Article

Sports under Quarantine: A Case Study of Major League Baseball in 2020

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Abstract: This case study entailed a Twitter content analysis to address the pandemic-delayed start to Major League Baseball (MLB) in the shortened 2020 season. This case study helps address the overarching objective to investigate how the sports world, especially fans, responded to MLB played during the 2020 COVID-19 pandemic. The methods investigated the common themes and determined who used predetermined Twitter hashtags. We recorded how many times external links, photos, emojis, and the 30 MLB teams were mentioned in the 779 tweets obtained during 39 days of data retrieval. Results showed that the most common category of tweeted content concerned news reports. Comparable numbers of positive and negative responses to the start of the MLB season were recognized, with a fraction of tweets highlighting COVID-19 impacts on health and modification of play (e.g., cardboard fans). The majority of Twitter users were from media and layperson categories. More inferred males tweeted using the selected hashtags. In exploratory analyses, results indicated that 50.2% of the sample included a link or a photo, and 2.2% of the sample used an emoji. The three most mentioned teams were the Cardinals ($N = 51$), Marlins ($N = 49$), and the Yankees ($N = 48$). The results confirmed the value of social media analysis as a research approach and revealed patterns emerging during a unique pandemic sports and media era.

Keywords: Twitter; social media; content analysis; baseball; sports; coronavirus

1. Introduction

Research on social media and sports is extensive (e.g., Alalwan et al. 2017; Billings 2011; Filo et al. 2015). Scholars have addressed such topics as team branding (Watkins and Lee 2016), player engagement (Thorpe 2017), and product marketing (Moyer et al. 2015) across various social media platforms, including Facebook and among various professional and amateur sports. A body of literature also addresses how sports fandom plays out in social media (Watanabe et al. 2015; Clavio and Walsh 2013; Hambrick et al. 2010; Kim et al. 2020; Pedersen 2017; Pegoraro 2010; Perez 2013; Sanderson 2014; Stavros et al. 2014). Among social media and sports fandom patterns, interactive platforms foster team sports identity-making, males are more likely to engage than females, and users are more likely to make comments one would not otherwise state in face-to-face interactions (Schweitzer 2014). Demographic and content analysis approaches to social media and sports have reached basic informational saturation (e.g., Hardin 2014), and thus call for stronger theoretical or methodological (e.g., longitudinal data collection) approaches. Here, we build on the existing social and media and sports research by undertaking a Twitter and Major League Baseball (MLB) content analysis during an unprecedented moment: the 2020 COVID-19 pandemic.

This study's theoretical background draws upon several key frameworks and the body of existing empirical sports and social media findings. Framing theory in social media and other interdisciplinary fields recognizes distinct schemas for approaching and interpreting

a common phenomenon (Goffman 1974; Scheufele 1999). This approach acknowledges that different sources and audiences can engage differently with the same topic (e.g., MLB on Twitter). A platform like Twitter that enables user-generated content fosters enhanced capacity for expressions of individual or networked sports fandom compared to legacy media (e.g., radio, TV) that disseminate media, league and team branding messages in largely one-way communication (Blaszka et al. 2012; Haugh and Watkins 2016). Accordingly, a focus on MLB and Twitter offers the opportunity to feature fandom—the nature of fans and what they express—embedded in a digital media arena that still involves other contributors such as players and brands. Within a fandom scope, theory addresses the demographics of sports fans (Apostolou and Lambrianou 2017) and aspects of fandom such as performance commentary (Kim and Hull 2017), expressions of team identity (Williams et al. 2014), influence (Lamirán-Palomares et al. 2020), and fan-fan interaction and coalition building (Blaszka et al. 2012). Sports and social media frameworks highlight engagement around major events such as the MLB World Series, the Olympics Games, and more mundane activities, like regular-season play, but have less insight to offer during catastrophic events that might result in the de-prioritization of sports relative to other societal concerns.

SARS-CoV-2 (COVID-19) was first detected in December 2019 in Wuhan, China. As the virus spread internationally, the disease (COVID-19) it gave rise to soon emerged as a 2020 pandemic. Different countries implemented travel bans, mask recommendations or requirements, and constraints on social grouping to manage its spread and impact. The COVID-19 pandemic soon transformed sports too. In the U.S., the National Basketball Association (NBA), National Hockey League (NHL), Major League Soccer (MLS), and MLB announced delays to the start of professional sports play as well as constraints on fan attendance and player behavior (Perry 2020).

After months of salary negotiations and detailed parameters of a 2020 season between MLB team owners and players, a consensus was reached, culminating in summer training set to begin on 1 July (Castillo 2020). The regular season, initiated on 23 July, was set to be played in 60 games without fans rather than the regular 162 games with fans (Wagner 2020). Instead, baseball stadiums had cardboard cutouts of fans who purchased a "seat" in each game (Clair 2020). The resumption of professional sports in 2020 marked the first time the MLB had played without fans since 2015 (Longman 2020). This year also marked the shortest MLB season since 1878, in which 40 games were played (Associated Press 2020). Per U.S. Centers for Disease Control (CDC) guidelines, the following health and safety procedures were set: no spitting, social distancing, no sharing or gathering of each other's equipment, decreased roster size, and injured players barred from play for ten days (Wang 2020). Due to these new rules, fandom shifted away from in-person experiences to more pronounced roles on social media platforms such as Instagram, Facebook, and Twitter.

The present study focused on the pandemic's impact on Major League Baseball (MLB) personnel and fans, with an emphasis on fandom as expressed on the social media platform Twitter. The study helps address the broader objective to investigate how the sports world, especially fans, responded to MLB played during the 2020 COVID-19 pandemic. This paper helps provide context for the delayed, and ultimately shortened, 2020 MLB season through the lens of Twitter users. Two broad questions are addressed. First, what themes emerge during the 2020 pandemic? Second, who (sources) Tweets about MLB during the 2020 pandemic? Based on existing research, we predicted more males than females would tweet about MLB during the pandemic but otherwise raise broad, open-ended questions to address during this unique time. Based on the theoretical and empirical background above, one might envision similar patterns to the who (predominantly fans, and also media) and what (concerns with team outcomes, sports identity connections) prior to and during the abbreviated 2020 season. Conversely, one might anticipate changes, such as how player safety concerns are perceived and disruptions to the in-person fan experience, which themselves offer novel pandemic insight to sports and media discussions.

2. Materials and Methods

The present study relied upon content analysis methods (Cavazos-Rehg et al. 2016) on the social media platform Twitter. While various methodological approaches exist to identify and quantify patterns in social media use (Reyes-Menendez et al. 2020; Saura et al. 2019), the content analysis approach here best fits the objectives and need to identify themes of Twitter content inductively. Twitter is a social media website created in 2006 that can be used to promote products, fan engagement, and build connections between users (Williams et al. 2014). This platform gives fans the benefit of getting information from multiple sources and the choice to interact with players (Sanderson 2014), expressed through relatively short strings of text known as "tweets." At the time of this paper, tweets are limited to 280 characters per post and can include links, photos, or images (Logghe et al. 2016). A primary Twitter attribute used in this case study is the "hashtags" feature. Hashtags are a way of conveying a topic (e.g., #MLB, #COVID19) along with a broader keyword or conversation thread. When users click on a given hashtagged word, the site redirects users to a page with other tweets that used the same hashtag (Smith 2012). Twitter was selected as the social media platform for this study because of the unique setting and wide range of users.

Tweets were downloaded using the "Advanced search" option on Twitter. Tweets were filtered to include:four different hashtag sequences, only tweets in English, and between 1 July and 8 October 2020. Tweets were downloaded every two hours between 09:00 a.m. to 09:00 p.m. (PST). Table 1 provides hashtag sequences and the frequency of tweets for each sequence.

Table 1. Description of hashtag sequences used.

Hashtag Sequences Used	Frequency
1. #MLB2020 AND #COVID19	29
2. #Coronavirus AND #MLB2020	75
3. #MLB AND #COVID19	396
4. #MLB AND #Coronavirus	277

2.1. Sample

A total of 779 tweets from four hashtag sequences were downloaded using the NVivo Ncapture function from 1 July to 8 August 2020. NVivo is a text analytic software that enables researchers to capture web content from social media sites as a dataset or as a PDF (Frederick et al. 2015). This allowed for tweets to be downloaded for the entire summer training period and two weeks of the regular season. Information obtained from the PDF downloaded and uploaded to NVivo was then transferred to a dataset to simplify the analytical process and ensure researchers were viewing the same information. Due to multiple hashtag sequences, tweets were expected to recur in varied, though repetitive, manifestations. Tweets were coded in accordance with the specific sequence and then counted with the total sample.

2.2. Coding Scheme

A thematic codebook was broken into eight classifications (1–8) with subcategories labeled alphabetically. The classifications were determined by a random selection of 25 tweets from both sequences three (#MLB and #COVID19) and four (#MLB and #Coronavirus). The codes were inductively specified by the authors by referring to overall themes of each tweet and comparing them to recurring phrases and hashtags. We subsequently coded 779 tweets using the codebook. Each tweet included at most three codes and resulted in a greater sum than the total number of tweets. The components, definitions, and examples comprising the Codebook are provided in Table 2.

Table 2. Description of tweet source categories and clarification.

Categories	Clarification
MLB/League Officials	Officials associated with the MLB company.
Player/MLB	Employed by the MLB as a player for one of the 30 teams.
Player/other	Employed by a different national team (e.g., NFL and NBA).
Media	Media outlets (verified by Twitter) such as ESPN and Bleacher Report.
Celebrity	Celebrities that a verified by Twitter.
Media Celebrity	Media account that is verified by Twitter.
Company/products	Tweets that are selling products using the hashtag sequences (e.g., baseball themed masks).
Layperson	The general user (unverified).
Other	An account that does not fit under the previous categories mentioned.

The source of a code was recorded, with potential coded categories and explanations provided in Table 2. These categories such as media and company/products drew upon a 2012 World Series study (Blaszka et al. 2012). For each tweet, we also noted the inferred sex of the tweeter, MLB teams mentioned, and whether a link to a video or photo was provided. For inferred sex, this was determined by looking at the name, username, and/or reading the tweet. We also incorporated a count for 'unknown' for tweets for which we could not feel confident inferring the sex or it was an account that was group-based.

Intercoder reliability was used to measure consistency between the coders required in a content analysis study (Lombard et al. 2005). To determine intercoder reliability, a sample of 15% (234 tweets) was randomly selected. The goal was to have a Cohen's kappa coefficient of 0.75 or higher of intercoder reliability (Blaszka et al. 2012; Wimmer and Dominick 2006). Our intercoder reliability was 0.83 (83%). Once that was established, the complete dataset was shared to begin analysis.

3. Results

3.1. Thematic Codes

Table 3 presents the number of tweets coded in the eight thematic categories and sub-categories, with those patterns also visualized in Figure 1. These data address the broad question concerning the themes featured in MLB tweets. Several key patterns emerge from these findings. Health risks and MLB Modifications occurred, in recognition of impacts of COVID-19 on the game, its play, and its health impact. Comparable numbers of positive ($N = 107$) and negative ($N = 106$) reactions were recorded. Among remaining categories, tweets concerning game play (e.g., game outcomes; $N = 342$) were the most common.

Table 3. Description of codebook categories and subcategories.

	Categories and Subcategories	Code Frequency
1	**Health Risks**	33
1a	Tweet expressed concern about the safety of MLB players, staff (coach, umpires, etc.) and families.	9
1b	Tweet mentioned positive tests among MLB players and staff members.	7
1c	Tweet referred to actions that would be seen as unsafe according to the *Center for Disease Control and Prevention* (CDC) guidelines. Actions such as not wearing a mask, high fiving, and spitting.	8
1d	The tweet mentioned cancelling or postponing the season for the health of everyone involved.	3
1e	Other tweets that would be under 'Health Risks' code not mentioned in 1a-1d.	6
Example	"As more @MLB players are testing positive for #coronavirus" we are finding it hard to believe that it's safe for the season to go underway . . . "	

Table 3. *Cont.*

|	Categories and Subcategories	Code Frequency
2	**2020 Major League Modifications**	34
2a	The tweet mentioned the cardboard cutout fans that filled the stadiums during the 2020 season.	13
2b	The tweet mentioned the requirement for all 2020 MLB players, extended staff, and fans to wear a mask.	2
2c	Tweet referred to new rules for the 2020 MLB season. These rules include but are not limited to the following: players wearing mask, social distancing during games, and regulation on players and staff spitting.	14
2d	Other tweets that would be under the '2020 MLB Modifications' code not mentioned in (2a–2c).	5
Example	"Watching baseball with no fans and cardboard cutouts in the seats is bizarre but still baseball."	
3	**Positive Reactions**	107
3a	The tweet refers to missing sports or major league baseball specifically.	15
3b	The tweet mentioned positive phrases or hashtags such as "baseball is back" or "play ball."	47
3c	Other tweets not included in subcategories 3a and 3b above.	45
Example	"It's that time of year again!!!!!"	
4	**Negative Reactions**	106
4a	A tweet that favored the cancellation of the 2020 MLB season.	20
4b	The tweet criticized the organization of the leaders (Rob Manfred) of the MLB.	28
4c	Oher tweets that have a negative view that does not fit under subcategories 4a and 4b.	58
Example	"Can the @MLB cancel the season already?"	
5	**Propositions**	114
5a	Tweets that included a sale or charity proposal for the league.	8
5b	A tweet that included bets or predictions for games or the season altogether.	40
5c	The tweet refers to a conspiracy theory in reference to current events and the MLB season.	4
5d	The tweet mentioned people or current events related to politics (#Biden, #Trump, etc.)	33
5e	Other tweets that did not fall under the 5a–5d categories.	29
Example	"@MLB teams should put up every homerun ball hit this year up for auction to benefit local #coronavirus efforts."	
6	**News Reports**	342
6a	Tweets that highlight official MLB news, such as game scores, team and individual players updates. This subcategory included tweets with any official MLB news.	203
6b	A tweet that referred to other major league (NFL, NHL, and NBA) scores, and general news updates.	65
6c	Other tweets that referred to game results and used the assigned hashtags.	74
Example	"More MLB Covid-19 POSITIVE Tests—Cardinals vs Brewers Game POSTPONED."	
7	**Inquiries**	111
7a	Question asked about a current event (games news, games states, etc.).	80
7b	Question asked about past role models and how they would have reacted to the 2020 MLB season.	3
7c	Question does not fit subcategories 7a and 7b.	28
Example	"Fanbassadors. Would you be willing to pay money to have a cardboard cutout of you attend baseball games?!"	
8	**Other**	140
8a	Tweets that used the chosen hashtag(s) randomly.	57
8b	A tweet that used the hashtags to sell a product such as masks.	8
8c	The tweet referred to national and global news and referenced the MLB using the hashtags.	14
8d	Other tweets that do not fit any of the previous codes.	61
Example	"If you want to know more about God, if you want to know more about the Bible . . . "	
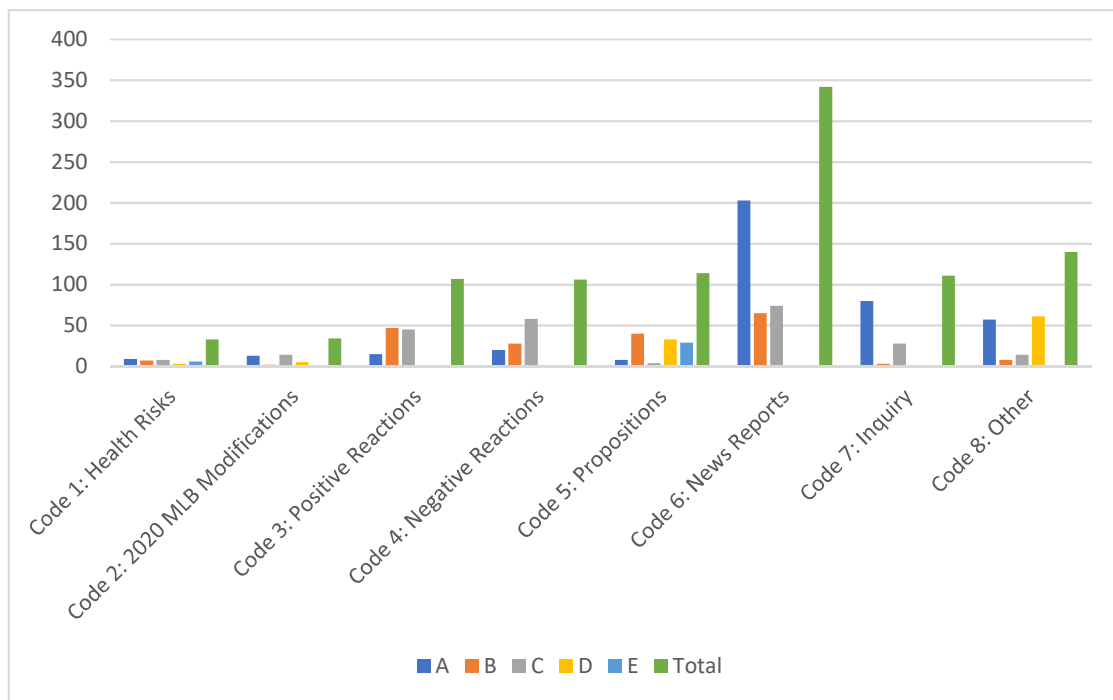
Figure 1. Frequency of tweets by category.

3.2. Sources of Tweets

Addressing the other broad research question, the source category of tweets is provided in Table 4. There was no record of MLB/League Officials, MLB players, and other major league players that tweeted using the assigned hashtags. General users (layperson) used the hashtags most (*N* = 393) and Media accounts (ESPN, FOX News, etc.) used them the second most (*N* = 168).

Table 4. Sources of tweets.

Category	Results
MLB/League Official	0
Player/MLB	0
Player/Other	0
Media	177
Celebrity	8
Media Celebrity	40
Company/Products	14
Layperson	477
Other	63

The inferred sex of tweets was 54% (*N* = 366) male, 8% (*N* = 51) female, and 38% (*N* = 256) unknown. These results are visualized in Figure 2. The results support the prediction that more males will tweet than females.
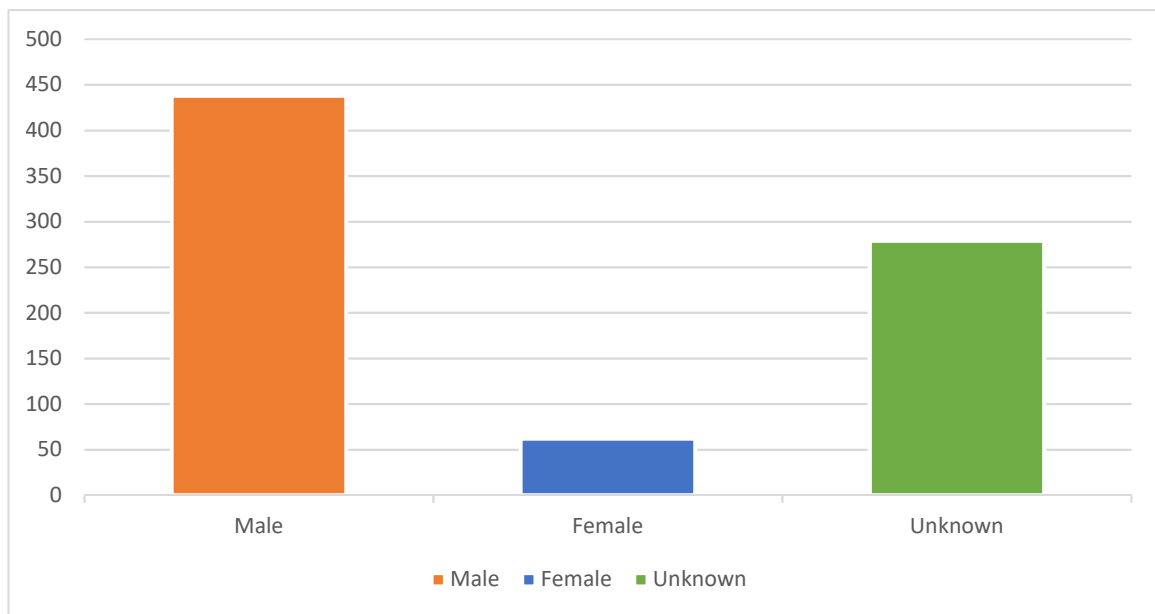
Figure 2. Inferred sex of tweeter.

3.3. Exploratory Analyses

Each time a tweet was categorized under *Code 1: Health Risks* we documented the sex of the user. As illustrated in Figure 3, each inferred sex to use *Code 1* was (N = 15) males, (N = 2) females, and (N = 11) unknown sex. *Code 1* was used (N = 33) and is different to the total of inferred sex because it was only counted once for this analysis.
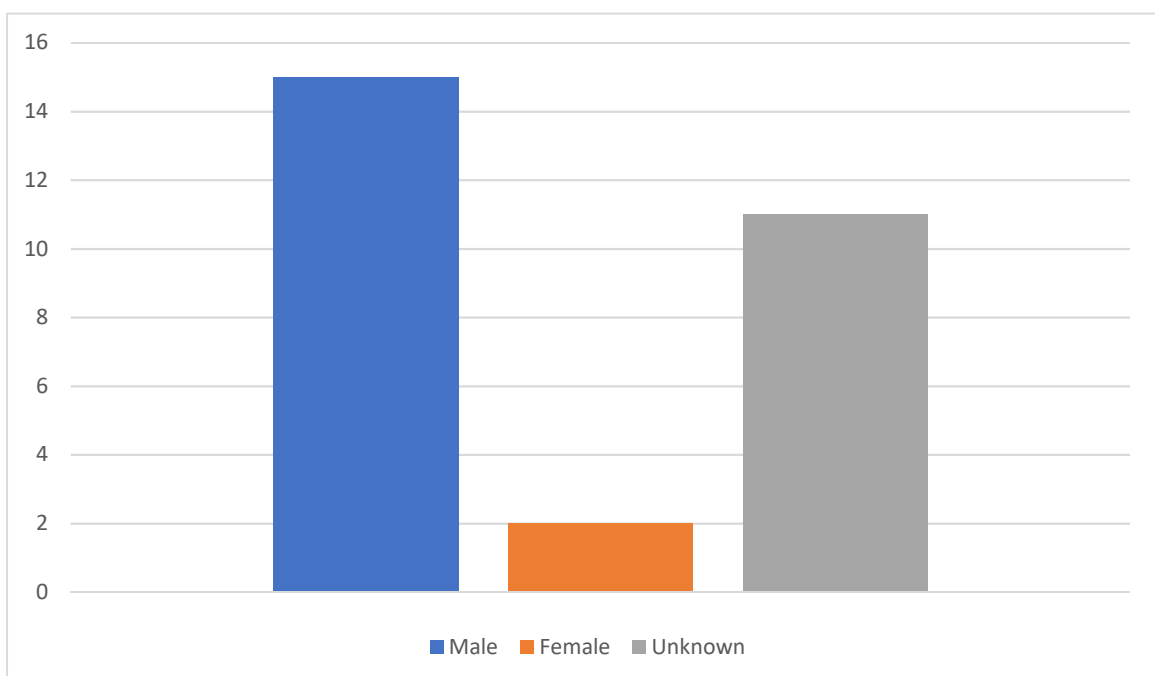

Figure 3. Inferred sex whose tweet was categorized as Code 1: Health Risk.

We found that 119 tweets included a link to a webpage. The links included, but were not limited to, podcasts, Instagram, Amazon, and Entertainment and Sports Programming Network (ESPN). Data also showed that 219 tweets included a photo. These photos included gifs, screenshots, photos from the camera roll, etc.

Each time a team was mentioned in a tweet, it was recorded in order to compare the team most referred in tweets with the fixed hashtags and time period. As shown in Figure 4, the teams most mentioned were the Yankees (*N* = 39), Marlins (*N* = 40), and Cardinals (*N* = 47). The only team not appearing in any tweet was the Oakland A's.

We included a quantitative analysis of the emojis used out of (*N* = 779) tweets. Upon analysis, we found that 46 out of the sample included at least one emoji. Converted into a percent, that is 2.2% of the sample included form of an emoji.
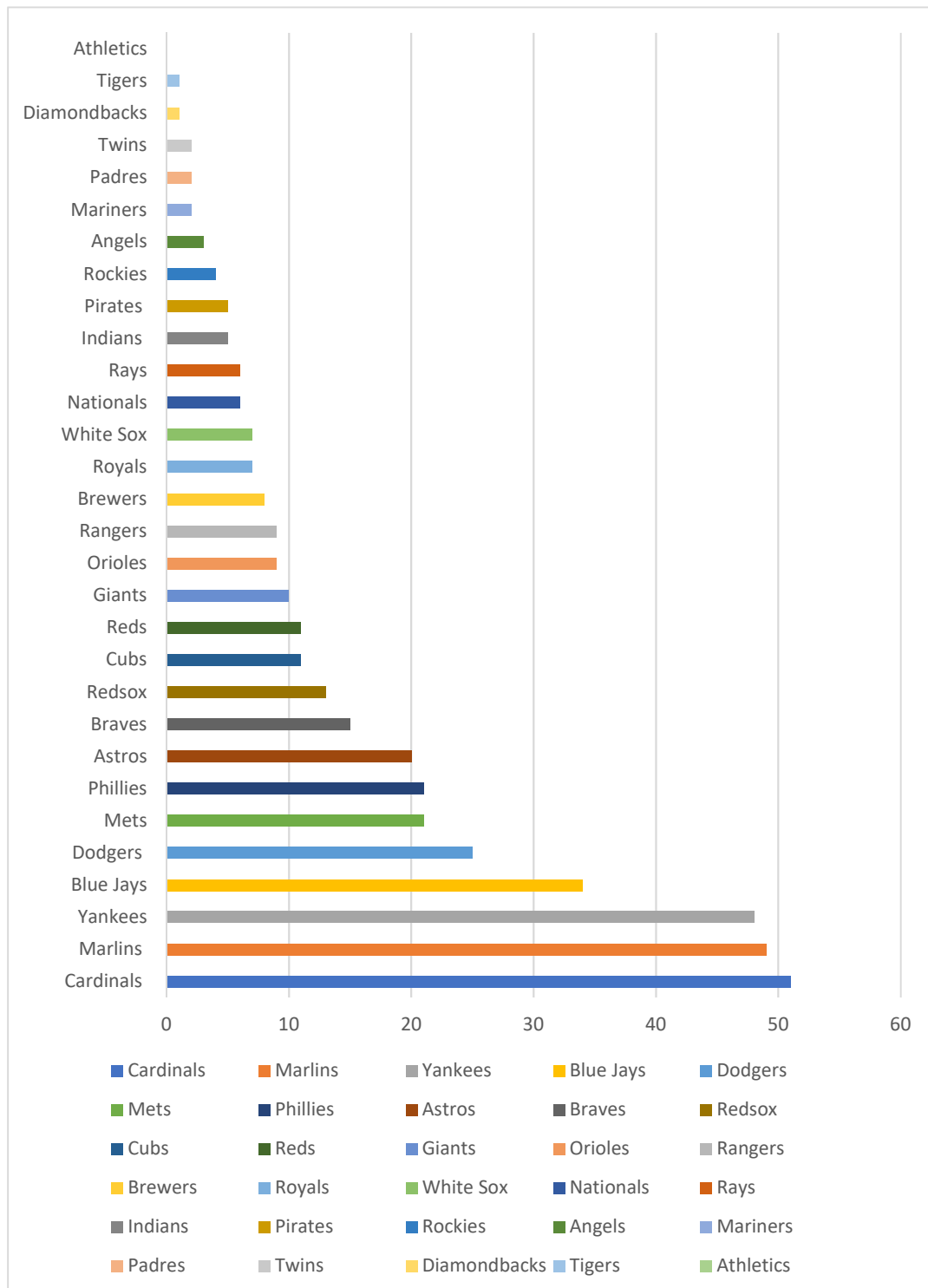

Figure 4. Frequency MLB teams mentioned.

4. Discussion

In the present study, we sought to uncover how sports fans reacted to the 2020 MLB season during the COVID-19 pandemic. We conducted a content analysis of Twitter hashtags related to MLB and COVID-19 and sought to answer two questions. The first question focused on the themes determined by an inductive codebook. The second question focused on who tweeted. Results uncovered each tweet's recurring themes and who was tweeting based on a source and the inferred sex. Results also included four exploratory analyses. The empirical evidence gathered in this study highlights that sports go on, even throughout a pandemic.

The number of positively valanced *Code 3* (N = 107) and negatively valanced *Code 4* (N = 106) tweets were comparable. The results illustrate how torn MLB fans were about play during the pandemic. The following is an example of a negative tweet by a user:

#Mondaytoughts just stop the #NBA and #MLB2020 this #COVID19 has done some damage!

An example of a positive tweet by a male user is:

Hoping #MLB can withstand the #COVID19 related issues they've been having, but if nothing else, at least we got a few weeks of #sports. We'll see what happens. Hope everyone is safe, staying well, and has a pleasant evening. #NHL #LGM #LetsGoRangers

Results showed the most common thematic category of tweets (*Code 6*; News Reports) was related to MLB events such as scores, or players and teams who tested positive for COVID-19. The overwhelming number of news reports documented in the results highlight how often media outlet reports are shared on Twitter. Studies show that media organizations with Twitter accounts were highly influential as agenda setters (Yun et al. 2016).

Results revealed that most tweeters fit the categories of a Layperson (N = 477) or Media (N = 177). Results also showed that (N = 8) users were verified celebrities. Hashtags are useful to users who are trying to develop marketing communications and specific messages (Pilař et al. 2018). Celebrities tend to use hashtags to market rather than generally update their followers (Page 2012). An example from our sample of a verified celebrity using the hashtags to relay their opinion is:

My prediction for the #mlb 2020: the #worldseries will be an intrasquad event after all but one team drops due to #COVID19.

The hashtags used in this study provided little opportunity for the celebrity to self-market themselves and the products they use. These results were consistent with previous research where they found Layperson and Media to be the two most tweeted users (Blaszka et al. 2012).

We inferred that 56% of tweets were submitted by males, 8% by females, and 36% by an unknown. These results supported the hypothesis that more males would tweet than females. This sex difference is consistent with a large body of previous sports fandom research, including in MLB (e.g., Deaner et al. 2016; James and Ridinger 2002).

In addition to who was tweeting overall, we looked to see whose tweet was coded regarding *Health Risks*. A population-based study on sex differences and gender roles in empathy and moral cognition found that women have a higher empathetic concern and discomfort rating (Baez et al. 2017). Our results showed that males (N = 15) tweeted more than females (N = 2) about *Health Risks*. Although this is surprising, another study used a survey to understand who tweets about politics. This study showed that tweeters are young, educated, white males (Bekafigo and McBride 2013). Tweets regarding COVID-19 were not only about the pandemic itselfbut also mentioned the 2020 presidential candidates. For example, in our analysis of tweets using #MLB and #Covornavirus an unknown user tweeted:

Phillies have 2 positive tests; series vs. Jays postponed - #mlb #COVID19 #Covid #Coronavirus #Trump #Biden #Pandemic #Virus #Mask #SchoolReopening #SocialDistancing.

Therefore, the 2013 study highlights not only why more men were tweeting in regard to *Code 1* but also in our overall results.

Our second additional exploratory analysis referred to the quantity of links and photos in the sample. The results showed that 19% included a link and 47% contained a photo of some sort. The third exploratory analysis uncovered the total occurrences each team was mentioned. Results showed that the Cardinals were the most-tweeted-about team. This was due to the fact that the Cardinals were the first team to be reported positive for COVID-19. A media account tweeted:

> New Podcast! "GSMC Baseball Podcast Episode 225: Cespedes opts Out, Cardinals COVID Outbreak, Weekend Round-Up" on @Spreake #americanleague #baseballnews #cardinals #covid19 #detroittiger #gsmcbaseballpodcast #gsmcp-docastnetwork #mlb #nymets

This led to game cancellations and articles reporting on the Cardinals. The second most referenced team was the Marlins ($N = 49$). The Marlins also had a COVID-19 outbreak around the same time as the Cardinals. Tweets by the media and layperson focused on rumored reports that some team members had gone to a club during the current pandemic. Another Twitter media user tweeted:

> Derek Jeter denies Marlins players went to clubs before coronavirus outbreak #MLB #SPORTS #COVID19

The only team not to be mentioned in a tweet from 1 July 2020 to 8 August 2020 was the Oakland Athletics. They did not have a positive coronavirus test until after we completed downloading tweets.

The fourth exploratory analysis was 'how many tweets included an emoji?' Our results showed that only 2.2% of the sample included an emoji in their tweet. Before the final analysis, we planned to use the emoji to help determine themes. This was soon dropped due to the small sample that did include them. Emojis are viewed as too casual or childish for News Organizations to use as a teaser on a post (Donaway 2020). This may be due to the fact that a large sample of the tweets were coded under *Code 6 'News Reports'* and excluded the use of emojis because they were news articles.

This case study's findings and methodology are broadly consistent with the prior sports fandom and social media literature, aligning with laypersons expressing positive and negative sentiments about MLB players, teams, and impacts on MLB of the 2020 COVID-19 pandemic. Smith and Smith (2012) used Twitter and hashtags to study social identity. O'Hallarn and Shapiro (2014) referred to hashtag #NBCFail to find a conversation between users with a similar opinion. Scholars such as Blaszka, Frederick, and Pegoraro analyzed Twitter hashtags #London2012, #Soshi2014, and #CheersToSochi (Blaszka et al. 2016; Frederick et al. 2015; Pegoraro et al. 2014) to analyze Olympics media patterns. Gibbs et al. (2014) referred to interviews, content analysis, and an online survey to determine what influences Twitter followers of professional sports teams; specifically, they looked at the Canadian Football League.

Consistent with framing theory, the findings suggest multiple constituents expressing views and interacting with varied concerns on this social media platform. The results also indicate varied dynamics such as layperson commentary on game outcomes to media reports of COVID-19 positive tests. The platform of Twitter lends itself to such expressions of readily shared public interest or concern about events, with limited contextual information (e.g., codes, inferred sex) also provided (Nisar et al. 2018). This consumer-generated and interactive social media domain of sports and fandom contrasts with other domains such as legacy media (e.g., sports sections in newspapers), websites, observations at in-person events, surveys, and search query analyses. For example, Twitter analyses of a previous flu pandemic recognized that public sentiments changed as the pandemic progressed, and this source of insight contrasted with traditional epidemiological surveillance techniques (Signorini et al. 2011). Moreover, the use of a social media platform such as Twitter offers insight into public sentiments during disasters like earthquakes or pandemics (e.g.,

González-Padilla and Tortolero-Blanco 2020; Simon et al. 2015), and may influence how other media channels such as television report on the events (e.g., Valenzuela et al. 2017).

This season had noticeable changes to life before the COVID-19 pandemic. Most fans could not attend the game, and if they did, the lucky few wore a mask as a requirement. People bought cardboard cutouts of themselves to be placed in the stands. Like Tom Hanks, celebrities bought cardboard cutouts; his was of him eating a hot dog in the stands (Pitoniak 2020). We documented (*N* = 13) users under *Code 2: 2020 Major League Modifications (2a)* referencing the cardboard cutouts. An example of a tweet coded under subcategory 2a:

> #BreakingNews #MLB REPORTS 12 CARDBOARD CUTOUTS HAVE TESTED POSITIVE FOR #Covid19.

Along with the rule changes mentioned previously in this paper (no spitting, no sharing equipment, weekly COVID-19 tests), the results are unique because they are reported at a time when fans used social media as a way to interact with fellow fans and rivals.

Although this season had its apparent alterations compared to previous seasons, it also illuminated similarities. For example, the teams still played a season that included traveling. Fans that could not make the game, which was almost everyone, watched the games from home. Consistent with pre-pandemic patterns, men were the overwhelming users tweeting and media outlets still tweeted about news regarding the season.

This study was subject to limitations. The reliance on the information available from tweets limits which variables can be adequately measured. We employed a sample of tweets between specific 2020 dates and with specific hashtags rather than a larger sample of MLB-related tweets over a longer duration (e.g., through conclusion of season). Future research might employ methods similar to Frederick et al. (2015) and Blaszka et al. (2012) that included one hashtag arrangement along with an official account, or investigate pandemic impacts in other major league, college, or international sports. Alternative methodological approaches, including ones based on machine learning and social network analysis (Reyes-Menendez et al. 2020; Saura et al. 2019), could also be employed to study specific facets of sports fandom using social media content. To further isolate pandemic influences of sports in social media, methodological approaches could track changes in sources and sentiments longitudinally, offer comparisons to non-pandemic times, and enable contrasts to other media platforms.

5. Conclusions

The case study's findings indicated that News Reports such as game results were the most-often tweeted theme and that comparable numbers of positively (*N* = 107) and negatively valanced (*N* = 106) tweets appeared. Results revealed that more inferred males than females tweeted using hashtags that referred to the MLB and COVID-19 and that laypersons and the media were the most common categories of tweeters. Exploratory analyses focused on links, photos, emojis, and teams mentioned, finding that the most often mentioned teams were linked with COVID-19 outbreaks. This study illustrates the value of a Twitter content analysis approach to sports fandom during an unprecedented pandemic.

Besides these empirical take-away points, what are the broader theoretical and empirical implications of the study? Arguably, the present study's primary implications and original contributions are in documenting some of the key patterns for how constituents, especially fans, engage on a leading social media platform during a unique sports moment: the pandemic-impacted MLB abbreviated 2020 season. While a body of research addresses patterns in sports and social media, that literature has not covered events of this disruptive magnitude, making for a unique angle into the world of sports and media. The findings also showed that the pandemic influenced how fans and others engaged with key MLB hashtags on Twitter during the pandemic. Fans and media commented on teams like the Marlins facing COVID-19 positive tests. Fans and media referred to negative aspects of play, including whether it made sense to play ball at a time when sports seemed less critical than more immense health and societal concerns and when players' health was also at

stake. Fans and media commented on how the game changed, such as the absence of fans, replaced in some stadiums with cardboard cutouts.

Yet, in other ways the game did go on, albeit in a shorted, delayed, and altered way. Just as previous sports and media studies had found that laypersons and media were primarily engaged on social media platforms, these were also the most common sources of tweets in the present analysis. More inferred males than females tweeted about MLB, consistent with much earlier research on sports fandom. The most recurrent themes tweeted about were news, such as baseball actions and scores. Even though in-person MLB fandom was disrupted, virtual fandom persisted, not without ambivalence (given the comparable numbers of positively and negatively valanced tweets) but active, engaged audiences still weighed in on MLB action. Perhaps illustrating the powerful draw of sports, this Twitter content analysis demonstrates that MLB played on in 2020, differently, even during a pandemic.

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