

SOCIAL MEDIA: THE IMPACT OF IMAGERY  
AND ENGAGEMENT IN ATHLETIC  
SOCIAL MEDIA

By

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## **Acknowledgement and Dedication**

Upon graduation from UT Arlington in 2011 with a bachelor's degree in communication, it never crossed my mind that I would take the next step in my education. I could not have completed this process if it was not for my wife, Jessica. During frustrating periods of work during my review of literature, to not being able to get the program to work, she was behind me and encouraged me. To Art Garcia for pushing me into the program when I was stubborn. If it was not for Art, I would have never taken a second thought at pursuing higher education. To Dr. Shelley Wigley, I owe the final portion of this accomplishment to you. From the first day of stepping into your office to discuss my plans, to the final days of editing and perfecting, Dr. Wigley has been supportive and helpful. There were points of the process that I was on the brink of giving up and removing myself from the program. However, because of the effort she gave to me, I had to push forward and continue on to the finish line. To Dr. Mark Tremayne and Dr. Brian Horton, they pushed me along the way and challenged me. At first I didn't want to react and accept the challenge, but I thank them for giving me the opportunity to do so. To my family, friends, colleagues and academic support, I thank you.

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## **ABSTRACT**

### **SOCIAL MEDIA: THE IMPACT OF IMAGERY AND ENGAGEMENT IN ATHLETIC SOCIAL MEDIA**

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As the athletic communication field enhances its practices on social media in order to have the highest reach, the impact of visual content and its role in increasing social media engagement cannot be overstated. This study explores social media patterns, specifically the use of visual content within professional sports, and how the role of semiotics influences the viewer. As social media moves forward in athletics, the practice of two-way communication has become vital. This study of social media across the NFL provides insight on specific content that engages sports fans. Findings suggest both the type of content and the timing of posts based on team performance have a significant impact on social media engagement. Harnessing this knowledge in a social media plan will give practitioners the greatest ability to reach the most users, and more importantly, grow their brand on online platforms.

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## Introduction

Social media is a new frontier of communication. From the beginning, sites like MySpace, Xanga and more recently Facebook, Twitter and Instagram have exploded into the daily routine of billions around the world. Harnessing this power has been a goal in the world of athletics as social media practitioners attempt to develop successful strategies to further the reach of their organizations.

According to Facebook, the social media site is home to more than one billion active users with 1.13 billion using the platform on a daily basis (Company Info | Facebook Newsroom, 2016). Twitter reports there are 302 million active users per month and more than 500 million Tweets speeding across the World Wide Web (About Twitter, Inc., 2016).

There is no question that social media is succeeding as an entity for pushing both personal and professional messages. It is important for the professionals who work in the media field, such as public relations practitioners who work in a university athletics and sports setting, to figure out a way to use social media to their advantage. Given that there are limitless opportunities to really connect with one's publics and with the cultivating aspect of 'liking' or 'following' a company through social networks there is now a smaller gap between organization-public relationships, compared to interpersonal relationships (Sweetser, Avery, Lariscy, & Howes, 2009).

Instead of communicating through press releases, news stories, and statements, PR practitioners can log onto Twitter or Facebook and let the world know what is happening instantaneously. Public relations practitioners were slow to adopt Internet-based tools and the use of the internet as a whole (Porter, Sallot, Cameron, & Shamp, 2001); however, when they learned that it allows managed communication to flow directly between organizations and mass

audiences without having to use some form of middleman or gatekeeper they became much more accepting of it. Being able to put out new information so effortlessly and quickly appeals to this field in many ways. Not only can they do their job and connect people to information, but also they can now create better relationships with their publics. Another study found that a majority (84%) of public relations practitioners believe social media is a low-cost way to develop relationships with strategic publics (Wright & Hinson, 2009).

Developing and keeping these relationships going is the sole purpose of public relations practitioners; knowing that there is a new way to create and manage these relationships is what is driving the field to use social media. There have been many studies done to show how PR professionals can use social media and the reasons they should. One study found that social media is a more advantageous avenue for building organization–public relationships (Kelleher & Miller, 2006) and is an effective crisis diffusion tool by an organization (Sweetser & Metzgar, 2007). With that said there is a belief that the public will respond more positively to organizations that use social media. Another study was conducted and found that reputation increased among groups exposed to high interactivity and multimedia web sites for an organization (Jo & Kim, 2003). When the form of media is there the public will take advantage of it and use it to gain information about a specific organization. In addition, public relations practitioners are more likely to use social media tools if they find them credible and helpful.

Social media techniques will become more abundant as public relations practitioners become mindful of their effectiveness in regards to reaching target audiences, promoting a specific cause, and further developing communication strategies (Curtis, Edwards, & Fraser, 2010). In the case of athletic organizations they can use these forms of media to promote their teams, build relationships with their fans, and bring a community together on a singular

communication forum.



## **Previous Social Media Studies and Relation to Theory**

### **2.1 Social Media Engagement – What Does it Mean?**

In its simplest form, social media has created a new definition for what it means to have engagement. Facebook defines social media engagement (SME) as likes, comments, and shares, while similarly Twitter looks at @replies, retweets, likes, and mentions (McGurk, 2012). However, the simple actions taken go far beyond just the click of the mouse or pressing of the screen for what it means to have engagement.

To understand how SME works and the practices of measuring and increasing the reach of the respective social media accounts, we must understand how SME has come from engagement and being engaged, to its newer and simpler form of engaging in a social media post. As a verb, Dictionary.com defines engagement (from engaged) as "to occupy the attention or efforts of (a person or persons)." Social media practitioners have a commitment to capture the attention of the viewer for a split second to create a reaction and draw in interest to engage, or take action, in the post. There are numerous types of engagement and definitions of the concept, including engaged in conversation, in a television show, and in the classroom. The practice of developing SME, however, is very similar to the challenges of educators in keeping their students engaged in a class setting.

First, engagement in the classroom has been proven to create increased improvements in interest levels (Fredricks, Bulmenfield, & Paris, 2004). Likewise, one of many challenges of a successful social media plan is to increase interest in the content that is posted. Creating a reaction takes time and requires trust in creating valuable content, positive experiences and a two-way relationship to build SME (McGurk, 2012). Second, engagement in a classroom setting comes from the understanding that "the students have qualitative differences in the level or

degree of engagement" (Fredricks, Bulmenfield, & Paris, 2004, p. 61). Interest, following the rules, participating, and completing work are different levels of classroom engagement that the authors point out can align with engagement practices of social media users. For this purpose, social media practitioners must be aware that there are different levels of interest in their brand. For sports and athletics, this can range from the highest engagement level, which would include season ticket holders, players on the team, and engaged fans, to the lower level, which would include opponents' fans, non-alumni followers of the account, or others with outside relation to members of the program.

Lastly, the study classifies three different types of engagement in the classroom setting that can correlate with successful social media ideology for creating SME; behavioral, emotional, and cognitive engagement. Behavioral engagement is looked at in three different definitions that range from being able to follow the rules, involvement increasing further interest, and participation maximizing further engagement in similar future settings (Finn, 1993). Aligning with the theoretical framework of "How social media engagement leads to sports channel loyalty," social media classifies behavioral engagement as how functional it is (Lim, Hwang, Kim & Biocca, 2015). Increased SME over time is focused on real-time interaction with the platform. In general, social media practices must first be able to meet the demand of its users by understanding that there is more time in-between action than there is physical action in the sport (Watanabe, Yan, & Soebbing, 2015). Using this time wisely helps maximize the ability to create participation. Cognitive engagement is not an element in this study, but draws upon future expansion possibilities to create higher levels of thinking in SME, especially in studying conversation and a deeper level of engagement in how users respond and interact.

It is no secret that engagement through technology has become a prominent piece of the fan experience, whether the individual is in attendance of an athletic event, watching live, or following the team's accounts on social media. The attendee or viewer is locked in more than ever on what is considered a "second screen" (Proulx & Shepatin, 2012). Proulx and Shepatin explored the use of using the mobile screen, as he called second-screen activity, for expanded use by television producers and the sponsors to gauge interest in an event or movie and measure the behaviors around their viewing. Examples of these actions can be seen largely on-screen and in front of the viewers with little or rarely any hiding. This includes ESPN using pieces such as hashtags for events (Example: #WCWS16 for the 2016 Women's College World Series), or by physically engaging the user in a fan app such as Fox's mobile application that allows the user to take other actions while they are watching the show (Example: voting, viewing content, or extended episodes). Researchers of the social web concluded that engagement increased commitment of the viewership, and thus the return of viewer increased exponentially (Dabbish, Farzan, Kraut, & Postmes, 2012). "Social TV" has since become the norm for a viewer as the individual becomes engaged in the practice of "second-screen methods."

## **2.2 Emotional Engagement**

Emotional engagement has been an area of murky water for social media study until recently. Prior to the inclusion of Facebook moods, there was limited ability to track emotion and reaction outside of the physical posts (De Choudhury & Counts, 2012). Only being able to interpret meaning and keywords that became attributed with the related emotion handicapped studies for what the true emotional engagement was if not clearly stated. As Facebook has upgraded its posting capabilities, users are now able to convey emotion in an original post, as well as their SME. The company created six different types of defined emotions that a user could

choose from when engaging, or taking action, in the post; like, love, haha, wow, sad, and angry.

This engagement measure has been built into the company's algorithm so that users will see more posts based on their reaction to the content (Constine, 2016). This means that a user, who likes or loves a page's post, will see more of that page in the future, while the opposite will happen with sad or angry reactions.

### **2.3 Exposure Based on Measurement of Engagement**

Bringing together the definition created for what engagement means in a literal sense, the conclusion can be drawn that SME is a product of the user's ability to take action with what they are viewing in a post and that reaction becomes the measurement of SME. The actions taken in SME (liking, sharing, reacting, etc.) are key to a positive social media experience that creates relationships and channel loyalty, thereby increasing views and followers (Lim, Hwang, Kim & Biocca 2015). The account relies on the SME to spread its social media messages and posts to other viewers as the reaction is needed for it to "spider web" across the platform. However, the importance of timing of SME is different based on the platform.

For a social media post to be seen by its followers on Facebook, it relies on content having SME not only on the physical post seen, but the content published over time (Oremus, 2016). While the actual algorithm that Facebook has released on its site is a secret to the company, Oremus' study into what content can be viewed by the user explains the basics of how it works, and how an organization can still reach its audience. Facebook ranks the average user's pages liked, users "friended," and content that the person publishes via the person's cookies (elements of a user's internet activity that tracks website visits and data while using the site) active on the computer (Oremus, 2016). This means in order to reach a larger audience, the content that is published on a Facebook page must create engagement to not only be successful

for the particular article or image, but for the long-term growth of the account. The assumption is that more likes and shares by an individual over time means the follower or user will see more of the content in the future as will the user's friends or followers.

To be successful on Facebook, companies do not have to rely on having an instant impact on the viewer to have SME. This practice is not the case for Twitter with 92% of retweets happening within the first hour, 1.63% in the second hour, and less than a percent in the third (Sysomos, 2010). Unlike Facebook, content published on the platform must engage the user instantaneously and enable the person to create an action so that the message can reach additional viewers, and potentially gain more followers.

In terms of the weighted value of the SME terms used for likes, shares, retweets, and comments, it must be noted that the value of likes across Facebook and Twitter hold different value to creating SME. Likes on Facebook are used in the platform's algorithm so that the social media post can be viewed by other followers, while a like on Twitter does not equate to additional views.

With different weights to the value of the different types of SME, Nate Smitha's Engagement Rate (ER) used by Sysomos gives the ability to compare posts used by organizations based on the access that the user has to the pages data across both Facebook Insights data and Twitter Analytics (Smitha, 2013). With access to the data provided by Facebook and Twitter, a measure can be taken to calculate the engagement rate. Therefore,  $ER = \frac{\text{People who liked, commented, shared or clicked on the post}}{\text{post reach (people who physically saw the post)}}$ . However, with limited availability to this data when trying to calculate ER, Smitha limits the equation to  $ER = \frac{\text{total engagement}}{\text{total followers of the page}}$ , viewing ER as a percentage to total fans. This equation is also weighted by the ability that

the physical action of engagement has (like, comment, retweets) and its ability to spread the content. For example, likes are removed from total engagement on Twitter due to the limitation the action has to spread the content.

## **2.4 Social Media Practices and Studies in Athletic Settings**

Pat Donahue, digital media coordinator of the NHL's Los Angeles Kings, says the key to a team's ultimate social media goal should be focused on engagement (Rogan, 2013). Blending of traditional marketing strategies already employed throughout athletics to social media projects can help create longer-termed relationships with the followers of the organization (O', M. & Shea, 2011).

### **2.4.1 Timing in Athletic Social Media**

One of social media's best practices, is timing, according to research done for Major League Baseball from 2013-14 (Watanabe et al., 2015). Examining a year's worth of data from July 6, 2013 – July 27, 2014 on Twitter, the researchers tracked follower changes of all of MLB's franchises as well as engagement statistics. The results showed the different trends that were created during the season as well as the off-season and importance of timing of social media posts to create engagement and followership. The study revealed that major events such as the World Series or All-Star Game had the largest ability to reflect change in the accounts.

The increase in engagement and account followers then came from major dates during the course of the regular season. For the All-Star Game, it rose more than 45 percent and specific game days saw a rise of more than 24 percent. Winning streaks of two and four games saw a rise that doubled their norm, while the alternate losing streak dropped the overall engagement rate by more than 30 percent. Days of the week and months of the year also saw a large flux in Twitter engagement (also including a rate of increased followers) that varied between negative

regression on Sunday, to as high as 95 percent on Tuesdays, a day in which sees all 32 teams in action compared to limited availability on other days. Month-to-month data gave the researchers the most surprising result. After a steady climb between March and April, a large drop off of engagement happened with users between May-July with each month having a lower and lower number despite an outlier of the summer's All-Star Game (Watanabe, et al., 2015).

#### **2.4.2 Identification in Athletic Social Media**

As athletic fan interaction has become an influential piece in sports communication, the role that it has in creating a community out of the fans is an area in which social media practitioners have the opportunity to exploit (Wysocki, 2012). Sports communication is seen as the process in which people in an athletic setting share symbols as they create meaning through interaction (Pederson, Miloch & Lauecella, 2011). At the very heart of this idea are the basics of a person's fandom, and as a result, their link to initial propinquity, as later explored in this literature review. The social media brands of the organizations are in a position in which their social media pages become that person's community in order to display their fandom, or identification, with the team.

Walden and Waters (2015) explored the connotation that social media was a potential host in online communities in sports and that the individual identification with the brand could be used to attract the individual user to the page. Their study of professional social media accounts in 2012 revealed the early transition and early adopters of the platforms of Facebook and Twitter were able to transition communities from online forums onto the social media pages. According to Walden and Waters, online communities were formed primarily by groups of fans associated with the brand in forums, blogs, and team pages, but not in social media. The development of team pages in Facebook in 2012 helped lead to the growth and transition from

what the pair called "webs of space" into a controlled community in which the fan could identify themselves with the team.

In a look at the psychology of fan identification and fandom with a team, Beth Jacobson (2003) separated the notion in two different theoretical levels. The first level was placed on interpersonal or network level that included influences of friends and family to identify with the brand. Examples are parents who are fans of a specific team and influence their children to also become fans of that team. Secondly, Jacobson viewed fandom on a symbolic level. This level included identification to factors such as the team's location, name, logo, colors, and fight song. She viewed fandom as "the desire to be part of the environment created by a winning team, or jumping on a bandwagon" (Jacobson, 2003, p. 8). This idea of Basking in Reflected Glory (BiRGing), defined as the tendency of individuals to publicize their connection with successful others (Cialdini, Borden, Thorn, Walker, & Sloan 1976), is explored later in this study.

A study conducted by Catalyst, a social media investigative company from IMG, said that nearly 70 percent of sports fans that "like" or follow brands on social media use hashtags that are tied in with the team. This use creates additional actions that can help spread the brand and disseminate information using trending values on social media. According to the study of 2,100 fans aged 16-64, over 50 percent of sports fans are using social media on game days. (Broughton, 2013).

The most active of these groups are US Soccer fans. Soccer fans overall had a higher level of use in relation to sports than any other organization. Seventy-two percent of US Soccer fans use Facebook, 78 percent used YouTube, 45 percent used Twitter and 25 percent used Instagram. The overall sports fan used Facebook 73 percent of the time, but the value dropped to 54 percent on YouTube, 37 percent on Twitter and just 18 percent on Instagram (Catalyst, 2014).



However, looking at social media's ability to increase profit, 64 percent of people who returned the survey said that they engaged positively with promotions and fan offers displayed from their team on game day. Catalyst (2014) also found that fans are more willing to connect to a consumer brand that aligns with their respective team, but the reverse effect would be true for a brand aligning with a rival brand or if they feel the content is too frequently advertised.

The growth of social media is not only affecting the brand of a team, but the individual in sports. Athletes, coaches, reporters, owners, and everyone in-between in an athletic organization are looking to take advantage of this market that is responding to social media. In 2010, LeBron James, a player for the Cleveland Cavaliers, opened a Twitter account for the first time and without posting a single tweet, had 18,000 followers an hour after opening the account (Pieper, 2013). Two days later came "The Decision," James' one-hour special deciding which team he had chosen to sign with during free agency. Immediately following his signing, social networks exploded with more than 10 million active users dispersing the news across social media.

## **2.5 SME in Relation to Dialogic Theory**

As social media began to grow and evolve, so to did the study of the practice of how it affected communication and its relation to theory. Early studies in communication theory for social media centered on social exchange theory, uses and gratification, as well as social penetration theory. However, the theories were largely based on a one-way model of communication and less on the ability to increase SME through the use of two-way communication (Waters, 2011).

Conducting a survey in 2013 of business executives, Brown, Sikes & Willmott (2013) found that customer SME has become a top-ten priority for companies as the digital material conveys a message to shareholders of what the brand is trying to accomplish or represent.

"Engage or die," Brian Solis said of the value of engagement in social media (Solis, 2010). He explained that a company that does not focus resources on creating and expanding SME does not expand in the first place.

As collegiate athletic departments and athletic organizations continue to place a focus on social media practices and procedures, the importance of creating a singular message and strategy is vital to success. An emphasis on positive dialogue with the public is taking on increased importance in the development of such social media strategies across all platforms available to the PR practitioners at the controls of the department.

The emphasis on the message, or dialogue, is placed on the relationship with the consumer (Kent & Taylor, 2002). Dialogic Theory of Public Relations is reduced down to five features of dialogue;

Mutuality- "acknowledgement that organizations and publics are inextricably tied together" (Kent & Taylor, 2002, p. 25)

Propinquity - "organizations should make themselves physically and emotionally accessible to their publics" (p. 25)

Empathy - "supporting others and confirming the importance of their views" (p. 26)

Risk - "Implicit in all organizational and interpersonal relationships is some risk" (p. 28)

Commitment – taking a commitment in the process to create two-way communication as a practice (p. 28).

### **2.5.1 Propinquity in Social Media**

Because the current research is concerned with what can and cannot increase the engagement rate with the followers of an athletic brand, the focus of the study will be on propinquity, or the temporality and spontaneity of interactions with publics (Kent & Taylor,

2002). Propinquity is an important aspect of online communication and the forming of communities through individuals with the respective page (Wessell, 2012). Social media pages, including the fan pages reviewed in this study, come together as examples of propinquity in which the fans of the respective athletic brands have formed the sense of online community on Facebook or Twitter. The individuals have identified themselves as fans of the team, and thus, have become a "member" of the social media outlet.

Kent and Taylor (2002) view propinquity as an advocate for rhetorical exchange, or an orientation to a relationship. Propinquity includes three features; Immediacy of presence (parties involved are communicating in the present), Temporal Flow (the communication is relational and features an understanding between the two communicators), and Engagement ("Dialogic participants must be willing to give their whole selves to encounters" (p. 26)). Of the three features that Kent and Taylor identify, the temporal presence of propinquity in social media is a feature that has many factors present when forming online communities (Croitoru, Wayant, Crooks, Radzikowski, & Stefanidis, 2015). Their research in how online communities formed provides a baseline for what it takes for those in the real world to come together in cyberspace. The study concluded that levels of fandom, location, access, and relation to physical presence created the greatest opportunity for individuals to come together in online communication.

Prior to 2009, research concluded that organizations rarely engaged on Twitter, and used the social media platform as a one-way dialogue to blast their own messages across to users (Lovejoy, Waters, & Saxton, 2012). Kent and Taylor (2002) discussed creating a relationship with the user when the web was viewed as a "dialogic communication medium." The possibility of building a relationship via social media helps the organization convey a feeling of being more human to the viewer of the content. For example, a brand that responds to user created feedback

online presents a more personalized experience for the users through two-way communication (Nordstrom, 2014). Nordstrom conveyed that the first step toward creating interactivity or engagement is embracing the practice of listening to the user. Creating SME with followers, not only helps the account seem more human to viewers, but also provides a way to influence positive or negative messages.

### **2.5.2 A Visual World in Social Media**

A practice that social media has adopted in order to increase SME and generate two-way communication from the viewer is the use of digital graphics that can range from video and gifs, to photos, Infographs and more. This practice has created an ever-more competitive world in the social media setting with 63 percent of social media being made up of images (Patel, 2015).

Imagery in social media increases the ability to create the opportunity for propinquity as users relate to the content that is being provided to them through an organization's post. The user is now able to identify with the brand or individual featured in the graphic, better enhancing the chances for SME.

As visual communication of brand becomes a primary practice to increase SME, understanding how the selection of images can enhance individual understanding and reaction is an important aspect that has been under studied within an athletic setting for social media. Understanding the perception and preference of digital content across the web has helped increase interest in growing visual theory (Schroeder, 2002). For social media, semiotics is used as a marketing tool to consciously penetrate the subconscious of consumers (Dasgupta, 2015).

Semiotics, or the study of signs, is an important aspect in helping the mind distinguish and make meaning of such signs. (Taylor, 2013). Ferdinand de Saussure developed early practices of semiotics, or semiology, that has later been applied to how we create meaning of not

only language but also visual signs in communication. The visual elements play a part in helping trigger the mind to create a reaction and become engaged in the content that they are viewing. In a study of how images are used in influencing others, social media activists have used the available platforms to freely display their content in an effort to convey opinion and increase following (Onursoy, 2015). The study revealed methods in which the symbols related to a viewer triggered a conscious meaning independent of size and color, displaying an underlying meaning and interpretation to the individual (Onursoy, 2015).

For example, organizations using images to attract attention to deforestation would use primarily green images and text and signs like trees to represent the forest. Protesters of government might use physical signs such as a fist to represent power. The relation from these graphical signs was developed in our subconscious from birth and through how we were raised and educated (Schroeder, 2002). Based on the meaning that an image gives to an individual, a reaction is sparked (Parsa, 2004.). The reaction is the piece social media practitioners focus on when choosing the visual to place within the social media post to create the highest level of SME. In athletic social media, the visual cues have been developed not only in communication, but also in the identification for the user to the brand. The logos, or icons of the team, are a symbol of the user's fandom and an aspect that the user may relate to. These logos create a mental reaction of the person and through the theory of semiotics, are a way for the person to react to a picture that contains the logo. Beyond just logos, an individual also has been trained to react to various individuals within the athletic organization (Sanderson, 2013). In Sanderson's review of athletes that stepped into the social media spotlight for the first time or were rookies who entered a professional league for the first time, the advertisement and identification of the player was found to have the highest impact in growing the individual's social media presence.

### **2.5.3 Basking in Reflected Glory and its Application to Athletic Social Media**

Social media practitioners hoping to increase SME also look to enhance the opportunity in which they can achieve the highest levels of distribution to the account's followers. Using personal experience with the social media accounts within the athletics world, the best times to create SME appear to hinge on the success of the associated team in what is referred to as "Basking in Reflected Glory," (BiRG) established by Robert Cialdini et al. (1976). The concept says that it is common for individuals to show off the success of others to which they are connected to or influenced by. The study reviewed students and their willingness to display an "identity" to the school during a football season. Students were found to wear shirts of their university at a higher rate on days following the win of their team, and likewise, were less likely to showcase school spirit in days following a loss (Cialdini et al., 1976). Using this concept in social media practice, athletic practitioners try to capitalize on events where followers might have high engagement levels, which can be events such as a team's win, connecting with fans of an individual, or times in which a team or player received an award. The followers of the account are most likely to practice ways in which they "live vicariously through their success" (Jackson, 2012, p. 9) for the team in which they identify with. By living vicariously through the team's success, or lack of, the user also displays further forms of propinquity by coming together in the online setting to display their forms of fandom. The users have a platform or online page to display their self-identification with the athletic team.

Through general practice, fans with high levels of team identification were more likely to BiRG after a team's victory than fans with low levels of identification (Bernache-Assollant, 2007). Bernache-Assollant found that for what they called "soccer-fandom," fans were more likely to "blast" or associate themselves with the soccer organization by using words such as we,

our, and grouping terms to relate to their team. On social media, this practice can be found by individuals being more likely to share and comment on a team's post during winning scenarios and positive situations. On the flip side during the process of "CoRFing" (Cutting off Reflected Failure"), using linguistic choices to reflect the cognitive process of negative situations (Ghiglione, Matalon, & Bacri, 1985), an equal amount of fan blasting was seen, but was less likely to include terms that associate the individual with the team (Bernache-Assollant, 2007). Terms associated would be they, him, or naming individuals, rather than terms seen to group within. This application reflects on the practice of social media where a user may be less likely to share or like a social media post, but may still engage in an action by commenting in a negative manner.

## 2.6 Social Media Engagement

As a factor of this study, the process of understanding SME and its terms is an important factor in determining the weight each value holds and its meaning when comparing posts.

### Review of SME Terms Applicable to Study (Hootsuite, 2016)

| <u>SME Term and Platform</u>            | <u>Meaning</u>  | <u>Value in dispersal of content</u>                                     |
|---|---|--|
| F = Facebook / T=Twitter                |   |  |
| <i>Forms of Social Media Engagement</i> |   |  |
| Comment (F/T)                           | A response that is often provided as an answer or reaction to a blog post or message on social network. | Comments hold value in helping spread the content across both platforms. |
| Retweet (T)                             | When someone on Twitter sees  | Retweets are an instantaneous  |

|                   |   |   |
|-------------------|---|---|
|                   | <p>your message and decides to re-share it with his or her followers.</p> <p>A retweet button allows them to quickly resend the message with attribution to the original sharer's name.</p> | <p>form of SME on Twitter that allows the content to be shared with the person or person's followers that takes the action.</p>   |
| Share (F)         | <p>When content is reposted on a social media site through another user's channel.</p>  | <p>A popular "button" used by social media platforms, clicking share on Facebook is a similar action to retweeting, as it goes to the users followers and friends.</p>                                |
| Like (F/T)        | <p>An action that can be made on a platform, instead of writing a comment or sharing a post, a user can click the Like button a quick way to show approval of the post.</p>                 | <p>The value that a like has differs based on platform. In Facebook's algorithm, likes are a key factor in the dispersal of a post. On Twitter, a like does not equate to more views on the post.</p> |
| Quote Retweet (T) | <p>A way to retweets where a user can include their own comments along with the original Tweet</p>  | <p>Much like the physical action of Retweet, Quote Retweet allows the post to be discriminated to the user's</p>  |



|   |  |  |
|---|--|--|
|   |  | followers.   |
| Followers (F/T)   | The number of accounts that are following a Facebook or Twitter page.  | In order to create an accurate engagement rate, the number of followers is assessed to track the percentage of SME.                                    |
| <b><i>Properties of Social Media and Engagement</i></b> |  |  |
| Infographic   | A graphical depiction of information that displays data for the user to see visually.                                      | In athletic social media, Infographics are use to relay statistical game information or content to the follower.                                       |
| Impressions   | An impression refers to the way in which marketers and advertisers keep track of every time an ad is "fetched" and counted | Impressions are a measurement of the physical number of views that a post has on the social media platform.  |
| Interest  | In social media terms, interest is defined as the users association to the page or post and its meaning to them.           | The interest level of the follower is an important aspect in gauging what type of posts to make and the impact that it has on the individual or group. |
| Commitment  | Commitment is the value that a   | In athletic social media,  |

|            |   |   |
|------------|---|---|
|            | group, page, or organization has to the user and their relation to taking action within the group or page.  | keeping the fan committed to the page and coming back for content helps sustain a social media page and its activity.       |
| Motivation | Motivation in social media refers to physical act of how to engage a user to take action by either enticing action or asking a question to produce a social media action. | Motivation to like, share, or comment on a post is an important piece of measuring the SME in types of post.                |
| Saturation | Producing too much content to the user, thus the user becomes less interested in the social media posts being made.   | Over-saturation of a social media page can lead to a user unfollowing the account or becoming disinterested in the content. |

## **2.7 Research Questions**

The value of having visual content in social media cannot be overstated. Posts with visuals receive on average 94% more views (Patel, 2015). It was also noted in the same study that as SME increases, the recognition of the brand image, or defined design style, became an important factor in building a relationship with followers. In a review of social media accounts across different levels of athletics, different strategies (or a lack there of) were found between the organization's accounts. Local accounts in the Dallas-Fort Worth Metroplex across professional

sports accounts such as the Texas Rangers (MLB), FC Dallas (MLS), and the Dallas Cowboys (NFL) were heavily driven in visual posting and practicing methods to create two-way communication. These accounts also showed higher levels of SME across two days of posting based on how users engaged with the posts in terms of likes, shares, and comments. At the lower level of the visual spectrum, the accounts of the Dallas Wings (WNBA) and Dallas Charge (National Pro Fastpitch) relied on primarily text-only content during the brief two-day review of the accounts. However, it must be noted that on the accounts that were reviewed in the DFW area for professional sports, the size of the organization's staff likely impacts the ability to create visual content, as well as the creation of social media strategies. This leads to the question; "Does content matter?"

RQ1A: Is there a difference in the amount of SME in athletic social media posts on Facebook that use visual media such as photos, graphics, or video compared to posts that are text-based only?

RQ1B: Is there a difference in the amount of SME in athletic social media posts on Twitter that use visual media such as photos, graphics, or video compared to posts that are text-based only?

As semiotics plays a major role in how content is analyzed and interpreted by an individual, the identification of visual elements and the types of content displayed in the elements must be addressed to determine what creates the highest levels of SME. As noted by Sysomos, studies have predominately been based on the study of the organizations in terms of the followers' identification and engagement with the physical brand, rather than the types of social media content posted by the brand. This echoes the question once again, does content matter?

RQ2A: Is there a difference in the amount of SME based on the type of visual content that is displayed in athletic social media posts on Facebook?

RQ2B: Is there a difference in the amount of SME based on the type of visual content that is displayed in athletic social media posts on Twitter?

In a continued exploration defined by RQ2A and RQ2B, Sanderson's review of the identification of an individual to grow the person's brand has been a study that has only reviewed the effect on an athlete's social media account, but not on the athlete's organization they are a part of. Studies have looked at individual growth and popular players having the ability to grow a followership from their fans instantaneously. Using the results from Sanderson who found newcomers to social media received an increase in SME on their individual accounts, does the opposite effect occur on a team's account when using an individual to increase engagement?

RQ3A: Is there a difference in the amount of SME on Facebook when using a person that is labeled as a fan favorite player in the visual content?

RQ3B: Is there a difference in the amount of SME on Twitter when using a person that is labeled as a fan favorite player in the visual content?

Finally, as the combined practices of the first three questions provide a base of review for creating higher levels of SME across athletic social media, the BiRG effect is an important factor in the equation for creating content. Fans who have identified with their teams through various forms have chosen to follow their teams online, but what effect does a win or a loss have on their ability to publically identify with that brand during positive or negative times for the organization in social media?

RQ4A: Is there a difference in the amount of SME on Facebook based on a team's performance within 48 hours of a social media post?

RQ4B: Is there a difference in the amount of SME on Twitter based on a team's performance within 48 hours of a social media post?

## **Method**

A content analysis of social media posts spanning September 16, 2016 through October 12, 2016 of social media posts and across 10 organizations of the National Football League was used as data.

In order to create an even playing field in analyzing the impact of image content on SME, several factors of social media capabilities within organizations measured had to be addressed prior to the selection of the accounts to study; staff potential for creating content, followers of the accounts, a league that is in an active season of play, as well as an even comparison between the level of potential interest in the team. This ruled out the leagues of the National Hockey League, National Basketball Association, and primary accounts associated with athletic departments in the NCAA. The NHL and NBA were excluded due to being out-of-season at the time of study. College social media accounts were also excluded from the study due to the possibilities of uneven data fluctuating based on universities posting different sports that may hold different levels of interest and create an uneven return of data. Out of active, in-season sports, the NFL was selected for this study as it was deemed the most appropriate with the largest fan base of the active leagues.

To create a manageable and accurate selection of data, 10 NFL teams were chosen for examination. During the study's test, 16 teams were originally chosen based on their position in the alphabet. However, after the test and in accordance with making the study more manageable, the 16 teams were reduced to 10 teams. The remaining teams to be studied were selected at random based on a drawing from the original 16. The 10 teams studied are listed below.

|           |          |          |         |
|-----------|----------|----------|---------|
| Cardinals | Ravens   | Bengals  | Cowboys |
| Lions     | Dolphins | Patriots | Giants  |

|         |          |
|---------|----------|
| Raiders | Steelers |
|---------|----------|

### **3.1 Data Collection Process**

#### **3.1.1 Collection Method**

The data-collection period was taken between the hours of 12 p.m. and 1 p.m. on each day of the week, except for Saturday. Saturday was selected as a day exempt from the study upon convenience. The times selected for review were chosen based on testing of the method during a three-day review. During review, it was noticed that taking data at 9 a.m. restricted some day-of game data and postgame data. Thus, the time of collection was changed to accommodate a timeframe that would create the best opportunity to review all types of data for the study.

Social media posts were selected by reviewing posts that were 12 to 24 hours old. This time frame was chosen based on Sysomos' review that 96% of SME happens within 12 hours, and 97% within 24 hours, thus giving the appropriate time for a social media post to receive interaction. The cutoff time of 24 hours was selected in order to prevent duplicate entries in the collection process.

#### **3.1.2 Platform and Win/Loss Examination**

As there are differences in the weight of what it means to like a post across Facebook and Twitter, the data was separated in order to explore SME; thus, posts across Facebook were given a 1, posts on Twitter were assigned a 2 to differentiate the two types during the examination period. Posts examined during the 24-hour period that produced text-only posts on social media were given a 1, while posts with visual elements or video were given a 2. Each post was

measured for SME with data collected for likes, shares, and comments for posts created on Facebook, while retweets, favorites, and replies were measured on Twitter.

Each team's win and or loss effect on SME was measured during a 48-hour time period. Teams that won and posted in a 48-hour period were coded with a 2, a loss within the period was coded with a 3, and posts made outside of the 48-hour time period were given a 1 as they were excluded from answering RQ4A/B.

### **3.1.3 Visual Element Coding**

The visual elements and content that is included with social media posts produced were coded based on the following criteria:


- Is there any editing of the photo? Example; photos that have text or other visual elements added to the photo other than just the raw photo. (1- No, 2- Yes)
- Visual content in photo – What type of content does the image convey? The final 12 categories of examination were determined during the three-day testing period based on the frequency of appearance.

#### **1. Game Action**





## 2. Practice Photo

 **Dallas Cowboys** @dallascowboys · Aug 1  
Ezekiel Elliott finally went up against the Cowboys defense & here's what happened.

 : [bit.ly/2aYxSZk](https://bit.ly/2aYxSZk)



## 3. Posed Photos



 **Dallas Cowboys** @dallascowboys · Jul 28  
These rookies are ready #CowboysCamp  
📍 Ezekiel Elliott and Dak Prescott

## 4. Player/Team celebration

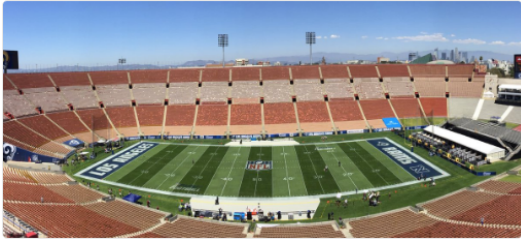


 **Dallas Cowboys** @dallascowboys · 14h  
When you see your best friends score TDs, you have to go get one of your own. #DALvsLA  
📍 Terrance Williams and Dez Bryant

## 5. Stadium photo



**Dallas Cowboys** @dallascowboys · 18h  
These stands will soon be PACKED! #DALvsLA



## 6. Players/Team in the Community



**Dallas Cowboys** @dallascowboys · Jul 26  
Thank you to everyone who's come out to say hi at Pt. Mugu!  
#CowboysCamp  
👤 Jason Witten and Jessica Marie



## 7. Fans



**Dallas Cowboys** @dallascowboys · Aug 10  
.@DaryJohnston well represented out at #CowboysCamp



## 8. Warm Up

## 9. Infographic



10. Video or Gif

11. Multiple Photos in a Single Post

12. Other or Unclear/Can't be Determined

- Does the photo contain a fan favorite? (1-No, 2-Yes)
  - The fan favorite was determined by using measurable data according to the 2016 NFL Jersey Sales available on NFL.com on Aug. 15, 2016.
- Does the photo contain an individual in a primary position? (1-No, 2- Quarterback, 3- Running Back, 4- Head Coach).
  - The three positions and head coach were selected based on Catalyst data that revealed that these four positions were the most recognizable to viewers.
- Text use – Does the photo contain any elements of text on the visual content (1- Yes, 2- No)

### 3.2 Testing and Intercoder Reliability

Coding Example:

Using the coding method above, the following sequence of posts on Twitter were reviewed:



| Date/Post # | Within 48 hours of win/loss? | Followers on account | Facebook or Twitter? | Retweets or Shares | Likes |
|-------------|------------------------------|----------------------|----------------------|--------------------|-------|
| 8/14 - 1    | 1                            | 1,341,998            | 2                    | 21                 | 108   |
| 8/14 - 2    | 1                            | 1,341,998            | 2                    | 213                | 633   |
| 8/14 - 3    | 1                            | 1,341,998            | 2                    | 47                 | 163   |

| Comments | Visual Element? | Visual Content Type | Fan Favorite? | Primary Position? |
|----------|-----------------|---------------------|---------------|-------------------|
| 0        | 1               |                     |               |                   |
| 11       | 2               | 10                  | 1             | 1                 |
| 1        | 2               | 1                   | 2             | 2                 |

Intercoder reliability was measured during a three-day process in which the independent coder and the author reviewed social media posts from all 10 teams at the same time every

morning. The data was compared in order to meet Holsti's 85% level of confidence, as well as create a general test of the proposed methods of research.

The test revealed the following measures of reliability; edited social media posts = .93; image type = .92; primary individual = .94; top player = .96.

*\*Notes: during the reliability test and coding test, it must be noted that several changes from the original study took place and have been added into the data collection noted above. Collection time changed from 9 a.m. to 12 p.m. Question 9 organized to meet the frequency of image content. Questions 10 and 11 were added to coding sheet to help better answer RQ3A and RQ3B and the effect that the content in an image has on SME.*

After the 10 National Football League teams were selected and tested, the independent coder and the author split the organizations into two groups of five teams for measurement. The teams were divided randomly using a drawing.

Data was examined on three different levels to provide clarity to research questions. The initial calculation of data examined the overall mean of SME in the data with Facebook and Twitter calculated together. Second and third measures were taken by dividing the posts and re-measuring the data using the same methods in order to create an accurate set of data for Facebook and Twitters posts separately.

## Results and Discussion

### 4.1 Results and SME Rate

During the study, 2,803 posts were examined with 2,618 containing an image and 175 containing text-only. The 10 teams averaged 280 posts with a mean of 127.1 posts on Facebook and 153.2 on Twitter. Teams were found to have a higher activity within the two days leading up to a scheduled game; post-game activity was based on performance. A team that won was more likely to reach 10 posts (96%) on each platform, while the losing team was found to meet the 10 needed 78% of the time.

**Table 1 | Social Media Frequency**

| Team         |  | Social Media Site |             | Total       |
|--------------|--|-------------------|-------------|-------------|
|              |  | Facebook          | Twitter     |             |
| Bengals      |  | 48                | 61          | 109         |
| Steelers     |  | 136               | 168         | 304         |
| Cardinals    |  | 99                | 136         | 235         |
| Cowboys      |  | 145               | 151         | 296         |
| Dolphins     |  | 155               | 174         | 329         |
| Giants       |  | 131               | 199         | 330         |
| Lions        |  | 124               | 142         | 266         |
| Patriots     |  | 110               | 161         | 271         |
| Raiders      |  | 208               | 202         | 410         |
| Ravens       |  | 115               | 138         | 253         |
| <b>Total</b> |  | <b>1271</b>       | <b>1532</b> | <b>2803</b> |

**Table 2 | Mean average of teams**

| Team         | Percent of RT/Share | Percent Likes | Percent Comments |
|--------------|---------------------|---------------|------------------|
| Bengals      | .0097               | .0570         | .0054            |
| Steelers     | .0374               | .1169         | .0022            |
| Cardinals    | .0154               | .1125         | .0042            |
| Cowboys      | .0273               | .1011         | .0023            |
| Dolphins     | .0078               | .0393         | .0070            |
| Giants       | .0092               | .0549         | .0027            |
| Lions        | .0055               | .0230         | .0029            |
| Patriots     | .0285               | .1024         | .0025            |
| Raiders      | .0097               | .0607         | .0021            |
| Ravens       | .0193               | .0983         | .0034            |
| <b>Total</b> | <b>.0170</b>        | <b>.0758</b>  | <b>.0033</b>     |

The frequency of posts by each team is shown in Table 1 displaying a disparity between the activities of the 10 teams studied. The Oakland Raiders were shown to be the most active team, while the Cincinnati Bengals displayed the lowest level of activity.

To give an accurate calculation based on the weight of each factor of SME, the social media equation used to analyze athletic social media content by Sysomos was used to analyze the data. As a product of its significance in the weight of the platform, Likes is only used in the equation for the social media engagement rate (SMER) of Facebook.

$$\text{Facebook SMER per 1,000 followers} = (\text{Shares} + \text{Likes} + \text{Comments} / \text{Fans}) \times 1,000$$

$$\text{Twitter SMER per 1,000 followers} = (\text{Shares} + \text{Comments} / \text{Fans}) \times 1,000$$

**Table 3 | Posts with or without images (Facebook)**

| Group Statistics |                  |      |        |                |                 |
|------------------|------------------|------|--------|----------------|-----------------|
|                  | Pic? No/Yes      | N    | Mean   | Std. Deviation | Std. Error Mean |
| SMER             | Picture Not Used | 7    | 1.7827 | 1.69246        | .63969          |
|                  | Picture Used     | 1263 | 1.5551 | 3.43153        | .09656          |

| Independent Samples Test |                             |   |      |                              |       |
|--------------------------|-----------------------------|---|------|------------------------------|-------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |       |
|                          |                             | F                                       | Sig. | t                            | df    |
| SMER                     | Equal variances assumed     | .077                                    | .781 | .175                         | 1268  |
|                          | Equal variances not assumed |   |      | .352                         | 6.277 |

| Independent Samples Test |                             |                              |                 |                       |                      |
|--------------------------|-----------------------------|------------------------------|-----------------|-----------------------|----------------------|
|                          |                             | t-test for Equality of Means |                 |                       |                      |
|                          |                             | Sig. (2-tailed)              | Mean Difference | Std. Error Difference | 95% Confidence Lower |
| SMER                     | Equal variances assumed     | .861                         | .22762          | 1.29825               | -2.31934             |
|                          | Equal variances not assumed | .736                         | .22762          | .64693                | -1.33862             |

An independent-samples *t* test was conducted to answer RQ1A as displayed in Table 3.

Table 3 revealed that there was not a significant difference in SME based on posts without visual elements ( $M=1.78, SD=1.69$ ) and with visual elements ( $M=1.55, SD=3.43$ );  $t(1268)=.175, p=.861$ .

**Table 4 | Posts with or without images (Twitter)**

| Group Statistics |                  |      |       |                |                 |
|------------------|------------------|------|-------|----------------|-----------------|
|                  | Pic? No/Yes      | N    | Mean  | Std. Deviation | Std. Error Mean |
| SMER             | Picture Not Used | 168  | .4674 | .63275         | .04882          |
|                  | Picture Used     | 1362 | .4647 | .73942         | .02004          |

**Independent Samples Test**

|      |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |
|------|-----------------------------|---|------|------------------------------|---------|
|      |                             | F                                       | Sig. | t                            | df      |
| SMER | Equal variances assumed     | .112                                    | .738 | .046                         | 1528    |
|      | Equal variances not assumed |   |      | .052                         | 227.206 |

**Independent Samples Test**

|      |                             | t-test for Equality of Means |                 |                       |                          |
|------|-----------------------------|------------------------------|-----------------|-----------------------|--------------------------|
|      |                             | Sig. (2-tailed)              | Mean Difference | Std. Error Difference | 95% Confidence ... Lower |
| SMER | Equal variances assumed     | .963                         | .00273          | .05957                | -.11413                  |
|      | Equal variances not assumed | .959                         | .00273          | .05277                | -.10125                  |

An independent-samples *t* test was conducted to answer RQ1B as displayed in Table 4. Table 4 revealed that there was no significant difference between posts without visual elements ( $M=.4674, SD=.63$ ) and posts with visual elements ( $M=.4647, SD=.74$ );  $t(1528)=.046, p= .963$ .

**Table 5 | SME in relation to image content (Facebook)**

**ANOVA**

| SMER           |                |      |             |        |      |
|----------------|----------------|------|-------------|--------|------|
|                | Sum of Squares | df   | Mean Square | F      | Sig. |
| Between Groups | 1356.020       | 11   | 123.275     | 11.438 | .000 |
| Within Groups  | 13504.928      | 1253 | 10.778      |        |      |
| Total          | 14860.947      | 1264 |             |        |      |

A one-way between subjects ANOVA was conducted to compare the effect of image type on SME on Facebook to answer RQ2A. There was a significant effect in the type of image used on SME at the  $p < .05$  level for the conditions [ $F(11, 1253) = 11.438, p < .001$ .]

Post hoc comparisons using the Tukey HSD test indicated the mean score for the Infographic condition ( $M=3.45, SD = 6.52$ ) and Player/Team Celebration condition ( $M=2.09, SD= 2.50$ ) were significantly above the overall mean ( $M=1.55, SD= 3.43$ ).



**Table 6 | SME in relation to image content (Twitter)**

| ANOVA          |                |      |             |       |      |
|----------------|----------------|------|-------------|-------|------|
| SMEr           | Sum of Squares | df   | Mean Square | F     | Sig. |
| Between Groups | 21.611         | 11   | 1.965       | 3.687 | .000 |
| Within Groups  | 723.183        | 1357 | .533        |       |      |
| Total          | 744.794        | 1368 |             |       |      |

A one-way between subjects ANOVA was conducted to compare the effect of image type on SME on Twitter to answer RQ2B. There was a significant effect in the type of image used on SME at the  $p < .05$  level for conditions [ $F(11,1357) = 3.69, p < .001$ ].

Post hoc comparisons using the Tukey HSD test indicated the mean score for the Infographic condition ( $M = 0.63, SD = 1.09$ ), Player/Celebration condition ( $M = 0.78, SD = 0.81$ ), and Stadium condition ( $M = 0.52, SD = 0.68$ ) were significantly above the overall mean ( $M = 0.46, SD = 0.74$ ).

**Table 7 | SME of Edited Photos (Facebook)**

| Group Statistics |                 |     |       |                |                 |
|------------------|-----------------|-----|-------|----------------|-----------------|
|                  | Editing? No/yes | N   | Mean  | Std. Deviation | Std. Error Mean |
| SMEr             | Not Edited      | 716 | .0011 | .00134         | .00005          |
|                  | Edited          | 549 | .0022 | .00490         | .00021          |

| Independent Samples Test |                             |   |      |                              |         |
|--------------------------|-----------------------------|---|------|------------------------------|---------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |
|                          |                             | F                                       | Sig. | t                            | df      |
| SMEr                     | Equal variances assumed     | 95.936                                  | .000 | -6.037                       | 1263    |
|                          | Equal variances not assumed |   |      | -5.386                       | 611.439 |

As a product of the type of image that is used on Facebook, the visual elements that were edited were also examined to better answer RQ2A using an independent samples  $t$  test. There

was a significant effect in the scores for edited visual content ( $m = 0.0022$ ,  $SD = 0.0049$ ) and unedited visual content ( $M = 0.0011$ ,  $SD = 0.0013$ );  $t(1263) = -6.037$ ,  $p < 0.001$ .

**Table 8 | SME of Edited Photos (Twitter)**

| Group Statistics |                 |     |       |                |                 |
|------------------|-----------------|-----|-------|----------------|-----------------|
|                  | Editing? No/yes | N   | Mean  | Std. Deviation | Std. Error Mean |
| SMER             | Not Edited      | 751 | .0005 | .00068         | .00002          |
|                  | Edited          | 618 | .0004 | .00080         | .00003          |

| Independent Samples Test |                             |   |      |                              |          |
|--------------------------|-----------------------------|---|------|------------------------------|----------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |          |
|                          |                             | F                                       | Sig. | t                            | df       |
| SMER                     | Equal variances assumed     | 1.035                                   | .309 | 1.171                        | 1367     |
|                          | Equal variances not assumed |   |      | 1.154                        | 1222.035 |

| Independent Samples Test |                             |                              |                 |                       |                               |
|--------------------------|-----------------------------|------------------------------|-----------------|-----------------------|-------------------------------|
|                          |                             | t-test for Equality of Means |                 |                       |                               |
|                          |                             | Sig. (2-tailed)              | Mean Difference | Std. Error Difference | 95% Confidence Interval Lower |
| SMER                     | Equal variances assumed     | .242                         | .00005          | .00004                | -.00003                       |
|                          | Equal variances not assumed | .249                         | .00005          | .00004                | -.00003                       |

The impact that edited visual content had on the SMER was examined in Table 8 to provide a factor of RQ2B using an independent samples t-test, revealing there was no significant difference between edited visual content ( $M = .0004$ ,  $SD = 0.009$ ) and unedited visual content ( $M = .0005$ ,  $SD = 0.0007$ ).

**Table 9 | SME by using a Top 50 Player (Facebook)**

| Group Statistics |            |      |        |                |                 |
|------------------|------------|------|--------|----------------|-----------------|
|                  | NFL Top 50 | N    | Mean   | Std. Deviation | Std. Error Mean |
| SMER             | No         | 1097 | 1.4519 | 3.29537        | .09950          |
|                  | Yes        | 168  | 2.2239 | 4.14708        | .31995          |

**Independent Samples Test**

|      |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |
|------|-----------------------------|---|------|------------------------------|---------|
|      |                             | F                                       | Sig. | t                            | df      |
| SMER | Equal variances assumed     | 9.376                                   | .002 | -2.725                       | 1263    |
|      | Equal variances not assumed |   |      | -2.304                       | 200.574 |

**Independent Samples Test**

|      |                             | t-test for Equality of Means |                 |                       |                          |
|------|-----------------------------|------------------------------|-----------------|-----------------------|--------------------------|
|      |                             | Sig. (2-tailed)              | Mean Difference | Std. Error Difference | 95% Confidence ... Lower |
| SMER | Equal variances assumed     | .007                         | -.77203         | .28336                | -1.32793                 |
|      | Equal variances not assumed | .022                         | -.77203         | .33507                | -1.43273                 |

Facebook posts were examined through an independent-samples *t* test to answer RQ3A and the impact of using a NFL Top-50 player in visual content. There was a significant difference in the SMER for posts with a Top-50 player ( $M = 2.22, SD = 4.15$ ) compared to posts without a Top-50 player used ( $M = 1.45, SD = 3.30$ );  $t(1263) = 2.725, p = .007$ .

**Table 10 | SME by using a top-50 player (Twitter)**

| Group Statistics |            |      |       |                |                 |
|------------------|------------|------|-------|----------------|-----------------|
|                  | NFL Top 50 | N    | Mean  | Std. Deviation | Std. Error Mean |
| SMER             | No         | 1187 | .0004 | .00067         | .00002          |
|                  | Yes        | 179  | .0008 | .00102         | .00008          |

| Independent Samples Test |                             |   |      |                              |         |
|--------------------------|-----------------------------|---|------|------------------------------|---------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |
|                          |                             | F                                       | Sig. | t                            | df      |
| SMER                     | Equal variances assumed     | 43.487                                  | .000 | -6.758                       | 1364    |
|                          | Equal variances not assumed |   |      | -5.011                       | 202.014 |

| Independent Samples Test |                             |                              |                 |                       |                      |
|--------------------------|-----------------------------|------------------------------|-----------------|-----------------------|----------------------|
|                          |                             | t-test for Equality of Means |                 |                       |                      |
|                          |                             | Sig. (2-tailed)              | Mean Difference | Std. Error Difference | 95% Confidence Lower |
| SMER                     | Equal variances assumed     | .000                         | -.00039         | .00006                | -.00051              |
|                          | Equal variances not assumed | .000                         | -.00039         | .00008                | -.00055              |

Posts were examined through an independent-samples *t* test to answer RQ3B and the impact of using a NFL Top-50 player in visual content on Twitter. An independent-samples *t*-test was conducted to compare posts with a Top-50 player compared to those without and a significant difference was found in posts with a Top-50 player ( $M = 0.0008, SD = 0.001$ ) compared to those without ( $M = .0004, SD = 0.0007$ );  $t(1364) = 6.758, p < .001$ .

**Table 11 | SME based on wins or losses (Facebook)**

| Group Statistics |             |     |       |                |                 |
|------------------|-------------|-----|-------|----------------|-----------------|
|                  | No/Win/Loss | N   | Mean  | Std. Deviation | Std. Error Mean |
| SMER             | Win         | 325 | .0031 | .00599         | .00033          |
|                  | Loss        | 212 | .0009 | .00129         | .00009          |

Facebook posts were examined using an independent-samples t-test to answer RQ4A and the effect of a team's performance on SME. An independent-samples t-test was conducted to compare posts within 48 hours of a team's win to the 48 hours after a team's loss. Table 11 revealed that there was a significant difference in favor of more SME after a team's win at a rate of ( $M = .0031, SD = .00599$ ) compared to after a loss ( $M = .0009, SD = .00129$ );  $t(535) = 5.083, p < .001$ .

**Table 12 | SME based on wins/losses (Twitter)**

| Group Statistics |               |     |       |                |                 |
|------------------|---------------|-----|-------|----------------|-----------------|
|                  | No/Win/Loss   | N   | Mean  | Std. Deviation | Std. Error Mean |
| SMEr             | Over 48 hours | 865 | .0004 | .00063         | .00002          |
|                  | Win           | 360 | .0008 | .00103         | .00005          |

| Group Statistics |             |     |       |                |                 |
|------------------|-------------|-----|-------|----------------|-----------------|
|                  | No/Win/Loss | N   | Mean  | Std. Deviation | Std. Error Mean |
| SMEr             | Win         | 360 | .0008 | .00103         | .00005          |
|                  | Loss        | 307 | .0003 | .00035         | .00002          |

Twitter posts were examined using an independent-samples t-test to answer RQ4B and the effect of a team's performance on SME. An independent-samples t-test was conducted to compare posts within 48 hours of a team's win to the 48 hours after a team's loss. Table 12 revealed that there was a significant difference in favor of more SME after a team's win at a rate of ( $M = .0008, SD = .00103$ ) and posts after a loss ( $M = .0003, SD = .00035$ );  $t(665) = 8.177, p < .001$ .

## **Discussion and Conclusions**

### **5.1 Overall Findings**

At the outset of the study, there was an anticipated idea that visual content in social media posts would impact SME. However, results concluded that RQ1A and RQ1B both returned results that showed there was not a significant difference in SME. Based on the data and the SMER for posts without content, the mean SMER was higher by 0.23. However, it must be noted that there was a return of only seven posts in which there was no visual content on Facebook and that with these results, there could be an alternate outcome with a larger sample size from the social media platform. Concurrently to Facebook, Twitter revealed a narrower gap within the mean SMER in posts with or without visual content, but once again the results concluded that the SMER in posts without visual content was higher by 0.003. These results provided more clarity and valid results with 168 data points to examine, thus providing a valid return of comparison. With this connotation, both RQ1A and RQ1B revealed that there was not an increase in SME in posts with visual content.

As the layers of the data are peeled off and examined as to what type of content provides the highest levels of SME, answers to RQ2A, RQ2B, RQ3A and RQ3B provided insights into the type of posts that influence users to take action on the content. Weighing the balance of the posts with visual content and without, the type of content also has an influence in possibly altering the results for the first two research questions, that with the right content, the posts with visual content would have been higher in future studies.

There was a wide disparity in SME based on the type of content that was posted on both platforms, with a return that showed Infographics, team/player celebrations and stadium photos had a significant difference from the mean using a one-way between ANOVA. The means for

these categories all showed a great increase in SME compared to that of other photos, independent of their posting frequency. Similar results were found in both social media platforms studied to give an accurate depiction of what social media practitioners should focus on in order to increase the two-way communication, as explained by the dialogic theory in relation to social media.

A bi-product of the overall type of content that was used in order to increase SME, the editing of content displayed an increased mean SMEr on Facebook, but not on Twitter. The edited content was measured for any aspects of visual editing that included placing logos on an image, displaying scores such as those included in the Infographic category for image type, as well as any other form of editing. The increase in this category by such a wide margin on Facebook (0.0011) and the lack of an increase on Twitter can be explained by the use of semiotic cues and the platform's practices on social media in terms of how content is disseminated. According to Facebook's algorithm and how media is spread over time, there is less of a need of instant reaction and an increased possibility in taking time to make a reaction to the content. The visual clues displayed in edited content spark a semiotic response based on the user's representation of the logos, colors, or types of edits in the photo that appear to be more prevalent in the Facebook platform. On the other hand, Twitter's mechanics force a more instant reaction to the content with much of its primary SME taking place instantaneously. Users have less time to make a reaction and distinction on the content that is being displayed to them. With Infographics being a primarily high-engagement category in both platforms and one of the categories that could be displayed in types of edited content, the results can also provide early answers to RQ4A and RQ4B and the results of a team having an effect on the SME. The reason for this can be

explained by the frequency in which this type of post is made in relation to the team's performance (team win = increased quantity of Infographics = higher SME).

Once again, the prevalent explanations for the increase in SMER means in the content could be explained by semiotics and the individual's identification to the team brand and player. The Top-50 Player, displayed as a list of fan favorites, showed that the users were more likely to engage with the content when they recognized the player, or liked the player.

One bi-product in exploring the individual used in created content further findings outside of the original study and the power of who was featured. The results found that using a quarterback in the content created the highest levels of SME overall. However, when a coach was featured the SME levels fluctuated based on the team's performance. When a post was made using a coach after a team's win, there was not a large increase in the SMER, but when there was a post made with a coach after a loss there was a large increase in engagement in the category of comments across both Facebook and Twitter. An explanation of this increase can be explained in the BiRG and CoRF effect. When a team losses, the increase in team's comments were portrayed primarily in a negative fashion as the user either unidentified themselves with the team or placed blame on the coach.

Lastly, a major player in an increase or decrease in SME across social media came in the form of team performance. For RQ4A and RQ4B, the results concluded a significant difference in posts on both Facebook and Twitter based on the result. The mean SMER difference on Facebook between a win and a loss was 0.0022 and on Twitter 0.0005. While the levels are just fractions of a percentage, the differences per 1,000 users creates a wide deviation in the team's performance.



## **5.2 Theoretical Discussion**

With social media studies and theoretical application still in early stages in terms of understanding popular practices and the social patterns that social media has created, the implications of the research scratch the surface in studying SME from an athletic standpoint. Social media has moved from a practice of one-way communication to a more two-way street in line with Dialogic Theory. This study's purpose relied on measuring the practices of better creating that two-way communication between the team's account and its following in order to increase the overall following. By revealing the practices in which a team can take advantage of not only increasing following, but increasing two-way communication, the organization can better relate to its fan base and cater to what the users and followers are reacting to. The social media practitioner has a base to use to create a dialogue of communication with the users, whether it be with the account itself or within the fan base. The users can utilize the platform to better relate themselves with the brand and increase the reach of the organization. By doing so, the communication and strength of the brand has better national and global prominence. The same can be said at the opposite end of the spectrum when the BiRG effect is applied to communication. In times of negative news such as losses or a player being removed or traded from the team, that two-way communication has a negative reaction and negative appeal to the brand. By posting an equal amount of content during a loss compared to that of a win or neutral period, the brand exposes itself to negative connotation and a more hostile environment for its follower base. During the study, an examination of the posts during a negative timeline for the page revealed a higher rate of comments on the posts. The comments had a higher likelihood of being negative for the page and had an increase of users from outside of the community creating a negative environment by what is called "trolling," or purposely posting to create a reaction.

The conclusion for theoretical approaches to social media, specifically in the NFL setting, includes a wide spectrum for future research to continue the exploration of better creating two-way communication and harnessing SME based on a team's performance on the field. Exploring the BiRG effect further in an athletic platform can better help social media practitioners balance the time and effort taken in posting during negative periods and better explain the use of the type of content posted.

### **5.3 Methodological Discussion**

The acknowledgement that this study only scratches the surface of data that can be explored in order to increase SME and increase the brand's reach, leaves an opportunity for further exploration into the content and being able to cross-study the data found.

Applying these practices to other fields in athletics and beyond could go a long way to validate the findings in the study and their theoretical and practical application in the social media field. With the National Football league having a higher average of followers on its accounts on Twitter and Facebook compared to other American sports brands, the application of this study could create interesting results in sports leagues with smaller numbers of followers. Future studies could look at other athletic league brands and organizations outside of the athletic setting, resulting in a better assessment of best social media practices. The application of this study also examines an overall average of the teams without notion of where the team is located or how the team has performed recently. Regionally separating organizations or organizing based on performance could create different results.

With an overall study of the effect that a win or loss has on a team, further study can be examined in an athletic setting on the BiRG effect. Diving deeper into the types of comments creates an opportunity to better understand the levels of fandom within an athletic setting,

specifically during positive and negative times for a team's account. This study revealed a high-level of comments during a team's loss, but the types of comments were not examined to fully understand and grasp what is being said on a social media page. With further access to the team's data, the results for shares/retweets and likes can also create a better measure for fandom and the types of fans that are close to the team regardless of the result and what type of content these users would best react to during a loss.

A notation that has been unexplored in analysis of social media practices has been that of the regional SME of a team. The overall aspect that has been measured in studies examined in the literature review and in practice in this study looks at the overall spectrum of SME across the full brand globally. With access to the data of the teams and a study of organizations in different areas of the country, an interesting question arises of the effect of SME based on where a team and its fan base is located. Users that are located in the Northeast may have different engagement patterns than a person in the south. This question can be placed on the teams in these locations also and an examination of where the primary groups of the fans are located that have SME with the team. With outside comments being predominately found during a loss on a team page, it begs the question of where these users come from in relation to the team and whether it is at random, or possibly from a user that relates with a rival of that specific organization.

#### **5.4 Professional Discussion**

As social media has become a primary source for athletic brands, a designated position or group of positions that practice social media use has increased. The importance of this individual cannot be understated, but how they practice also becomes an important aspect, and this study can hopefully provide a guide.

Early practices of social media specific positions have primarily engaged a "post away" method, or better explained by someone generating content just for the purpose of generating content without taking into account what the content is and how it is viewed by followers. As this study found, the type of content and when it is posted is important. In the athletic setting, teams have increasingly posted the same type and quantity of content regardless of the team's performance. Reaching users and increasing followers becomes easy when the team's performance is reflective of a positive result, but when a team is not performing as well on the field, practitioners must take into account what will help the team's accounts the most in terms of SME. Spending valuable time on creating videos or graphics when a team loses may not be as time-effective in the long term when the content does not reach as many users.

The professional setting of athletic social media must take into account the timing of posting just as much as creating post content. These results show that the development of a social media plan based on performance and content is valuable. Having items ready for positive performances will only enhance the brand during a team's positive run as explained by the BiRG effect. The followers of the organization continue to consume the information, even if being re-posted in a different manner. Exploring examples of how the Dallas Cowboys have taken advantage of the rookie pair of Dak Prescott and Ezekiel Elliot and their success, provides a base for this argument. Despite Prescott not being a member of the NFL Top-50 at the beginning of the season, his exposure since taking over the starting role has been an aspect that has been consumed by the followers of the team's accounts. Examining the top results from the Cowboys on both Facebook and Twitter, content that has the same message, and may even just be a simple re-post, have just as high of an effect on the account's SME. One can conclude from this example

that re-creating different content may not be as important as simply harnessing the positive waves of a team and exploiting them.

## **5.5 Conclusion**

This study provides support for the idea that content matters when it comes to social media. Simply posting images may not be effective. Rather than creating a post with visual content, the content itself must be thought out and examined for how it will fit in with the overall plan of creating better two-way communication and SME. According to results of this study, using particular types of media in posts, timing of posts and harnessing the power of the BiRG effect play a significant role in determining the success of an individual social media post. Factors displayed in the data examined showed much higher SME means when a team was successful. Building a plan for this success and being able to take advantage of this time should go a long way to increasing the reach of the post, and the overall brand itself.

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