-SQ) and satisfaction on intention to revisit sports websites. International Journal of Sports Marketing and Sponsorship, 14(4), 261-278.

Sumino, M., & Harada, M. (2004). Affective experience of J. League fans: The relationship between affective experience, team loyalty and intention to attend. Managing Leisure, 9(4), 181-192.

Sutton, W. A., McDonald, M. A., Milne, G. R., & Cimperman, J. (1997). Creating and fostering fan identification in professional sports. Sport Marketing Quarterly, 6(1), 15-22.

Tajfel, H. (1982). Social psychology of intergroup relations. Annual Review of Psychology, 33(1), 1-39.

Trail, G. T., Anderson, D. F., & Fink, J. S. (2000). A theoretical model of sport spectator consumption behavior. International Journal of Sport Management, 1(3), 154-180.

Trail, G. T., Fink, J. S., & Anderson, D. F. (2003). Sport spectator consumption behavior. Sport Marketing Quarterly, 12, 8-17.

Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with the team. International Journal of Sport Psychology, 24, 1-17.

Zhao, X., Lynch, J. G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. Journal of Consumer Research, 37, 197-206.