

COMPARISONS OF GENDER AND TEAM IDENTIFICATION ON WEB MOTIVATIONS AND WEB CHARACTERISTICS IN THE OFFICIAL ATHLETIC DEPARTMENT WEBSITE: USES AND GRATIFICATIONS PERSPECTIVES

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Where do students turn to quench their thirst for sports knowledge? Perhaps they read various newspapers, watch television programs, or use the Internet to learn what happened at sporting events. The Internet may be a useful tool for obtaining sports-related knowledge. It has become the most important media outlet due to its unique characteristics such as giving users the ability to interact with each other, reaching a global audience, convenient accessibility, and the speed with which information can be updated (Cho & Cheon, 2005). With this trend, official athletic department websites offer college sports fans various information, including schedules for sporting events, statistics, athlete profiles, up-to-date ticket information, and the latest sports news stories.

Although official athletic department websites have been actively utilized for the purpose of marketing communica-

tion in athletic departments, there is a dearth of systematic academic studies on this specific area. The majority of previous sport website studies were focused on professional sport websites in understanding the traditional marketing mix content (e.g., product, price, promotion, place), visitor rate, demographic information, and online consumption (Brown, 2003; Duncan & Campbell, 1999; Filo & Funk, 2005; Hur, Ko, & Valacich, 2007; Seo & Green, 2008). A few studies related to athletic department websites were also focused mainly on content analysis including athletic website coverage by gender, team, and marketing elements (Cooper, 2008; Cooper & Pierce, 2011; McClung, Hardin, & Mondello, 2004). The use of content analysis can make it possible for sport marketers and web developers to assess website content and basic design. However, content analysis may provide a limited analysis when determining

website effectiveness in terms of the users' perspective. It is not useful to develop a website with numerous tools if users are not interested and involved in the website. Therefore, it is necessary to investigate more consumer-oriented approaches focusing on why college sport fans visit an official athletic department website and what content they prefer on a website.

The main goal of this research was to illustrate how and why college sport fans use an official athletic department website. Specifically, this investigation sought to identify user motivations and Web characteristics that college sports fans like. To investigate user motivations for visiting an official athletic department website, the current study applied the uses and gratifications theory as a theoretical framework. Since the uses and gratifications theory is employed to understand media effects from a user-oriented perspective, it can be a useful and practical tool in understanding a sport website user's motivations and Web characteristics (Ko, Cho, & Robert, 2005). In addition, using a convenience sample of 424 undergraduate and graduate students at a Midwestern university, this study conducted a comparison across different demographic groups (e.g., fan identification, gender) in ways that will be informative to both sport marketers and sport website developers.

CONCEPTUAL FRAMEWORK

Uses and Gratifications Theory

To understand user motivations and Web characteristics of sport websites, the present study applied the uses and gratifications theory. This approach has been developed and applied in the communication area to understand media effects. Specifically, the uses and gratifications theory explains how people use and select various mediums for different purposes (Katz, Blumer, & Gurevitch, 1974). Before the uses and gratifications theory was developed, traditional media effects research focused on "what media does to people," (p. 525) considering media users as passive and the media as having a direct impact on an audience's thoughts, attitudes, and behaviors (Rubin, 2002). However, the uses and gratifications research utilized the audience as a point of departure, considering the users as active and goal-directed individuals who are able to select media to gratify their needs (Ruggiero, 2000). The Internet has strengthened the core uses and gratifications notion of active and goal-directed users, because the medium requires active involvement of its users in various ways such as searching out information or exchanging messages, compared to other traditional media users such as TV and radio (Kaye & Johnson, 2002). Therefore, the uses and gratifications theory can be considered a proper method with which to examine Web-based communication.

Motivations for Visiting an Official Athletic Department Website

It has always been important for marketers to understand users' motivations through media research (Stafford, 2005). If marketers can better understand what users want and need, they are able to meet users' preferences. Applying uses and gratifications theory, one concern in this study was why sport fans utilize the Internet to gratify their needs and wants. From a review of the uses and gratifications literature (see Table 1), this study chose three components as sig-

nificant motivations to visit an official athletic department website: entertainment, information and social interaction. The three motivations were frequently measured as key motivations in website research in marketing, communication, advertising, and sport motivation studies. As Table 1 shows, previous Internet uses and gratifications research suggested variously and differently named motivations. However, the major concepts of these motivations share similar ideas, which are congregated into three major motivations. For example, diver-

Table 1
Three Major Motivations in Previous Media Research

Motivations	Previous Research
Entertainment	Diversion (Blumler, 1979) Easy access to entertainment (Eberonle, 2000) Entertainment (Farquhar & Meeds, 2007; Ishii, 2008; Lin, 1993; Pentina, Prybutok, & Zhang, 2008; Papacharissi & Rubin, 2000; Wann, 1995) Entertainment value (Funk, et al, 2002; Funk, et al., 2003) Escape (Katz, et al.,1974) Surveillance & excitement (Parker & Plank, 2000)
Information	Information (Lin, 2001; Papacharissi, 2002) Cognitive (Katz, et al., 1973) Information guidance (Lin, 1993) Information seeking (Ishii, 2008; Papacharissi & Rubin, 2000) Learning (Raney, 2006)
Social Interaction	Companionship (Lin, 2001; Papacharissi & Rubin, 2000) Communication & social interaction (Eberonle, 2000) Communication & social relationships (Parker & Plank, 2000) Group affiliation (Raney, 2006) Interpersonal utility (Muhtaseb & Frey, 2008) Social factor (Stafford & Stafford, 2001) Social identity \ Social integrative (Katz, et al., 1974)

sion (Blumler, 1979), entertainment value (Funk, Mahony, & Ridinger, 2002; Funk, Ridinger, & Moorman, 2003), escape (Katz, et al., 1974), and excitement (Parker & Plank, 2000) can be merged as entertainment motivation.

Entertainment. It is obvious that sport websites need to provide entertainment motivation. Raney (2006) said, "the most important motivational factor behind viewing mediated sports is for the enjoyment and emotional satisfaction" (p. 316). Previous researchers consistently found that entertainment is a critical component of media motivation, having positive consequences such as increased sales and enhanced brand images (Ko et al., 2005). In previous spectator motivation studies of sport events, the entertainment motivation was named in many different ways such as "vicarious achievement", "drama", "aesthetics", "escape", "physical skill of the athletes", and "enjoyment of aggression" (Funk, et al., 2003; Trail & James, 2001; Wann, 1995). In the same manner, recent research verified that the entertainment factor is one of the most important factors influencing website usage (Donthu & Garcia, 1999; Hur et al., 2008; Seo & Green, 2008; Stafford & Stafford, 2001; Swinyard & Smith, 2003). For example, Stafford and Stafford (2001) stated that website users tend to seek fun and entertainment via methods such as online game, chat room, and other forms of enjoyment. Hur et al. (2008) also suggested that online sport consumers visit sport websites to seek pleasure, fun, and enjoyment. Therefore, the entertainment motivation can be evaluated by the ca-

capacity to fulfill user needs related to fun, excitement and enjoyment on sport websites.

Information. Another important motivation that attracts consumers to sport websites is cognitive perspective motivation such as availability of information on teams, players, and leagues. The information factor can be defined as the extent to which an audience can access helpful information on the website (Chen & Wells, 1999). In previous sport fan motivation scales, information refers to "knowledge" and "sport knowledge" (Trail & James, 2001). Information content has proven to be one of the most important factors in increasing positive attitudes toward websites (Chen & Well, 1999; Luo, 2002). Luo (2002) also found that positive attitude generated from information factors led to more frequent website use. When compared to other media types, the Internet provides more detailed and immediate information to sport fans. Since the Internet is the most prominent media source providing fast information updates, many sport fans can log in and find instant real-time information. For example, baseball fans can easily find their favorite teams' game statistics with specific content such as batting averages, errors, scores, and steals on sport websites.

Social Interaction. In early Internet research, Stafford and Stafford (2001) mentioned that social interaction motivation (e.g., communicating with friends or unknown people) is "a new Internet-specific, media gratification" (p. 28). It can be defined as the extent to which audiences can feel companion-

ship, social identity, and interpersonal relations with other audience members while they access Internet Web sites. In previous sport spectator motivation scales, social interaction referred to "family", "social interaction", "group affiliation", "bonding with friends", "socialization", and "bonding with family" (Trail & James, 2001). In Internet websites, the social interaction factors can be measured by words such as companionship, group affiliation, and social integration (Papacharissi & Rubin, 2000; Stafford, 2005; Stafford & Stafford, 2001). Previous media did not fully provide social interaction functions because of numerous limitations, but the Internet can provide sport fans with various ways of interacting socially such as chat rooms, forums, and fantasy games. Sport marketers could take advantage of the Internet to make sport fans join various Internet communities. The small and homogeneous sport Internet communities provide an opportunity for sport fans to gather and exchange similar interests, including sharing personal opinions and experiences with others. Certain chat rooms in sport websites provide fans with particular rooms to communicate specific team information while they watch games. This group activity and communication allows each sport fan to build a collective identity with others (Milne & McDonald, 1999). Social interaction can generate a positive effect on the human-human interaction on Web sites, which leads to a positive attitude toward the website itself (Ko, et al., 2005).

Web Characteristics

In addition to users' motivations, the current study also investigated Web characteristics that attract fans' usage on an official athletic department website. In an early uses and gratifications study, Ruggiero (2000) stated that the Internet possesses unique features, allowing 24-hour asynchronous or synchronous interactions and exchanging unlimited information among users. Compared to traditional media, official athletic department websites provide exclusive tools for users to find information, interact with fans, buy team merchandise, and gather specific information. These users' active engagements are possible since there are several key Web characteristics implemented. According to Ruggiero (2000), three characteristics differentiate the Internet from traditional media: interactivity, demassification, and synchronicity. In his study, interactivity is defined as the degree to which users are able to control information and communicate with other users. Recently, this concept transformed into two different types such as human-human interaction (users can communicate with different users) and human-message interaction (users can communicate with a computer) (Ko, et al., 2005). Demassification refers to "the control of the individual over the medium" (Ruggiero, 2000, p. 16). The control on a website is described as the user's ability to search and find what they want to find in a short period of time (McMillan & Hwang, 2002). With active control of content, users can condense wide menus

into specific information that they want. For example, hypertextuality provides users with associated links so that they can easily and effectively find similar information. Synchronicity refers to the concept of Internet communication being able to occur at any time based on user preference (Liu & Shrum, 2002). Both senders and receivers of electronic messages can read them at different times (i.e., email) or at the same time (i.e., messenger in MSN) based on their convenience.

The three Web characteristics (i.e., interactivity, demassification, and synchronicity) introduced by Ruggiero (2000), form the term "interactivity" (Liu, 2003; Liu & Shrum, 2002; McMillan & Hwang, 2002). Recent researchers mostly agreed that there are three dimensions of interactivity: two-way

communication, active control, and synchronicity (Liu, 2003; McMillan & Hwang, 2002). The dimensions are similar to Ruggiero's (2000) suggested characteristics. For example, interactivity is comparable to two-way communication; active control covers demassification functions; synchronicity is exactly transformed as one of the interactivity dimensions. Therefore, in this study we investigated each of the three dimensions of interactivity, which are relevant to the usage of an official athletic department website (Table 2). For example, fans access the websites to communicate with other fans (i.e., two-way communication), find up-to-date game results and statistics (i.e., synchronicity), and actively modify, create, or customize Web content based on what they like (i.e., active control).

Table 2
Dimensions of Web Characteristics (Liu, 2003; Liu & Shrum, 2002)

Conceptual Definition	Operational Concepts
Two-way Communication: Two-way communication refers to the ability for reciprocal communication between companies and users, and between users and users.	Users can communicate with others applying different tools such as chat rooms and email.
Active Control: Active control is characterized by voluntary and instrumental action that directly influences the controller's experience.	Users can customize the information and jump from one location in the network to another.
Synchronicity: Synchronicity refers to the degree to which users' input into a communication and the responses they receive from the communication are simultaneous.	Users can send instant message to their friends and check up-to-date information.

Different Demographic Characteristics

In 2004, a *BusinessWeek* cover story titled "The Vanishing Mass Market" indicated that the mass market strategy is not effective anymore. From a marketing standpoint, identifying different market segmentations and developing proper strategies are crucial. Just as individuals' reasons for attending a game are not all alike, users of an official athletic department website have different reasons to visit the website as well. For this reason, the current study chose two different demographics to better understand the particular characteristics of each segment: gender (male vs. female) and team identification (high vs. low). Consequently, the following research questions were formed to guide the study:

- RQ1: Are there any differences in user motivations and Web characteristics between female and male users?
- RQ2: Are there any differences in user motivations and Web characteristics between users with high and low identification levels?

Gender. In professional sport teams, gender-based segmentation is one of the most common segmentations used to promote marketing strategies. For example, MLB teams hold "Ladies Day" as a promotional strategy to increase female attendance, while the Indianapolis Colts of the NFL created "Colts 201", which provided an opportunity for female fans to better understand the game of football (Fullerton, 2010). Commis-

sioners of two major leagues sports agreed about the importance of female fans, which constitute over 40% of league fans (CEO Exchange, 2004). Given the large number of female sport fans, it is crucial to understand the difference between male and female fans in terms of using an official athletic department website. Previous sport media studies have demonstrated differences between female and male sport fans. For example, Gantz and Wenner (1991) found that gender differences exist in the audience when watching televised sports. Specifically, males were more likely to watch a televised sport program to satisfy an entertainment need (e.g., excitement), while females were more likely to watch the program to satisfy a social need (e.g., companionship).

Team Identification. Just as gender differences exist in sport fans' behaviors, several scholars proposed that difference in team identification is another important segmentation consideration in order to understand sport fans' behaviors (Koo & Hardin, 2008; Kwon & Armstrong, 2006). According to Wann et al. (2001), team identification refers to "the extent to which a fan feels psychologically connected to a team" (p. 3). Previous studies have made a distinction between low or high levels of team identification such as spectator vs. fan and fair-weather fans vs. die-hard fan (Sloan 1989; Wann & Branscombe, 1990). For athletic department website promoters, it is also important to develop different promotion strategies regarding different levels of team identification. In

this study, we divided the levels of team identification in two categories: high and low. In the use of an official athletic department website, we assumed that the differences between spectators and fans may exist.

In summary, this study focused on an understanding of college sport website users' activities on an official athletic department website. Specifically, by applying uses and gratifications theory, we investigated the users' motivations for visiting the website and the primary using web contents of an official athletic department website. In addition, we evaluated the effect of different demographic characteristics (i.e., gender and team identification) on users' activities on the website.

METHODS

Sample and Data Collection

The current study utilized the online survey method (i.e., surveymonkey.com) and a convenience sampling method was employed. The questionnaires were distributed to undergraduate and graduate students enrolled at a large state university in the Midwest, which has a large NCAA Division I athletic department. An invitation email including the URL which contained access to the online survey was sent to the students registered for sport management courses. Survey respondents were asked to visit the survey website and completed the questionnaire. One of the first questions was, "How often do you visit the official athletic site to get in-

formation about college sports?" with a 5-point Likert scale (1= never, 5 = very often) for responses. Respondents who answered "never" were removed from further consideration since the study was focused on how the official athletic department website was used. Of the 550 questionnaires sent out, 454 (83%) completed surveys were returned, and 30 questionnaires were excluded from the data analysis based on the following reasons: (1) did not complete, (2) included too many missing values, and (3) answered "never" for the question above. Therefore, the sample size for this study was 424.

Measurement

The survey questionnaire included the following sections: (1) motivation scale, (2) Web characteristics scale, (3) Sport Spectator Identification Scale (SSIS), and (4) demographics information and overall website usage questions.

Motivations. Section 1 included motivation scales modified by previous website studies (Lou, 2002; Ko et al, 2005). Three motivation factors each contained four items, which were measured by a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). For example, one item in entertainment was, "The website is entertaining to me;" one item in information was, "The website gives me large volumes of information"; one item in social interaction was, "I am able to communicate with other visitors." Cronbach's alpha coefficients were calculated to test reliability of the scales, and all ranged from

.84 to .91 exceeded the recommended .70 cut-off level (Nunnally & Bernstein, 1994).

i. In section 2, Web characteristics scales modified by Liu's (2003) previous study were included. These Web characteristics factors also contained four items. The questions were measured by a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). For example, one item in synchronicity was, "I can obtain what I want to find without any delay"; one item in two-way communication was, "The sport website facilitates two-way communication between visitors"; one item in active control was, "I have a great deal of control over what I can do." Cronbach's alpha coefficients for all

factor ranged from .84 to .91, exceeding the recommended .70 cut-off level (Nunnally & Bernstein, 1994).

Team Identification. In section 3, this study adopted and modified seven items of the Sport Spectator Identification Scale (SSIS) developed by Wann and Branscombe (1993) in order to identify fan identification. The scale were measured by a 7-point Likert-type scale, with response options ranging from 1 "not important" to 7 "very important." The items included questions such as, "How important is being a fan of the athletic team?" and "How important is it to you that the athletic team wins?" Cronbach's alpha coefficient was .91 (Wann & Branscombe, 1993).

Table 3
Demographic Characteristics

	Category	Frequency	%
Gender	Male	226	53.3
	Female	198	46.7
Total		424	100
Race	White/Caucasian	359	84.7
	Asian	26	6.1
	African American	18	4.2
	Latino/Latina	10	2.4
	Other	10	2.8
Total		424	100
School Year	Freshman	26	6.1
	Sophomore	89	21.0
	Junior	120	28.3
	Senior	93	21.9
	Graduate	92	21.7
	Other	4	0.9
Total		424	100

Demographics and Overall Website Usage. The last section included demographic related questions such as gender, school classification, and ethnicity. Respondents also answered the number of hours spent on sport websites, the number of times visiting sport websites, frequency of purchasing sport products on sport websites, and the frequently visiting sport websites. In addition, respondents were asked to respond how often they accessed 10 major content areas on the website (e.g., game schedules, statistics, scores/results, online shopping, photo galleries, etc.) using a 5-point Likert-type scale, with 1 indicating “never” and 5 indicating “always” (See Table 3).

DATA ANALYSIS AND RESULTS

The data for the current study were analyzed using the Statistical Package for the Social Science (SPSS). Two multivariate analyses of variance (MANOVA) were performed to compare mean differences between different cohorts (i.e., by team identification and by gender). Dependent variables in the first MANOVA were the 10 major content areas from the official athletic department website, while dependent variables in the second MANOVA were the three motivations and three Web characteristics.

Demographic Characteristics

Three demographic characteristics (i.e., gender, school classification, and ethnic background) were measured in

this study. The results are reported in Table 3. Among 424 respondents, 53.3 % were male (N= 226). In terms of race, White/Caucasian (84.7%) was the most prevalent group, followed by Asian (6.1%) and African American (4.2%). In terms of year in school, the respondents were approximately equal in representation among most of the school years: sophomore (21%), junior (28.3%), senior (21.9%), and graduate (21.7%).

Overall Website Usage

Research investigated which areas of Web content were primarily used on the official athletic department website. Ten major Web content areas from the official athletic department website were chosen, and respondents were asked how often they accessed each area (Table 4). In the combined sample, the most frequently accessed content on the official athletic department website was “game schedules” (M=4.08) followed by “scores/results” (M=3.86) and “statistics” (M =3.06). However, “poll/voting” (M= 1.80)” and “online shopping” (M=1.82) were the least frequently accessed content areas for college sport fans. MANOVA was conducted to determine whether differences existed by team identification and by gender regarding frequently accessed contents. The MANOVA revealed a significant effect in team identification (Wilks Λ = .522, $F(10, 410) = 34.144$, $p < .001$, $\eta^2 = .478$) and in gender (Wilks Λ = .708, $F(10, 410) = 15.339$, $p < .001$, $\eta^2 = .292$) on the set of 10 major Web content areas.

The univariate tests indicated that there were no significant differences on accessing “game schedules” and “online shopping” by team identification. However, in the other eight major Web content areas, highly identified fans more frequently accessed other content than fans with low identification such as

“statistics” ($M_{high}=3.61$ vs. $M_{low}=2.56$), “player information” ($M_{high}=3.59$ vs. $M_{low}=2.23$), “feature stories” ($M_{high}=3.48$ vs. $M_{low}=2.14$) and so on. In terms of gender, the univariate tests showed that female fans more frequently accessed the following contents compared male fans: player information ($M_{high}=3.23$ vs.

Table 4
Means (Standard Deviations) of Primary Using Web Contents

	Combined	Team ID		Gender	
		Low	High	Male	Female
Game Schedules	4.08 (1.02)	4.00 (1.16)	4.16 (0.85)	4.09 (1.08)	4.06 (0.96)
Statistics	3.06 (1.35)	2.56 (1.46)*	3.61 (0.97)	2.96 (1.46)	3.18 (1.21)
Scores/Results	3.86 (1.16)	3.67 (1.34)*	4.09 (0.89)	3.85 (1.19)	3.88 (1.14)
Player Information	2.88 (1.26)	2.23 (1.15)*	3.59 (0.95)	2.57 (1.26)**	3.23 (1.16)
Feature Stories	2.78 (1.36)	2.14 (1.22)*	3.48 (1.13)	2.47 (1.35)**	3.13 (1.29)
Banner Information	2.82 (1.38)	2.16 (1.21)*	3.54 (1.19)	2.81 (1.52)	2.83 (1.21)
Poll / Voting	1.80 (1.13)	1.60 (1.05)*	2.03 (1.17)	1.61 (1.04)**	2.03 (1.18)
Online Shopping	1.82 (1.82)	1.70 (1.11)	1.96 (1.01)	1.54 (0.85)**	2.15 (1.20)
Photo Galleries	2.79 (1.37)	2.55 (1.47)*	3.04 (1.22)	2.23 (1.23)**	3.41 (1.26)
Multi-Media	2.91 (1.52)	3.56 (1.52)*	2.19 (1.17)	2.90 (1.56)	2.91 (1.49)

*Difference by team identification at $p<.05$; **Difference by gender at $p<.05$

$M_{low}=2.57$), feature stories ($M_{high}=3.13$ vs. $M_{low}=2.47$), poll/voting ($M_{high}=2.03$ vs. $M_{low}=1.61$), online shopping ($M_{high}=2.15$ vs. $M_{low}=1.54$), and photo galleries ($M_{high}=3.41$ vs. $M_{low}=2.23$).

Motivations and Web Characteristics

The means and standard deviations for all scales (i.e., three motivations and four Web characteristics) by team identification and by gender are shown in Table 5. For the combined sample in motivations, entertainment ($M=3.61$) was the primary motivation for college

sport website usage, followed by information ($M=3.57$) and social interaction ($M=3.28$). In Web characteristics, two-way communication ($M=3.50$) was the primary Web characteristic for college sport fans, while active control ($M=3.28$) was a less considerable Web characteristic. MANOVA was also conducted to determine whether differences existed in motivation and Web characteristics by team identification and by gender. MANOVA revealed a significant effect in gender (Wilks $\Lambda = .775$, $F(6, 410) = 17.207$, $p < .001$, $\eta^2 = .225$) and

Table 5
Means (Standard Deviations) of Motivation and Web Characteristics by Team Identification and Gender

	Combined	Team ID		Gender	
		Low	High	Male	Female
Motivations					
Entertainment	3.61 (0.68)	3.60 (0.69)	3.62 (0.67)	3.65 (0.67)	3.56 (0.69)
Information	3.57 (0.75)	3.35 (0.63)*	3.81 (0.79)	3.55 (0.75)	3.60 (0.75)
Social Interaction	3.28 (1.06)	3.04 (0.91)*	3.54 (1.15)	2.88 (0.90)**	3.74 (1.04)
Web Characteristics					
Synchronicity	3.18 (1.03)	2.86 (0.79)*	3.52 (1.14)	3.22 (0.99)	3.13 (1.07)
Two-way Com.	3.50 (0.84)	3.28 (0.78)*	3.75 (0.84)	3.32 (0.82)**	3.71 (0.81)
Active Control	2.89 (0.82)	2.81 (0.77)*	2.97 (0.87)	2.96 (0.74)**	2.80 (0.90)

*Difference by team identification at $p .05$; **Difference by gender at $p < .05$

in team identification (Wilks $\Lambda = .742$, $F(6, 410) = 20.590$, $p < .001$, $\eta^2 = .258$) on the set of motivations and Web characteristics.

The univariate tests indicated that there were no significant differences on accessing entertainment in motivation and organization in Web characteristics by team identification, while two other motivations (e.g., information, social interaction) and three Web characteristics (e.g., synchronicity, interactivity, user control) were significantly different. In gender, female fans were more likely to consider social interaction as the most important motivation compared to male fans ($M_{\text{female}}=3.74$ vs. $M_{\text{male}}=2.88$). Gender differences were apparent in Web characteristics as the univariate tests showed that female fans have significantly higher mean scores in two-way communication ($M_{\text{female}}=3.71$ vs. $M_{\text{male}}=3.32$), but lower mean score in active control ($M_{\text{female}}=2.80$ vs. $M_{\text{male}}=2.96$) compared to male fans.

DISCUSSION AND CONCLUSION

This study focused on examining the usage of an official athletic department website. Based on previous literature, this study proposed three user motivations and four Web characteristics to understand media effects from a user-oriented perspective. Furthermore, this study investigated the differences in these factors based on team identification and gender. The results of overall website usage revealed a need to understand which categories on the official athletic department website are used

most by the college students. For example, the official athletic department website users mainly access "game schedules", "statistics", and "scores and results." This provides evidence that one of the main reasons to visit sport websites is to gain valuable resources and information (Hur et al., 2008).

Consistent with the results of existing literature (e.g., Carlo, 2010; Farquhar & Meeds, 2007; Ko et al., 2005; Raney et al., 2003), this study also found that entertainment is the most significant motivation for using the official athletic department website. In an investigation of four popular sport websites (i.e., ESPN.com, Deadspin.com, Football Outsiders, Yahoo!Sports), Carlo (2010) used focus group interviews and found that content related to entertainment and humor had the most positive impact on users' intentions to use the website. An interesting finding in the current study was that using "multimedia", such as instant video and video clips, was the one of most frequently accessed content areas. A possible explanation for these findings is that the entertainment factor, such as video footage and audio, combined with an interactive feature is a critical element to attract Web users. Raney et al. (2003) investigated the effects of four different levels of entertaining content on automotive websites. The results suggested that the highly entertaining websites, which included a mini and suspenseful movie clip, led to users developing a positive attitude toward the website compared to the lower-level entertainment content websites. Not surprisingly,

the findings are in line with the current trends of most sport websites. For instance, Ourand (2009) noted that major sport websites such as ESPN and Yahoo! Sports are making an investment toward strengthening the entertaining and interactive features (e.g., podcasting, video and audio streaming). Consequently, the official athletic department website is no exception to this trend, and must focus on improving the entertainment factors on their websites.

Regarding the three Web characteristics, two-way communication was the primary way the official athletic department website was used, followed by synchronicity, and active control. Two-way communication in Web studies has been named differently, such as "reciprocal communication" (Ha & James, 1998), "responsiveness" (Heeter, 1989), and "direction of communication" (Liu & Shrum, 2002). In traditional media such as magazine, radio, and television, the users were unable to directly and immediately respond with their opinions for advertising messages they received. However, in Internet websites, users can communicate with others through various tools such as chat rooms, bulletin boards, and emails. As in other website studies (Brown, 2003; Ko et al., 2005; Sicilia, Ruiz, & Munuera, 2005), the results of this study supported the idea of two-way communication playing an important role on sport websites. For example, Brown (2003) also emphasized active interaction between sport organizations and customers as the critical component of sport marketing on the Internet. By en-

gaging consumers, sport organizations can increase users' level of involvement, which is expected to foster a positive attitude toward the organization. Two-way communication tools such as forums and blogs are utilized as a place where sport fans can interact with others. Question and answer and voting polls are fun two-way communication tools that sport fans are frequently involved with.

For different demographics, the results showed various outcomes. In terms of gender differences, the social interaction motivation had the highest mean score for female college sport website users and was also significantly higher than the mean score for male users. This finding is consistent with previous studies about spectator sports (e.g., Dietz-Uhler et al., 2000). Dietz-Uhler et al. (2000) found that female sport fans were engaged in sports for a social reason, whereas male sport fans were interested in sports for enjoyment.

For team identification, the results showed that fans with high team identification are more likely to be motivated by information and social interaction content areas on the official athletic department website. Research by Milne and McDonald (1999) supported these findings, indicating that loyal sport fans are more likely to be interested in sport information such as team records, daily player performances, and other private team, league, or player news. In addition, previous research supported that loyal sport fans are more likely to be engaged in interaction with other fans (Wann et al., 2001).

In addition, fans who were highly identified showed significance with all interaction functions (i.e., synchronicity, two-way communication, and active control), compared to fans with low identification. Whereas users have no control over messages and little accessibility to others in traditional media, Internet users can have an abundance of interactivity with the both the website content and with other fans (Downes & McMillan, 2000). The results show that the highly identified fans are more engaged in content (e.g., they access a forum and write their opinions for their favorite team) and like to communicate with other fans (e.g., chatting and send instant messages to other fans on the sport website). Ariely (2000) mentioned that these active interactions have a positive effect, indicating that high interactive conditions create better information processes when using computer systems.

IMPLICATIONS AND LIMITATIONS

The findings of the current study presented various information and insights for academicians and practitioners. From an academic standpoint, the current findings bolster the sport media literature since the current study is one of the first efforts to examine an official athletic department website from a user-oriented perspective. The current study supported the fundamental notion of uses and gratifications, in which active and goal-oriented users seek to satisfy their own gratifications when they use college athletic department websites

(Ruggiero, 2000). As result, there was a notable disparity by team identification and gender in using the official athletic department website, which implied that different types of fans utilized the athletic department website based on their various preferences.

Furthermore, from a practitioner perspective, college athletic department web developers need to create Web content to attract different market segmentations. It is recommended that sport marketers provide customized Web content for their different target populations. For example, the findings imply that Web developers of official athletic department websites need to provide more opportunities for interactivity to highly identified fans. In professional sport websites, users are provided with various "active control" functions. For example, the front page of the Manchester United Official Website provides three different language options to attract and accommodate international users. In addition, the users of My ESPN in ESPN.go.com also receive personalized and customized information regarding game results and breaking news. Marketers of official athletic department websites should adopt these approaches for their loyal fans. For example, there are two different types of active control (i.e., one of interactivity functions) that the sport marketers may develop: "control over form" and "control over content" (Roehm & Haugtvedt, 1999). Specifically, "control over form" includes page layout, language change, and color content, and "control over content" includes modifying and creat-

ing information and messages (e.g., customizing information) based on users' preferences. Marketers should carefully review their official websites and investigate whether the websites provide enough technical functions related to active control, which in turn allows loyal fans to become more involved with the content. Practitioners must be careful, however, that they do not provide so much interactivity that they lose control of the messages presented on the official athletic department websites. It is likely that many official athletic department websites limit the amount of user-generated content that can be included on the site in order to maintain control over their organizational messages and to minimize negative comments or content that could reflect poorly on the university or the athletic department. Striking a balance between the amount of control the athletic website developers and the website users have over the content is a crucial consideration for athletic departments wishing to involve their fans via active control.

As noted previously, sport marketers should focus on creating content that attracts all market segments, including those who are not classified as highly identified fans. Even though some fans are not highly identified, they still visit the athletic website from time to time, and therefore marketers should attempt to create content tailored to these fans that will help increase their level of identification. In addition, responses in the current study reported that both female and male fans actively utilized the

contents of college athletic department website. However, there were no significant differences on some components of the primary using web contents (e.g., game schedule, statistics, scores/results, banner information, multimedia) between female and male respondents. In addition, the results of several mean scores (i.e., poll/voting, online shopping, photo gallery, feature stories) showed notably low average scores. A possible explanation for this result is that sport fans may be drowning in a flood of information and news generated by a variety of sport-related websites. For example, real time information, in-depth analysis for players and team, and interactive tools such as bulletin boards, chatting rooms, and video streaming, delivered by top major sports websites (i.e., ESPN, Yahoo! Sports, NFL.com) might be more attractive and interested for sport fans than contents from collegiate athletic websites. Furthermore, those top major sports websites might provide better online shopping environment and experience for sport fans and customers. Thus, it is necessary for sport marketers to develop appropriate contents and items on collegiate athletic websites for both female and male sports fans, which based on their preference and usage of web contents.

The current study included several limitations. Caution should be exercised in terms of generalizability, as the data were secured through a convenient sampling method from undergraduate and graduate students enrolled at a Division I university. Therefore, it would

be recommended for future studies to select different populations (e.g., faculty, staff, alumni). Another limitation is that the current study focused on only one official athletic department website. Thus, future researchers need to recognize that there could be differences in motivations and Web characteristics in using Division II and Division III athletic websites, or in using websites from institutions located outside of the Midwest region of the U.S. It would be recommended for future researchers to choose other divisional websites and compare differences among them, and to possibly select multiple universities in the same NCAA division, but in different regions of the country to compare. This wide range of research in different athletic department websites using different populations would provide for a more comprehensive understanding of official athletic department websites.

Another suggestion for future studies is that researchers investigate more variables related to use of athletic websites. The variables could include other demographic factors (e.g., age, level of education, income, school year) and personal characteristics (e.g., knowledge of the sport, experience on the Internet). In addition, further studies could include a Web effectiveness measurement, such as attitude toward the sport website, satisfaction of the sport website, the duration of each visit, and the frequency of purchasing. These studies could help our understanding of sport websites usages and behavior.

Finally, it is possible that future research could include different methodologies than the one utilized in this study. For example, focus groups or interviews with college athletic website users would provide richer data and explanations for some of the findings from this study and similar studies. It is possible that future researchers could employ both a quantitative survey and qualitative interview to provide data with greater depth.

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