

Second-Screen Experiences in Sports, and their Impact on the Sport Communication Process

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ABSTRACT

Sports continue to be a significant part of culture, both in the United States and around the world. More than ever, sport communication is a multi-step process that is dynamic, multi-platform and multi-dimensional. Live sporting events are consistently among the most watched—and posted about on social media—television programs of the year. Fans are passionate about their teams, and want to share that passion, while teams and athletes are eager to forge stronger connections with their supporters. The rise of interactive digital technologies as second-screen experiences are continuing to change how fans engage with their teams, and vice versa. While fans tend to be motivated by passion and psychological needs, athletes and teams are more motivated by finding ways to monetize that passion and emotional connection. This paper examines these interactions within the context of second-screen interactive experiences and platforms, as well as how the communication process works in these contexts.

General Terms

Human Factors. Theory.

Keywords

Sport communication, second-screen, social media, multitasking

1. INTRODUCTION

The love affair with sport around the world is not a new phenomenon. However, innovative technologies that have come with the emergence of Web 2.0 platforms and applications are rapidly changing how fans interact with their favorite teams and athletes, as well as how athletes and teams communicate with their publics. This is especially true in the context of live sporting events where fans are perhaps at their most passionate and engaged with their teams. As internet access has become more ubiquitous, and computing more portable, fans are increasingly engaging with second-screens—mobile devices or laptops used while watching television or live action to access supplementary content—during these events for a variety of reasons.

The process of sport communication is defined by Pederson, Miloc and Laucella (2007) as a “process by which people in sport, in a sport setting, or through a sport endeavor share symbols as they create meaning through interaction” (p. 76). It’s a dynamic process that is impossible to analyze, according to the authors, without examining the contexts or levels of communications involved—interpersonal, group, organizational, mass mediated. It is through this process that fans are interacting with teams and vice versa. It has continued to evolve since their definition was written, as it is becoming even more of a two-way conversation, with immediate feedback, rather than a team sending out messages to its fans.

According to Nielsen (2014) data, a collective 72.3 million Americans consumed 7.1 billion minutes of sports content in October 2014 alone, and that number is only expected to continue

to increase. Smartphone penetration has jumped from 30% in 2010 to 75% in 2014, and broadband access sits at 78%. That means that more than ever, fans are able to engage with their teams on the go, or on the couch through laptops, tablets and/or smart phones. Yet, even with all of the mobile and second-screen capabilities, research by Anstead, Benford, and Houghton (2014) showed that while many viewers enjoy second-screens, for big events like the Olympic 100-meter race, fans still value the big, primary screen for watching live sports.

The opportunities for engagement have never been more abundant, and both teams/athletes and fans are taking advantage. Kusumoto, Kinnunen, Kätsyri, Lindroos and Oittinen (2014) found that participants in their study were more receptive to the complementary information and tweets for sporting programs, versus most other kinds of programming, and the findings generally support that sports are suitable programming companions for the second-screen applications.

Whatever their motivation, the numbers are clear that fans are engaging on second-screens more than ever. Super Bowl XLVIII, for example, generated 25.3 million total tweets, and the NBA Finals generated 16.6 million tweets making them the two most tweeted about sporting events of 2014 (Nielsen, 2014). Even a more niche sport in the United States—the English Premier League—generated more than 174,000 tweets for the Chelsea vs. Manchester United match, which had the largest viewing audience of the season. It should be noted, however, that some of the numbers could be inflated. Doughty, Rowland and Lawson (2011) found through an analysis of the popular British TV show *The X Factor* that 20% of tweeters for one week’s episode accounted for 68% of the total tweet volume. That was largely due to bots, which are still prevalent on Twitter. Regardless, a massive number of the over 1.7 million tweets with “xfactor” were real people engaging with a live event, much like sports.

With the proliferation of Web 2.0 technologies, fans are engaging with their favorite teams through second-screens during live sporting events, and now more than ever it is critical for teams and athletes to recognize the trend and produce interactive experiences and content to better connect with their publics. This literature review will explore the various participants in the sport communication process and what motivates them. First, the impact and potential negative aspects of multitasking are discussed. Next, the impact and potential negative aspects of multitasking are discussed. Then, the motives of teams and athletes, and how they interact with the fans will be reviewed. Finally, examples of second-screen beyond traditional social media are presented through documented case studies.

2. MULTITASKING AND THE SECOND-SCREEN

Utilizing second-screen experiences naturally lends itself to multitasking. While many sports do have down times in which second-screens can be utilized, there are also times when users would want to engage simultaneously with the live action on their

primary screen. But questions have arisen as to whether it's really possible, or even healthy to multitask.

Narasimhan and Vasudevan (2012) looked at the collective nature of social television in general, as well as collective attention behaviors. They note that people who multitask watching television usually take on a task that falls into at least one of three categories: search (for information), social (for conversation), and interstitial (for quick opportune tasks during perceived lulls in the first screen content). They used these to determine a "divided attention" factor that takes into account actions that are additive versus unrelated tasks that do not add, or perhaps take away, from viewers engagement. The word cloud of their data indicated that a lot of the most frequently used words were related to promotions, or were retweets. This would seem to indicate that viewers like sharing that they are watching with their friends/followers, but they are also not necessarily coming up with their own content either. This also holds true in sports viewing, where people live-tweeting sports have been found to be more likely to retweet while watching (Ji & Zhao, 2015). Narasimhan and Vasudevan (2012) point out, however, that Twitter has become ideal for increasing viewer engagement with television because it has been proactively advocating "best practices". Many of these practices indicate that users are not spending a lot of time composing tweets, but rather enjoy the feed during lulls and prefer a quick retweet of what they enjoy.

Utilizing the uses and gratifications theory, Wang and Tchernev (2012) found that media multitasking increases gratifications, which in turn reduces needs in real time. They also found media multitasking behavior is driven by cognitive needs which are not gratified by the behavior. They suggest this is because though cognitive needs are not gratified by media multitasking, emotional needs are--like being entertained or relaxed, but they are not sought in media multitasking. Thus, emotional gratifications seem to be a byproduct of the behavior. It's emotionally satisfying but cognitively unproductive. It can also be self-reinforcing. They suggest it is important to carefully examine the mutual influences of media multitasking, cognitive functions and personal traits long-term, as some studies have suggested that chronic media multitasking can impair cognitive functions. Despite these potential pitfalls, the data suggests fans are still very much willing to participate in second-screen experiences.

3. FAN MOTIVATION AND INTERACTION

Fans of sports teams and athletes have an inherent desire to seek connections with the players and teams they support (Billings, 2011). Sports have become engrained in our culture and in many people's lives. Fans seek out and receive gratification from anything from a simple casual conversation to autographed memorabilia. More recently this has also evolved to include following favorite teams and athletes on Twitter, Facebook, Instagram and other social media. Billings also notes the power of a sporting event, whether it's a mega event like the Olympics or a World Series viewed by millions of people, or a more niche sport like collegiate volleyball, they have all been found to have a demonstrable and loyal following. Sports also have an extraordinary ability to stimulate social exchange (Billings, 2011). This made the advent of social media, in particular, a natural extension for fans' game-day experience. Fans were already, by definition, passionate and eager to share that passion, but digital tools have given them the ability to share those passions even more readily.

In an effort to develop a reliable measure of fans' motivation, Wann (1995) developed a Sport Fan Motivation Scale (SFMS) consisting of eight types of motivation: eustress, self-esteem benefits, escape from everyday life, entertainment, economic factors, aesthetic qualities, group affiliation and family needs. It shows that fans are clearly motivated by different things, and the aspects of the game they enjoy vary. For example, Wann found that fans scoring high on the aesthetics, group affiliation, and family subscales may be less concerned about the score, and more about the experience. People motivated primarily by self-esteem needs would be more likely to have a biased account of the team's performance. These motivations would also naturally influence what fans would post about, or enjoy engaging with on a second-screen experience.

A theoretical framework that points to fan motivation is the uses and gratifications theory, which views the audience as an active, instead of passive, media user. This especially holds true in the context of the digital age. As Wang and Tchernev (2012) summarize it, the needs combine the user's psychological dispositions, sociological factors and environmental conditions that motivate media consumption or exposure. Gratifications are how the user perceives those needs are being met through media. Wang and Tchernev synthesized commonly used needs in four categories: emotional, cognitive, social and habitual. Chung, Koo, and Park (2012) found that it is important, in terms of uses and gratifications, for users to stay for a while in pertinent social networking systems (SNSs) in order to want to share. These are all needs that may or may not be met through watching live sports, in addition to experiencing those events with a second-screen.

The social identity theory might also explain fan motivation for active participation with second-screen experiences. Chung et al. (2012) summarize social identity theory as describing the process of understanding individual identity within a specific group, and people tend to behave in a way that matches their identity, causing them to likely support an organization that can crystallize their identity. Their research also indicated a need for a venue that provides diversified topics and in-depth discussions in order to improve continuance motivation. This is likely why fans tend to find groups of similar fans or official team pages online, because it helps them crystallize their identity as a fan.

These frameworks provide some indication for why fans would seek out a second-screen experience, but as Velt et al. (2015) found, there is no magic bullet for reaching or satisfying everyone's needs, so offering more options, and more ways to personalize the coverage is crucial. Their research showed there was no single trend of how participants engage with the event, in that case a music festival, but rather a diverse range of ways through which participants experience the event.

Sports provide a unique forum for engagement with second-screens because they are experienced differently than other forms of television. Gantz, Wang, Paul and Potter (2006) assessed the ways in which the viewing experience for sports fans is similar to, and different from, the viewing experience for fans of regular TV programming. They found fans of televised sports were likely to engage in a lot of pregame planning and information search activities, which meant they were clearly more active in their preparation to watch versus other genres. They were also most likely to think about what might happen in the game, talk with friends about it, and plan their schedules in advance in order to watch the game. Members of all four fan groups tended to talk with friends regarding upcoming programming, but sports fans

were significantly more likely. The majority of the sports fans tuned-in to sports events to see who does well/wins; because they care about the players and teams; because of the unpredictability of the game; so they could follow their favorite player or team; to put aside responsibilities, like studying, for a while; and because they did not want to miss anything in the game. They note that most of that data signals an emotional attachment to a player or team, and viewing is more content oriented and purposive rather than a last-ditch alternative when there is nothing else to do, or nothing else on TV. Among concomitant behaviors such as: feeling happy when their favorite character, player or team did well; feeling excited, feeling sad or depressed when their favorite player or team did poorly, feeling mad under those same circumstances, yelling at a player/character, hoping or praying for a positive outcome, and talking about the show/game. The data also suggests sports fans seemed more actively involved with their favorite program even after the game or program ended, and were most likely to say they would follow postgame coverage on TV and talk with friends about the game. Sports fans stand out from fans of other types of television programming, and that aside from sports, the various types of fan groups are essentially the same. When one's team does well, it helps validate the mental, emotional and often financial investment fans have in their teams. Talking about the games with other fans allows fans to feel part of a cohesive group with common interests. These kinds of motivations are, in part, what draw fans to second-screen experiences from the pregame through the postgame.

Another lens through which one can view sport fandom and interaction is the disposition theory of sports spectatorship. Disposition theory, as studied by Yu and Wang (2015), is based on emotional reactions to the games changing as a function of the game. The researchers applied the theory to real-time tweets from United States soccer fans during the 2014 FIFA World Cup matches. Yu and Wang found that their data was consistent with the disposition theory of sports spectatorship. The negative emotions, mainly anger and fear, increased when the opponents scored and decreased when the US team scored. Anticipation was high when the US team needed to rally or when the team showed positive signs. Altogether, they found fanship heightens one's involvement with the results of the games and introduces fear, anger and other negative emotions, as well as providing enjoyment related to the outcome of the game. Even in matches for which they had no natural rooting interest, they found fans showed anticipation, happiness and emotional release simply from being fans of the game. Fans have an emotional reaction to live sporting events, and that emotion can manifest itself on social media, like Twitter in this case.

Fans have varying motivations for why they interact with teams and other fans through second-screens. Whether fulfilling needs or crystallizing identity, fans are eager to share their opinions, and they have strong and lasting emotions related to the events happening on the field of play. The need to share these opinions and emotions is starting to be filled by things like social media, and that, in turn is giving teams an opportunity to reach out and help fill the desire for interaction.

4. TEAM/ATHLETE MOTIVATION AND INTERACTION

Teams and athletes have largely different motivations for utilizing second-screen technologies from the average fan, but they are equally as important to the communication and interaction process. As Centieiro, Romão and Dias (2014) theorize, the main

goals of these platforms are to build an emotional connection between the athlete/club and the fans, and therefore increase the fans' interest and engagement with the team/athlete, which in turn leads to more loyal following and potential for increased profit.

Fans have a need for interaction with their favorite athletes, and Twitter provides an optimal outlet for athletes to provide that interaction. Clavio and Kian (2010) applied the uses and gratifications theory to followers of a retired female professional golfer on Twitter. Many followed her, according to the data, because of elements of personal fandom and affiliation towards the athlete. They liked her, or what she generally posted about. They noted the athlete did not interact with her followers much, if at all, which might explain some of the data, and they summarize this may mean that they view her feed as less a way to interact with the athlete and more of a place to get unique information directly from the athlete. While in this specific case, the fact that the athlete is retired may have some different implications from one who is still active, Twitter represents a unique opportunity in social networking where possibilities for a variety of information sharing and interactivity can be determined by the content generator. The researchers believe Twitter's ease of use, low resource requirements and informational brevity will ensure that it remains at the forefront of sport-consumer interaction.

Communication from an athlete has more to do with promoting and/or maintaining a personal brand, even when that athlete is part of a larger team structure. Individual athletes are creating Twitter accounts, as well as personal websites and applications to reach their publics (Centieiro, Romão, & Dias, 2014). Meanwhile, teams are using social media and other interactive experiences to inform fans, raise awareness, provide fans with forums, and also generate revenue for the organization.

Most teams are, at their core, businesses, and as such seek to enhance the bottom line. This is an avenue where harnessing the engagement of the fans, as well as tools for data mining, through social media can potentially be used for financial gain. Zhao, Zhong, Wickramasuriya and Vasudevan (2011) utilized a program to glean real time Twitter data pertaining to NFL related tweets. They see this as a potential tool for advertisers to send quick, relevant ads within seconds of something happening during an event. Some of the challenges of separating tweets in real time are: only a relatively small percentage of tweets contain a hashtag, misspellings from users, and delays in the Twitter streaming API. The algorithm looked for team names and game terminology to determine the top 10 most frequent keywords. Excitement levels peaked, not too surprisingly, after touchdowns and turnovers. Post rates ranged from around 20 per second during the NCAA Tournament to over 80 during the Super Bowl at certain points. However, one of the shortcomings of the study, as they point out, is it only works for events in which keywords can be predetermined. So if something happens during the game somewhat out of the ordinary that causes chatter, it is probable that it could be missed. Regardless, there is opportunity with technology like this to target fans not only with external advertisements, but also opportunities to buy team merchandise at strategic times during or after a game without a need for having a social media manager or staff attempting to figure out the best time.

Providing avenues for second-screen experiences for those at the event, where the playing field is the main "screen," is of growing importance to teams. Wang (2013) examined the motivations and factors that might predict one's intentions to use social media during a live sporting event utilizing the integrative model of

behavioral prediction. The major assumption of the model is many human behaviors can be predicted by attitudes, norms and efficacy. Intentions are formed by the user and then intentions can be predicted by the preceding list of human behaviors. Wang found, in part, that because there are alternative choices to most media behaviors, one has to account for the influence of alternative choice in estimating the relationship between attitudes, norms, efficacy, and media choice tendency. Those who are more likely to choose alternatives are more likely to choose social media as well, according to Wang. Sports fans in this case had a more positive attitude towards social if they perceive that social media can provide them with scores, and that they can know how to use it. Fans may choose to use social media simply because of convenience or the need to search for game-related information--thus fulfilling the instrumental and utilitarian function (Wang, 2015). Wang also notes that social engagement increases when stadiums provide WiFi to fans, which is increasingly becoming part of the game-day experience. He observes that as the technologies to access SNSs get more ubiquitous the behavior will be seen as popular, and the benefits more observable.

The National Basketball Association (NBA) was an early adopter of social media and relationship marketing through social media. Fan motivation factors can have an impact on what teams choose to post, and how (or if) they choose to interact with fans. Stavros, Meng, Westberg and Farrelly (2014) chose to focus their content analysis on Facebook, where the NBA is considered a leader in good social media practice. They categorized comments on the pages of eight different NBA teams into different fan motivation categories. These included: passion, hope, esteem, and camaraderie. They noted the content posted by the team had a considerable impact on the kinds of responses received. Generally posts about new players elicited hope. Posts looking forward to the new season elicited passion responses, and on down the line. One theme was clear: the Facebook fans of the team did not need much encouragement to voice their opinion. Fans seek opportunities to support or cheer for their team and proclaim their passion, and fan expressions of hope can allow a team to monitor and potentially manage expectations. Fans also seek interaction to display how knowledgeable they are about the team, as well as a place to vent frustrations. They also enjoy sharing a spirit of camaraderie among the fellow fans on a community level, which reinforces their identity with the team. While Stavros et al. noted that many of the teams they studied did not generally reply to comments on posts, that is usually best practice given the nature of the comment sections for more notable teams. Overall, the NBA provides a prime example of the effectiveness of strong social content for building relationships with fans.

Social media use to build awareness and spread one's messages effectively has been adopted and used effectively for niche sports, in particular. These sports find it more difficult to get media attention, particularly in non-Olympic years and competitions, so social media has provided an avenue for them to grow their respective sports. Eagleman (2013) looked at the role of social media within National governing bodies of sport in the United States (NGBs). Survey results from NGB employees showed that 100% of respondents indicated that their organization used Facebook and 98.4% use Twitter. Other social platforms that were less utilized included: YouTube (51.6%), LinkedIn (12.9%), Pinterest (11.3%), FourSquare (11.3%) and Google+ (9.7%). The most popular responses for goals of social media use centered around enhancing relationships with the fans and promoting the

organization's brand and sport. In terms of greatest advantages that social media provides, many credited social media with developing a greater connection with fans, and providing a forum in which the fans could connect with each other as well. It also provides them with a platform for answering fan questions quickly, and being able to send out mass thank yous publicly, according to many of the responses. They also noted the low cost of social marketing. Responses to a question about challenges brought responses that centered on three main aspects: maintaining message control, monitoring fan comments, and finding the right balance between posting too much and too little from the NGB's social accounts. Interestingly, the data seems to indicate that the organizations tend to use social as more of a communications tool than a marketing one--ie they do not do many/if any contests or brand activations and the like. There are a lot of ways to utilize technology to interact with fans, and it is interesting to note the differences in how NGBs use it--more for two-way communication-- versus NBA teams that tend to use it as a largely one-way communication tool and for marketing purposes. They both provide digital forums for fans to interact and connect with each other, and that is of particular value for niche sports.

In addition to these more conventional methods for reaching fans and furthering brands, more innovative and interactive experiences continue to emerge. As they develop, both teams and athletes will be forced to keep up in order to best reach their fans.

5. SECOND-SCREEN BEYOND TRADITIONAL SOCIAL MEDIA

Throughout the sporting landscape, there are platforms and technologies being developed that are revolutionizing the way in which fans are able to consume live sporting events, outside the realm of traditional social media platforms like Facebook or Twitter. Internet TV platforms, for one, give viewers more freedom, outside the control of traditional TV gatekeepers. Additionally, interactive frameworks on the platforms each have a unique style for how viewers will interact with the content (Olsen, Partridge & Lynn, 2010).

Centieiro, Romão, and Dias (2012) developed and tested an interactive, multiplayer mobile game called WeApplaud to enhance remote fans' experience during a live sports broadcast. They felt the at-home viewing experience was somewhat lacking because the fan is not a part of the atmosphere and energy of a live crowd at the event. Their application, "WeApplaud" allows the user to pick one of the teams and applaud during key moments. It focuses on the eustress, entertainment and group affiliation components of Wann's SFMS. The application, though used within a controlled setting for this study, provided some interesting insight into how people watch sports. Of their population that watched sports regularly, 60% used second-screens during the broadcast--the most popular device being a mobile phone (89%), then the computer (44%), and tablet (22%). Among the ones who used additional devices, 89% performed activities related with the event, and all performed other activities. The activities related to the game included: browsing the web (67%), texting (56%), chatting (44%), social networks (33%) and making voice calls (22%). In terms of non-related activities, email was the most popular (77%), but web browsing was also popular (67%). These results clearly indicate that people are used to multitasking while watching live sports on television, and a large

majority of those are related to the event itself.

In related research, Centieiro, Romão, and Dias (2014) worked with the Viva Ronaldo experience, centered around Real Madrid star Cristiano Ronaldo. Important to the second-screen experience, it offers coverage of live matches, support and predict in-game actions--like where he will shoot on a penalty--play trivia challenges, answer polls and more. The goal of their research was to incorporate some of those types of experiences in order to enhance the engagement level during broadcasted sporting events. They found fans are motivated by social experiences, and that is what drove their design. Their interface incorporates a betting experience called "Goal In The Next Seconds" which allows fans to bet based on the WeBet interaction mechanism--fans can guess whether a goal will happen in the next seconds during a live match. If they choose to play there is a 20 second countdown clock in which the team needs to score a goal. It was designed to require minimal eye interaction and only requires a couple of swipes and a tap--in a large area-- to place the bet. This allows users to interact without having to take their eyes off the action for long. There were mixed reviews from participants as to how effective the application was, as many found it frustrating as well as fun, but it goes to show what is possible with the convergence of sports and betting, which can also be done from a second-screen application.

Some research has delved into even more diverse ways to have interactive second-screen experiences. Shirazi et al. (2011) created a non-verbal, non-textual application called "WorldCupinion" during the 2010 FIFA World Cup. The app is simple: only three screens with one showing a list of upcoming matches in the phone's local time zone, the second is the "arena" for the selected game where users can share opinions--after selecting a match from the initial screen and choosing a team to support--and finally, the third screen shows the geographical distribution of opinions for both teams overlaid on Google Maps. Options on the second-screen of the application included buttons like red card, play-on, or other opinions related to refereeing decisions, as well as excitement, a simple thumbs-up or thumbs-down, boring, and finally a vuvuzela button, with sound. This kind of interface, in theory, allows for fans to share opinions while taking less time away from focusing on the match itself. Vatavu (2015) incorporated the concept of using audience silhouettes, or visual representations of viewers' body movements that are displayed in real time on top of television content. Utilizing the technology of the Microsoft Kinect depth sensor, it captures audiences' body movements to display using a prototype application. The intent is to deliver new, enriched social experiences for television utilizing kinesics as a non-intrusive communication channel while watching TV. Other silhouettes, captured via the same method in other locations, were synchronously displayed on top of the same content. The silhouettes are merely color gradients of the user, not detailed images that show traits or clothing. This helps minimize bandwidth for video transmission. Many of the participants noted that because they were non-verbal interactions, it actually helped communication and made the experience more interactive, and produced a sense of connectedness. On a similar note, it also produced a reduced sense of loneliness when watching TV. There are a great deal of potential innovations, such as these, that push the boundaries of what we expect from a second-screen experience.

6. CONCLUSION

As audiences for live sporting events become increasingly connected, opportunities for content providers, teams and athletes to interact with their publics through second-screens are becoming increasingly important. Though the concept of a second-screen is still relatively new, considering when essential tools like broadband, smart phones/applications, tablets and social media became readily available. Fans are eager to connect and seek out content to enhance their viewing experience before, during and after live events, and teams have to be ready to help facilitate those experiences. Teams utilize them in different ways, but second-screen experiences will likely continue to rise towards the top of any organization's marketing efforts because sports and second-screen experiences are highly compatible.

Further research still needs to be done, though it can be difficult given the rate at which these kinds of technologies evolve, regarding best practices and how multitasking affects the viewing experience. Fans are increasingly using mobile devices to access supplementary content in stadiums as well, and that experience deserves more study.

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