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Like and Shout: Brand Loyalty, Framing, and Fan Interactions on the BYU Football Facebook Page

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ABSTRACT

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This research is intended to provide the stewards of social media for Brigham Young University's football program with information that will allow them to make better decisions on what kind of content will maximize engagement and enhance brand loyalty among fans and consumers on Facebook. Using several variables, including the type or theme of content, post frequency, and sponsorship, content was compared against that from the University of Oregon's football program for the 2017 season. The results, found using quantitative data analysis, reveal that some variables have a significant impact on the quantity of engagement from viewers for both programs and provide valuable insights that will allow the universities to improve how and what they deliver on their Facebook pages.

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My experience as a graduate student was, in many ways, transformative for me. During a period in my life when I felt most unsure of who I was, lacking both direction and purpose, I was given new, challenging, and life-changing opportunities to redefine my life.

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I dedicate my work to all who have made me who I am. I hope I have made you proud. I send each of you my love and gratitude, wherever you may be.

TABLE OF CONTENTS

Introduction

Brigham Young University (BYU) boasts a historically successful athletic program that includes a Heisman Trophy winner, over 1,000 All-American student-athletes, 296 conference titles, and 10 NCAA national championships (BYU Athletics, 2016). Additionally, BYU's football program has the fifth highest total number of wins for a program since 1975 (BYU Athletics, 2018a).

In 2011, BYU's athletic program went through a transition as they exited the Mountain West Conference in all sports. The football program became an independent team, affiliating with no conference, while all other sports joined the West Coast Conference. This change marked a new era in BYU athletics, particularly regarding football and its new independence from a conference.

The change in conference affiliation not only allowed BYU's football team to play opponents outside their geographic region throughout the season, but also allowed the program to sign a television contract that would broadcast home games across ESPN networks, which includes ESPN, ESPN2, ESPNU, and ESPN's online platform, ESPN3 (or WatchESPN) (Katz, 2010). Since this change in 2011, attendance at BYU's football games has been on a downward trend, with only 14 home games (of 54) between 2011 and 2017 reaching sellout capacity or higher (BYU Athletics, 2017c). Attendance figures in 2017 show only an 88.7 percent attendance rate for home games at LaVell Edwards Stadium (LES) (BYU Athletics, 2017b). The issue of game attendance is not unique to BYU, with attendance at college football games having declined for five straight years between 2010 and 2015 at the Football Bowl Subdivision level (Solomon, 2015).

        BYU's attendance numbers can be viewed as disappointing, considering that there are approximately 160,000 alumni living along the Wasatch Front in Utah, the metropolitan region between Ogden, Utah, and Provo, Utah (BYU Alumni Twitter, personal communication, November 29, 2016). Combined with the more than 33,000 current daytime students (BYU University Communications, 2017), BYU athletics has close to 200,000 people who currently attend or previously attended BYU and live in the immediate vicinity of the university, to say nothing about people who are connected to the university in other ways. On the surface, the numbers show there is much room for improvement in improving fan attendance at home football games and an immediate reaction to these numbers might be to put more money into different methods of directly selling tickets. However, these attendance figures could be symptoms of a deeper problem or concern. Beyond wanting to know why fans aren't buying tickets, an understanding of fans' perceptions of BYU Football's brand, the community involvement of the fanbase, and how BYU engages with its fans through messaging and events, might reveal more telling information about how BYU can improve its brand awareness among its most loyal followers while actively growing the fanbase.

        After suffering through one of the worst seasons in recent memory in 2017, fans are right to question the state of the football program at BYU. How is BYU setting itself apart from other programs in the country to make it a destination that potential players would want to play for and a program that fans want to support, rally behind, and personally identify with? How does BYU rebound from a difficult season and invoke excitement within the fanbase for the next season and beyond? BYU might be wise to look west to the University of Oregon Ducks, whose 2016 football team had the program's worst season since 2004, going 4-8.

While the two programs' troubles are not exactly alike, the fall from grace for the Oregon Ducks was swift and somewhat unexpected. In the seven seasons prior to 2016, Oregon had a 79-15 record, winning four Pac-10/12 championships, playing for the national title twice, a Heisman Trophy winner (2014) and runner-up (2010), and several players voted to All-American teams. Oregon had finished the 2015 season with a 9-4 record and would be returning all-conference players the next season. But during the 2016 season several problems arose, and the bottom fell out from below the program. After 17 seasons, Autzen Stadium's streak of 110 home game sellouts ended (Alger, 2016). Fans had become disillusioned with the coaching staff and began to be more critical of the team's direction (Duck fans react to firing of football coach Mark Helfrich, 2016), particularly on the defensive side of the ball where the team had a historically bad year. Recruiting was suffering, with Oregon losing out on more high-profile athletes to schools that they had previously had great success against. In short, the luster and mystique of what was once considered one of the top brands in college football and worn away. After the 2016 season, the head coach and all staff assistants were let go, meaning the program would have to regroup, rebrand, and rebuild. Much like Oregon, BYU suffered a similarly miserable season in 2017 after a relatively successful season in 2016 in which they finished with a 9-4 record. After the 2017 season had officially ended, BYU decided to make similar coaching changes, firing offensive coordinator and BYU legend, Ty Detmer, among other position coaches.

Moving into the 2018 season, it is worth investigating how fans engaged with the BYU brand the previous year and determine what changes can and could be made to increase fan interest, investment, and loyalty to the program, particularly on social media. Social identity theory, or how people's identities are molded by the groups that they follow or, in this case, a brand or sports team, is an important piece of understanding a fanbase of any program. With this

focus and an interest in better understanding the community of BYU fans themselves, BYU could better position themselves long-term relative to maintaining and engaging with an invested fanbase.

While there are a variety of reasons that could be behind the less-than-capacity crowds at LES, including the team's on-field performance, getting to the heart of what the BYU Football fanbase community wants to see and hear from the program might be an effective way to renew fan interest and investment in the program, even when the program may be struggling. By understanding how fans view and perceive the BYU Football brand, changes can be made to better frame the program in marketing materials, while also maintaining a sense of authenticity and connection to what fans are feeling, thinking, and seeking. This study will primarily focus on content shared from BYU Football but will incorporate data and information from what the University of Oregon football team shared during the 2017 season as well to provide some contrasting strategy for comparison between the two programs.

Significance of Research

As teams and schedules change on a year-to-year basis, and with the unpredictability of the outcome of sporting events, framing marketing messages plays an important role in shaping the value of each season to a fanbase. Shank explains that a fan's motivation to attend a game can be attributed to a variety of causes, including a team's success. A marketing message can change from week-to-week and, depending on the success (or failure) of a team, how an athletic department frames its content and communications can change almost overnight. The reality is that the success of a team and program can and must be framed to speak to the target audience and must be done quickly to stay current with each team's win or loss.

The data and research gathered from BYU Football's Facebook page could yield results and recommendations that could eventually be adapted to address the needs of other sports within the program, such as men's/women's basketball, baseball, men's/women's volleyball, track and field events, and other various sports sponsored by BYU. The BYU athletic department will be the primary beneficiary of this research, with its goals to help marketing directors better frame their messaging and communications to resonate with a fanbase and address their concerns or needs, hopefully leading to further investment into the program, both emotionally and financially.

Framing can play an important role in BYU athletics' marketing message as the meaning of each game throughout a season will depend on a variety of factors like weather, team success, and broadcast schedules. BYU cannot control every variable that may arise, but they can adjust their marketing strategy to frame outcomes in a way that allows fans to positively connect with the team, its players, and its coaches. Further, with results from this study, BYU could begin a process of conducting more research to better understand what fans really desire to see and hear

from the team. Feedback to promotional messaging is "an element of the communication process that cannot be overlooked" (Shank, 2002, p. 343). Effective sports marketing will address fan feedback regarding topics like motivations, game attractiveness, economics, competitiveness, demographics, and stadium factors, as well as the value of the sport to the community, among other issues. The athletic department at BYU can show that they value their fans' opinions and concerns by listening to their voices, understanding their needs, and addressing those needs through its marketing messages. By demonstrating their expertise about what fans are wanting out of their BYU Football experience, BYU's athletic department can become a trustworthy source of marketing and create persuasive marketing messages that frame game experiences in a way that will resonate with fans across the board (Shank, 2002).

Literature Review

This literature review provides necessary context to understand how framing theory connects with sports marketing, fan engagement, social media, and BYU's own efforts to connect with its fanbase and improve brand awareness. Each of these topics is important to understand when attempting to effectively analyze the marketing messages and materials produced for BYU's football program.

Framing Theory

Framing theory is rooted in research centered on studying the effects of how mass media is communicated to viewers and traditionally focuses on the lens through which a story is told (Ardèvol-Abreu, 2015). One way that framing can be defined, according to Ardèvol-Abreu (2015), is "a process in which some aspects of reality are selected, and given greater emphasis or importance" (p. 424). Another way that framing has been explained is that it is "the power of a communicating text" (Entman, 1993, p. 51).

The origins of framing theory can be traced back alongside the history of the study of media effects, beginning at the turn of the 20th century and the distribution of propaganda during World War I and the study of its effects on viewers (Scheufele, 1999). The study of media effects continued to evolve into the 1960s, 1970s, and 1980s, with each stage of evolution focusing ideas like attitude change, cognitive effects of the media, and social constructivism (Scheufele, 1999). Scheufele (1999) explains that "framing has to be defined and operationalized on the basis of this social constructivisim" (p. 105). People interpret the media they consume.

One aspect of understanding framing comes from Goffman (1974), who describes framing as being a necessary part of how humans create meaningfulness out of something that otherwise may be meaningless. The occurrence of framing is also generally unknown to the

receiver of the communication, whereas concerning persuasion theory, audiences understand that the content they are viewing is purposefully intended to be persuasive (Tewksbury & Scheufele, 2009). A more thorough understanding of framing theory can help us better know how diverse types of communication, be they news reports, lectures, advertising, or other materials, influence human consciousness (Entman, 1993).

Framing Theory and Sports

As it relates to sporting events, media outlets use framing to help viewers (or readers) make sense of what is often a complicated collection of information and narratives, allowing them to better understand what's happening in the world around them (Walters & Murphy, 2008). Networks that broadcast college football are in the business of making money and one of their goals is to attract as many viewers as possible to tune in and watch programming on that channel (or one of the many channels a network may own), meaning that the network will frame events being broadcasted in a way that will appeal to as large an audience as possible (Walters & Murphy, 2008).

The most common way in which sporting events are framed is using a frame of competitive conflict, with two opposing sides preparing to battle each other in the field of competition (Walters & Murphy, 2008). Another method of framing sporting events is to focus on the high-stakes, high-drama narrative, where the outcome of the game or competition is unknown, increasing anticipation and interest (Walters & Murphy, 2008). Using critical pillars of storytelling, such as plots, characters, and symbolism, allows networks and broadcasters to weave a compelling narrative together in which the viewer invests themselves and, combined with framing of the conflict between the two teams, the viewer believes that determining who is

a winner and who is the loser in the event is the single most important part of the sporting event (Walters & Murphy, 2008).

Every fan wants their favorite team to win each game but, as anyone who watches sports knows, one team generally must fall short and lose. In the aftermath of a defeat, sports marketers use framing to shape how the narrative of the team moving forward can be presented and influence how readers or viewers perceive the content (Lewis & Weaver, 2015). Sports marketers are responsible for identifying relevant information to be reported to consumers, making decisions on how teams and athletes are portrayed in the media and the direction the story or information will take, which, in turn, influences how viewers or readers evaluate the subjects of the content (Lewis & Weaver, 2015). Even beyond the team, sports writers and marketers have greater access into the personal lives and thoughts of athletes via social media and are turning these athletes into characters and the narrative focus of stories about the team these athletes participate in or the sport itself (Lewis & Weaver, 2015). Sports marketers ultimately create coverage of their team or players that converges sports, entertainment, and celebrity into a single narrative, creating content that is interesting and enjoyable to consumers (Lewis & Weaver, 2015).

Fan Reactions to Game Outcomes

Fans of sports teams throughout the world feel a sense of ownership, pride, and involvement with the teams they follow. Social identity theory provides explanation and understanding for this phenomenon. It focuses on how a person's identity is shaped by the memberships that a person is a part of, be that a religion or a fan of a team. As a member of that group (followers of a sports team), fans may feel threatened by group failure or some other kind of negative event (Dietz-Uhler & Murrell, 1999). Research has shown that fans are more likely

to use pronouns like "we" and "us" when the team they follow wins or experiences a positive event and use terms "they" and "them" when the team loses (Lee M. J., 1985). Fans make efforts to try and distance themselves from a team when they lose or try to explain away how the events of the game unfolded (i.e. "Our best player was hurt"). When a team wins, fans may take some credit for a team's success as they may feel like a member of the team itself (Dietz-Uhler & Murrell, 1999).

Furthermore, how a fan identifies themselves in relation to a sports team's success depends on other factors, such as if the team was expected to win or lose a game, or if there is coverage and attention from the media. While these things do not play a role in the actual game itself, they tend to hold influence over a fan's perceptions of the game itself (Dietz-Uhler & Murrell, 1999). For instance, if a fan's favorite team is favored to win a game that is significant (high ranking matchup, conference title game, bowl game, etc.) and there is a high amount of media attention, a loss would incite a stronger negative reaction for that fan than if the game were of lesser meaning and did not have as much attention from the external media.

One study found that fans who identify strongly with their university held favorable views of the program throughout the season, while those fans who identified weakly with the university held generally the same views regardless of wins or losses. Additionally, this same study found that fans who identified strongly with their university saw the team in a more positive frame after the team won a game that they were expected to win and when there was high media attention surrounding the game. Those who identified weakly with the university evaluated the team similarly to those with strong ties, regardless of a win or loss, the expected outcome of the game, and whether or not there was any media attention (Dietz-Uhler & Murrell, 1999).

Sports Marketing

During the 2016 season, ESPN revealed that 255 nationally broadcast college football games (across the networks of ABC, CBS, NBC, FOX, ESPN, ESPN2, ESPNU and Fox Sports 1) averaged just over two million viewers per game (Kaplan, 2016). That is almost 513 million people who watched college football on national networks alone (figure does not include other college sports networks like the Big Ten Network, Pac-12 Networks, the SEC Network, the ACC Network, and others) (Kaplan, 2016).

The sheer number of viewers of college football is a testament to how important this demographic is for sports marketers. Mike Mulvihill, Fox Sports' senior vice-president of programming, research, and content strategy, was quoted as saying that "college football is the ultimate regionalized and localized sport" (Kaplan, 2016). The sport is made up of several geographically-based conferences (e.g. Pacific 12 Conference, Atlantic Coast Conference, West Coast Conference, etc.), each with their own fan following both locally and sometimes nationally. A marketing campaign designed to communicate with fans of the University of Michigan Wolverines in Ann Arbor, Michigan, might be significantly different to a marketing campaign created to address fans of the University of Oregon Ducks in Eugene, Oregon. University and school officials and marketing professionals must understand how to reach these markets and tap into the unique cultures that permeate the campuses and programs within them.

At its core, sports marketing can be defined as "the selling of sponsorship rights to sporting events and additionally utilizing sports figures as spokespeople to promote the purchase of sports and non-sports products and services" (Coleman, Kelkar, & Goodof, 2001, p. 196). As noted by Colman, Kelkar, and Goodof (2001), sports marketing is about promoting products and services related to a sports franchise; it is like any other business and requires money and

consumer spending to stay viable. In this case, the product is the team or program that fans come to watch (along with merchandise) and the service can be the stadium experience to VIP access for fans. It would stand to reason that sports marketing professionals would exhaust all resources to maximize revenue for their organizations. However, according to DeGaris (2015), "sports [marketing] lags woefully behind other industries in its use of research and data" (p. 4). Sports marketing professionals have a history of being skeptical when it comes to using research as part of their process of creating marketing campaigns (DeGaris, 2015).

DeGaris (2015) explains that some sports marketing professionals advocate for "free research" or the process of having organization executives conduct convenience sample research at their arenas or stadiums with fans to obtain information about what is important and observe the general makeup of the event, taking notes about the various experiences they learn about. This might work on some level, but DeGaris (2015) believes that "it's a terrible method of collecting information, prone to all sorts of individual biases and measurement errors" (p. 5), instead advocating the use of rigorous research methods that reduce individual bias and help reduce the risk involved with marketing decisions.

One aspect critical to sports marketing is that of fan development, a combination of catering to existing fans while making efforts to create new fans (DeGaris, 2015). "In a standard marketing growth matrix, fan development executives are most often concerned with market development, developing new fans with the existing product" (DeGaris, 2015, p. 47). One area that is of great interest to sports marketers is that of youth markets, due to the fact that this market holds the greatest potential for future fans of a franchise (DeGaris, 2015).

Another area that seems to be lacking when it comes to fans is the support of female fans. According to a poll conducted by ESPN, women account for only 38 percent of college football

fans (Miller & Washington, 2016). DeGaris (2015) states that sports organizations can grow their fanbases by re-framing their business to also appeal to women. Additionally, appealing to growing Hispanic markets is another strategy sports marketers are attempting to do. Hispanic markets tend to intersect well with the youth market because Hispanics tend to be younger than the average American. The projected future growth of the Hispanic population is important to consider when attempting to find new fans (DeGaris, 2015).

Effective sports marketing must address a variety of fan motivations to increase or maintain attendance. Shank (2002) outlines eight motivating factors for fans in attending games: self-esteem enhancement, a diversion from everyday life, entertainment value, eustress, economic value, aesthetic value, need for affiliation, and family ties. According to Shank (2002), fans motivated by self-esteem enhancement are typically called "fair-weather fans" as they are more likely to be interested in the team when their fandom is rewarded with success and accomplishment. These fans like to be associated with a winning team, presenting themselves in a more positive light to others. Those who attend sporting events as a diversion from their everyday lives are fans who simply want to remove a focus from their own problems and issues and add variety to their lives (Shank, 2002).

One of the most unique aspects of a sporting event is the unknown outcome of the event. The entertainment factor of sporting events is said by some to be the highest motivating factor for fans to attend and watch. For others, eustress, or the sensory experience of the event, is enticing to fans. Rather than simply watch at home, they want to experience the roar of the crowd and the effect of tension during the clutch moments of the game or event. Some fans find economic value in sports through gambling and the excitement that comes from having a vested interest in the outcome of the games and events (Shank, 2002).

Sports are also seen as an art form, with some fans deriving enjoyment and pleasure from the beauty of an athlete's performance (e.g. gymnastics). Being part of a group and having an affiliation with a sport or team also drives people to attend events. Fans are motivated by "reference groups," such as the community they live in or group of friends they might have. Finally, a fan's family ties are an important aspect of game attendance as it can be seen as a way to cultivate family togetherness and bonding. Women, in particular, are more likely to cite family ties as the main motivation for attending sporting events to promote family bonding experiences (Shank, 2002).

One final caveat regarding attendance involves the experience a fan has at the event. Sports marketers explain that "participation and attendance are cornerstones of long-term sports devotion" (DeGaris, 2015, p. 50). More than simply putting people in chairs inside a stadium or arena, sports marketing is about creating "brand experiences" and catering to not only what the product itself is, but how the consumer (or in this case, the fan) perceives the brand, not just how it is experienced (DeGaris, 2015). DeGaris (2015) further explains that "sports fans are not just consumers of sports products; they are the product. In college sports, for example, a big part of the experience for older ticket buyers is watching the youthful exuberance of the students in attendance" (p. 64). Cultivating and framing its brand is important for BYU athletics to do to enhance perceptions of its gameday experiences.

Social Media and Marketing

Social media has quickly become a necessary tool for marketers to use in order to reach and engage with their audiences (Arli, 2017). Social media is most commonly understood to be social networks like Facebook, Twitter, Instagram, and others, but Chung and Austria (2010) believe it to include blogs, company websites, and things like podcasts. More than just a place

for people to catch up with and follow friends, social media has become a valuable space for business and brands to increase brand awareness and help influence how consumers spend their money (Husain, Ghufran, & Chaubey, 2016). Newberry (2018) lists a number of reasons for why social media is important for an organization to invest in using it, such as using platforms to build brand awareness or help humanize a brand for consumers.

When corporations and organizations began to implement social media into their marketing strategies, marketers believed that engagement was mostly driven by the size of their follower count. This led marketing teams to invest funds into increasing the size of their audience and reach, which they believed would increase engagement with their content. After studies that reviewed the data were conducted, it was found that only a small percentage of an organization's following engaged with the content. This led marketers to adjust their strategy from simply building their reach, but to also create content that encouraged more engagement (Lee, Hosanager, & Nair, 2017).

One of the more challenging issues facing marketers is the means by which Facebook deploys an organization's non-paid advertisement posts. Unlike paid advertisements on Facebook, which allow marketers to choose specific demographics and other identifiers to target their media to, unpaid posts are delivered to users' news feeds by means of Facebook's EdgeRank algorithm, which aims to provide content to users that gives them a positive experience on the platform. EdgeRank favors providing a user content that is newer and is more aligned with their tastes. This might cause problems when interpreting data, as a post may be delivered to more active users, leading to skewed results and interpretation of the kind of engagement that a particular kind of post receives (Lee, Hosanager, & Nair, 2017).

As social media becomes a larger part of everyday life for users and takes up more of their time, it becomes more important for organizations to include funds to invest into their social media activity and provide content to users. But what kind of content works best for an organization? According to some researchers, this information has not been well-established by research, but their findings suggest that posts with "brand-personality," or that contain things like humor, casual banter, or an appeal to a user's emotions are related to higher user engagements with that content (Lee, Hosanager, & Nair, 2017).

As it relates to effective marketing, social media can be used by marketers to conduct relationship marketing that focuses on building long-term relationships with a brand or the organization's most loyal customers (Witkemper, Lim, & Waldburger, 2012). Relationship marketing is believed to contribute "to stronger brand awareness, increased understanding of consumer needs, enhanced loyalty, and added value for consumers" (Witkemper, Lim, & Waldburger, 2012, p. 172). Using social media, these relationships can be built by communicating and interacting with audiences via two-way or multi-way messaging (Witkemper, Lim, & Waldburger, 2012).

Social Media and College Sports

As with other industries and fields, social media has had a tremendous impact on college sports and the college football landscape. According to a study conducted for the College Sports Information Directors of America (CoSIDA), 92% of sports information directors (SIDs) indicated that they agreed or strongly agreed that social media has had an impact on how the organizations they work for communicate, and 89% said that they have changed how their organizations communicate with external groups (Stoldt, 2012).

Social media is seen as a necessary marketing tool for athletic departments of Division I NCAA schools, with Facebook and Twitter playing key roles in connecting with audiences (Popp, McEvoy, & Watanabe, 2017). College athletic programs use social media to connect with fans, players, coaches, and the media to share the events, news, and fun aspects of a team's experience each season. An athletic department official (Official B) from a Big Ten University said this regarding who their social media content is for: "We want to get ticket-buyers, we want to get folks for promotions and products… my main focus is the fans. It's not for media purposes; it's not for donor purposes. It's for our everyday 'Joe or Jane' fan" (Hipke & Hachtmann, 2014, p. 522). A major area of concern is that athletic directors are not effectively using strategic marketing on social media to maximize attendance and ticket revenue for their programs (Popp, McEvoy, & Watanabe, 2017). Sports marketers can address these concerns by properly using social media to increase awareness, providing customer service, and conducting audience research that, ideally, will hopefully generate sales for the program (Popp, McEvoy, & Watanabe, 2017).

After conducting interviews with athletic department officials from four universities from the Big Ten Conference, Hipke and Hachtmann (2014) stated that creating and strengthening fan loyalty is a critical element to a successful social media campaign. One athletic department official (Official A) from one Big Ten Conference university (titled University A) said the following regarding providing a space for fans to engage and interact with each other:

> Our primary goal is to make sure fans are having a positive social media experience with University A athletics. We know there are plenty of places fans can go to talk about University A sports. We just want to make sure that we are there providing an official

and positive voice and place for people to engage in those conversations (Hipke &

Hachtmann, 2014, p. 524).

In the same study from Hipke and Hachtmann, Official B said that, when an athletic

department can effectively engage a fanbase on social media "your fan loyalty builds

organically, and that's where ticket sales come, and that's where merchandise sales come" (p.

524). This same official also stated that when athletic departments engage in two-way

communication with fans that "fan loyalty builds because they know they're being heard.

They're being respected" (p. 525). Official B continued and explained: "As long as fans are

interacting with us, commenting on posts, retweeting, @ messaging us and having a conversation

with us, then I know we are doing things well" (p. 526). The idea of fan loyalty is one that is

critical to the success of an athletic department. Hipke and Hachtmann (2014) state that fans who

are loyal to a brand are more likely to spend money on that brand. Based on this research, it's

clear that community building and engagement from official university sources is an important

part of maintaining a healthy relationship between fans and the athletic department (Hipke &

Hachtmann, 2014).

So how does a university effectively build and create an online community that engages

with its fanbase and provides an online space or conversation where fans can interact with one

another, players, coaches, and the team? For at least two major universities, the solution was to

invest heavily into the creation of dedicated spaces and the acquisition of human capital that

would focus on managing and creating engaging social content. In 2012, the University of

Oregon athletic department created what they called the "QuackCave." The QuackCave was

designed to be the social media hub of all things pertaining to the University of Oregon's sports

teams and would allow them to "monitor, produce and push content through Oregon's multitude

of general and sport-specific accounts across all major social media platforms" (Sorensen, 2012)

and was labeled by the university as the first digital media hub in college athletics (Jude, 2012).

Under the direction of the athletic department and run by students, the QuackCave helped build

the Oregon Ducks' brand and grow their social media following across different platforms,

including Facebook, Twitter, YouTube, and Instagram (Sorensen, 2012). In 2015, USA Today

ranked the University of Oregon Ducks as being the best program on social media (Siegel, The

10 best college football programs on social media, 2015) and was also listed as one of the top

four most fan-engaging college football teams by SportTechie in 2014 (Cahill, 2014). The

QuackCave is an example of the kind of commitment and investment that college athletic

departments are making in ensuring that their university's sports team have a presence online and

the tools necessary to provide an engaging and community-focused social media experience for

fans.

   Another university that has invested heavily in its social media presence is Clemson

University in South Carolina. Clemson, winners of the 2017 College Football Playoff National

Championship, recently invested more than $200,000 into its social media efforts, with most of

those funds being used to enhance the talent on their digital team (Smith, 2017). Dan

Radakovich, the athletic director at Clemson, invested heavily into social media to enhance

Clemson's brand online, with the university seeing benefits to "branding, fan engagement and,

most importantly, recruiting" (Smith, 2017). While those who are responsible for Clemson's

social media readily admit that they have likely seen an increase in engagement because of the

football team's recent success (the team is 40-4 since the 2015 season with three appearances in

the College Football Playoff and two appearances in the College Football Playoff National

Championship), the quality of the content and their productions has increased as well (Smith,

2017). It should be noted that ardent social media users indicated that they are more likely to

engage with a program's content and conversation when their team is winning or has won a

game or contest, providing solid evidence that a team's win-loss record is an important part of

fan engagement and that people who are upset about the outcome of a contest are less likely to

engage in social media after the game (Broughton, 2012).

Fans crave to get more information about what is happening with the players and coaches

on their favorite teams and social media provides programs with the tools and opportunity to

meet that interest (Weaver K., 2011). One way that social media has been used by athletic

departments at universities to satisfy this desire for more information is in the production of

"backstage" or "behind the scenes" content for fans to consume. Hipke and Hachtmann (2014)

state that content that is categorized as "backstage" material helps enhance ties and connections

between fans and the programs and athletes that they follow. Hipke and Hachtmann say that this

"backstage" content on social media helps fans feel that there is a sense of transparency between

them and the program and feel more connected than if they were to consume content through

more traditional means of media, giving them a feeling of receiving exclusive or a never-before-

seen look into the programs they follow (Hipke & Hachtmann, 2014).

Beyond engaging with fans, the impact that social media can have on how potential

student athletes perceive a university and its athletic program is not going unnoticed. In

November 2017, one of the highest rated basketball recruits in the country committed to play for

the University of Oregon Ducks' basketball, saying that, among other reasons, the program's

social media was a significant factor in why he decided to sign with the school over other suitors

(Bol, 2017). Furthermore, one researcher recently completed a study in which she investigated

how college football recruits used Twitter, including how their behaviors on the platform could

be used to help predict where that student-athlete would attend school and how these athletes use social media to join an online community and conversation about the universities they're interested in attending (Bogage, 2017). With the potential success of the program on the line, other schools are taking notice of what is happening at schools like the University of Oregon and Clemson University and, following suit, pushing their own brand across the internet.

While the creation of content is of the utmost importance for an athletic department, knowing when and where to post that content is equally critical. According to a study about the use of multiple screens to consume content, 77% of the time a person spends watching a television they are also using another device (e.g. mobile phone, PC/laptop, or tablet computer) (Google, 2012). Data shows that 71% of college football fans simultaneously watch the game(s) on a device (such as a television) and follow the game(s) on Facebook and 83% will simultaneously follow the game(s) on Twitter (Broughton, 2012). While Twitter may seem to have a higher engagement rate during a live game or event, Broughton states that 77% of college football fans have liked a brand on Facebook, compared to only 30% on Twitter. Additionally, 58% of college football fans indicated that they use Facebook to follow or discuss sports, compared to only 18% on Twitter, seemingly indicating that Facebook more likely reaches a broader, bigger group of people (Broughton, 2012). Furthermore, 42% of people stated that they interact with social media on their second screen device while watching television (Google, 2012). This data paints a compelling picture as to the importance of producing content through official channels on social media *during* a live sporting event.

Mass Communication of BYU Football

Framing theory, the effects of advertising, and previous scholarship on sports marketing will help focus this study on how BYU's marketing materials are received by fans and how BYU can better frame their messaging to meet the needs of its audience.

While BYU uses various methods of mass communication to advertise its sporting events (e.g. radio, television, billboards, print media, internet), their efforts on social media will be the focus of this study (see Figure 1). As of April 19, 2018, BYU had 168,974 "Likes" on Facebook (BYU Athletics, 2018a), 56,980 followers on Twitter (BYU Athletics, 2018c), and 50,885 followers on Instagram (BYU Athletics, 2018b) with a total of 260,270 followers across those three social networks. Communicating to a large group of followers via the Internet, BYU's efforts to advertise its football program should be considered as mass communication.

What makes BYU a unique case study is that they are a privately owned, religious university with the largest on-campus enrollment for a private university in the United States (Lindsay, 2017). BYU is one of sixteen private and one of eight religious universities that field a football program at the FBS level (there are 130 programs in the FBS). BYU is also the only FBS university sponsored by The Church of Jesus Christ of Latter-day Saints. According to the Washington Times, approximately 98.5 percent of BYU's student population were members of The Church of Jesus Christ of Latter-day Saints (Schad, 2014) (Brigham Young University, 2007). All of this is to say that those who affiliate with and associate with BYU are likely members of The Church of Jesus Christ of Latter-day Saints. As of July 2017, Latter-day Saints make up almost 63 percent of the population of Utah, including 50 percent of residents in nearby Salt Lake County and almost 85 percent of residents in Utah County, where BYU is located (Canham, 2017). Effective marketers will understand that religion should play a large part in

determining the overall market strategy and that understanding a religion can help provide a

more detailed understanding of what a targeted audience wants to see and hear in advertising

(Minton & Kahle, 2013). While the main product being marketed is BYU's football program, an

effective market strategy will likely need to account for how to effectively market to a Latter-day

Saint who likely lives in Utah or the Intermountain West region of the United States.

When asked if there was a kind of content that BYU athletics favored on their social

platforms, Stuart Call, the director of social media for BYU athletics, explained that:

Video content is the most successful. That's the same across all social media platforms

for every team. Fans want to see video. Fans want to see a side of our teams and student

athletes they can't see anywhere else. So that's what we strive to show them…(personal

communication, March 19, 2018)

Regarding engagement with posts, Call stated that they "create content for fan

engagement. We want fans to comment, like, and share. The more people that see our content the

better. So, we will always strive to create content that fans want to share and engage with."

Furthermore, he explained that "the more the fans engage with us and the more those fans will

buy tickets to see the team" and his objective when it comes to sharing content is to "Grow the

brand. Engage with the fans. Show them a side of BYU Football they can't see anywhere else."

Purpose

The purpose of this project was to analyze Facebook content shared on the official pages for the football teams at BYU and the University of Oregon and to try and determine what practices are being implemented by the University of Oregon and how BYU can replicate the success that that program has had in creating a successful college football social media brand. The study was designed to provide BYU with more information about how fans engage with the content on the football team's Facebook page, giving them data that they can then use to make better strategic decisions about how they can create content that will increase brand awareness and move fans to be more invested in the program and help those fans to better personally identify with what the BYU Football brand stands for.

Four research questions were the driving force behind this study. These questions attempted to determine what type of content (i.e. images, videos, links, etc.) was most successful in terms of engagement, to better understand what kind of content is being shared on these two Facebook pages, and if the timing of posts had a significant impact on fan engagement.

RQ1. Is there a difference in engagement based on the type of content shared?

RQ2. What kind of content posted receives higher engagement from viewers?

RQ3. Are there significant differences in engagement based on when the content was posted (i.e. time of day, day of week, etc.)?

RQ4. Do sponsors and paid boosts see greater engagement than their counterparts?

Methods

This project relied on a content analysis of social media shared from the official Facebook Pages of both BYU Football and Oregon Football. These were verified as official accounts from the two universities via the blue verification badge next to the account's name. Furthermore, each of these accounts has links to these Pages from official university websites.

A content analysis can be defined as "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, p. 1278). Rather than text data being the focal point of this study, a post's entire contents were considered when conducting the content analysis. This method was selected as a means of attempting to identify themes and patterns from social media from both football programs during the 2017 season. The results from BYU's page will be compared against that of the University of Oregon to try and identify effective methods and best practices that BYU can follow to enact a more effective messaging strategy on Facebook.

The University of Oregon football program's Facebook Page was selected to serve as the baseline for this study because they have been consistently ranked as being one of the best social media follows in college football and are praised for the unique content that they share with followers (Blocksidge, 2017) (Cahill, 2014) (Siegel, 2015) (Siegel, 2017) (Sorensen, 2012) (Top NCAA college football teams getting social online, n.d.) (Twiford, 2017). Other programs, such as Clemson University and Ohio State University, which are also noted as being some of the best on social media in college football, were not selected because of their geographic location within the United States (both teams are in the Eastern Time Zone) and their recent success (both have won national titles since 2014) was figured to create too much disparity between them and BYU.

The University of Oregon also has closer geographic proximity to BYU and experienced similar

negative events during the 2017 season (i.e. starting quarterback injuries, at least a three-game

losing streak).

Facebook was selected for this study because this platform had the highest follower count

when compared to accounts on Twitter and Instagram for BYU's football team. Data from the

Pew Research Center, found in Table 1, shows that 79% of online adults use Facebook

(compared to 32% who use Instagram and 24% who use Twitter) (Greenwood, Perrin, &

Duggan, 2016). Pew also states that young adults continue to use the platform in high numbers

and that older adults are joining at a more rapid rate. Users also visit Facebook at higher rates

than other social media networks, with 76% of Facebook users visiting the site daily, compared

to 51% for Instagram and 42% for Twitter (Greenwood, Perrin, & Duggan, 2016).

Table 1

Percent of online adults who use Facebook

All online adults	79%
Men	75%
Women	83%
18–29	88%
30–49	84%
50–64	72%
65*	62%
High school degree or less	77%
Some college	82%
College+	79%
Less than $30K/year	84%
$30K–$49,999	80%
$50K–$74,999	75%
$75,000+	77%
Urban	81%
Suburban	77%
Rural	81%

(Pew Research Center, 2014)

Previously mentioned research also states that college football fans tend to use Facebook more to follow and interact with the teams they follow (Broughton, 2012).

The content analyzed consisted of posts shared between August 20, 2017, and December 2, 2017. These dates were selected to isolate content as best as possible to only games that occurred in the 2017 season. All of BYU's games were contained between these two dates, while the University of Oregon was eligible for a bowl game in December 2017 that occurred outside dates selected. During this timeframe, BYU had 431 posts and the University of Oregon had 245 posts for a total of 676 posts between the two programs.

The research was aided by the use of BuzzSumo, an online web service that allows users to analyze content posted on Facebook, Twitter, and other social media networks. Users can search for content based on topics, find topic influencers, and find insights across millions of social media accounts (BuzzSumo, 2018). Using this powerful analytical tool, information about the Facebook posts between the aforementioned dates for both programs was exported. Data from this BuzzSumo export included these variables and required no manual coding: the username of the page, the post URL, the post type (video, image, link, giveaway, and other), the date and time the content was posted, and the number of likes, shares, and comments. For the purposes of this study, engagement was defined as a user liking, commenting, sharing, or in the case of video content, viewing a post. Only data that was publicly available was considered. Data that was unavailable for research included reach, impressions, total clicks per post, different metrics on video views, and audience demographics. Those metrics are available only to Page owners and administrators as part of Facebook's Page Insights reporting tool.

Posts were coded using 19 variables based on the kind of content that they focus on. Posts that were Facebook photo albums, originally labeled as "image" in the BuzzSumo data

export, were later coded as "photo album." Posts that were videos (either live or previously recorded and then shared) also required coders to note the number of views (either approximate or exact) of that video. Below are each of the variables and explanations for each variable and how coders were to identify the type of content when coding.

- *Photo album*: Originally labeled an "image" by BuzzSumo in the data pull, these were posts that were officially identified by Facebook page as photo albums and mislabeled by BuzzSumo.

- *Video type* (*and views*): This code was a binary choice (pre-recorded and live broadcast). This content was coded as pre-recorded when Facebook's "live" indicator was not present in the post; posts with the "live" indicator were labeled as live broadcast. Views were generally shown in their approximate values.

- *Call to action*: These posts asked followers to participate in doing something (i.e. comment on this post, tell us about a time when…, what was your favorite moment, sign up, buy tickets, join this program, go find a helmet from BYU 50, etc.). If a post was coded as having a call to action, a follow-up question was presented allowing coders to select from a provided list of calls to action. These options were: 1) engage (comment, like, share, tag a friend, etc.), 2) purchase merchandise, 3) purchase tickets, 4) wear a specific color for a game, and 5) other (if the call to action was not a previously mentioned option).

- *Incentives*: Could a fan receive something in reward for engaging in the post? These incentives include prizes such as gift cards or merchandise for participation in a call to action in the post. If a post was coded as having an incentive, a follow-up question was presented allowing coders to select from a provided list of incentives. These options

were: 1) free merchandise (apparel, team gear, etc.), 2) gift cards of any kind, 3) free

tickets (or similar rewards to assist in attending a game in person), 4) other (if the

incentive was not a previously mentioned option).

- *Pregame*: Content that was shared prior to the start of a scheduled game with a specific

  opponent (that opponent may not have been explicitly mentioned, but it was implied that

  the content referred to an upcoming game). These posts focused on an upcoming game,

  including information about when the game was scheduled for kickoff, where the game

  could be seen on television or heard on radio, the location of the game, etc. These posts

  could also have included content for games beyond the next game in the schedule (i.e.

  BYU plays Team A and Team B in consecutive weeks. BYU may post something about

  their game with Team B without having yet played Team A on their schedule). This code

  refers to the *type* of content in a post and *not the time* the content was posted to the Page.

- *Mid-Game*: These posts were updates about a game as it occurred, usually focused on

  providing scoring and player/team statistics updates. Could also include information

  about records broken, injuries, etc. This code refers to the *type* of content in a post and

  not the time the content was posted to the Page.

- *Postgame*: These were posts that contained information or highlights about the most

  recently completed game. These posts included content such as "plays/calls of the game,"

  other highlights, statistics, and recap information. Posts could have also referred to

  previously completed games. These posts could occur on the day of the game itself or in

  the following days. This code refers to the *type* of content in a post and *not the time* the

  content was posted to the Page.

- *Gameday*: This code was binary (gameday or non-gameday) and determined by comparing the date when the content was posted and the schedule for each team.

- *Team Focused:* Content that would fall under this category focused only on the 2017 season and included things like articles written about the team or coaches and players (i.e. game recaps, practice reports, gameday notes, opinion pieces, etc.), video interviews or footage either with coaches and players or with program media personnel (i.e. hype videos, practice footage, press conferences, practice reports, team travel activities, etc.), and other program news (i.e. weekly uniform updates, player or program awards/records, program/player news, new opponents announced for future schedules beyond 2017, etc.). Much of this content could also be considered "behind-the-scenes" access or things that happen off the field of play. Much of this content was information, either visual or written, that would not be seen during a television broadcast or while sitting in the stands.

- *Historical*: Posts that are historical will feature content from events, games, players, or seasons prior to the 2017 season. Content featuring former players (i.e. players currently playing in the NFL), coaches, or other aspects of the program outside the current season will be seen as historical in nature.

- *Fan Focused*: These posts focused on fans' experience *with* the team/coaches, the experience at a football game, either home or away (i.e. BYU's Cougar Walk, stadium experience, what to wear to games, team/player interactions with fans, fan events, etc.). These events could also be things fans participated in, such as holiday parties. Sometimes fan-focused events crossed over into giveaway events.

- *Miscellaneous*: These were posts that are not focused on the team, players, coaches, fans, or the football program itself, but rather external events, such as holidays, commemorative/remembrance sentiments, or other university activity.

- *Sponsorship*: This included content that mentioned an external business (outside the scope of the athletic program) either in the text of the post or a watermark on an image or video.

- *Paid Boost*: Posts that receive a boost are posts shared on a Page's wall that are then pushed to the NewsFeeds of users that are targeted. Boosted posts can be targeted based on location, age, gender, and interests. These differ from sponsored posts in that sponsored posts are classified as advertisements on Facebook, offer more features, can be shown outside a user's NewsFeed while on Facebook, and are not posts shared on the Page's wall.

Additionally, using the timestamp of the post, content was categorized into six periods during the day. The six categories were: twilight (12:00AM to 4:00AM), early morning (4:01AM to 8:00AM), morning (8:01AM to 12:00PM), afternoon (12:01PM to 4:00PM), evening (4:01PM to 8:00PM), and night (8:01PM to 11:59PM). BYU posts were displayed using Mountain Daylight Time and Mountain Standard Time, and posts from the University of Oregon were displayed using the Pacific Daylight Time and Pacific Standard Time (observance of daylight saving time ended on November 5, 2017). Another variable created was that of "kickoff time," which grouped posts that were shared on a gameday and were each coded based on the time the game was scheduled to begin using the same time periods previously mentioned. Furthermore, two additional variables were created using the dates of when content was posted: 1) the number of posts shared per day and 2) the day of the week that the content was shared.

A critical aspect of a content analysis is the establishment of intercoder reliability, defined as "the extent to which independent coders evaluate a characteristic of a message or artifact and reach the same conclusion" (Lombard, Snyder-Duch, & Bracken, 2002, p. 589). Intercoder reliability was calculated for each variable using Scott's pi and Cohen's kappa, two measures that identify change agreement (Riffe, Lacy, & Fico, 2013). Ten percent (68) of the total number of posts (676) were coded. All but one variable (fan-focused) had a measure of Scott's pi and Cohen's kappa that ranged from .80 to 1.00. The variable that did not reach the .80 threshold had a Scott's pi of .775 and a Cohen's kappa of .776 with an agreement percentage of .941, having only four discrepancies between the two coders. Due to the high agreement percentage, the "fan-focused" variable remained a part of the study and analysis.

Some variables that could not be accounted for were the reach, follower growth, and post clicks for each Facebook Page. That information is not public and is available only to the owners of the Pages. Additionally, follower count was not included as part of the analysis due to the great disparity between the two schools. At the time of the completion of this study, the University of Oregon had more than five times the number of followers (889,087) than that of BYU (168,974), making any kind of engagement comparison between the two schools substantially skewed in favor of the University of Oregon. Furthermore, no reliable methods were found that determined an accurate engagement rate without the use of a Page's administrator tools and metrics.

Data Analysis

Following the completion of coding, results were exported into IBM SPSS software, allowing for advanced statistical analysis. The initial engagement data (dependent variables) was not normally distributed, causing outliers to have a greater effect on the data as a whole. The

engagement data (likes, comments, shares, and views for videos) was logarithmically

transformed to normalize their data distribution as dependent variables. Independent *t*-tests and

ANOVA tests were the primary means of data analysis, with a few data points being acquired

through simple arithmetic (addition, subtraction, multiplication, division) using Microsoft Excel.

To determine whether any statistically significant relationships existed between the independent

and dependent variables described above, a difference in means t-test with an alpha level of 0.05

was computed. Results for all *t*-tests and ANOVA tests are represented using the transformed

dependent variables.

Results

Result tables and explanations of the data for both BYU and the University of Oregon will be displayed in order of relevance to the four proposed research questions:

RQ1. Is there a difference in engagement based on the type of content shared?

RQ2. Are their significant differences in engagement based on the post type?

RQ3. Are there significant differences in engagement based on when the content was posted (i.e. time of day, day of week, etc.)?

RQ4. Do sponsors and paid boosts see greater engagement than their counterparts?

RQ1 – Engagement Based on Type of Content Shared

RQ1 examined if there were differences in the amount of engagement based on the type of content shared. The following results look at the engagement of content that mentions an upcoming, current, or previous opponent relative to each other, as well as how different themed posts (i.e. team-focused, fan-focused, historical, etc.) compared to each other in terms of the number of engagements. Calls to action and incentives are also examined. It should be noted that there are no datasets for the University of Oregon for calls to action or incentives as they did not employ these tactics during the sample period.

Table 2

Engagement by pregame, mid-game, postgame, and combination content for BYU

Variable	None	Pregame	Mid-Game	Postgame	Combo	
	n = 164	*n* = 132	*n* = 28	*n* = 100	*n* = 7	
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.94 (0.43)^{abd}	2.34 (0.30)^{abcd}	2.05 (0.39)^{bcd}	1.69 (0.79)^{abcd}	2.08 (0.36)^{e}	25.53 (4, 426)***
Comments	1.26 (0.64)^{ad}	1.41 (0.43)^{bd}	1.52 (0.44)^{cd}	0.99 (0.71)^{abcd}	0.92 (0.61)^{e}	9.39 (4, 426)***
Shares	0.75 (0.51)^{ab}	1.20 (0.42)^{abcd}	0.86 (0.41)^{bc}	0.64 (0.59)^{bd}	0.82 (0.45)^{e}	22.44 (4, 426)***
Views	2.72 (1.73)^{abcd}	1.28 (1.83)^{abd}	1.39 (1.90)^{ac}	2.06 (1.73)^{abd}	2.69 (1.85)^{e}	13.32 (4, 426)***

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. The Combo variable contains posts that had a combination of two or three of the other variables. The None variable contains posts that had no elements of the other variables.

Results from Table 2 were found using an ANOVA test and indicate that there are statistically significant differences between all dependent variables and the independent variables.

Likes.

The ANOVA results show that content relating to upcoming, current, or previous games had an impact on the number of likes these posts received, *F*(4, 426) = 25.56. Posts with pregame content had significantly more likes (*M* = 2.34, *SD* = 0.30) than posts with no mention of upcoming, current, or previous opponents (*M* = 1.94, *SD* = 0.43), as well as those with mid-game (*M* = 2.05, *SD* = 0.39) or postgame content (*M* = 1.69, *SD* = 0.79). Posts with mid-game content also had a statistically significant higher number of likes than posts with postgame

content. Posts that did not mention an upcoming, current, or previous opponent had more likes than posts that had postgame content.

Comments.

The ANOVA results show that content relating to upcoming, current, or previous games had an impact on the number of comments these posts received, $F(4, 426) = 9.39$. Posts with pregame content had significantly more comments ($M = 2.34$, $SD = 0.43$) than posts that contained postgame content ($M = 0.99$, $SD = 0.99$). Posts with mid-game content had more comments ($M = 1.52$, $SD = 0.44$) than posts that contained postgame content. Postgame content had significantly fewer comments than posts that made no mention of an upcoming, current, or previous opponent ($M = 1.26$, $SD = 0.64$).

Shares.

The ANOVA results show that content relating to upcoming, current, or previous games had an impact on the number of shares these posts had, $F(4, 426) = 22.44$. Pregame content posts received significantly more shares ($M = 1.20$, $SD = 0.42$) than posts with midgame content ($M = 0.86$, $SD = 0.41$), postgame content ($M = 0.64$, $SD = 0.59$), or lacked any mention of any upcoming, current, or previous opponent ($M = 0.75$, $SD = 0.51$).

Views.

The ANOVA results show that video content relating to upcoming, current, or previous games had an impact on the number of views these posts received, $F(4, 426) = 13.32$. The number of views for posts that were videos with no mention of upcoming, current, or previous opponents were significantly higher ($M = 2.72$, $SD = 1.73$) than posts with pregame content ($M = 1.28$, $SD = 1.83$), mid-game content ($M = 1.39$, $SD = 1.90$), and postgame content ($M = 2.06$, SD

= 1.73). There was also a significant difference in the number of views between posts with

pregame and postgame content.

Table 3

Engagement by pregame, mid-game, postgame, and combination content for the University of Oregon

	None	Pregame	Mid-Game	Postgame	Combo	
	$n = 70$	$n = 82$	$n = 28$	$n = 41$	$n = 24$	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	2.82 (0.40)^a	2.72 (0.35)^{bd}	2.87 (0.33)^c	2.99 (0.48)^{bde}	2.67 (0.39)^{de}	4.12 (4, 240)***
Comments	1.46 (0.49)^{ad}	1.37 (0.51)^{bd}	1.46 (0.35)^c	1.73 (0.44)^{abd}	1.41 (0.43)^e	3.97 (4, 240)**
Shares	1.66 (0.69)^{ad}	1.51 (0.66)^{bd}	1.85 (0.61)^c	2.04 (0.71)^{abd}	1.61 (0.53)^e	4.93 (4, 240)**
Views	1.47 (2.13)^a	0.86 (1.77)^{bcd}	2.28 (2.18)^{bc}	2.54 (2.31)^{bd}	1.55 (2.06)^e	5.65 (4, 240)***

*$p = .05$, **$p = .01$, ***$p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. The Combo variable contains posts with a combination of two or three of the other variables. The None variable contains posts with no elements of the other variables.

Results from Table 3 were found using an ANOVA test and indicate that there are

statistically significant differences between all dependent variables and the independent

variables.

Likes.

The ANOVA results show that content relating to upcoming, current, or previous games

had an impact on the number of likes these posts received, $F(4, 240) = 4.12$. The number of likes

for posts with postgame content ($M = 2.99$, $SD = 0.48$) was significantly more than posts with

pregame content ($M = 2.72$, $SD = 0.35$) and posts with a combination of content ($M = 2.67$, $SD =$

0.39).

Comments.

The ANOVA results show that content relating to upcoming, current, or previous games had an impact on the number of comments these posts received, $F(4, 240) = 3.97$. Posts with postgame content had significantly more comments ($M = 1.73$, $SD = 0.44$) than content that did not mention an upcoming, current, or previous opponent ($M = 1.46$, $SD = 0.49$), as well as posts with pregame content ($M = 1.37$, $SD = 0.51$).

Shares.

The ANOVA results show that content relating to upcoming, current, or previous games had an impact on the number of shares these posts had, $F(4, 240) = 4.93$. Postgame content saw a higher number of shares ($M = 2.04$, $SD = 0.71$) compared to those with pregame content ($M = 1.51$, $SD = 0.66$) or posts that did not mention an upcoming, current, or previous opponent ($M = 1.66$, $SD = 0.69$).

Views.

The ANOVA results show that video content related to upcoming, current, or previous games had an impact on the number of views these posts received, $F(4, 240) = 5.65$. The number of views for video posts with pregame content ($M = 0.86$, $SD = 1.77$) was significantly fewer than posts with mid-game ($M = 2.28$, $SD = 2.18$) or postgame content ($M = 2.54$, $SD = 2.31$).

Table 4

Engagement by team, historical, fan, and misc. content for BYU

	No Theme	Team	History	Fan	
	n = 187	*n* = 89	*n* = 58	*n* = 66	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.98 (0.69)	2.08 (0.40)	1.83 (0.44)	2.12 (0.41)	1.82 (7, 423)
Comments	1.21 (0.62)	1.40 (0.57)	1.25 (0.70)	1.23 (0.57)	1.12 (7, 423)
Shares	0.92 (0.61)^{ac}	0.90 (0.38)^{bc}	0.58 (0.55)^{abcd}	0.94 (0.48)^{cd}	3.35 (7, 423)**
Views	1.46 (1.77)^{abce}	3.06 (1.57)^{abd}	2.86 (1.57)^{acd}	1.50 (1.89)^{bcd}	11.04 (7, 423)***

p = .05, **p* = .01, ***p* = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 4.1

Engagement by team, historical, fan, and misc. content for BYU (continued)

	Team/Fan	Combo	Misc.	Fan/Misc.	
	n = 13	*n* = 9	*n* = 5	*n* = 4	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	2.14 (0.40)	2.13 (0.48)	2.26 (0.4)	2.06 (0.23)	1.82 (7, 423)
Comments	1.15 (0.63)	1.13 (0.48)	1.10 (0.33)	0.95 (0.56)	1.12 (7, 423)
Shares	0.75 (0.52)^{e}	0.94 (0.60)^{f}	1.00 (0.37)^{g}	1.23 (0.38)^{h}	3.35 (7, 423)**
Views	3.02 (1.74)^{ae}	1.71 (2.03)^{f}	2.25 (2.05)^{g}	0.99 (1.98)^{h}	11.04 (7, 423)***

p = .05, **p* = .01, ***p* = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. The Team/Fan and Fan/Misc. variables were posts that contained elements of both team-focused and fan content, and fan-focused and miscellaneous content.

Results from Table 4 and Table 4.1 were found using an ANOVA and indicate that there are statistically significant differences between two dependent variables and the independent variables

Shares.

The ANOVA results show that the type of theme that the content focused on had an impact on the number of shares these posts had, $F(7, 423) = 3.35$. Posts with historical content saw significantly fewer shares ($M = 0.58$, $SD = 0.55$) than posts with no specific theme ($M = 0.92$, $SD = 0.61$), team-focused content ($M = 0.90$, $SD = 0.38$), and fan-focused content ($M = 0.94$, $SD = 0.48$).

Views.

The ANOVA results show that the type of theme that the video content focused on had an impact on the number of views these posts received, $F(7, 423) = 11.04$. Posts that were videos with no specific theme had a significantly lower number of views ($M = 1.46$, $SD = 1.77$) than videos with team-focused ($M = 3.06$, $SD = 1.57$), historical ($M = 2.86$, $SD = 1.57$), or team/fan-focused content ($M = 3.02$, $SD = 1.74$). Views for videos that were team-focused had more views than videos that were fan-focused ($M = 1.50$, $SD = 1.89$). Additionally, views for fan-focused videos had a lower number of views than videos that were historical in nature.

Table 5

Engagement by team, historical, fan, and misc. content for the University of Oregon

Variable	No Theme	Team	History	Team/Fan	Team/History	Other	
	n = 56	*n* = 150	*n* = 20	*n* = 5	*n* = 11	*n* = 3	
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	2.83 (0.39)	2.80 (0.42)	2.84 (0.32)	2.95 (0.64)	2.61 (0.29)	2.75 (0.36)	0.72 (5, 239)
Comments	1.56 (0.39)	1.44 (0.51)	1.60 (0.51)	1.46 (0.80)	1.18 (0.25)	1.38 (0.52)	1.53 (5, 239)
Shares	1.84 (0.61)	1.61 (0.72)	1.78 (0.46)	2.16 (1.17)	1.54 (0.42)	1.87 (0.44)	1.66 (5, 239)
Views	2.06 (2.17)	1.31 (2.05)	1.82 (2.29)	2.02 (2.77)	1.16 (2.00)	2.81 (2.43)	1.45 (5, 239)

*p = .05, **p = .01, ***p = .001

Note. The Team/Fan and Team/History variables were posts that contained elements of both team-focused and fan content, and team-focused and historical content. The None variable contains posts that had no elements of the other variables.

Results from Table 5 were found using an ANOVA test and indicate that there are no statistically significant differences between the dependent variables and the independent variables.

Table 6

Engagement by presence of call to action for BYU

Variable	Call to Action	No Call to Action	
	n = 113	*n* = 318	
	M (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	2.04 (0.46)	2.00 (0.59)	0.69 (429)
Comments	1.46 (0.53)	1.18 (0.62)	4.71 (228.61)*
Shares	0.83 (0.54)	0.89 (0.55)	-0.88 (429)
Views	1.87 (1.92)	2.10 (1.85)	-1.14 (429)

*p = .05, **p = .01, ***p = .001

Results from Table 6 were calculated using an independent *t*-test and indicate that there are statistically significant differences between one dependent variable and the independent variables.

Comments.

Posts with a call to action saw a significantly higher number of comments ($M = 1.46$, *SD* $= 0.53$) compared to posts with no call to action ($M = 1.18$, *SD* $= 0.62$).

Table 7

Engagement by call to action type for BYU

Variable	Engage $n = 60$ M (*SD*)	Merch. $n = 3$ M (*SD*)	Tickets $n = 13$ M (*SD*)	Color $n = 24$ M (*SD*)	Other $n = 13$ M (*SD*)	F (*df*)
Likes	1.95 (0.56)	2.10 (0.19)	2.16 (0.30)	1.98 (0.47)	2.15 (0.35)	0.82 (4, 108)
Comments	1.20 (0.64)	1.14 (0.38)	1.14 (0.79)	1.19 (0.48)	1.24 (0.44)	0.05 (4, 108)
Shares	0.86 (0.57)	0.82 (0.11)	0.99 (0.46)	0.84 (0.53)	0.90 (0.47)	0.20 (4, 108)
Views	1.73 (1.83)	1.27 (2.20)	2.38 (1.97)	2.70 (1.78)	1.80 (2.02)	1.45 (4, 108)

*$p = .05$, **$p = .01$, ***$p = .001$

Note. "Merch." = Merchandise.

Results from Table 7 were found using an ANOVA test and indicate that there are no significant differences in the values of the dependent variables and independent variables. The number of posts with calls to action was insignificant for the University of Oregon (less than 2% of all posts) and was therefore not analyzed.

Table 8

Engagement by presence of incentive for BYU

	Incentive	No Incentive	
	n = 75	*n* = 356	
Variable	*M* (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	1.89 (0.40)	2.04 (0.58)	-2.68 (147.2)*
Comments	1.56 (0.56)	1.19 (0.60)	4.96 (429)
Shares	0.64 (0.47)	0.92 (0.55)	-4.22 (429)
Views	2.20 (1.87)	2.01 (1.87)	0.81 (429)

p = .05, **p* = .01, ***p* = .001

Results from Table 8 were calculated using an independent *t*-test and indicate that there are statistically significant differences between one dependent variable and the independent variables. The University of Oregon did not offer incentives for engagement on their posts.

Likes.

Posts with an incentive to participate saw a higher number of likes (*M* = 1.56, *SD* = 0.40) compared to posts without an incentive (*M* = 1.19, *SD* = 0.58).

Table 9

Engagement by incentive type for BYU

	Merch.	Gift Card	Free Tickets	Other	
	n = 37	*n* = 28	*n* = 6	*n* = 4	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.93 (0.43)	1.85 (0.27)	1.86 (0.79)	1.89 (0.29)	0.23 (3, 71)
Comments	1.39 (0.62)^{ab}	1.77 (0.31)^{ab}	1.71 (0.73)^{c}	1.40 (0.77)^{d}	2.90 (3, 71)*
Shares	0.63 (0.52)	0.62 (0.42)	0.73 (0.41)	0.72 (0.50)	0.14 (3, 71)
Views	1.55 (1.81)^{ab}	3.26 (1.36)^{ab}	1.99 (2.18)^{c}	1.15 (2.29)^{d}	5.89 (3, 71)***

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. "Merch." = Merchandise.

Results from Table 9 were found using an ANOVA and indicate that there are statistically significant differences between two dependent variables and the independent variables.

Comments.

The ANOVA results show that the incentive type offered had an impact on the number of comments these posts received, $F(3, 71) = 2.90$. The number of comments was significantly higher when a post's incentive to participate was a gift card ($M = 1.77$, $SD = 0.31$) rather than merchandise ($M = 1.39$, $SD = 0.62$).

Views.

The ANOVA results show that the incentive type videos offered had an impact on the number of views these posts received, $F(3, 71) = 5.89$. The number of views was significantly higher when a video post's incentive to participate was a gift card ($M = 3.26$, $SD = 1.36$) rather than merchandise ($M = 1.55$, $SD = 1.81$).

RQ2 – Engagement Based on Post Type

RQ2 sought to investigate if post type, whether it was an image, video, link to external content, photo album, or a giveaway, saw differences in the number of engagements they received relative to each other. As part of this query, understanding what kind of video content, be it a pre-recorded clip or a live broadcast, performed better was also considered.

Table 10

Engagement by post type for BYU

	Image	Video	Link	Album	Giveaway	
	$n = 124$	$n = 244$	$n = 25$	$n = 25$	$n = 13$	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	2.13 $(0.50)^{ab}$	1.90 $(0.59)^{abcd}$	2.23 $(0.39)^{bc}$	2.33 $(0.28)^{bd}$	2.04 $(0.52)^{e}$	7.12 (4, 426)***
Comments	1.34 (0.59)	1.20 (0.64)	1.22 (0.51)	1.33 (0.35)	1.33 (0.63)	1.25 (4, 426)
Shares	0.98 $(0.55)^{abd}$	0.75 $(0.52)^{abcd}$	1.12 $(0.42)^{bc}$	1.31 $(0.50)^{bde}$	0.81 $(0.47)^{de}$	10.53 (4, 426)***

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. The variable for video views was omitted because videos are the only post type that tracks the number of views it receives.

Results from Table 10 were found using an ANOVA test and indicate that there are statistically significant differences between two dependent variables and the independent variables.

Likes.

The ANOVA results show that post type had an impact on the number of likes these posts received, $F(4, 426) = 7.12$. Posts that were videos saw a significantly lower number of likes ($M = 1.90$, $SD = 0.59$) when compared to posts that were an image ($M = 2.13$, $SD = 0.50$), link ($M = 2.23$, $SD = 0.39$), or photo album ($M = 2.33$, $SD = 0.28$).

Shares.

The ANOVA results show that post type had an impact on the number of shares these posts had, $F(4, 426) = 10.53$. Posts that are videos saw significantly lower numbers shares ($M = 0.75$, $SD = 0.52$) when compared to posts that were an image ($M = 0.98$, $SD = 0.55$), link ($M = 1.12$, $SD = 0.42$), or photo album ($M = 1.31$, $SD = 0.50$). Photo albums also saw more shares than a post with a single image or was a giveaway ($M = 0.81$, $SD = 0.47$).

Table 11

Engagement by post type for the University of Oregon

	Image	Video	Link	Album	
	$n = 47$	$n = 86$	$n = 101$	$n = 11$	
Variable	M (SD)	M (SD)	M (SD)	M (SD)	F (df)
Likes	2.77 (0.40)	2.86 (0.42)	2.77 (0.40)	2.87 (0.30)	0.88 (3, 241)
Comments	1.53 (0.43)	1.48 (0.49)	1.45 (0.52)	1.32 (0.27)	0.67 (3, 241)
Shares	1.73 (0.61)	1.79 (0.71)	1.63 (0.67)	1.29 (0.71)	2.32 (3, 241)

$*p = .05$, $**p = .01$, $***p = .001$

Note. The variable for video views was omitted because videos are the only post type that tracks the number of views it receives.

Results from Table 11 were found using an ANOVA and indicate that there are no statistically significant differences between dependent variables and the independent variables.

Table 12

Engagement by video type for BYU

	Pre-Recorded	Live Broadcast	
	n = 186	*n* = 53	
Variable	*M* (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	1.85 (0.64)	1.98 (0.37)	-1.99 (148.81)***
Comments	1.06 (0.63)	1.71 (0.44)	-8.69 (118.66)***
Shares	0.72 (0.58)	0.84 (0.40)	-1.77 (122.3)***
Views	3.00 (1.46)	3.19 (1.49)	-0.84 (237)

*p = .05, **p = .01, ***p = .001

Results from Table 12 were calculated using an independent *t*-test and indicate that there are statistically significant differences between three dependent variables and the independent variables.

Likes.

Videos that were broadcast live had more likes (*M* = 1.98, *SD* = 0.37) than posts with pre-recorded videos (*M* = 1.85, *SD* = 0.64).

Comments.

Videos that were broadcast live had more comments (*M* = 1.71, *SD* = 0.44) than posts with pre-recorded videos (*M* = 1.06, *SD* = 0.63).

Shares.

Videos that were broadcast live had more shares (*M* = 0.84, *SD* = 0.40) than posts with pre-recorded videos (*M* = 0.72, *SD* = 0.58).

Table 13

Engagement by video type for the University of Oregon

	Pre-Recorded	Live Broadcast	
	n = 77	*n* = 9	
Variable	*M* (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	2.81 (0.38)	3.25 (0.56)	-3.11 (84)
Comments	1.41 (0.45)	2.03 (0.52)	-3.88 (84)
Shares	1.70 (0.63)	2.55 (0.88)	-3.65 (84)
Views	1.65 (2.15)	1.79 (2.70)	-0.18 (84)

*p = .05, ***p* = .01, ****p* = .001

Results from Table 13 were calculated using an independent *t*-test and indicate that there are no statistically significant differences between dependent variables and the independent variables.

RQ3 – Engagement Based on Time or Frequency of Posting

RQ3 set out to better understand if there was any kind of difference in the number of engagements relative to the day of the week, as well as if there were periods during the day that sought significantly different amounts of engagement. The frequency with which a program posted was also examined relative to engagement numbers. Finally, tests were run to examine engagement rates on gamedays versus non-gamedays, as well as the impact that kickoff times had on those rates.

Table 14

Engagement per weekday for BYU

	Sunday	Monday	Tuesday	Wednesday	
	n = 58	*n* = 57	*n* = 50	*n* = 53	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.71 (0.76)^{adefg}	1.78 (0.52)^{bdefg}	1.85 (0.37)^{cef}	2.09 (0.42)^{abd}	10.49 (6, 424)***
Comments	0.97 (0.64)^{adeg}	1.24 (0.67)^{b}	1.30 (0.83)^{c}	1.34 (0.46)^{ad}	2.78 (6, 424)***
Shares	0.62 (0.56)^{adefg}	0.68 (0.47)^{befg}	0.60 (0.50)^{cdefg}	0.91 (0.47)^{acd}	11.36 (6, 424)***
Views	2.00 (1.74)^{ac}	2.86 (1.54)^{bfg}	3.08 (1.49)^{cfg}	2.18 (1.94)^{d}	9.23 (6, 424)***

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 14.1

Engagement per weekday for BYU (*continued*)

	Thursday	Friday	Saturday	
	n = 44	*n* = 60	*n* = 109	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	2.23 (0.31)^{abce}	2.28 (0.35)^{abcf}	2.10 (0.61)^{abg}	10.49 (6, 424)***
Comments	1.37 (0.47)^{ae}	1.25 (0.45)^{f}	1.30 (0.60)^{ag}	2.78 (6, 424)***
Shares	1.08 (0.44)^{abce}	1.15 (0.47)^{abcf}	0.99 (0.57)^{abcg}	11.36 (6, 424)***
Views	2.29 (1.93)^{e}	1.28 (1.83)^{bcf}	1.42 (1.83)^{bcg}	9.23 (6, 424)***

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Results from Table 14 and Table 14.1 were found using an ANOVA test and indicate that there are statistically significant differences between all dependent variables and the independent variables.

Likes.

The ANOVA results show that the day of the week that content was shared had an impact on the number of likes these posts received, $F(6, 424) = 10.49$. Content that was posted on a Sunday had significantly fewer likes ($M = 1.71$, $SD = 0.76$) compared to content posted on Wednesday ($M = 2.09$, $SD = 0.42$), Thursday ($M = 2.23$, $SD = 0.31$), Friday ($M = 2.28$, $SD = 0.35$), or Saturday ($M = 2.10$, $SD = 0.61$). Content shared on a Monday had fewer likes ($M = 1.78$, $SD = 0.52$) compared to content posted on Wednesday, Thursday, Friday, or Saturday. Content shared on Tuesdays had fewer likes ($M = 1.85$, $SD = 0.37$) compared to content posted on Thursday or Friday.

Comments.

The ANOVA results show that the day of the week content was shared had an impact on the number of comments these posts received, $F(6, 424) = 2.78$. Content that was posted on a Sunday ($M = 0.97$, $SD = 0.64$) had a significantly lower number of comments compared to content posted on Wednesday ($M = 1.34$, $SD = 0.46$), Thursday ($M = 1.37$, $SD = 0.44$), or Saturday ($M = 1.30$, $SD = 0.60$).

Shares.

The ANOVA results show that the day of the week that content was shared had an impact on the number of shares these posts had, $F(6, 424) = 11.36$. Content that was posted on a Sunday ($M = 0.62$, $SD = 0.56$) had significantly fewer shares compared to content posted on Wednesday ($M = 0.91$, $SD = 0.47$), Thursday ($M = 1.08$, $SD = 0.44$), Friday ($M = 1.15$, $SD = 0.47$), or Saturday ($M = 0.99$, $SD = 0.57$). Content that was shared on Mondays had fewer shares ($M = 0.68$, $SD = 0.47$) compared to content posted on Thursday, Friday, or Saturday. Content that was

posted on Tuesdays had fewer shares ($M = 0.60$, $SD = 0.50$) compared to content posted on Wednesday, Thursday, Friday, or Saturday.

Views.

The ANOVA results show that the day of the week that video content was shared had an impact on the number of views these posts received, $F(6, 424) = 9.23$. Video views for content that was shared on a Sunday ($M = 2.00$, $SD = 1.74$) had a significantly lower number of views compared to content shared on a Tuesday ($M = 3.08$, $SD = 1.49$). Videos shared on Mondays ($M = 2.86$, $SD = 1.54$) or Tuesdays had higher views compared to Fridays ($M = 1.28$, $SD = 1.83$) or Saturdays ($M = 1.42$, $SD = 1.83$).

Table 15

Engagement per weekday for the University of Oregon

	Sunday	Monday	Tuesday	Wednesday	
	$n = 24$	$n = 30$	$n = 30$	$n = 26$	
Variable	M (SD)	M (SD)	M (SD)	M (SD)	F (df)
Likes	2.86 (0.33)[ad]	2.68 (0.30)[bg]	2.74 (0.37)[c]	2.51 (0.23)[adeg]	5.13 (6, 238)***
Comments	1.43 (0.34)[ad]	1.59 (0.43)[bd]	1.27 (0.50)[cg]	1.05 (0.41)[abdg]	10.09 (6, 238)***
Shares	1.62 (0.59)[a]	1.28 (0.68)[beg]	1.58 (0.62)[cg]	1.29 (0.40)[dg]	7.69 (6, 238)***
Views	0.41 (1.38)[ag]	1.46 (2.10)[b]	1.61 (2.17)[c]	1.51 (2.12)[d]	3.89 (6, 238)***

*$p = .05$, **$p = .01$, ***$p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 15.1

*Engagement per weekday for the University of Oregon (*continued*)*

	Thursday	Friday	Saturday	
	$n = 26$	$n = 29$	$n = 80$	
Variable	M (*SD*)	M (*SD*)	M (*SD*)	F (*df*)
Likes	2.89 (0.40)^{de}	2.78 (0.40)^{f}	2.94 (0.46)^{bdg}	5.13 (6, 238)***
Comments	1.36 (0.46)^{eg}	1.37 (0.46)^{fg}	1.72 (0.43)^{cdefg}	10.09 (6, 238)***
Shares	1.80 (0.66)^{be}	1.65 (0.74)^{f}	2.01 (0.63)^{bcdg}	7.69 (6, 238)***
Views	1.19 (2.00)^{e}	0.78 (1.75)^{fg}	2.31 (2.24)^{afg}	3.89 (6, 238)***

$*p = .05, **p = .01, ***p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Results from Table 15 and Table 15.1 were found using an ANOVA and indicate that there are statistically significant differences between all dependent variables and the independent variables.

Likes.

The ANOVA results show that the day of the week content was shared had an impact on the number of likes these posts received, $F(6, 238) = 5.13$. Content that was posted on a Sunday ($M = 2.86, SD = 0.33$) had more likes compared to content posted on Wednesday ($M = 2.51, SD = 0.23$). Content shared on a Monday had more likes ($M = 2.68, SD = 0.30$) compared to content posted on Saturday ($M = 2.10, SD = 0.46$). Content shared on Wednesdays had more likes compared to content posted on Thursday ($M = 1.36, SD = 0.40$) or Saturday ($M = 1.72, SD = 0.46$).

Comments.

The ANOVA results show that the day of the week that content was shared had an impact on the number of comments these posts received, $F(6, 238) = 10.09$. Content that was posted on

a Tuesday (*M* = 1.27, *SD* = 0.50) had fewer comments compared to content posted on Saturday (*M* = 1.72, *SD* = 0.43). Content that was shared on Wednesdays (*M* = 1.05, *SD* = 0.41) had a significantly lower number of comments compared to content posted on Sunday (*M* = 1.43, *SD* = 0.34), Monday (*M* = 1.59, *SD* = 0.43), or Saturday (*M* = 1.72, *SD* = 0.43). Content shared on a Thursday (*M* = 1.36, *SD* = 0.46) had a lower number of comments compared to content posted on Saturday. Finally, content shared on a Friday (*M* = 1.37, *SD* = 0.46) also had fewer comments compared to content posted on Saturday.

Shares.

Content that was posted on a Monday (*M* = 1.62, *SD* =0.68) had significantly fewer shares compared to content posted on Thursday (*M* = 1.80, *SD* = 0.66). Content that was posted on Saturdays (*M* = 2.01, *SD* = 0.63) had a significantly higher number of shares compared to content posted on Monday, Tuesday (*M* = 1.58, *SD* = 0.62), or Wednesday (*M* = 1.29, *SD* = 0.40).

Views.

Video views for content that was shared on a Saturday (*M* = 2.31, *SD* = 2.24) had a statistically higher number of views compared to content shared on Sunday (*M* = 0.41, *SD* = 1.38) and Friday (*M* = 0.78, *SD* = 1.75).

Table 16

Engagement during time of day for BYU

	Twilight	Early Morning	Morning	
	n = 7	*n* = 9	*n* = 88	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.37 (0.47)^{aef}	1.50 (0.85)^{bef}	1.89 (0.53)^{ce}	9.02 (5, 425)***
Comments	0.95 (0.53)	1.16 (0.65)	1.32 (0.58)	0.79 (5, 425)
Shares	0.38 (0.29)^{aef}	0.57 (0.60)^{b}	0.77 (0.52)^{c}	4.98 (5, 425)***
Views	1.70 (1.64)^{a}	2.07 (1.60)^{b}	2.34 (1.77)^{c}	2.39 (5, 425)**

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 16.1

Engagement during time of day for BYU (*continued*)

	Afternoon	Evening	Night	
	n = 93	*n* = 179	*n* = 55	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.89 (0.61)^{de}	2.18 (0.42)^{abcde}	2.06 (0.67)^{abf}	9.02 (5, 425)***
Comments	1.20 (0.67)	1.25 (0.59)	1.28 (0.62)	0.79 (5, 425)
Shares	0.78 (0.53)^{d}	0.97 (0.52)^{ae}	1.02 (0.61)^{af}	4.98 (5, 425)***
Views	1.81 (1.86)^{d}	2.22 (1.92)^{e}	1.41 (1.80)^{af}	2.39 (5, 425)**

*p = .05, **p = .01, ***p = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Results from Table 16 and Table 16.1 were found using an ANOVA and indicate that there are statistically significant differences between three dependent variables and the independent variables.

Likes.

The ANOVA results show that the time of day that content was shared had an impact on the number of likes these posts received, $F(5, 425) = 9.02$. Content that was posted during the twilight hours had significantly fewer likes ($M = 1.37$, $SD = 4.47$) compared to content posted during the evening ($M = 2.18$, $SD = 0.42$) or night hours ($M = 2.06$, $SD = 0.67$). Early morning posts also had a significantly lower number of likes ($M = 1.50$, $SD = 0.85$) compared to the evening and night hours. Content posted in the morning had fewer likes ($M = 1.89$, $SD = 0.53$) when compared to the evening hours. Content posted in the afternoon also had a significantly lower number of likes ($M = 1.89$, $SD = 0.61$) to that of content posted during the evening.

Shares.

The ANOVA results show that the time of day that content was shared had an impact on the number of shares these posts received, $F(5, 425) = 4.98$. Content that was posted during the twilight hours had a significantly lower number of shares ($M = 0.38$, $SD = 0.29$) compared to content posted during the evening ($M = 0.97$, $SD = 0.52$) or night hours ($M = 1.02$, $SD = 0.61$).

Views.

The ANOVA results show that the time of day that video content was shared had an impact on the number of views these posts received, $F(5, 425) = 2.39$. Videos that were posted during the morning hours saw more views ($M = 2.07$, $SD = 1.77$) compared to content posted during the night hours ($M = 1.41$, $SD = 1.80$).

Table 17

Engagement during time of day for the University of Oregon

Variable	Twilight to Early Morn. $n = 3$ M (SD)	Morning $n = 50$ M (SD)	Afternoon $n = 84$ M (SD)	Evening $n = 76$ M (SD)	Night $n = 32$ M (SD)	F (df)
Likes	2.83 (0.52)	2.90 (0.36)	2.72 (0.36)	2.81 (0.40)	2.88 (0.53)	2.11 (4, 240)
Comments	1.56 (0.25)[a]	1.53 (0.46)[b]	1.31 (0.44)[ce]	1.46 (0.48)[de]	1.79 (0.48)[cde]	6.53 (4, 240)***
Shares	1.51 (0.71)[a]	1.88 (0.63)[bc]	1.48 (0.66)[bce]	1.70 (0.64)[d]	1.91 (0.76)[ce]	4.10 (4, 240)***
Views	0 (0)	1.50 (2.11)	1.30 (2.02)	1.96 (2.22)	1.42 (2.18)	1.45 (4, 240)

*$p = .05$, **$p = .01$, ***$p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. The Twilight to Early Morning variable contains a combination of content posted in both the Twilight and Early Morning time periods.

Results from Table 17 were found using an ANOVA and indicate that there are statistically significant differences between two dependent variables and the independent variables.

Comments.

The ANOVA results show that the time of day that content was shared had an impact on the number of comments these posts received, $F(4, 240) = 6.53$. Content that was posted during the night hours received significantly more comments ($M = 1.79$, $SD = 0.48$) compared to content posted during the afternoon ($M = 1.31$, $SD = 0.44$) and evening hours ($M = 1.46$, $SD = 0.48$).

Shares.

The ANOVA results show that the time of day that content was shared had an impact on the number of shares these posts had, $F(4, 240) = 4.10$. Content that was shared during the afternoon hours had fewer shares ($M = 1.48$, $SD = 0.66$) compared to content posted during the morning ($M = 1.51$, $SD = 0.63$) or night hours ($M = 1.91$, $SD = 0.76$).

Table 18

Engagement count per number of posts a day for BYU

Variable	1x	2x	3x	4x	
	$n = 7$	$n = 14$	$n = 19$	$n = 14$	
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.97 $(0.28)^{acdefghikl}$	2.36 $(0.31)^{bdeghikl}$	2.51 $(0.22)^{achikl}$	2.79 $(0.37)^{abd}$	10.15 $(11, 81)$***
Comments	1.29 $(0.47)^{acdefghijkl}$	1.62 $(0.38)^{bdeikl}$	1.95 $(0.40)^{ack}$	2.22 $(0.33)^{abd}$	7.31 $(11, 81)$***
Shares	0.96 $(0.26)^{adeghikl}$	1.20 $(0.38)^{bhikl}$	1.29 $(0.30)^{cikl}$	1.68 $(0.42)^{ad}$	7.45 $(11, 81)$***
Views	0.55 $(1.45)^{abcdefghijkl}$	3.23 $(1.39)^{abde}$	4.10 $(0.26)^{ac}$	4.36 $(0.30)^{abd}$	15.38 $(11, 81)$***

*$p = .05$, **$p = .01$, ***$p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 18.1

Engagement count per number of posts a day for BYU (*continued*)

Variable	5x	6x	7x	8x	
	n = 12	n = 7	n = 7	n = 4	
	M (SD)	M (SD)	M (SD)	M (SD)	F (df)
Likes	2.85 (0.33)abe	2.64 (0.65)afikl	2.95 (0.34)abg	3.15 (0.10)abch	10.15 (11, 81)***
Comments	2.18 (0.37)abe	2.13 (0.53)af	2.19 (0.38)ag	2.29 (0.38)abh	7.31 (11, 81)***
Shares	1.71 (0.42)ae	1.64 (0.68)f	1.76 (0.48)ag	1.97 (0.24)abh	7.45 (11, 81)***
Views	4.27 (0.22)abe	3.80 (0.54)af	4.08 (0.72)ag	4.39 (0.36)ah	15.38 (11, 81)***

$*p = .05, **p = .01, ***p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 18.2

Engagement count per number of posts a day for BYU (*continued*)

Variable	9x	10x–11x	12–13x	14x	
	n = 3	n = 2	n = 2	n = 2	
	M (SD)	M (SD)	M (SD)	M (SD)	F (df)
Likes	3.44 (0.08)abcfi	2.78 (0.25)j	3.62 (0.03)abcfk	3.55 (0.20)abcfl	10.15 (11, 81)***
Comments	2.72 (0.16)abi	2.53 (0.04)aj	2.92 (0.13)abck	2.73 (0.16)abl	7.31 (11, 81)***
Shares	2.30 (0.30)abci	1.69 (0.22)j	2.63 (0.18)abck	2.52 (0.21)abcl	7.45 (11, 81)***
Views	4.74 (0.09)ai	4.39 (0.03)aj	4.79 (0.06)ak	4.61 (0.13)al	15.38 (11, 81)***

$*p = .05, **p = .01, ***p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Results from Table 18, Table 18.1, and Table 18.2 were found using an ANOVA test and indicate that there are statistically significant differences between all dependent variables and the independent variables.

Likes.

The ANOVA results show that the number of times content was posted in a day had an impact on the number of likes these posts received, $F(11, 81) = 10.15$. Days that saw only one post had significantly fewer likes ($M = 1.97$, $SD = 0.28$) compared to days when there were three ($M = 2.51$, $SD = 0.22$), four ($M = 2.79$, $SD = 0.37$), five ($M = 2.85$, $SD = 0.33$), six ($M = 2.64$, $SD = 0.65$), seven ($M = 2.95$, $SD = 0.34$), eight ($M = 3.15$, $SD = 0.10$), nine ($M = 3.44$, $SD = 0.08$), twelve to thirteen ($M = 3.62$, $SD = 0.03$), and fourteen posts ($M = 3.55$, $SD = 0.20$). Days with only two posts also had fewer likes ($M = 2.36$, $SD = 0.31$) than days with four), five), seven, eight, nine, twelve to thirteen, and fourteen posts. Days with three posts shared had fewer likes compared to days with eight, nine, twelve to thirteen, and fourteen posts. When six posts were shared in a single day there were significantly less likes compared to days with nine, twelve to thirteen, and fourteen posts.

Comments.

The ANOVA results show that the number of times content was posted in a day had an impact on the number of comments these posts received, $F(11, 81) = 7.31$. Days that saw only one post received significantly fewer comments ($M = 1.29$, $SD = 0.47$) compared to days when there were three ($M = 1.95$, $SD = 0.40$), four ($M = 2.22$, $SD = 0.33$), five ($M = 2.18$, $SD = 0.37$), six ($M = 2.13$, $SD = 0.53$), seven ($M = 2.19$, $SD = 0.38$), eight ($M = 2.29$, $SD = 0.38$), nine ($M = 2.72$, $SD = 0.16$), ten to eleven ($M = 2.53$, $SD = 0.04$), twelve to thirteen ($M = 2.92$, $SD = 0.13$), and fourteen posts ($M = 2.73$, $SD = 0.16$). Days with only two posts had a fewer number of

comments ($M = 1.62$, $SD = 0.38$) compared to days with four, five, nine, twelve to thirteen, and fourteen posts. Days that had only three posts saw fewer comments compared to days with twelve to thirteen posts.

Shares.

The ANOVA results show that the number of times content was posted in a day had an impact on the number of times posts were shared, $F(11, 81) = 7.45$. Days that saw only one post saw fewer shares ($M = 0.96$, $SD = 0.26$) compared to days when there were four ($M = 1.68$, $SD = 0.42$), five ($M = 1.71$, $SD = 0.42$), seven ($M = 1.76$, $SD = 0.48$), eight ($M = 1.97$, $SD = 0.24$), nine ($M = 2.30$, $SD = 0.30$), twelve to thirteen ($M = 2.63$, $SD = 0.18$), and fourteen posts ($M = 2.52$, $SD = 0.21$). Days with only two posts also saw a lower number of shares ($M = 1.20$, $SD = 0.38$) compared to days with eight, nine, twelve to thirteen, and fourteen posts. Finally, days that had only three posts had fewer shares ($M = 1.29$, $SD = 0.30$) compared to days with nine, twelve to thirteen, and fourteen posts.

Views.

The ANOVA results show that the number of times video content was posted in a day had an impact on the number of views these posts received, $F(11, 81) = 15.38$. Days that saw only one video post showed a significantly lower number of views ($M = 0.55$, $SD = 1.45$) compared to days when there were two ($M = 3.23$, $SD = 1.39$) three ($M = 4.10$, $SD = 0.26$), four ($M = 4.36$, $SD = 0.30$), five ($M = 4.27$, $SD = 0.22$), six ($M = 3.80$, $SD = 0.54$), seven ($M = 4.08$, $SD = 0.72$), eight ($M = 4.39$, $SD = 0.36$), nine ($M = 4.74$, $SD = 0.09$), ten to eleven ($M = 4.39$, $SD = 0.03$), twelve to thirteen ($M = 4.79$, $SD = 0.06$), and fourteen posts ($M = 4.61$, $SD = 0.13$). Days with only two videos had fewer views compared to days with four or five posts.

Table 19

Engagement count per number of posts a day for the University of Oregon

	1x	2x	3x	4x	
	$n = 27$	$n = 31$	$n = 15$	$n = 8$	
Variable	M (SD)	M (SD)	M (SD)	M (SD)	F (df)
Likes	2.61 (0.29)^{abcdefg}	3.11 (0.27)^{abdeg}	3.25 (0.28)^{aceg}	3.58 (0.25)^{abdg}	35.87 (6, 85)***
Comments	1.26 (0.40)^{abcdefg}	1.83 (0.38)^{abeg}	1.97 (0.40)^{acg}	2.12 (0.26)^{adg}	20.90 (6, 85)***
Shares	1.34 (0.41)^{abcdefg}	1.98 (0.59)^{abdeg}	2.21 (0.62)^{aceg}	2.59 (0.37)^{abd}	20.16 (6, 85)***
Views	0.33 (1.20)^{abcdefg}	2.43 (2.25)^{abg}	3.95 (1.64)^{ac}	2.94 (2.44)^{ad}	12.17 (6, 85)***

*$p = .05$, **$p = .01$, ***$p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Table 19.1

Engagement count per number of posts a day for the University of Oregon (continued)

	5x–6x	x7–8x	9x+	
	$n = 5$	$n = 2$	$n = 4$	
Variable	M (SD)	M (SD)	M (SD)	F (df)
Likes	3.89 (0.28)^{abce}	3.58 (0.08)^{af}	4.16 (0.34)^{abcdg}	35.87 (6, 85)***
Comments	2.54 (0.32)^{abe}	2.62 (0.11)^{af}	2.84 (0.30)^{abcdg}	20.90 (6, 85)***
Shares	3.16 (0.28)^{abce}	2.75 (0.02)^{af}	3.47 (0.50)^{abcg}	20.16 (6, 85)***
Views	4.87 (0.43)^{ae}	4.73 (0.03)^{af}	5.43 (0.48)^{abg}	12.17 (6, 85)***

*$p = .05$, **$p = .01$, ***$p = .001$

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row.

Results from Table 19 and Table 19.1 were found using an ANOVA and indicate that there are statistically significant differences between all dependent variables and the independent variables.

Likes.

The ANOVA results show that the number of times content was posted in a day had an impact on the number of likes these posts received, $F(6, 85) = 35.87$. Days with only one post received significantly fewer likes ($M = 2.61$, $SD = 0.29$) compared to days when there were two ($M = 3.11$, $SD = 0.27$), three ($M = 3.25$, $SD = 0.28$), four ($M = 3.58$, $SD = 0.25$), five to six ($M = 3.89$, $SD = 0.28$), seven to eight ($M = 3.58$, $SD = 0.08$), and nine or more posts ($M = 4.16$, $SD = 0.34$). Days with only two posts also had a lower number of likes compared to days with four, five to six, and nine or more posts. Days that had only three posts also had fewer likes compared to days with five to six, and nine or more posts. Finally, days with four posts received fewer likes than days with nine or more posts.

Comments.

The ANOVA results show that the number of times content was posted in a day had an impact on the number of comments these posts received, $F(6, 85) = 20.90$. Days with only one post had significantly fewer comments ($M = 1.26$, $SD = 0.40$) compared to days when there were two ($M = 1.83$, $SD = 0.38$), three ($M = 1.97$, $SD = 0.40$), four ($M = 2.12$, $SD = 0.26$), five to six ($M = 2.54$, $SD = 0.32$), seven to eight ($M = 2.62$, $SD = 0.11$), and nine or more posts ($M = 2.84$, $SD = 0.30$). Days with only two posts saw a lower number of comments compared to days with five to six posts. Days that had nine or more posts had significantly more comments compared to days when there were two, three, and four posts.

Shares.

The ANOVA results show that the number of times content was posted in a day had an impact on the number of times posts were shared, $F(6, 85) = 20.16$. Days that saw only one post had fewer shares ($M = 1.34$, $SD = 0.41$) than days when there were two ($M = 1.95$, $SD = 0.59$),

three ($M = 2.21$, $SD = 0.62$), four ($M = 2.59$, $SD = 0.37$), five to six ($M = 3.16$, $SD = 0.28$), seven to eight ($M = 2.75$, $SD = 0.02$), and nine or more posts ($M = 3.47$, $SD = 0.50$). Days with only two posts had a lower number of shares compared to days with four, five to six, and nine or more posts. Days that had only three posts also had fewer shares than days with five to six posts and nine or more posts.

Views.

The ANOVA results show that the number of times video content was posted in a day had an impact on the number of views these posts received, $F(6, 85) = 12.17$. Days that saw only one video post had a lower number of views ($M = 0.33$, $SD = 1.20$) compared to days when there were two ($M = 2.43$, $SD = 2.25$), three ($M = 3.95$, $SD = 1.64$), four ($M = 2.94$, $SD = 2.44$), five to six ($M = 4.87$, $SD = 0.43$), seven to eight ($M = 4.73$, $SD = 0.03$), and nine or more posts ($M = 5.43$, $SD = 0.48$). Days with only two videos posted also had fewer views compared to days with nine or more posts.

Table 20

Engagement gameday vs. non-gameday for BYU

	Gameday	Non-Gameday	
	$n = 117$	$n = 314$	
Variable	M (SD)	M (SD)	t (df)
Likes	2.19 (0.48)	1.95 (0.57)	4.49 (242.88)**
Comments	1.41 (0.54)	1.19 (0.62)	3.37 (429)
Shares	1.07 (0.53)	0.80 (0.53)	4.67 (429)
Views	1.30 (1.82)	2.32 (1.81)	-5.21 (429)

*$p = .05$, **$p = .01$, ***$p = .001$

Results from Table 20 were calculated using an independent *t*-test and indicate that there are statistically significant differences between one dependent variable and the independent variables.

Likes.

Posts on a gameday had significantly more likes (*M* = 2.19, *SD* = 0.48) versus a non-gameday (*M* = 1.95, *SD* = 0.57).

Table 21

Engagement gameday vs. non-gameday for the University of Oregon

	Gameday	Non-Gameday	
	n = 78	*n* = 167	
Variable	*M* (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	2.13 (2.22)	1.28 (2.02)	2.87 (138.39)
Comments	2.87 (0.43)	2.78 (0.39)	1.59 (243)**
Shares	1.50 (0.42)	1.45 (0.51)	0.80 (178.5)
Views	1.81 (0.71)	1.63 (0.66)	1.92 (243)***

*p = .05, **p = .01, ***p = .001

Results from Table 21 were calculated using an independent *t*-test and indicate that there are statistically significant differences between two dependent variables and the independent variables.

Comments.

Posts shared on a gameday had more comments (*M* = 2.87, *SD* = 0.43) than posts shared on a non-gameday (*M* = 2.78, *SD* = 0.29).

Views.

Videos that were posted on gamedays had significantly more views (*M* = 1.81, *SD* = 0.71) than videos posted on non-gamedays (*M* = 1.63, *SD* = 0.66).

Table 22

Engagement based on kickoff time for BYU

	Morning	Afternoon	Evening	Night	
	n = 11	*n* = 44	*n* = 30	*n* = 31	
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F* (*df*)
Likes	1.62 (0.66)^{abcd}	2.25 (0.38)^{ab}	2.29 (0.31)^{ac}	2.21 (0.56)^{ad}	6.56 (3, 112)***
Comments	1.14 (0.72)	1.38 (0.50)	1.46 (0.49)	1.47 (0.55)	1.20 (3, 112)
Shares	0.62 (0.51)^{abcd}	1.10 (0.55)^{ab}	1.13 (0.45)^{ac}	1.15 (0.55)^{ad}	3.09 (3, 112)**
Views	1.77 (1.77)	1.24 (1.84)	1.16 (1.81)	1.26 (1.86)	0.32 (3, 112)

p = .05, **p* = .01, ***p* = .001

Note. Using Tukey Post-Hoc tests, superscripts indicate differences by row. The absence of other time period variables indicates that there were no games that began in the specified time period.
Results from Table 22 were found using an ANOVA and indicate that there are statistically significant differences between two dependent variables and the independent variables.

Likes.

The ANOVA results show that the time a game was kicked off had an impact on the number of likes these posts received, $F(3, 112) = 6.56$. Posts for games that had a morning kickoff had statistically significant fewer likes ($M = 1.62$, $SD = 0.66$) than games with an afternoon ($M = 2.25$, $SD = 0.38$), evening ($M = 2.29$, $SD = 0.31$), or night kickoff time ($M = 2.21$, $SD = 0.56$).

Shares.

The ANOVA results show that the time a game kicked off had an impact on the number of shares these posts had, $F(3, 112) = 3.09$. Posts for games that had a morning kickoff were shared significantly less ($M = 0.62$, $SD = 0.51$) than games with an afternoon ($M = 1.10$, $SD = 0.55$), evening ($M = 1.13$, $SD = 0.45$), or night kickoff time ($M = 1.15$, $SD = 0.55$).

Table 23

Engagement based on kickoff time for the University of Oregon

	Afternoon	Evening	
	n = 39	*n* = 37	
Variable	*M* (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	3.04 (0.38)	2.87 (0.51)	1.67 (74)
Comments	1.66 (0.41)	1.82 (0.41)	-1.70 (74)
Shares	2.10 (0.56)	1.98 (0.69)	0.82 (74)
Views	2.47 (2.23)	2.28 (2.28)	0.37 (74)

*p = .05, **p = .01, ***p = .001

Note. The absence of other time period variables indicates that there were no games that began in the specified time period.

Results from Table 23 were calculated using an independent *t*-test and indicate that there are no statistically significant differences between the dependent variables and the independent variables.

RQ4 – Effect of Sponsors and Paid Boosts on Engagement

The last research question, RQ4, investigated the impact of mentioning sponsors and paid boosts on engagement numbers. Were posts that mentioned sponsors or received paid boosting getting higher engagement numbers compared to those posts that had neither element? The University of Oregon did not mention sponsors in any posts and did not use paid boosts.

Table 24

Engagement by presence of sponsor for BYU

	Sponsor	No Sponsor	
	n = 227	*n* = 204	
Variable	*M* (*SD*)	*M* (*SD*)	*t* (*df*)
Likes	1.86 (0.62)	2.19 (0.42)	-6.55 (402.62)***
Comments	1.23 (0.67)	1.28 (0.53)	-0.91 (422.53)***
Shares	0.74 (0.54)	1.02 (0.51)	-5.43 (429)
Views	1.94 (1.83)	2.15 (1.92)	-1.17 (419.05)***

*p = .05, ***p* = .01, ****p* = .001

       Results from Table 24 were calculated using an independent *t*-test and indicate that there are statistically significant differences between three dependent variables and the independent variables.

Likes.

       Posts that mentioned a sponsor had significantly fewer likes (*M* = 1.86, *SD* = 0.62) than posts that didn't mention a sponsor (*M* = 2.19, *SD* = 0.42).

Comments.

       Posts that mentioned a sponsor had significantly fewer comments (*M* = 1.23, *SD* = 0.67) than posts that didn't mention a sponsor (*M* = 1.28, *SD* = 0.53).

Views.

       Posts that had videos and mentioned a sponsor had significantly fewer views (*M* = 1.94, *SD* = 1.83) than posts that didn't mention a sponsor (*M* = 2.15, *SD* = 1.92).

Table 25

Engagement of paid vs. non-paid posts for BYU

	Paid	Non-Paid	
	n = 196	*n* = 235	
Variable	*M* (*SD*)	*M* (*SD*)	t (*df*)
Likes	1.85 (0.64)	2.15 (0.43)	-5.71 (330.42)***
Comments	1.19 (0.69)	1.30 (0.53)	-1.8 (364.45)***
Shares	0.73 (0.56)	1.00 (0.50)	-5.16 (393.27)***
Views	1.99 (1.82)	2.08 (1.91)	-0.48 (421.43)***

*p = .05, ***p* = .01, ****p* = .001

Results from Table 25 were calculated using an independent *t*-test and indicate that there are statistically significant differences between all dependent variables and the independent variables.

Likes.

Posts that received a paid boost had significantly fewer likes (*M* = 1.85, *SD* = 0.64) than posts that weren't boosted (*M* = 2.15, *SD* = 0.43).

Comments.

Posts that received a paid boost had significantly fewer comments (*M* = 1.19, *SD* = 0.69) than posts that weren't boosted (*M* = 1.30, *SD* = 0.53).

Shares.

Posts that received a paid boost were shared significantly less (*M* = 0.73, *SD* = 0.56) than posts that weren't boosted (*M* = 1.00, *SD* = 0.50).

Views

Posts that had videos and received a paid boost had significantly fewer views (*M* = 1.99, *SD* = 1.82) than posts that weren't boosted (*M* = 2.08, *SD* = 1.91).

Overall Post Comparisons

While this data is not connected with any specific research question, it is helpful to better understand the context of each program's Facebook Page and how they generally compare to each other relative to the types of posts and content shared, as well as when they share that content.

Table 26

Number of posts by type

| | The University of Oregon | | BYU | | |
Variable	*n*	% of total	*n*	% of total	Difference
Image	47	19.18%	124	28.77%	9.59%
Video	86	35.10%	244	56.61%	21.51%
Link	101	41.22%	25	5.80%	-35.42%
Photo Album	11	4.49%	25	5.80%	1.31%
Giveaway	0	0.00%	13	3.02%	3.02%
Total	*N* = 245		*N* = 431		43.16%

Table 26 shows the differences in the total number of posts for each program, the number of posts per type, the percentage that each post type is of the whole, and the percentage difference between the number of posts between the two programs. These numbers show that BYU posts content significantly more than the University of Oregon. In terms of post diversity, nearly 57% of content shared by BYU consists of videos, with images accounting for almost 29% of posts. Post data for the University of Oregon shows a somewhat more rounded approach to post types, with images accounting for just over 19%, videos around 35%, and links to external content a little more than 41% of posts.

Table 27

Number of posts per weekday

	The University of Oregon		BYU		
Variable	*n*	% of total	*n*	% of total	Difference
Sunday	24	9.80%	58	13.46%	3.66%
Monday	30	12.24%	57	13.23%	0.98%
Tuesday	30	12.24%	50	11.60%	-0.64%
Wednesday	26	10.61%	53	12.30%	1.68%
Thursday	26	10.61%	44	10.21%	-0.40%
Friday	29	11.84%	60	13.92%	2.08%
Saturday	80	32.65%	109	25.29%	-7.36%

Table 27 shows the differences in the number and percentage of posts per weekday and the percentage difference between the number of posts per weekday between the two programs. This data shows that both programs post almost equally on each day of the week. One area of difference was that the University of Oregon posted content on Saturdays (typically gamedays) a little more than 7% compared to BYU.

Table 28

Number of posts per time period

	The University of Oregon		BYU		
Variable	*n*	% of total	*n*	% of total	Difference
Twilight	2	0.82%	7	0.82%	0.00%
Early Morning	1	0.41%	9	0.41%	0.00%
Morning	50	20.41%	88	20.41%	0.00%
Afternoon	84	34.29%	93	34.29%	0.00%
Evening	76	31.02%	179	31.02%	0.00%

Table 28 shows the differences in the number and percentage of posts per time period and the percentage difference between the number of posts per time period between the two programs. Amazingly enough, the percentage of posts shared by both schools during specific periods of the day were identical.

Discussion

As the literature made clear, social media is an important piece of an effective marketing campaign for a collegiate sports program. Social media allows officials in athletic departments to share unique, insider perspectives to fans that they can't find anywhere else (Hipke & Hachtmann, 2014). By helping fans to feel like they are heard, understood, and a part of the conversation with their favorite teams, social media can be a means by which fan loyalty can be created and nurtured. Furthermore, because programs often create their own content, they are able to frame the perspective of the information in a way that can be beneficial to their organization and the fans who support them.

As I reviewed the material shared by BYU and the University of Oregon, there was a sense that some of BYU's content at times came across as lacking authenticity given the context of the events of the season. After each game, posts for several superlatives, such as player of the game or play of the game were posted. These posts are great after a team wins or a player has a standout performance, but it can come across very hollow and tone deaf when the team was soundly defeated, like BYU was when they lost to LSU by a score of 27-0. Trying to force what was clearly a bad experience for both fans and players into something positive can feel like the content is disconnected from what is happening in reality on the field.

Throughout the season, it didn't appear as though BYU framed content any differently from one game to the next, maintaining a business as usual, positive outlook on things. This is understandable from a number of perspectives. No program wants to shine a light on its weakness or shortcomings, highlighting the poor quality of the team's results or negative events that occur during the season. A program wants to highlight and create a sense of optimism for each game and situation. No team wants to project an image that it can't beat an opponent on its

schedule or that they're struggling. It also makes sense when trying to maintain a consistent voice throughout the season from one game to the next. This approach seemed to be methodical and formulaic for BYU and that's not a bad thing. After reviewing the content throughout the season however, I felt BYU could have framed the events of the season in a way that would have been more connecting for fans and could have allowed fans to better understand the inner-workings of the team as it worked through a challenging season.

BYU is the gatekeeper of information about its football program and has the opportunity to frame all of its messages to help fit a narrative that they want. This gatekeeping role is likely more difficult when the team is not performing at a high standard. Fans can become disillusioned with a program as the prospects of success during the new season give way to disappointment and frustration. During these difficult times for the program are opportunities for content creators from BYU Football to distribute content that helps create empathy and understanding for the players and coaches from the fans' perspective. No fan wants to identify themselves with a program that is losing and struggling, but by framing the messaging a little differently, the community that supports a program could be given new ways for fans to identify themselves with players and coaches, which in turn could lead to continued and strengthened identification with the program itself.

In this next section, each of the research questions are reviewed from the perspective of how the results can be interpreted to help improve and enhance the social media efforts of BYU Football, but the findings may be also useful for the University of Oregon football program too. The questions were designed to investigate different parts of the social media efforts for both programs and the results reveal potentially significant findings that could affect how both schools plan for future marketing campaigns.

RQ1 – Engagement Based on Type of Content Shared

    Pregame, mid-game, and postgame.

    The results based on this question showed that there were significant differences in the kinds of content shared by both schools, mostly as it relates to content that mentions an upcoming, current, or previous opponent.

    For BYU, fans liked content more that mentioned an upcoming game (pregame content) than they did mid-game content. The difference was even greater when compared to fans liking postgame content. This could be interpreted as fans having greater levels of excitement for upcoming games than they have for previous games. This data makes sense as it's likely that fans are more interested in what's next rather than what's already happened. In the context of BYU Football's 2017 season, which saw a seven-game losing streak, it's possible that fans' attitudes were such that there was greater anticipation for future games in the season because they offered opportunities to end the losing streak. The postgame results were the worst performing kinds of posts as it related to this kind of content, performing worse than posts that made no mention of any opponent whatsoever. This outcome likely coincides again with the disappointing season that BYU Football had, with fans possibly not wanting to engage with content after a game in which the team had lost. As was discussed earlier, fans are more likely to engage with a team's social media following a win, rather than a loss (Broughton, 2012).

    Findings also showed that postgame content saw fewer comments than any of the other categories. Again, it's possible that fans were less motivated to post comments on postgame content after a disappointing loss. Videos that were not about an upcoming, current, or previous opponent also saw a statistically significant higher number of views. A few variables could explain this viewing behavior. First, as has been mentioned a number of times already, the

underwhelming and disappointing performances by BYU's football team likely dampened

interest in video content about actual games. Video content that did not mention any opponents

was also more likely to be more personal, with coaches and players sharing thoughts and feelings

about the season, games, and themselves. This kind of content may garner more views because it

provides fans a look into who the players and coaches are as people and how they are working to

overcome their struggles and push through the challenges they are facing as a player, coach, or

team. Persevering through difficult experiences or completing a difficult task is something that

people can connect and empathize with. By giving fans a more personal connection with

members of the team, greater investment by those fans could follow as they begin to see the

players and coaches as extensions of themselves and want to see them succeed.

For the University of Oregon, postgame content was king with significant differences

between it and pregame content. Content referring to a completed game was more engaging and

interesting to fans which seemed to indicate that fans are more interested in current game

highlights or postgame reviews. After each game, in addition to highlights or game recap

articles, the University of Oregon live broadcasts the postgame press conference that features the

head coach and usually one or two players (typically one from offense and one from defense).

This gives fans an opportunity to see and hear from players almost immediately after a game and

hear their perspectives on what went right or wrong during the game. As players receive more

facetime with cameras and become more familiar to viewers, fans are might feel a greater

connection with them because they can learn more about who these players are and better

understand their personalities.

BYU does something similar with a weekly live broadcast on BYUtv that features the

head coach and usually one or two players. The biggest difference between what BYU does and

what the University of Oregon does is the production of these player/coach interviews. BYU's

production is held on a weekday either at BYU Broadcasting on a stage in front of a live studio

audience or at a sponsored location. The University of Oregon presents players to the media

following a completed game or daily practice. BYU's events are hosted by Greg Wrubell, who is

the main play-by-play radio announcer for football and the Director of Broadcast Media within

the BYU athletic department, whereas Oregon's postgame interviews are generally broadcasting

the interactions between coaches and players with media members who sometimes ask difficult

or thoughtful questions that could illicit an emotional or raw response. BYU's broadcasts are

more polished and are often include the integration of sponsorship. While these broadcasts can

be entertaining and insightful, it is worth considering if these events are seen as inauthentic by

fans and more for show than to actually bridge the gap between the fanbase and members of the

team.

      I argue that by having a coach and/or player talk show televised or broadcast on radio a

few days after a game, BYU risks extending the disappointment of a previous loss beyond the

immediacy of the game itself. *BYU Football with Kalani Sitake* is broadcast on Tuesday nights

from 6:00PM MDT to 7:00PM MDT where head coach Kalani Sitake answers questions. By

having this event occur at almost the midpoint of the week, BYU runs the risk of bringing up

negative aspects of the previous game possibly only a couple of days away from the next game.

With BYU having lost nine games in 2017, that means that each week, fans were reminded of

everything that went wrong during a game that happened sometimes up to five days prior (if a

game is held the previous Thursday night). I think it would be wise for BYU to contain postgame

content within the immediate context of a game, rather than drawing out discussion about a game

for a number of days. This allows fans, players, and coaches to move their focus ahead to the

next opponent instead of rehashing events that occurred the previous week. By placing greater emphasis about moving forward to the next opponent, BYU can play to the strengths of what their audience seems to prefer to engage with rather than producing content that may re-open the metaphorical wounds of a difficult loss.

Content themes.

Themed content did not seem to affect engagement as it related to likes, comments, or shares. The theme with the most posts were posts that had team-focused content. This aligns with what Stuart Call, director of social media for BYU athletics, explained, saying that "Fans want to see a side of our teams and student athletes they can't see anywhere else. So, that's what we strive to show them on our social platforms" (personal communication, March 19, 2018). The views that team-focused videos received were significantly higher from videos that had no theme or were fan-focused. Views for videos that were historical in nature also had more views than videos with no theme or were fan-focused. These results support Call's claim that fans want to see content about the team that they can't see anywhere else.

Obviously, it makes sense that BYU is playing to their fanbase's interests by providing fans with content that they are more likely to engage with compared to other types of themed content. Surprisingly, fan-focused content performed more poorly than anticipated. One potential cause could be that fan-focused content is underdeveloped or not focused on the unique aspects of being a BYU fan. This could be another area that BYU could spend more time framing messaging around. By helping fans and the community understand how their commitment to the BYU Football program not only helps support the team, but how it helps create the bedrock of what the BYU Football is about as a program, fans might feel a greater sense of ownership and pride about how their fandom means something more than just hoping their team wins.

Ultimately, the core cause for the lower rates of engagement is unknown and would likely require more detailed research to better understand fans' attitudes toward content that focuses on them.

Unlike BYU, themed content for the University of Oregon saw no significant differences in engagement numbers across all variables. Even though team-focused content accounted for more than 61% of content for the 2017 season, these posts did not see any significant differences when compared to other variables. This may mean that Duck fans enjoy content of any theme, so long as it relates to the team. Another possible explanation is that, because the University of Oregon posted such a significant amount of content that was focused on the team, there weren't enough data points to accurately determine if there were differences in how fans engaged with other kinds of themed content. A larger sample size could potentially reveal different results.

Of all the posts BYU shared, more than 26% of them included a call to action for fans to do something. These posts only saw a statistically significant higher number of comments when compared to posts that had no call to action. That being said, with no significant difference in what kind of call to action was applied in the post, this study cannot make a determination about what kind of calls to action work better than others. Based on the means for each call to action, the dependent variables performed almost equally for each call to action. This might mean that, no matter what the call to action in a post, fans are likely to engage with it equally or similar to that of another call to action. BYU fans seem willing to engage and do something when asked or encouraged to do so by content creators. This insight might be useful when trying to bring about a desired outcome from the community, knowing that the data supports the idea that fans generally engage with content when there is a call to action.

Posts from BYU that offered incentives had fewer likes than those that had no such offer. This outcome can likely be attributed to the difference between the number of posts with an incentive and posts without an incentive. When there was an incentive, fans commented more on posts with gift cards as a prize or reward than if there was merchandise up for grabs. Fans also viewed video posts with gift cards as an incentive more than they viewed video posts with merchandise as the incentive. While BYU did offer other incentives such as free tickets and other things, there likely wasn't enough of these posts to accurately determine if they performed significantly worse or better than their counterparts. Fans seemed to like and share these posts similarly, regardless of the incentive. It may be a better strategy to encourage fans to comment on a post with an incentive, particularly if the incentive is a gift card.

The University of Oregon only had four posts with calls to action (less than two percent of all posts) and no posts with incentives. Due to these insignificantly small (or nonexistent) datasets, these categories were omitted.

RQ2 – Engagement Based on Post Type

Some of the most interesting and potentially impactful results of the study were found when seeking to answer RQ2, especially concerning the next topic: post type.

Post type.

Call explained that, for all types of content that BYU posts, "The end goal is always the same. Reach the fans and provide content that they want to engage with." As also mentioned earlier, Call explained that "Fans want to see video" and that "Video content is the most successful" (personal communication, March 19, 2018). Perhaps fans do want to see videos and in that they are successful in some measure, but according to the results of this study, fans did not engage with videos as much as they did with other types of posts. Post shared by BYU that

were videos had fewer likes when compared to posts with an image, with a link, or posts that were photo albums. This isn't to say that fans didn't engage with videos, but they did so at lower rates. This could be concerning, considering that, of BYU's 431 posts during the 2017 season, more than 56 percent were videos. Furthermore, fans shared videos less than images, links, and photo albums. These results may be at odds with what Call stated, depending on what the measure of success is for how videos perform. This depends on what the goals are for content creators for BYU and how they determine what a successful video post is.

Does this mean that BYU should panic and completely rethink their content strategy? Not necessarily. What exactly constitutes as engagement with videos is difficult to determine. Facebook defines video engagement for Page owners using two categories. The first metric is called "video views." This engagement tallies the number of people who saw a video for three seconds or more. The second metric is called "30-second views." As the name implies, this measures the number of users who watch the video for 30 or more seconds (and if the video is shorter than 30 seconds, Facebook counts users who view 97 percent of the video) (Facebook, 2018b). Are these the greatest measurement tools? It's hard to definitively say. Because watching videos is a passive experience where users can press the play button and do nothing but watch the screen and be served content, users may be more likely to be distracted. This study does not address how fans watched video content which may be more telling than how they engaged with the post itself. That being said, those metrics could not be quantified and were thus not included.

For the University of Oregon, fans seemed to respond equally no matter the type of post that content was shared in. The University of Oregon had a more well-rounded approach regarding the type of content they shared compared to BYU. Referencing Table 26, Oregon

shared images a little more than 19% of the time, compared to BYU who shared images almost 29% of the time. When it comes to videos, BYU shared videos nearly 57% of the time, whereas Oregon only posted videos 35 percent of the time; a difference of nearly 22 percent. The greatest discrepancy between the two schools in terms of type of posts were links. Oregon shared links approximately 41 percent of the time, with BYU only sharing links just under 6 percent of their total post volume, a difference of 35 percent. This discrepancy in links can be likely attributed to the daily practice reports that are produced by the University of Oregon and shared on social media.

Engagement of different video types.

Part of this research question also looked to see if there was a difference in user engagement between the two kinds of videos that are shared on Facebook: pre-recorded videos and live broadcasts. BYU shared 186 pre-recorded videos (almost 78 percent of videos) and had 53 live broadcasts (roughly 22 percent). BYU's live broadcasts had significantly more likes, comments, and shares compared to the number of likes, comments, and shares for pre-recorded video clips. There was no significant difference in the number of views for each type of video, indicating that while pre-recorded footage receives similar counts of views, people are engaging with these clips less. It makes sense that live-broadcasts receive more engagement because they might be seen as more authentic than a pre-produced and recorded video clip. Perhaps users feel more engaged by live content where they can provide immediate and direct feedback and be part of an ongoing conversation. As was previously discussed, more live video broadcasts following the conclusions of games could be a good way to give fans a more authentic experience with members of the team and the program.

For the University of Oregon, there were no significant differences in engagement between pre-recorded video and live broadcasts.

RQ3 – Engagement Based on Time or Frequency

Weekday engagement.

Because the college football schedule typically moves from week to week and a team only has one game a week, it was worth investigating if certain days saw more engagement than others. Traditionally, games occur on Saturdays but, with programs always trying to gain greater exposure and brand recognition, TV contracts have opened up a variety of kickoff times, including on Thursday and Friday nights. During the 2017 season, BYU had ten games on a Saturday and three games on a Friday. All twelve of Oregon's regular season games were held on a Saturday.

BYU had nearly an equal distribution of posts during the week (approximately 10 to almost 14 percent of posts) with the exception of Saturday, which saw a little more than 25 percent of posts during the season. Generally speaking, Sunday posts performed the worst in terms of likes, with Wednesdays, Thursdays, Fridays, and Saturdays seeing significantly higher rates of engagement. Sundays also saw significantly lower rates of commenting compared to content posted on a Wednesday, Thursday, or Saturday. Shares on Sundays were also fewer compared to posts from Wednesdays, Thursdays, Fridays, and Saturdays. Interestingly enough, videos had higher view counts on Sunday than they did Tuesday. Videos shared on a Monday or Tuesday had more views than those posted on a Friday or Saturday. This significant difference can likely be explained by the fact that BYU's games were played on Fridays and Saturdays, and fans watching the game rather than consuming content on Facebook.

The low engagement on Sundays could be explained by a couple of different things. First, as has been mentioned a few times already, is BYU's disappointing season. Of BYU's nine losses during the 2017 season, seven occurred on a Saturday, which may have contributed to a lack of postgame engagement the next day. Another potential reason that BYU saw significantly lower rates of engagement on Sundays could be attributed to the lifestyles of BYU fans.

The literature review explains that nearly 99 percent of the student body at BYU are members of The Church of Jesus Christ of Latter-day Saints, who practice Sabbath observance on Sundays. Members typically attend a three-hour block of meetings and are asked to practice Sabbath observance by participating in "activities that are appropriate for the Sabbath Day." Some activities that Church leadership has suggested include things like "spending quiet time with your family, studying the gospel, fulfilling your Church callings and responsibilities, serving others, writing letters, writing in your journal, and doing family history work" (The Church of Jesus Christ of Latter-day Saints, 2016). Since 2015, Church leaders have placed a greater emphasis on asking members to improve their practice of Sabbath day worship (Weaver, 2015). This directive from leaders of the Church may have contributed to lower rates of engagement as fans are involved in other activities on Sundays that may be seen has having more significance in a person's life than catching up on their favorite sports team.

For the University of Oregon, almost the exact opposite effect was seen. Posts shared on Sundays saw a significantly higher number of likes than Wednesdays, Thursdays, Fridays, and Saturdays. Equally interesting was that Mondays also saw more likes than Thursdays, Fridays or Saturdays. Commenting rates were also higher on Sundays than they were Wednesdays, Thursdays, and Saturdays. Fans also shared more content when shared on a Sunday than they did when content was posted on Thursdays, Fridays or Saturdays. Interestingly enough, only 9.8

percent of all posts from the University of Oregon were shared on Sundays. This was perhaps a missed opportunity for the program to better engage with its audience.

The results between the two schools are almost exactly opposite to each other. Referring to what possibly contributed to lower rates of engagement for BYU, it seems that cultural differences between fans of Oregon and of BYU could likely be behind the opposite outcomes. While no official religious demographic information was available for the University of Oregon or its general fanbase, inferential data from the Pew Research Center states that 29 percent of adults in Oregon reported attending a religious service once a week, compared to 53 percent in Utah (Pew Research Center, 2014). To drill down further, Gallup found that 75 percent of practicing members of The Church of Jesus Christ of Latter-day Saints attend a religious service weekly or almost weekly (Newport, 2014). The information available creates a compelling narrative that not only do BYU fans engage less with content on Sundays, but that it could as a direct result of their religious affiliation.

Time of day.

As it relates to a single day, the time of day when BYU posts seems to have an impact on the number of engagement posts get. Results show that content posted during the evening period have more likes than when content is shared during the twilight, early morning, morning, and afternoon periods. This suggests that viewers like posts more during the evening commute, dinner, and primetime hours of the day. For the University of Oregon, content posted during the night period had more comments compared to content posted during the afternoon or evening periods.

It should be noted that Facebook's News Feed algorithm does not sort posts chronologically, but rather curates content for each user based on previous interactions with

individuals and brands to give them what Facebook thinks is the most relevant content

(Luckerson, 2015). This aspect of Facebook could lead users to see content that is days old and

may have been posted outside one of the time periods used in this study. Because Facebook's

NewsFeed algorithm is personalized for each individual and has not been made public, it is

impossible to determine when a user likes a post relative to when that content is actually posted.

The data could be interpreted by marketers to mean that more content should be posted during

the evening hours. While that could be true, because of the opaque nature of the Facebook News

Feed, these results should be viewed with some skepticism.

Posts per day.

A major part of this research question was to determine if the frequency with which a

team posts content had an impact on engagement rates. Did a high number of posts lead to less

engagement or vice versa? In the case of this study, the results are a little ambiguous. BYU

posted anywhere from 1 post a day to 14 posts. With so much variance between the number of

posts in a day, it was difficult to say definitively that there is an ideal number of posts to share

with an audience. It must be noted though that there were significant differences between the

variables for likes, comments, shares, and views. From a broader perspective, it can be said that,

for BYU, posting only once a day yielded the lowest rates of engagement. The University of

Oregon saw similar significant differences. Days with only one post performed worse than every

other variable. Seventy-three percent of the days that Oregon posted, they posted between one

and three posts. It makes sense that days with fewer posts would total fewer numbers of

engagement but posting more to get higher engagement isn't necessarily the answer.

Buffer recommends that brands post two posts a day at the most and only five to ten

times a week, saying that more posts beyond that will begin to see "likes & comments begin to

drop off dramatically" (Lee K., 2016). While the results for BYU and the University of Oregon show that days with higher post counts performed better than days with one or two posts, it would be worth further investigating if users experience content fatigue and if the content can be consolidated. For example, rather than posting three separate posts after a recently completed game for "play of the game," "player of the game," and "call of the game," BYU could consolidate those posts into a single piece of content and combine the engagement from each of those individual posts into a potentially better performing post.

It might be worth investigating if BYU is saturating its fanbase with too much content. As BYU shares more and more content, the posts become might be seen as less valuable in a person's mind. Rather than being something fans look forward to everyday, fans might begin to ignore posts because they happen too frequently, losing interest by seeing a lot of content from the same provider. Further, by sharing too many posts in a single day, BYU risks overwhelming fans with too much information or by having outdated, non-relevant posts resurfaced to users as a result of the NewsFeed's non-chronological content recommendation algorithm.

Gamedays versus non-gameday posts.

Perhaps not surprisingly, posts shared on gamedays performed better in some metrics for both BYU and the University of Oregon. Content posted on a gameday by BYU saw a higher number of likes than those on non-gamedays. Content posted by the University of Oregon on gamedays had more comments than posts on non-gamedays. Videos posted by the Ducks also had higher views on gamedays than they did on non-gamedays. The upticks in engagement could be attributed to people having greater anticipation for the events of the day. It is also likely that, as a result of this anticipation, more people are "tuned in" to what is happening with the team they follow. What is more difficult to understand is this: why is it that non-gamedays – days on

which most of the content is posted throughout the season – see lower rates of engagement? One takeaway from this aspect of the research is that, because people are tending to engage more with content on gamedays, it may be worthwhile to examine the reasons for what drives that behavior. The results show that Saturdays are days in which BYU should take every opportunity to push its brand and engage the community to invest in the program.

Engagement based on kickoff times.

For BYU, the one game during the season that had a kickoff time of 10:00AM MDT saw a lower number of likes than that of their games during the afternoon, evening, or night. The challenge with kickoff times is that networks have to fill different timeslots based on viewership and time-zones in order to have a full slate of games during a Saturday. In BYU's case, their 2017 season schedule saw kickoff times between 10:00AM and 8:30PM MDT. The biggest problem regarding kickoff times is that the schools are left out of the scheduling process. Television networks dictate when games are played to maximize viewership for every program. So, while content shared on the day of BYU's morning kickoff performed worse than any other kickoff time period, it should be noted that, with games later in the day, fans are more able to interact with content leading up to the event.

Results from RQ1 discussed earlier show that fans engaged with pregame content more than postgame content in every dependent variable, except videos, which are likely highlights after a game has been completed. Morning kickoff times preclude schools from sharing more content to drum up the anticipation of the day's game. One way to combat the poor engagement of content for morning kickoffs might be to shift most of the pregame content to the evening the day before (in almost every case, this day would be Friday).

The University of Oregon did not have any games that kicked off during the morning period and did not see any significant differences between variables. Duck fans seemed to engage with content at the same rates regardless of kickoff time.

RQ4 – Effect of Sponsors and Paid Boosts on Engagement

When asked about how sponsors play into the social media strategy for BYU Football, Call explained:

> Sponsors are a huge part of our revenue generation for the BYU athletic department. Therefore, we are always trying to find new inventory so that we can increase the number of sponsors and generate more revenue. Social media is a new channel for inventory and a new way of creating revenue. We try to create as many sponsored campaigns as we can that cohesively fit into our overall social media strategy. It is important to note that BYU creates the strategy and the campaigns that sponsors can then sign on to be a part of, not the other way around. The key to the success of sponsored campaigns is that they fit the overall BYU strategy. We are not an extension of their personal social media platforms. People follow BYU to engage with BYU content (personal communication, March 19, 2018).

Based on Call's response, it's clear that sponsorship is an important part of BYU Football. Of the 431 posts from BYU in the sample, 227 posts mentioned a sponsor. Speaking generally about their social media strategy for BYU Football, Call stated that "most content is not sponsored," which is likely true over the course of a calendar year but, during the season, sponsors were mentioned in posts more than 52 percent of the time. So, do fans engage more with posts that are sponsored? The results from Table 24 show that in some ways they don't. Posts with no sponsorship had more likes than posts with sponsorship. Non-sponsored posts had

more comments compared to those with a sponsor mentioned. Finally, videos had more views on

posts without sponsorship when compared to those with a sponsor. Could it be that viewers see

these posts as inauthentic? Perhaps fans see these types of posts as blatant advertising. One study

about sponsorship showed that viewers found advertising to be more overt, forceful, or abrupt,

but also that, when only a company's name or logo is mentioned, it is perceived as more

tolerable and less intrusive than advertising (Meenaghan, 2001). BYU's sponsored content coded

in this study showed that sponsorship seemed to fall in line with what respondents from

Meenaghan's study would label as sponsorship rather than advertising. However, this study did

not measure fan *perceptions* of sponsored content on the Facebook Page of BYU Football.

Of the 227 posts that mentioned a sponsor, 196 of them also received paid boosting.

Facebook explains paid boosting as a way to "get more people to like, share and comment on the

posts you create. Boosted posts are also a way to reach new people who are likely interested in

your content but don't currently follow you on Facebook" (Facebook, 2018). Brands are able to

target posts based on location, interests, age, and other demographic information. They can also

choose where to show the paid boost, be it in the NewsFeed of a desktop computer or mobile

phone, as well as on Instagram (Facebook, 2018).

When it came to the engagement performance of these boosted posts, the results may be

surprising to some. Posts that received a paid boost performed worse in every dependent variable

compared to organic posts. These organic posts had more likes compared to boosted posts.

Organic posts had more comments than paid posts. Posts that were organic had more shares than

those that were paid for. Finally, video views for organic posts were higher in number compared

to posts that were boosted. Based on these results, it is worth asking what the motivation is

behind boosting these posts. Are boosted posts meant to increase reach and be seen by more

people? Without administrative access to the Page, this question cannot be answered. However, if the goal is to, as Facebook puts it, "get more people to like, share and comment on the posts you create," the results show that the money spent on these posts may be useful being spent elsewhere.

Posts from the University of Oregon mentioned no sponsors and received no paid boosting. It is unknown at this time why the program chooses not to integrate these aspects into their social media strategy.

Conclusions

So how does this all fit together? How can the social media of BYU Football help increase attendance at its games in future seasons? Some research suggests that there is no connection between fan use of social media and buying tickets and other revenue-generating outcomes. That being said, the same study states that it is possible sports marketers have not yet discovered the most effective way to leverage social media into generating revenue (Popp, McEvoy, & Watanabe, 2017). It is this bit of uncertainty where BYU could add new elements to their social media strategy to engage with fans more and, in return, receive more engagement from fans.

As the creators of content, BYU Football has an opportunity to shape the narrative and quality of that content. It's been explained that the outcome of games has an effect on how fans engage with content on social media (Broughton, 2012). Rather than focusing on the outcome of games, particularly losses, BYU could frame the focus of their social media content on the bigger picture of what the brand of BYU Football is about, instead of rehashing potentially negative outcomes. During the 2017 season, on at least one occasion, BYU posted *seven* times the day after a game in which they lost. Four other losses saw six posts the day after and another loss saw five posts the following day. Compare that with the University of Oregon who posted only twice after two of their losses and once after the other three.

With the high frequency that BYU posts following a loss, that content is likely to reinforce the negative feelings a person has about the outcome of that game. Rather than moving forward and focusing on the next opponent, a fan might have to sift through, on some occasions, up to six posts on the day after a game in which BYU lost, with a majority of those posts

focusing on events that occurred during that game. Repeated exposure may be great for brand recognition, but I believe it is unwise to reinforce that brand in the context of a negative event.

To grow its community, I think there are several things that BYU could do to connect with more diverse markets and audiences. As DeGaris (2015) said, reaching out to specific groups like women and minority groups is a way of increasing the fanbase. By specifically making greater efforts to connect with women, young people, and minority groups, BYU athletics can create new connections with these groups of people that could provide long-term benefits as women become mothers, children grow up, and minority populations continue to increase. BYU's marketing efforts should be made for as broad a population as possible, with perhaps the creation of content that is specifically for minority groups and women. Additionally, creating content for fans who may not be as high-monitoring as others could help bridge the gap between casual fan and a dedicated follower who will ingrain in the program itself. Dedicated fans will be invested regardless of what kind of content is produced but capturing the attention and engagement of low-monitor fans is where BYU could find significant growth. As the community grows, BYU athletics could be viewed as an organization that genuinely attempts to reach out, be inclusive, and connect with people from all backgrounds, fostering trust amongst fans.

To connect with those who consider themselves casual followers, BYU Football could begin to use elements of framing theory in the creation of their social media content to show that BYU Football isn't just team a person cheers for, but a lifestyle brand and a unique experience for fans. It has already been stated, but it is worth mentioning again: fans who are loyal to a brand are more likely to financially invest in that brand (Hipke & Hachtmann, 2014). By investing in the process of helping a low-monitoring fan to becoming a dedicated, high-

monitoring fan, BYU could over time see a greater return on that investment that helps fund future endeavors for the program. How does BYU go about doing this? Perhaps it means continuing to produce content that helps fans see who the team is when the lights or television cameras aren't on. Knowing more about the team provides greater transparency to fans about what happens behind the scenes, but does it increase brand loyalty or a person's likelihood of investing in the program? Does this content help fans feel that they are a part of the program? Only more research will be able to accurately answer this question. But there may also be other ways that could help fans be more integrated with the team and players that could provide new experiences and perspectives on what it means to be a fan of BYU Football. Finding ways to make the relationship between fans and the program more personal could help plant the seeds for greater fan support and investment.

Future initiatives from BYU Football could mimic some of the same marketing tactics employed by the University of Oregon to generate greater fan interest and involvement. The University of Oregon football program has done a few different events in the past that involve fans of the program, both locally and nationally. As part of the 2017 season, the Oregon Ducks unveiled a new uniform for their week two game against the University of Nebraska. Named the "#StompOutCancer" uniforms, the Ducks partnered with three children who were cancer survivors, and Doernbecher Children's Hospital in Portland, Oregon, where the children were treated, to design and create the new uniforms. Because of this partnership, more than $1 million has been donated to the hospital to help the fight against pediatric cancer. In terms of exposure, the Ducks prepared a strategy that showcased content featuring the children who helped design the uniforms, the interactions between the children and the program, and the importance of the event for players and coaches. National sports networks, including ESPN, SBNation, Yahoo!

Sports, and others featured stories about the new uniforms. Across social media, the Ducks'

content had tens of millions of impressions on content that used the #StompOutCancer hashtag.

Fans were proud to be associated with the team and the charitable efforts being made by them.

Who wouldn't want to support a team that puts in a considerable effort to help raise money to

fight cancer?

This positive association can be recreated by BYU and have similar effects. By working

with local residents in Utah Valley, students, and community groups that also include non-

religious organizations, BYU can use their reach and influence to help people rally around a

universal cause. These initiatives would provide excellent opportunities for fans to become more

invested in BYU Football as they see them leading the charge to improve the community that

they are a part of. As was stated previously in the literature, when there are positive outcomes for

the teams they follow, fans are more likely to identify personally with the team.

Another popular event that the University of Oregon held from 2005 to 2015 was the

"Spirit Tee" contest. During the offseason, the athletic department requested from fans and

received submissions for the next season's football spirit t-shirt that would be sold in campus

bookstores around the state of Oregon. Winners were given two season tickets and a $200 gift

card to The Duck Store on campus. Through the years, these shirts became collector's items for

fans and helped them memorialize seasons.

These two examples are great case studies on how a sports program can engage with their

community to make the fans feel like they're part of what makes the program what it is. While it

is unknown what financial or resource constraints the program has, the BYU athletic department

is more than well-equipped to implement elements of some of the events that the University of

Oregon has previously executed.

BYU releases a spirit t-shirt at the beginning of each football season as well, but without input from fans. Using social media, BYU could send out a call each offseason for shirt designs or slogans from fans. As slogans or designs become more formalized by officials in the athletic department, fans could vote online for their favorite shirt on Facebook over a period of weeks, stretching out the engagement of fans as they wait to see if their created or voted design progresses. This kind of event could easily be framed in such a way to make fans feel like they are part of the creative process for BYU's football team, while also keeping the conversation about the team and program relevant during a period of the year that is often considered a dead period (April to August).

Additionally, BYU can frame its messaging to be more about the importance of the fan experience. The data from Table 4 indicates that fans didn't seem to really have a preference of theme when it came to liking or commenting on content. If fans aren't responding significantly different to one type of content over another, BYU could see this as an opportunity to have a little more freedom to try new things. Emphasizing what it means to be a BYU fan, and the unique benefits and experiences that only come from attending games, might be an avenue that could lead to greater fan loyalty, engagement, and hopefully higher attendance. Call stated that "BYU Football fans are loyal, and they love the Cougars, so they never stop following the team" (personal communication, March 19, 2018). BYU could also showcase more user-generated content from its followership to reward the loyalty Call spoke of. Showcasing unique content from fans would further visualize the relationship between the fans and the program.

It can't be ignored that yes, wins and losses dictate much of a team's success in social media growth and exposure. This variable is beyond the control of everyone but the coaches and players themselves. However, because of their position as gatekeepers of information for fans,

marketers from BYU athletics have the ability to frame messages and outcomes from games. Much of this framing already comes in the form of the coaches' shows that are live broadcast on BYU Football's Facebook page. These shows are informative and provide insight as to the inner-workings of the team, but they are often catered toward more fervent fans who closely follow the team and already have an established knowledge of football. It could be argued that these kinds of shows are not accessible to the casual fan. Many of the shows can be an hour or longer and are often broadcast during the day, rather than in the evening when more people have free time and tend to engage with content. Creating content that is more understandable for a wider range of audiences and distributed in media forms that require a lower time commitment may help increase engagement and allow more fans to better know what is happening with the team.

Much like the University of Oregon, BYU could create written practice reports, alongside short video clips, and have more feature stories about the players on the team and coaches. Apart from their efforts on Facebook and other social media channels, the University of Oregon employs a full-time beat writer, Rob Moseley, to cover the team, create content, and engage with fans on social media, mostly through Twitter. Moseley frequently answers fans' questions, retweets fan comments and insights, reports team news, and offers insights that nobody else is privy to outside of the athletic department. The only way for fans to learn specific bits of information is to consume the content Moseley produces under the marketing umbrella of the University of Oregon's athletic department. The two-way communication that occurs between Moseley and fans helps engender feelings of loyalty, because the fans know they are being heard and their views are respected by an official within the organization itself.

The use of second screen devices was also discussed earlier and this previous research could be used to help develop other opportunities to help fans be more involved with the game,

whether they're at the stadium or at home watching it on their television. BYU currently offers a number of calls to action and incentives for those who follow the Facebook Page, but I believe that are other ways that BYU could engage with fans during the game. Certainly, a fan's first priority will probably be watching the game itself, but since a large number of people are on their personal devices while watching television, BYU could have resources dedicated to connecting with fans while the game is in play. Much like how the University of Oregon created the QuackCave to engage with fans across social networks, BYU could implement something on a smaller scale. This venture could focus on providing live, in-game content updates, fun facts, amplifying fan comments or content, and providing a richer experience for viewers of the game. If people are going to be on their phones when a game is on, BYU would be wise to do everything they can to put their unique content on that person's screen while they are interested in what is happening with the team.

Fans are the lifeblood of a successful sports organization. A team may be successful on the field, but if no one is there to watch and support them through tickets and apparel sales, donations, or other means of financial support, the team's existence is threatened. This is true for every sports team in America, professional or amateur alike, and BYU is no exception to that. The fan must be put first in every part of BYU Football's messaging and communication efforts. As social media continues to grow and be a more vital part of everyday life, it is critical that people feel connected and involved with the brands they associate with. BYU has great opportunities to do just that with the resources and talent available to them. By framing its brand and helping fans find meaningfulness out of what could be seen by some as meaningless through its messaging, BYU Football and the athletic department can build and strengthen its community to be more involved and invested in an identity they are proud to be associated with.

Future Research

Beyond what was done in this study, future research could focus on the other two social networks that BYU uses on Twitter and Instagram. Each of those platforms communicates different kinds of information and have various differences in the demographics of its userbase. Additionally, doing a more longitudinal study might yield different results. Rather than focusing only on the weeks in which games are played or prepared for, it is possible that the content shared during other parts of the year might show significant differences in engagement between differently-themed posts. This may help to inform content creators at BYU what type of content performs best throughout the year rather than over a period of a few months.

It is also suggested that more research is conducted on fan perceptions of BYU's brand across different demographics. Knowing more about how fans view the stadium experience, their connection with the program, what it means to be part of the community, and other in-depth discussions will help fans to feel validated and heard by the athletic department and the school itself. Conducting focus groups with women, children, teenagers, the elderly, current students, alumni, non-sports fans, and minority groups may reveal new insights that could serve to better inform content creators on how to better serve the interests of those groups of people and create new dedicated fans that become invested in the community and personally identify with the BYU brand itself.

Limitations

Perhaps the most significant limitation of this study was the performance of BYU's

football team during the 2017 season. A program known for exciting and innovative offenses,

BYU Football had one of its most historically poor offenses. After a record of 9-4 during the

2016 campaign, the 2017 record of 4-9, which included a seven-game losing streak, was as

frustrating as it was disappointing for fans. The Cougars had their worst season since 2003 when

they lost five of six home games and finished with a record of 4-8. Call stated that there was a

small engagement drop-off from the 2016 season. It is unknown how much of a drop-off there

was but it's clear that the poor performance of the team was likely the culprit behind the drop in

engagement from fans.

The scope of this project, while by no means a small sample of data, only used data for

one season. The type of content that is shared during the season is far different than that shared

during the offseason. It may be that, during the season, the strategy dictates that content be more

focused on the team itself as it plays through its schedule, rather than content that showcases

how the team connects with fans.

This study also only reviewed interactions of the Facebook pages for both BYU and the

University of Oregon. Twitter and Instagram are also used heavily by both programs and are

other sources of engagement and interaction between fans and the teams. Furthermore, this study

was quantitative in nature, with no qualitative data of either the content of posts or the comments

on the posts being analyzed.

References

Alger, T. (2016, September 3). *Oregon Ducks sellout streak ends after 17 years and 110 games*. Retrieved from The Oregonian: http://www.oregonlive.com/ducks/index.ssf/2016/09/oregon_ducks_sellout_streak_en.html

Ardèvol-Abreu, A. (2015). Framing theory in communication research. Origins, development and current situation in Spain. *Revista Latina de Comunicación Social, 70*, 423-450.

Arli, D. (2017). Does Social Media Matter? Investigating the Effect of Social Media Features on Consumer Attitudes. *Journal of Promotion Management, 23*(4), 521-539. doi:10.1080/10496491.2017.1297974

Blocksidge, S. (2017, October 12). *10 college football programs making creative strides on social media*. Retrieved from Higher Education Marketing: https://www.highereducationmarketing.com/2017/10/12/10-college-football-programs-making-creative-strides-on-social-media-higher-education-marketing/

Bogage, J. (2017). *This researcher just solved college football's biggest mystery. She can predict where high school players will commit*. Retrieved from The Washington Post: https://www.washingtonpost.com/news/early-lead/wp/2017/12/20/this-researcher-just-solved-college-footballs-biggest-mystery-she-can-predict-where-high-school-players-will-commit/?utm_term=.7044ce434c7e

Bol, B. (2017, November 20). *Shoes to Fill*. Retrieved from The Players' Tribune: https://www.theplayerstribune.com/bol-bol-oregon-ducks-basketball/

Brigham Young University. (2007). *BYU Demographics*. Retrieved from Y Facts:

    https://web.archive.org/web/20080608222029/http://yfacts.byu.edu/viewarticle.aspx?id=

    135

Broughton, D. (2012). *Survey: Social media continues to fuel fans*. Retrieved from Street &

    Smith's Sports Business Journal:

    http://www.sportsbusinessdaily.com/Journal/Issues/2012/07/16/In-Depth/Catalyst-Survey

BuzzSumo. (2018). *Product Tour*. Retrieved from BuzzSumo: http://buzzsumo.com/tour/

BYU Athletics. (2016). *Quick Facts*. Retrieved from BYU Athletics:

    http://byucougars.com/athletics/quick-facts

BYU Athletics. (2017a). *2017 Football Schedule*. Retrieved from BYU Cougars:

    https://byucougars.com/schedule/football/2017

BYU Athletics. (2017b). *2017 Men's Football Stats*. Retrieved from BYU Cougars:

    http://byucougars.com/stats/m-football/2017

BYU Athletics. (2017c). *BYU Football.* Retrieved from BYU Cougars:

    http://byucougars.com/home/m-football

BYU Athletics. (2018a). *BYU Football*. Retrieved from Facebook:

    https://www.facebook.com/BYUFootball/

BYU Athletics. (2018b). *BYU Football*. Retrieved from Instagram:

    https://www.instagram.com/byufootball/

BYU Athletics. (2018c). *BYU Football*. Retrieved from Twitter: https://twitter.com/BYUfootball

BYU University Communications. (2017). *BYU: A Community of Learners and Lifters*.

    Retrieved from Brigham Young University: https://news.byu.edu/about

Cahill, K. (2014, October 18). *The 4 Most Fan Engaging College Football Teams on Social Media*. Retrieved from SportTechie: https://www.sporttechie.com/the-4-most-fan-engaging-college-football-teams-on-social-media/

Canham, M. (2017, July 16). *Salt Lake County is becoming less Mormon — Utah County is headed in the other direction*. Retrieved from Salt Lake Tribune: http://archive.sltrib.com/article.php?id=5403049&itype=CMSID

Chung, C., & Kristine, A. (2010). Social Media Gratification and Attitude toward Social Media Marketing Messages: A Study of the Effect of Social Media Marketing Messages on Online Shopping Value. *Proceedings of the Northeast Business & Economics Association*, 581-586.

Coleman, L. J., Kelkar, M., & Goodof, D. A. (2001). Contemporary sports marketing: Issues, challenges, and opportunities. *Journal of Promotion Management, 7*(1/2), 195-213.

DeGaris, L. (2015). *Sports Marketing : A Practical Approach*. New York: Routledge.

Dietz-Uhler, B., & Murrell, A. (1999). Examining fan reactions to game outcomes: a longitudinal study of social identity. *Journal of Sport Behavior, 22*(1), 15. Retrieved from http://link.galegroup.com.erl.lib.byu.edu/apps/doc/A54194984/AONE?u=byuprovo&sid=AONE&xid=62b0d2be

Duck fans react to firing of football coach Mark Helfrich. (2016, November 30). Retrieved from FOX 12 Oregon: http://www.kptv.com/story/33822309/duck-fans-react-to-firing-of-football-coach-mark-helfrich

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51-58. Retrieved from

https://www.researchgate.net/profile/Robert_Entman/publication/209409849_Framing_T

oward_Clarification_of_A_Fractured_Paradigm/links/0deec52e3d7f32deb3000000.pdf

Facebook. (2018, April). *About boosting posts*. Retrieved from Facebook Business:

https://www.facebook.com/business/help/240208966080581?helpref=page_content

Facebook. (2018b). *Using Page Insights*. Retrieved from Facebook:

https://www.facebook.com/business/a/page/page-insights

Goffman, E. (1974). *Frame analysis: an essay on the organization of experience.* New York,

NY: Harper & Row.

Google. (2012). *The New Multi-Screen World Study.* Retrieved from Think with Google:

https://www.thinkwithgoogle.com/advertising-channels/mobile/the-new-multi-screen-

world-study/

Greenwood, S., Perrin, A., & Duggan, M. (2016). *Social Media Update 2016*. Retrieved from

Prew Research Center: http://www.pewinternet.org/2016/11/11/social-media-update-

2016/

Hipke, M., & Hachtmann, F. (2014). Game-Changer: A Case Study of Social-Media Strategy in

Big Ten Athletic Departments. *International Journal of Sport Communication, 7*(4), 516-

532. doi:10.1123/IJSC.2014-0022

Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis.

Qualitative Health Research, 15(9), 1277-1288. Retrieved from https://doi-

org.erl.lib.byu.edu/10.1177/1049732305276687

Husain, S., Ghufran, A., & Chaubey, D. (2016). Relevance of Social Media in Marketing and

Advertising. *Splint International Journal of Professionals, 3*(7), 21-28.

Jude, A. (2012, August 8). *Oregon launches 'QuackCave,' a social media command center to*

connect with fans. Retrieved from The Oregonian:

http://www.oregonlive.com/ducks/index.ssf/2012/08/oregon_launches_quackcave_a_so.h

tml

Kaplan, E. (2016). *Why Haven't College Football Ratings Fallen Like the NFL's?* Retrieved

from Sports Illustrated: http://mmqb.si.com/mmqb/2016/11/15/college-football-ratings-

2016-season-nfl-ratings-espn-fox-nfl-draft

Katz, A. (2010). *BYU leaving MWC for 2011-12 season*. Retrieved from ESPN:

http://www.espn.com/college-sports/news/story?id=5517305

Lee, D., Hosanager, K., & Nair, H. (2017). Advertising Content and Consumer Engagement on

Social Media: Evidence from Facebook. *Management Science, Accepted and*

Forthcoming. Retrieved from https://ssrn.com/abstract=2290802

Lee, M. J. (1985). Self-esteem and social identity in basketball fans: A closer look at basking-in-

reflected glory. *Journal of Sport Behavior, 8*(4), 210-223.

Lewis, N., & Weaver, A. J. (2015). More than a game: Sports media framing effects on attitudes,

intentions, and enjoyment. *Communication & Sport, 3*(2), 219-242.

doi:10.1177/2167479513508273

Lindsay, S. (2017, September 1). *The 35 Biggest Colleges in the United States*. Retrieved from

PrepScholar: https://blog.prepscholar.com/the-biggest-colleges-in-the-united-states

Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content analysis in mass

communication: Assessment and reporting of intercoder reliability. *Human*

Communication Research, 28(4), 587-604. Retrieved from

https://academic.oup.com/hcr/article-abstract/28/4/587/4331304

Luckerson, V. (2015, July 9). *Here's Why Facebook Won't Put Your News Feed in Chronological Order*. Retrieved from TIME: http://time.com/3951337/facebook-chronological-order/

Meenaghan, T. (2001). Sponsorship and advertising: A comparison of consumer perceptions. *Psychology and Marketing, 18*(2), 191-215. doi:10.1002/1520-6793(200102)18:2<191::AID-MAR1005>3.0.CO;2-C

Miller, R. K., & Washington, K. D. (2016). *Sports Marketing 2016-2017*. Loganville, GA: Richard K. Miller & Associates.

Minton, E. A., & Kahle, L. R. (2013). *Belief Systems, Religion, and Behavioral Economics: Marketing in Multicultural Environments*. New York, NY: Business Expert Press, LLC.

Newberry, C. (2018, May 2). *23 Benefits of Social Media for Business*. Retrieved from Hootsuite: https://blog.hootsuite.com/social-media-for-business/

Newport, F. (2014, December 24). *Three-Quarters of Americans Identify as Christian*. Retrieved from Gallup: http://news.gallup.com/poll/180347/three-quarters-americans-identify-christian.aspx

Oregon Football. (2018, April 19). *Oregon Football*. Retrieved from Facebook: https://www.facebook.com/OregonFootball/

Pew Research Center. (2014). *Religious Landscape Study*. Retrieved from Pew Research Center: http://www.pewforum.org/religious-landscape-study/

Popp, N., McEvoy, C., & Watanabe, N. (2017). Do college athletics marketers convert social media growth into ticket sales? *International Journal of Spots Marketing and Sponsorship*, 212-227. doi:10.1108/IJSMS-05-2017-090

Riffe, D., Lacy, S., & Fico, F. (2013). *Analyzing Media Messages: Using Quantitative Content Analysis in Research* (2nd ed.). New York, NY: Routledge.

Schad, T. (2014, August 12). *Taking it on faith: Redskins' Cody Hoffman starred as rare non-Mormon at BYU*. Retrieved from The Washington Times: https://www.washingtontimes.com/news/2014/aug/12/cody-hoffman-starred-rare-non-mormon-byu-joining-r/

Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of communication, 49*(1), 103-122.

Shank, M. D. (2002). *Sports Marketing: A strategic perspective* (Second ed.). Upper Saddle River, NJ: Pearson Education Inc.

Siegel, A. (2015, December 5). *The 10 best college football programs on social media*. Retrieved from USA Today: http://fanindex.usatoday.com/2015/12/05/the-10-best-college-football-programs-on-social-media/

Siegel, A. (2017, December 1). *The best college football teams on social media*. Retrieved from USA Today Sports: http://ftw.usatoday.com/2017/12/the-best-college-football-teams-on-social-media

Smith, M. (2017, January 16). *How Clemson has nailed it on social media*. Retrieved from Sports Business Daily: http://www.sportsbusinessdaily.com/Journal/Issues/2017/01/16/Colleges/Clemson-social.aspx

Solomon, J. (2015). *College football attendance drops for fifth straight year, but at slower rate*. Retrieved from CBS Sports: http://www.cbssports.com/college-football/news/college-football-attendance-drops-for-fifth-straight-year-but-at-slower-rate/

Sorensen, E. (2012, August 9). *Oregon Football: Ducks Prove They Are Cooler Than Everyone*

    Else with Quack Cave. Retrieved from Bleacher Report:

    http://bleacherreport.com/articles/1291150-oregon-football-ducks-prove-they-are-cooler-

    than-everyone-else-with-quack-cave

Stoldt, G. C. (2012). *The Impact of Social Media on College Athletics Communications*.

    Retrieved from College Sports Information Directors of America:

    http://www.cosida.com/media/documents/2012/7/Social_media_impact_2012_Stoldt_stu

    dy.pdf

Tewksbury, D., & Scheufele, D. A. (2009). News framing theory and research. In *Media Effects:*

    Advances in Theory and Research (Third ed., p. 20). New York, NY: Routledge.

The Church of Jesus Christ of Latter-day Saints. (2016, September 1). *Sabbath Day Observance*.

    Retrieved from LDS.org: https://www.lds.org/youth/for-the-strength-of-youth/sabbath-

    day-observance?lang=eng&_r=1

Top NCAA college football teams getting social online. (n.d.). Retrieved March 14, 2017, from

    CBS News: https://www.cbsnews.com/pictures/top-ncaa-college-football-teams-getting-

    social-online/11/

Twiford, K. (2017, November 2). *The best college sports teams to follow on social media in*

    2017. Retrieved from Libris: https://librisblog.photoshelter.com/best-college-sports-

    teams-on-snapchat-twitter-instagram/

Walters, C., & Murphy, S. (2008). Framing the Olympic games: Impact of American television

    coverage on attitudes toward international cooperation and foreign policy in the United

    States. *American Journal of Media Psychology, 1*, 76-102. Retrieved from

    https://www.researchgate.net/publication/257025614

Weaver, S. J. (2015, December 30). *Leaders Hope Emphasis on Sabbath Observance Increases*

    Faith in God. Retrieved from Church News: https://www.lds.org/church/news/leaders-

    hope-emphasis-on-sabbath-observance-increases-faith-in-god?lang=eng

Witkemper, C., Lim, C. H., & Waldburger, A. (2012). Social Media and Sports Marketing:

    Examining the Motivations and Constraints of Twitter Users. *Sport Marketing Quarterly,*

    21, 170-183.

Appendices

A. BYU/University of Oregon Football Facebook Page Content Analysis Coding Sheet

Content

Text copy from post

Post Type					
☐ Image	☐ Album	☐ Video	☐ Link	☐ Giveaway	☐ Other
Video Views					

Type of Content

☐ Call to action	☐ Mid-game	☐ Giveaway
☐ Incentive to engage	☐ Postgame	☐ Miscellaneous
☐ Non-Gameday	☐ Team Focused	☐ Sponsorship
☐ Gameday	☐ Historical	☐ Paid Boost
☐ Pregame	☐ Fan Focused	

If there was a call to action for viewers in the post, what was it?	If there was an incentive for viewers to engage or interact with the post, what was it?
☐ Comment	☐ Merchandise
☐ Buy merchandise	☐ Gift cards
☐ Buy tickets	☐ Tickets
☐ Wear color	☐ Other
☐ Other	

B. Sample BYU Football posts

      Example 1.

Example 2.

C. Sample University of Oregon Football posts

Example 1.

Example 2.