USING POINTS OF ATTACHMENT TO EXAMINE REPATRONAGE AND ONLINE CONSUMPTION OF WHEELCHAIR RUGBY SPECTATORS

Michael P. Cottingham II Sheryl L. Chatfield Brian T. Gearity James T. Allen Stacey A. Hall

The sport industry, generating an estimated \$410.6 billion per year in revenues (Plunkett, 2010), contains a wide range of consumer segments, making it crucial for sport marketers to gather information specific to their target audience before promoting products or services. Marketing wheelchair rugby, a full contact sport for people with quadriplegia who use manual wheelchairs, presents multiple challenges, two of which are readily identifiable. First, disability sports in general have limited budgets when compared to more traditional non-disability sports (Byon, Cottingham & Carroll, 2010). Second, lack of fan-based studies conducted on disability sporting events means that the organizers do not have clear direction guiding effective use of the marketing resources that are available. The present study seeks to address this gap in the body of research and to provide marketers of wheelchair rugby and other disability sporting events

with a better understanding of the consumer behavior of their spectators.

CONTEXT

Wheelchair rugby is a full contact sport played by participants with quadriplegia who use specially constructed wheelchairs. The sport is played 'four on four' on a basketball court, and a player must carry the ball over a goal line in order to score. People with quadriplegia who were not physically able to compete in wheelchair basketball developed a sport that better fit their physiology (Mandel & Shapiro, 2005). The creators named it 'murderball' because it described the violent nature and aggressive actions found in the plays. Sponsorship was difficult to attain for a sport with the evocative title "murder" in it, so in the 1980's, the sport changed its name to 'quad rugby.' Internationally the term 'wheelchair rugby' took hold as administrators wanted to focus on the

wheelchair component rather than the form of disability. This paper will refer to the sport as wheelchair rugby but the event as Quad Rugby Nationals hosted by the United States Quad Rugby Association (USQRA).

Points of Attachment

Trail, Anderson, and Fink (2000) defined points of attachment as a relationship between "...self in regard to other objects including a person or group that result in feelings or sentiments of close attachment" (p. 165-166). In essence, a spectator or fan can be attached to aspects of a sporting environment, and this attachment may influence the investment the individual has in that environment. Early attempts to analyze points of attachment in sport marketing include Wann and Branscombe's (1993) development of the Sport Spectator Identification Scale (SSIS), and Trail and James's (2001) development of Team Identification Index (TII), both single factor scales used to determine if attachment to a specific team could explain spectator consumption behavior.

Some researchers (Dimmock, Grove, & Eklund, 2005; Trail, Robinson, Dick, & Gillentine, 2003) suggest that attachment cannot be measured with a single factor and have instead employed one of two distinct alternative approaches to measuring attachment. The first method takes a multidimensional approach to team identification, examining various constructs within the single point of attachment to team (Dimmock et. al, 2005). A second approach, developed by

Trail et. al (2003), utilizes a seven-factor scale known as the Point of Attachment Index (PAI). The PAI has been tested in the contexts of intercollegiate athletics (Trail et al., 2003), professional sport (Robinson, Trail, & Kwon, 2004), and in general student populations (Kwon, Trail, & Anderson, 2005). In each of these studies, the PAI demonstrated validity by means of confirmatory factor analysis.

Marketing of Disability Sport

While participant studies in disability sport are numerous, literature that examines spectators of disability sport is sparse at best and can be categorized into one of three distinct groups. The first group consists of annual and technical reports produced by governing bodies, the second group comprises articles that discuss issues related to marketing and finance of disability sport which are not empirical in nature, and the third group includes empirical studies that focus on the marketing of disability sport.

Larger governing bodies, such as the International Paralympic Committee (IPC) produce annual reports (IPC, 2008) that discuss the importance of marketing while the reports produced by smaller governing bodies such as the IWRF reference the need to market their sport more effectively and to develop more sponsors. These documents do not necessarily state a clear plan of action (IPC, 2008; IWRF, 2008). Publications that refer to marketing in the context of disability sport but lack empirical con-

tent include those that expound on the need for additional visibility (Eleftheriou, 2005; Hums, 2002), those that analyze the impact of marketing disability sport (Hums, 2001), those that speculate on the perceived marketability of wheelchair rugby (Gard & Fitzgerald, 2008), and those that discuss the financial and marketing effects of inclusion of Paralympic sports in the Olympics (Hums, Moorman, & Wolff, 2003).

To date, only three empirical marketing studies have examined disability sport spectatorship. Byon, Cottingham, and Carroll (2010) and Byon, Carroll, Cottingham, Grady, & Allen (2011) studied spectator motives in the context of wheelchair rugby and wheelchair basketball, respectively. While these studies found multiple motives to be salient in predicting consumption variables, a third study conducted by Cottingham, Byon, Phillips, and Drane (2010) found that spectator attachment to a team partially mediated the relationship between motives and intention to attend future events. It should be noted that none of these three studies examined multiple points of attachment or considered factors specifically related to disability.

Disability Community as a Measure of Attachment

Community is one of the seven factors comprising the PAI. Robinson and Trail (2005) cite Anderson and Stone's (1981) argument that a sports team serves both as a metaphor for the community and as an entity that individuals feel connected

to. For the purpose of this study, as recommended by members of the USQRA National Committee, community was modified to disability community. It is believed this factor serves the same purposes articulated above for individuals who participate in or support disability sport. As Nelson (2000) states "...the notion of community has had a bonding effect on those with disabilities" (p. 192). The increased availability of the internet has played a significant part in defining the disability community (Nelson, 2000) and in defying physical limitations and geographical boundaries. According to Seymour and Lupton (2004), use of the Internet connects people with disabilities "... throughout the world" (p. 297).

Individuals who are born with disabilities may view themselves as part of the disability community very early in life (Hall, 2002), while individuals who acquire disabilities may gradually begin to identify themselves as part of the disability community in response both to the injury and to others' reactions to the acquired disability (Devlieger, Albrecht, & Hertz, 2007). For some individuals, the existence of a disability may be a more significant point of identity than other characteristics such as race, socioeconomic status, ethnicity, or gender (Riddell, Baron, & Wilson, 2001).

Persons without disabilities may find a connection with the disability community through their relationship with a person with a disability. Individuals may take on active and visible roles in promoting, organizing, or implementing opportunities for loved ones, as Ryan and Cole (2009) found when examining mothers of children with disabilities. Family members' support or advocacy roles do not necessarily decrease as children with disabilities grow up and become more independent (Ryan & Cole, 2009), suggesting the relationship with the disability community, once established, tends to remain.

PURPOSE OF STUDY AND RESEARCH QUESTIONS

The purpose of this present study was to determine if a modified version of the PAI is a valid and reliable instrument explaining consumer behavior among wheelchair rugby spectators. Promoters of disability sport, including wheelchair rugby, are interested in attracting additional spectators and sponsors through online viewership (Byon et al., 2010) so this specific consumption behavior was considered as well. Additional goals include the intent to provide further direction for marketing of disability sport and to add to the body of research examining marketing of disability sport.

Based on the review of literature and pursuant to the exploratory nature of this study, the researchers sought to develop a better understanding of wheelchair rugby spectators by advancing the following research questions.

Research Question 1: Is a modified point of attachment index a viable instrument for use in assessing wheelchair rugby consumer behavior?

Research Question 2: Will points of attachment significantly predict future attendance intentions of wheelchair rugby spectators?

Research Question 3: Will points of attachment significantly predict future online consumption of wheelchair rugby spectators?

METHOD

Context and Instruments

This study took place during the 2010 United States Quad Rugby Association (USQRA) Division I and II National Championships held in Birmingham, Alabama. Participants in the study were asked demographic questions (e.g., age, gender, income), two disability-specific questions (i.e., do you have a disability, and does a close friend or family member have a disability; Byon et al. 2010), questions on consumption behavior (e.g., frequency of attending or watching similar events, frequency of attending or watching non-disability events, frequency of other recreation consumption), future consumer intention (i.e., intention to repatriate the event; Söderlund, 2006) and intention to watch online (Fink, Trail, & Anderson, 2002) as well as a modified form of the PAI. The original PAI (Trail et al., 2002), used seven points of attachment including (1) player(s), (2) coach, (3) community, (4) sport, (5) university, (6) team, and (7) level of play. In this study, three of the seven factors were removed (coach, university, and level of play) and one factor was modified (community).

Coach was removed because many teams have player coaches or multiple coaches sharing the coaching role by committee. University was removed because only one of the 16 teams in attendance was a university program. Level of play was removed because few obvious distinctions were made between the two divisions represented at this tournament. Also, as discussed above, 'community' from the original PAI was modified to 'disability community.' These factors and the subsequent items were analyzed by a panel of experts which included two members of the USQRA board and three wheelchair rugby event coordinators. Their input helped to establish content validity to the instrument. The university institutional review board approved all instruments, and a consent form was provided to each subject. Participants surveyed were all of legal age and able to consent to engaging in the study.

RESULTS

Participants

Surveys were completed by 154 spectators who were selected through random clustered sampling. Due to the 'rush' of many spectators arriving at the same time immediately before games, it would have been difficult to engage in truly random sampling. Instead surveys were handed out to spectators as they entered the building and as they sat in the stands. At times, multiple people in a party may have received surveys while members of other parties may not

have received a survey. Surveys were returned to researchers in the stands and at entrances and exits. Responses indicated 52% of participants were female, 85.1% were White, and 76.2% of participants described themselves as not having a disability, although just over three-quarters (77.9%) had at least one close friend or family member with a disability. In addition, 77.9% of participants completed some college, with 62.8% attaining a bachelor's degree or higher. Finally, 56.6% of participants reported annual income over \$60,000, and 29% reported income over \$100,000.

Exploratory Factor Analysis

An Exploratory Factor Analysis (EFA) was conducted on the adjusted PAI to determine construct validity. An EFA was selected as the mechanism to test construct validity due to the substantial modifications made to the original model as well as the fact that this was the first time the PAI was used in the context of disability sport. Following the recommendation of Tabachnick and Fidell (2007), variables with eigenvalues over 1.0, including attachment to disability community, sport, and player, were selected for further analysis. Items that were hypothesized to load as a factor determining 'team' double loaded in the case of two items and did not load in the third. For this reason items related to 'team' were removed and a second EFA was conducted.

An Oblimin with Kaiser Normalization EFA was conducted using the same eigenvalue criteria, and a three-factor model emerged. The KMO Bartlett's test was significant 2 (36) = 557.372, p < .001 and Kaiser's measure of sampling adequacy was .745, well above the recommended threshold of .6 (Tabachnick & Fidell, 2007). The three factors, including attachment to disability community, sport, and player, accounted for 75.5% of the variance (refer to Table 1 for the EFA analysis). Cronbach's alpha was used to test internal consistency reliability, and values ranged from .796 (attachment to sport) to .842 (attachment to disability community). In addition, the correlation matrix was examined

and each sub scale was independent of the others (See Table 2). It should be noted that sport 3 loaded lower than other items. Although, as previously discussed, level of play was removed because of the multiple levels of play competing at wheelchair rugby nationals. Sport 3 may in part to address level of play and this may explain why it had a lower loading (.622) than the other items. Given that this loading is still well above the .4 threshold, Sport 3 was retained because it was developed to function as part of the construct sport and has previously been modeled suc-

Table 1
Exploratory Factory Analysis of the Modified PAI Pattern Matrix

	Component		
	1	2	3
I am a fan of quad rugby because it enhances the image of disability community (Discom1)	0.767		
Attending quad rugby games allows me to support the disability community (Discom2)	0.851		
I am a fan of quad rugby because it allows me to show my support for disability culture (Discom3)	0.923		
Quad rugby is my favorite sport (Sport1)			0.932
First and foremost I consider myself a fan of quad rugby (Sport2)			0.816
I am a fan of all levels of quad rugby (Sport3)			0.622
I identify with individual players more than the team (Player1)		0.803	
I am a fan of specific players more than I am of the team (Player2)		0.869	
I consider myself a fan of certain players more than of the team (Player3)		0.912	

^{*} Coefficients suppressed < .40.

Component	1	2	3
1 = Attachment to disability community	1.000	0.048	0.401
2 = Attachment to the sport	0.048	1.000	0.034
3 = Attachment to player(s)	0.401	0.034	1.000

Table 2
Modified PAI Factor Correlation Matrix

cessfully with the factor sport (Trail et. al, 2002). An additional consideration was that removal of the factor sport would have lowered the Cronbach alpha level to below .7.

Points of Attachment and Repatronage Intentions of Wheelchair Rugby Spectators

Prior to regression analysis to examine repatronage intentions, tests verified that the data met the assumptions of homoscedasticity and normality, and data were also examined for multicollinearity with none present. Using the three points of attachment as independent variables and future attendance intention as the dependent variable, multiple regression analysis demonstrated that the full model accounted for 54.4% of the variance. Attachment to sport (β =. 649, p < .001) and attachment to disability community (β = .197, p = .017) were found to be significant predictors of future online consumption.

Points of Attachment and Future Online Consumption of Wheelchair Rugby Spectators

Prior to regression analysis to examine online consumption intention, it was again verified that the data met the assumptions of homoscedasticity and normality and did not show evidence of multicollinearity. Using the three points of attachment as independent variables and intention to view future online wheelchair rugby events online as the dependent variable, multiple regression analysis demonstrated that the full model accounted for 35.3% of the variance. Only attachment to sport (β = .647, p < .001) was a significant predictor of the online consumption.

Additional Findings

Due to the exploratory nature of the present study, additional items of interest suggested by the results were examined after the data was collected. These items should be approached with some caution, as related questions were not developed through a full literature review. The first of these findings was that online viewership of sport involv-

ing participants without disabilities had a negative correlation with online viewership of wheelchair rugby (Pearson r [152] = -.176, p = .033). This correlation is very weak but should be noted because intuitively the opposite may have been hypothesized; that those who consume other sports online would be more likely, not less, to consume disability sport online. This result suggests that consumers who view some sporting events online may not be inclined to view all types of sporting events online.

The researchers also suspected differences in points of attachment between spectators with and without disabilities and spectators who did or did not have friends or family with disabilities. A series of t-tests were conducted on the three points of attachment (player, sport, and disability community) and the two consumption variables (desire to repatronize and desire to view future events online) to determine if there were in fact differences among these groups. Analyses found that individuals with disabilities felt less attachment to specific players, were more likely to view future events online, and were more likely to attend future events. For individuals who had friends or family members with disabilities, only attachment to player was significant (t [146] = 2.728, p = .007). The mean value for those with a friend or family member with a disability was 4.70 while those without a friend and family member with a disability was 3.85, within the 95% confidence interval.

DISCUSSION

According to Byon et al. (2010), the most appropriate way to examine the relatively new research field of disability sport is through use of instruments previously tested on non-disability sport. The findings of this study provide evidence to support use of a modified form of the PAI to predict spectators' desire to attend future events and to view wheelchair rugby online, although we believe that the instrument would benefit from additional modification. These results demonstrate there are aspects of the PAI-notably sport and player, as well as the modified factor, disability community—that are appropriate for use in examining and predicting consumer behavior related to disability sport.

We believe disability community is of particular interest for several reasons, despite not being identified by this research as the point of attachment having the greatest impact. First, the representatives of the USQRA were integral in selecting this factor, and their expertise relating to behavior of wheelchair rugby spectators is respected and valued. Second, the fact that the disability community itself is unique (i.e., not defined by geography) provides additional opportunities for those marketing disability sport as the consumer base may encompass a larger area than is typical for sporting events. Opportunities greater still when considering individuals without disabilities, who made up the majority of spectators in this instance, may also identify with the disability community. Williams and Kolkka (1998) suggest the primary motivation for initial engagement in disability sport is to obtain social support from those without disabilities. Martin and Mushett (1996) found athletes with disabilities rely more on their support systems, consisting of individuals without disabilities, than do athletes without disabilities. Efforts should be made to determine to what extent individuals without disabilities, who comprise these support systems, consider themselves part of the disability community. Lastly, the increasing interest expressed by promoters toward online broadcasting of wheelchair rugby events, coupled with the increasingly 'virtual' nature of the disability community, offers additional justification for continued study of this point of attachment.

Further study is needed to examine attachment of those who watch live sporting events online to continue and grow this trend. While several hundred people attended the 2010 Wheelchair Rugby Nationals over the course of a weekend, over 4,000 viewers, representing 49 US states and 33 countries, watched online (quadrugby.com, retrieved May 22, 2010).

While the PAI was able to predict a substantial percentage (54.4%) of r repatronage intentions, it was only able to predict 35.3% of online viewership. The variance was consistent with prior research (Byon et al., 2010; Byon et al., 2011) using motives as a predictor of consumer behavior related to disability sport. In this study the PAI predicted more variance of repatronage intentions

than the aforementioned Byon studies but less variance of online viewership. It is recommended that the PAI and the Motivation Scale for Sport Consumption (MSSC) be modeled together to determine how much of the variance can be explained by either the PAI or the MSSC.

Practical Implications

The results of this study add to the growing body of knowledge in the field of disability sport working to facilitate a varied approach to marketing. In some cases, selected motives as discussed by Byon et al. (2010), Byon et al. (2009), and Cottingham et al. (2010), may provide preferred means of marketing, while in other cases PAI factors may identify more effective marketing strategies. For example, some studies have shown the PAI factors of team and sport were predicted by motives such as vicarious achievement and knowledge (Trail et al., 2003; Woo, Trail, Kwon, & Anderson, 2009). Collecting and analyzing data relating to both motives and psychological attachment factors offers sport marketers the ability to utilize this information to develop promotional strategies for encouraging repatronage or online viewership among existing spectators and to attract potential new consumers to disability sport.

These results also provide practitioners with critical information. First, attachment to players was not a significant predictor of repatronage or online consumption. However, it is logical to assume that many people initially at-

tend these events to see a friend or a family member compete in rugby live, so sport marketers would be well served in efforts to develop long term consumption from first time spectators. Based on our results, one recommended approach is to transform the affiliation of these individuals from attachment to players to attachment to disability community or sport. This might be accomplished by having games where the home team is scheduled to play immediately followed by the most high profile games. In addition, efforts should be made through large draw sheets, information, and imagery to educate fans about the sport in order to transfer their attachment from player to sport.

Desire to support disability community was also a significant factor in repatronage intentions, although previous literature suggests individuals with disabilities who do not themselves participate in sport may be uninterested in supporting disability community through sport. Wolfe (2001) identified possible resentment from those with disabilities who do not engage in athletics toward those 'supercrips' who do. For that reason, this support of disability community might be better targeted at those without disabilities or individuals with disabilities who actively engage in disability sport. For individuals with disabilities who do not themselves participate in sport, attachment to sport rather than desire to support the disability community might be a more effective means to attract fans.

Limitations

While this document represents the third study in the context of wheelchair rugby (Byon et al., 2010; Cottingham et al., 2010), this information cannot necessarily be generalized to all disability sports. In addition, the development and examination of this instrument did not include testing for other forms of reliability and validity including interobserver reliability, test-retest reliability, content validity, and criterion validity. Finally, it should be noted that the researchers were able to collect data from a substantial portion of fans in attendance at USQRA Nationals, but there is substantial interest in marketing to online viewers; any similarities between the online audience and the participants in this research are unknown, so these results cannot be generalized to the online audience.

Future Research

This study focusing on wheelchair rugby is the first attempt at developing a model for attachment in disability sport and helps improve understanding about attachment. We believe there are additional factors that should be considered as this modified version of the PAI is furthered. First, our finding that attachment to team is indistinguishable from the other factors of disability community and sport must be addressed to determine if this finding is uniquely related to wheelchair rugby. Second, the PAI may be used more effectively in the context of disability sport if other factors are added to the scale, possibly including attachment to disability sport in general, attachment to sport in general, and attachment to the non-disability component of the sport (i.e., are wheelchair basketball spectators attached to non-disabled basketball).

The differences in attachment between those with and without disabilities and those who do and do not have close friends and family members with disabilities merit additional examination. These differences and the impact they have on consumption behavior will dictate in large measure the potential market share that disability sports may be able to develop. If those who market wheelchair rugby are limited to only attracting individuals with disabilities or only those with friends and family members of those with disabilities to consume the sport, then the marketing strategy will be far different than if the wheelchair rugby has appeal to a larger audience.

REFERENCES

- Byon, K.K., Cottingham II, M., & Carroll, M.S. (2010). Marketing murderball: The influence of spectator motivation factors on sports consumption behaviours of wheelchair rugby spectators. *International Journal of Sports Marketing & Sponsorship*, 12(1), 76-94.
- Byon, K.K., Carroll, M.S., Cottingham II, M., Grady, J., & Allen, J.T. (2011). Examining gender differences in the effect of spectator motivation on sport consumption behaviors at col-

- legiate wheelchair basketball games. *Journal of Venue & Event Management* 3(1), 11-28.
- Cottingham II, M., Byon, K. K., Phillips, D., & Drane, D. (2010, April). The Mediating effect of team identification on the relationship between spectator motive and repatronage intentions: Case of wheelchair rugby event. Oral presentation presented at the Southern Sport Management Conference, Troy, Alabama.
- Devlieger, P.J., Albrecht, G.L., & Hertz, M. (2007). The production of disability culture among young African-American men. *Social Science & Medicine*, 64, 1948-1959.
- Dimmock, J., Grove, J., & Eklund, R. (2005). Reconceptualizing team identification: New dimensions and their relationship to intergroup bias. *Group Dynamics: Theory, Research, and Practice*, 9(2), 75-86.
- Eleftheriou, T. (2005). Squashing stereotypes: Quad rugby is the coolest game you've never heard about. *Parks and Recreation-West Virginia*, 40(9), 102-107.
- Fink, J., Trail, G., & Anderson, D. (2002). An examination of team identification: which motives are most salient to its existence? *International Sports Journal*, 6(2), 195-207.
- Gard, M., & Fitzgerald, H. (2008). Tackling Murderball: Masculinity, disability and the big screen. *Sport, Ethics and Philosophy, 2,* 126-141.
- Hall, J.P. (2002). Narrowing the breach: Can disability culture and full edu-

- cational inclusion be reconciled? *Journal of Disability Policy Studies*, 13(3), 144-152.
- Hums, M.A. (2001, April 2-8). There's gold for sponsors in Paralympic Games, too. *Street & Smith's Sports Business Journal*, p. 44.
- Hums, M.A. (2002, March 11-17). Another bid for gold but TV fades to black. *Street & Smith's Sports Business Journal*, p. 40-41.
- Hums, M., Moorman, A., & Wolff, E. (2003). The inclusion of the Paralympics in the Olympic and Amateur Sports Act: Legal and policy implications for integration of athletes with disabilities into the United States Olympic Committee and national governing bodies. *Journal of Sport and Social Issues*, 27(3), 261.
- International Paralympic Committee Annual Report (2008). Retrieved February 18, 2009 from:
- http://www.paralympic.org/export/sites/default/IPC/Reference_Documents/2009_05_Annual_Report_2008_web.pdf
- International Wheelchair Rugby Federation. (2008, June). *Annual General Meeting*. Burnaby, Canada.
- Kwon, H., Trail, G., & Anderson, D. (2005). Are multiple points of attachment necessary to predict cognitive, affective, conative, or behavioral loyalty? *Sport Management Review*, 8(3), 255-270.
- Mandel, J., Shapiro, D. (Producers), Rubin, H., & Shapiro, D. (Directors).

- (2005). *Murderball* [Motion picture]. United States: Paramount Pictures.
- Martin, J., & Mushett, C. (1996). Social support mechanisms among athletes with disabilities. *Adapted Physical Activity Quarterly*, 13, 74-83.
- Nelson, J.A. (2000). The media role in building the disability community. *Journal of Mass Media Ethics*, 15(3), 180-193.
- Plunkett, J.W., (2010). Plunkett's sports industry almanac: Sports industry market research, statistics, trends, and leading companies. Houston, TX: Plunkett Research.
- Riddell, S., Baron, S., & Wilson, A. (2001). The significance of the learning society for women and men with learning difficulties. *Gender and Education*, 13(1), 57-71.
- Robinson, M., & Trail, G. (2005). Relationships among spectator gender, motives, points of attachment, and sport preference. *Journal of Sport Management*, 19(1), 58-80.
- Robinson, M., Trail, G., & Kwon, H. (2004). Motives and points of attachment of professional golf spectators. *Sport Management Review*, 7(2), 167-192.
- Ryan, S. & Cole, K.R. (2009). From advocate to activist? Mapping the experiences of mothers of children on the autism spectrum. *Journal of Applied Research in Intellectual Disabilities*, 22, 43-53.
- Seymour, W. & Lupton, D. (2004). Holding the line online: Exploring wired

- relationships for people with disabilities. *Disability & Society*, 19(4), 291-305.
- Söderlund, M. (2006). Measuring customer loyalty with multi-item scales: A case for caution. *International Journal of Service Industry Management*, 17, 76-98.
- Tabachnick, B. & Fidell, L. (2007). Using Multivariate Statistics (5th Ed.). New York: Pearson Education, Inc
- Trail, G., Anderson, D., & Fink, J. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management*, 1(3), 154-180.
- Trail, G., Robinson, M., Dick, R., & Gillentine, A. (2003). Motives and points of attachment: Fans versus spectators in intercollegiate athletics. *Sport Marketing Quarterly*, 12(4), 217-227.
- Trail, G., & James, J. (2001). The Motivation Scale for Sport Consumption:

- Assessment of the scale's psychometric properties. *Journal of Sport Behavior*, 24, 108-127.
- Wann, D., & Branscombe, N. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24, 1-17.
- Williams, T., & Kolkka, T. (1998). Socialization into wheelchair basket-ball in the United Kingdom: A structural functionalist perspective. *Adapted Physical Activity Quarterly*, 15, 357-369.
- Wolfe, K. (2001, July 1). He's your inspiration, not mine. *The Washington Post*, p. B4.
- Woo, B., Trail, G.T., Kwon, H.H., & Anderson, D. F. (2009). Testing models of motives and points of attachment. *Sport Marketing Quarterly*, *18*, 38-53.

Michael Cottingham is an Assistant Professor at Southern New Hampshire University,
Sheryl Chatfield is a doctoral student at the University of Mississippi.
Dr. Brian Gearity and Dr. Stacey Hall are affiliated with the University of Southern
Mississippi, and Dr. James Allen is an Assistant Professor at Christian Brothers
University.