Sport, Twitter Hashtags and the Public Sphere

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SPORT, TWITTER HASHTAGS AND THE PUBLIC SPHERE

by

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A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
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ABSTRACT

SPORT, TWITTER HASHTAGS AND THE PUBLIC SPHERE

Brendan O’Hallarn
Old Dominion University, 2016
Director: Dr. Stephen L. Shapiro

Sport and social media researchers have been challenged to go beyond simply analyzing the content of public social media posts, and to incorporate different critical frameworks to seek more meaningful findings about these relatively new online phenomena. This three-paper format dissertation attempts to frame interactions through sport-themed Twitter hashtags sociologically by incorporating a critical theory rarely deployed in the study of sport—the public sphere. In paper one, the study introduces a theoretical model which suggests sport consumption patterns and the unique architecture of Twitter can promote public sphere-like discourse in hashtags connected to sport. The model suggests amplifiers and barriers which promote or inhibit the creation of an online space for pro-democratic, rational-critical discourse. The second and third papers are empirical tests of the theoretical model—a qualitative case study examination of Twitter hashtag discussions, and they impact they have on participants, following the firing of former Major League pitcher Curt Schilling by ESPN; and a quantitative survey of users of three different types of sport-themed hashtags to assess the generation of social capital as a byproduct of public sphere-like interactions. Together, the three studies comprise the first comprehensive analysis of the public sphere as a way to explain online discussions on Twitter. Given the prevalence of the social media site, and its strong pull among sport fans, better understanding of the motivations for online behaviors—whether reflective of the public sphere or not—can help inform a wide range of issues connected to sport.
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This “accidental journey” to a Ph.D. would not have been possible without the help of so many people. I am humbled to be surrounded by supportive friends and family members, who have provided me with encouragement and advice, and empowered me with belief. A little more than nine years ago, I arrived in my adopted country of the United States with no Green Card (yet), no work prospects, with one child and another on the way. Crossing the stage at the Ted Constant Convocation Center in December to receive a doctorate from Old Dominion University, and a handshake from my first ODU professional contact President John R. Broderick, feels like a fantasy. I left my undergraduate alma mater Ryerson in 1993 with a C average and no plans to return to school—ever. Now I may never leave university again. Life takes strange turns.

To begin with, I need to thank my adviser and dissertation committee chair, Dr. Stephen L. Shapiro, the kindest, most supportive doctoral mentor I could imagine. Providing near-weekly reassurance that no, I was not going to fail at this process, he may be as happy to see the end of this project as I am. Dr. Shapiro has helped me grow throughout this process of doctoral education, and it’s largely thanks to him I feel prepared to (hopefully) take the next step into a faculty position. I feel like I was also blessed with the perfect dissertation committee for me. Dr. Lynn Ridinger, chair of the Department of Human Movement Services, volunteered to serve on my committee though she is not even on Twitter. Yet it was her suggestion to create a conceptual model of public sphere-like interactions that focused my entire dissertation project. As well, her office door has been open for guidance and encouragement at any time as I struggled to balance a full-time job, a part-time doctoral degree and a family. Attending my first conference in Austin, Texas, I nervously approached a social media scholar whose impactful research I had just read.
Dr. Marion Hambrick may not have realized how intimidated I was, but could not have been more friendly, supportive and welcoming at the very beginning of my doctoral journey. He has also provided indispensable advice throughout the dissertation process. Finally, Dr. Dylan Wittkower is a scholar who I first encountered in my role in public relations for Old Dominion University. He introduced me to the concept of the public sphere, mentored me as I wrote my first manuscript, and has continued to provide guidance and friendship. Also, as a world-renowned expert in the philosophy of technology, he asked terrifying questions during my comprehensive oral examination, and proposal and dissertation defenses. This project is better because of his wisdom, and indeed the insight of my entire committee.

Besides my dissertation committee, my time at Old Dominion has been filled with encounters with special people, who have helped me along my doctoral journey, or helped me enjoy day-to-day life here more. My first boss, Jennifer Mullen Collins, and my current boss, Giovanna Genard, have empowered and supported my educational dreams. They have invested in my doctoral education, and I hope I have repaid their kindness through diligent work. My current supervisor Jon Cawley has not only accommodated a serious juggling act by an employee in our understaffed public relations office, he has patiently listened to me repeatedly describe arcane academic terms like confirmatory factor analysis in far more detail than necessary. Other colleagues, past and present, Jim Raper, Steve Daniel, Susan Malandrino, Lisa Sinclair, Jason Phenicie, Chuck Thomas, Tom Robinson, Karen Smallets, Ericha Forest, Caitlin Chandler, Lisa Jones, Elise Kluge, Kim Sawyer, and fellow and former building denizens Christina Lipuma, Karen Meier, Jim Clanton, Son Nguyen, Kelly Schumacher Fuller, Ashley Puvogel, Tami Park-Farinholt, Cecilia Tucker—plus many others I have surely forgotten—make Koch Hall a memorable place to have spent the past eight years.
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Truly, however, this dissertation is completed because of three people. Summerlin and Gene, my two sweet children, have heard “no” from their father far more than any child should. I feel heartbroken to have missed so many experiences as I have worked on this opus. I promise to spend the rest of my days trying to capture that lost time. And Reva, my heart and soul, thank you. You made this possible. You give me freedom to dream, and support while I pursue those dreams. You have dealt with my temper, my impatience, my distraction, my absence, and my insecurity. This dissertation is dedicated, with all of my heart, to you. I love you.
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CHAPTER 1

Introduction

In its eight years of existence, the microblogging site Twitter has become one of the most popular social media sites in the world (Murthy, 2013), and a particular favorite of sport fans (Burns, 2014) for its ability to connect strangers together in real time. Twitter allows users to create short posts, known as tweets, which are disseminated to the users who follow that particular account. Each Twitter user receives his or her own curated feed of tweets in a reverse-chronological timeline, based on who they are following. The connective nature of the social media site allows for worldwide spread of timely and relevant information. The interconnected power of Twitter was hailed in the aftermath of protests connected to despotic governments, economic inequality, and corruption in the United States and around the world (Benhabib, 2011; Castells, 2012; Gleason, 2013). The open commons that can be created through instantaneous, worldwide dialogue has been studied widely for its potential to promote citizen engagement and pro-democratic aims (Hoskins, 2013; Murthy, 2013; Shirky, 2008).

This process can be aided through a Twitter technological affordance known as the hashtag (#), a 2007 innovation that organizes tweets on one topic into a single community, accessible with one mouse click, through the use of a “#” immediately before a word or phrase (Murthy, 2013). While Twitter’s potential to organize and link participants was hailed as a breakthrough for activism and democracy as it became more popular (Castells, 2012), that endorsement of the site has been countered by criticism from social media scholars. Critics suggest that there is little or no link between activity on Twitter and real-world activism to encourage democratic causes (Morozov, 2010). There is also significant criticism of the social media site for its tendency to incite hateful remarks about women (Chess & Shaw, 2015;
Sanderson, 2014a), minority groups (Cisneros & Nakayama, 2015; Sharma, 2013), gays and lesbians (Ford, 2012), and in the field of sport, athletes and rival fans (Hay, 2015).

The unique architecture of hashtags creates topic-specific conversations whose collective voice forms a corpus, providing a narrative as a particular issue unfolds in real time (Murthy, 2013). Hashtags serve myriad functions for Twitter users, including organization (Khondker, 2011), identity creation (Sharma, 2013), fanship or support (Smith & Smith, 2012), and editorial comment (Small, 2011). This unique aspect to Twitter’s architecture has been studied extensively. Hashtags have been analyzed for their potential to provide greater insight into sociological phenomena. This field of study is still maturing, and there are calls for research into Twitter to include more in-depth analysis of the meaning of these online interactions (Filo, Lock, & Karg, 2015; Hardin, 2014). The past five years have seen an influx of sport scholarship of Twitter hashtags, starting with content analysis, and employing several critical frameworks to better understand what users deploy them to do (Blaszka, Burch, Frederick, Clavio, & Walsh, 2012; Moore, Hesson, & Jones, 2015; Pegoraro, 2010; Smith & Smith, 2012).

Many different theoretical frameworks have been used in the study of social media. An analysis of sport and social media studies conducted since 2008 found more than 25 theories utilized in conceptual and empirical examinations of this relatively new technology (Abeza, O’Reilly, Seguin, & Nzindukiyimana, 2015). Collectively, these studies have sought to better define the interactions that occur in real time on social media, and their potential impact on both participants, and on outcomes ranging from breaking news (Kaye & Johnson, 2014), to marketing (Burton, Dadich, & Soboleva, 2013), to advocacy (Meuleman & Boushel, 2014).

One of the critical frameworks used in these social media studies is the public sphere, or since these interactions are online, the virtual public sphere (Papacharissi, 2009). The public
sphere is a concept introduced to mainstream critical theory by Jürgen Habermas, a 20\textsuperscript{th} Century philosopher and sociologist, and author of the 1962 German-language masterwork, “\textit{The Structural Transformation of the Public Sphere: an Inquiry into a Category of Bourgeois Society}” (Habermas, 1962 [1989]). Habermas envisioned the public sphere as a space, accessible to all, for deliberative democracy, through the “traffic in commodities and news” (p. 15).

Described as: (a) A space for the formation of public opinion; (b) with access for all citizens; (c) unrestricted conference through freedom of assembly, freedom of expression and publication of opinions about matters of general interest; and (d) debate over the general rules governing relations (Fuchs, 2014a), the public sphere has been debated by scholars since its introduction as a critical concept. Limitations of Habermas’s theory have been pointed out by numerous scholars, in terms of inclusiveness (Eley 1992; Mouffe 1999), male-dominated hegemony (Fraser, 1992), and media influence (Carey, 1995).

This debate took on new vigor with the popularization and spread of connected Internet technologies such as the social media sites Facebook and Twitter. Multiple studies have analyzed social media interactions through the lens of the public sphere (Girgorasi, 2015; Grogan, 2015; Hoskins, 2013; McNutt, 2014). The modern-day portrayal of the Internet and social media as a virtual form of the Habermasian public sphere has been attacked in several ways. Critics have noted that users tend to get embedded within existing power structures, though the popularization of “official” Twitter feeds, sponsored corporately (Goldberg, 2010), that the channels of communication are not truly free and accessible to all (Fuchs, 2014b), and most pointedly, that the actions of participants in online discussion fall far short of the ideals of the public sphere (boyd, 2010; Dean, 2005).
Within Internet scholarship, the public sphere is an important concept for attempting to explain and ascribe value to discourse online. Given the worldwide ubiquity and impact of social media on daily lives, especially as social media criticism grows, it is worth considering whether this type of activity on Twitter can still meet the ideals of the public sphere. As well, the passion of sport fans on Twitter and their potential to create Habermasian public sphere-like conversations is understudied, especially in comparison to the application of the public sphere as a critical framework in other topic areas across the social science spectrum. Sport has been established as having a significant impact on the economy as a whole (Burrow, 2013), as well as occupying an outsized place in our psyche as a society (Perryman, 2013). The Habermasian principle of free and open access is certainly available to anyone who chooses sport fandom. Given the spread and penetration of social media technologies, as well as the easy marriage between social media and sport (Burns, 2014) a study attempting to explain the power of these interconnected interactions through the public sphere represents a valuable contribution to sport and social media literature. Therefore, the purpose of this study was to examine the phenomenon of hashtag use connected to issues of societal concern by sport fans on Twitter, through the lens of the Habermasian public sphere. This sought to further understand the motivations of sport fans to participate, or not participate, in such rational-critical discourse.

Because of the large convergence of sport fans on Twitter, reinforced by athletic passions and the simultaneous sport-consumption model, there is potential for the type of open commons that can inspire sphere-like discussion. The limited number of academic studies of the public sphere and sport have found some indications of behavior akin to a public sphere in online interactions, though short of the true public opinion-generating discourse Habermas terms the public sphere (Brownell, 2012; Galily, Tamir, & Muchtar, 2012; Wamucii, 2012; Yanity &
Pegoraro, 2015). However, within the unique architecture of Twitter—and especially hashtags, and the way society both cares about and consumes sport—there is significant potential to realize the ideals of the Habermasian public sphere. A single, 140-character post on Twitter, viewed on its own, does not come anywhere close to a public sphere. However, when selecting events that relate to sport, but also touch issues of societal concern, the collective body of tweets can display markers of the public sphere, with evidence of rational-critical debate, the emergence of societal norms, and the power to influence public opinion.

Utilizing the framework of the Habermasian public sphere, this three-article dissertation investigated the link between the use of hashtags to comment on issues of societal concern by sport fans on Twitter, and the creation of online activity akin to a classic public sphere. It is possible to theorize that the architecture of Twitter and the consumption model for sport can work in tandem to generate public sphere-like activity through the use of sport-themed Twitter hashtags. Together, these factors can contribute to public sphere activity of a significant kind, can affect the public discourse and, it is proposed, affect participants in the debate.

Since this phenomenon in sport and social media is under examined, a framework must be developed to further explain it. This study created a model that seeks to explain why Twitter hashtags and sport can combine to create the preconditions for sphere-like activity among users, discussing factors that can amplify and inhibit its development. This model opened avenues to study online debate through sport-themed Twitter hashtags, grounded in public sphere theory. The outcome of a sporting match may evoke passion, but issues like domestic and sexual violence may provoke action. Finding a way to further unpack these sometimes emotionally charged debates would be a valuable contribution to sport and social media scholarship.
Following the development of a model, this dissertation involved two empirical tests of the theoretical construct—a qualitative examination designed to test each supposition of the model, and a survey-based study to assess the generation of social capital from these interactions by sport fans on Twitter. Together, this study comprises the first system-wide examination of the interaction between sport fans on Twitter and the public sphere phenomenon, and proposes a research agenda that examines Twitter, sport hashtags, and the public sphere. The following sections provide an overview of three studies that will examine this topic, the research questions that guide each study, and the rationale for examining those research questions.

**Study I**

*Statement of Problem*

There is debate within the Internet scholarly community about the utility of social media in promoting democratic aims, such as those outlined in Habermas’s public sphere. At the same time, social media research has been criticized for not seeking deeper meaning and theoretical understanding of social media posts, relying instead on content analysis of the short public statements. Yet there is no framework for understanding sport and social media within the context of a public sphere.

*Purpose*

This study consists of the development and introduction of a theoretical model which can be used to analyze sport-themed Twitter hashtags through the critical framework of the public sphere. This construct, based on the unique attributes of the social media site, and the passion and simultaneous nature of sport consumption, can be used to assess how well the users of sport-themed hashtags on Twitter are realizing the democratic ideals outlined by Habermas, such as open access, rational-critical discourse, deliberative democracy, and the generation of informed
public opinion. This theoretical framework proposes factors that can contribute to the creation of sphere-like debate, and those that can inhibit it. Additionally, the framework lays the groundwork for further empirical tests of the generation of public sphere-like behavior in selected sport-themed hashtags.

Theoretical Framework

Through an analysis of previous literature and theory related to the public sphere, this paper suggests the following amplifiers and technological affordances aid in the creation of public spheres through the use of hashtags connected to sporting events: (a) our passion about sport itself; (b) the fact sport is consumed simultaneously; (c) the way that Twitter hashtags link conversations into issue-specific virtual town halls; and (d) Twitter’s unique architecture, which displays the most recent tweet in users’ feeds. At the same time, aspects of Twitter’s online interface, and the behavior frequently exhibited by online debate participants, can act as barriers to creation of sphere-like interactions. Potential inhibitors of the generation of spheres include (a) the Online Disinhibition Effect (Suler, 2004); (b) the site’s tendency to give disproportionate impact to already high-profile tweeters; and (c) the potential for inauthentic expression. When examining particular issues through the lens of the virtual public sphere, this model could be used to assess the generation of sphere-like behavior among Twitter debate participants. The intention of this study is not to make a judgment call about whether any particular sport-themed hashtag results in a public sphere. Instead, this model is proposed as a foundation for a more detailed discussion of the outcomes of such sphere-like activity.

It is suggested that the interconnected nature of real-time interactions can still result in the pro-democratic collective action that Twitter proponents believe the social media site enables (Benhabib, 2011; Castells, 2012), simultaneously pushing back against critics who dismiss the
value of these online interactions (Morozov, 2010). Sport has been hailed as a democratizing force in its own right (Kidd, 2008). This theoretical construct suggests an approach to determine the possible impact of that passion, expressed through Twitter posts, on society. The discussions can also, it is argued, create byproducts beneficial to society and participants. One such potential benefit is social capital, defined as a way of assessing the intangible resources of community, shared values and trust upon which we draw in daily life (Field, 2008).

Study II

Statement of Problem

The critical framework developed for this dissertation warrants significant empirical investigation. Studies 2 and 3 tested the framework in different ways, seeking to add further understanding to an understudied phenomenon connected to sport and social media. Many social media studies suffer from a deficit of appropriate theoretical grounding (Filo, Lock, & Karg, 2015), and, because of the over-reliance on content analysis, do not explain phenomena occurring on social media well enough. In sport and social media scholarship, there have been calls for research to seek deeper meaning (Hardin, 2014). Furthermore, very little public sphere research is empirical, in sport or elsewhere. Almost no studies rely on participant surveys to turn the lens, to determine the effect that participation in these online discussions has on participants. This means that examinations of sport and social media, as well as the public sphere, miss an important dimension—the views of the participants themselves.

The Qualitative Examination of the Public Sphere Framework

Collecting tweets containing the hashtag #CurtSchilling for 29 hours following his firing by ESPN, the researcher conducted a directed content analysis of the sample of tweets, to determine if the ideals of the Habermasian public sphere are being realized. Then an online
qualitative survey was administered to a purposive sample of Twitter users who deployed the #CurtSchilling hashtag during the period it was collected.

By grounding the examination of a sport-themed Twitter hashtag in public sphere theory, and by conducting a qualitative questionnaire with hashtag participants, this study sought to further explain the phenomena and advance the literature. This study of sport, Twitter hashtags and the public sphere surveyed Twitter-engaged sport fans to provide insight into their collective mindset in a rapidly growing social media environment, and what they as Twitter users are gaining from the experience of participation in debate through hashtags. At the same time, the questionnaire allowed the lead researcher the opportunity to assess, through participant reactions, whether the proposed constructs of the theoretical model introduced in Study 1 are valid rationale for why sport-themed Twitter hashtag discussions reflect, or do not reflect, the parameters of the Habermasian public sphere.

Research Questions

Guided by literature about the public sphere, and the study of Twitter hashtags connected to sport, this study proposed the following research questions:

RQ1 – How does the discussion of issues of societal concern through sport-themed Twitter hashtags reflect the Habermasian public sphere?

RQ2 – Do users feel like their participation in hashtags of this nature represents rational-critical discourse in a free and open space, leading to the generation of informed public opinion?

Study III

Statement of Problem

Other empirical studies must still be done to assess the value of the critical framework for this dissertation as a research tool. Social capital, a widely studied critical theory in the social
sciences, relies on many of the same tenets of social entanglements and creation of social trust as
the public sphere (Bourdieu, 1986; Granovetter, 1973; Putnam, 2000). However, social science
scholarship has not included extensive work linking the two theories.

Sommerfeldt (2013) suggests that public relations in democracy can create the social
capital that ensures access to public spheres, but Paxton (2002) indicates there is little
quantitative evidence to support the idea that associations affect democracy. By utilizing social
capital and adapting a valid and reliable instrument to measure it, this study seeks to better
explain what participants are deriving from sport-themed hashtag debates. The use of both the
public sphere and social capital as critical frameworks yields new insight into the instantaneous,
multidirectional interactions that occur through hashtags connected to issues of societal concern
expressed through sport. The study also relied on participant survey to turn the lens, offering
critical analysis of the views of participants in Twitter discussions connected to sport—an
understudied population in sport and social media research.

The Quantitative Examination of the Public Sphere Framework

Following the development and testing of a survey instrument—modified from existing,
validated Facebook-social capital scales—an attempt was made to test social capital generation
through different categories of sport-themed Twitter hashtags. Social capital generation in three
categories—the exchange of information, the generation of an online community, and the
encouragement of collective action—was tested on a population of users of three different types
of sport-themed hashtags by using this instrument.

A Twitter survey of users of these hashtags was conducted, comparing users of hashtags
connected to a calendar sporting event, #MarchMadness (referred to in this study as an
“evergreen” hashtag), with two different hashtags that emerge connected to societal issues that
emerge through sport (for this study, called an “organic” hashtag). One organic hashtag was be
connected to activity on the field of play (#deflategate), the other organic hashtag emerged when
sport intersects with broader societal concerns (the hashtag #MoreThanMean, created by female
sportswriters Julie DiCaro and Sarah Spain to spotlight online abuse received when female
journalists do their jobs). The study sought to analyze social capital as a byproduct of public
sphere-like activity in sport hashtags on Twitter, looking for differences in social capital
generation by hashtag type.

Research Questions

Guided by literature about the public sphere and social capital generation through online
activity, this study asked the following research questions:

RQ1 – How do levels of social capital generation compare between Twitter hashtags used in
connection with a calendar event and hashtags created in response to an issue of societal
concern?

RQ2 – Among hashtags created by sport fans on Twitter in response to an issue, what difference
exists in social capital generation between hashtags directly connected to on-field activity, and
those that use sport to discuss broader societal concerns?

Definition of Terms

Twitter: Twitter is an online social media service that enables users to send and read short, 140-
character messages, which are known as tweets. Twitter was launched in July 2006 and has more
than 300 million active users, who send more than 350 million tweets per day.

Hashtag: A unique construct of Twitter architecture, which has been adopted by other social
media sites Facebook and Instagram, a hashtag is a word in a tweet proceeded by a pound sign
(#), which identifies that tweet or its sender as part of a community of concern. Created at a
conference by Twitter users in 2007, hashtags are now used in half of all tweets sent from mobile devices.

The Public Sphere: A concept created by German philosopher and sociologist Jurgen Habermas, the public sphere is a space, accessible to all, where rational-critical discourse leads to the formation of public opinion, which can effect democracy.

Virtual Town Hall: Proponents of the power of social networks for activist and pro-democratic causes suggest the open dialogue and real-time interface on social media creates an instant online debate where issues of concern can be articulated.

Issue of Societal Concern: Operationally, for this dissertation, a distinction will be made between hashtags created for a particular calendar event or sporting body (an “evergreen” hashtag), and a hashtag created in response to an issue that matters beyond the outcome of a sporting event (an “organic” hashtag).

Reverse-Chronological Interface: A unique aspect to Twitter’s website architecture is that the vast majority of tweets appear on users’ timelines in reverse-chronological order. From among the list of accounts a user is following, the most recent tweet shows up at the top of their timeline. This has been shown to create a corpus of common thought among participants.

Online Disinhibition Effect: The Online Disinhibition Effect (Suler, 2004) is a theory created to explain the potential of some participants in online interactions to exhibit strongly negative behaviors such as bullying, misrepresentation, disagreeability, and trolling.

Inauthentic Expression: Users of Twitter are not required to use their real names when signing up for the social media site. They can also parrot others’ opinions on the social media site without any type of comment of their own opinion through an action known as “retweeting.” It is hypothesized that these actions can inhibit the creation of public sphere-like behavior on Twitter.
Social Capital: The central thesis of Social Capital theory is that social networks are a valuable asset. Interaction enables people to build communities and help knit the social fabric of society, leading to a sense of belonging and concrete experience from the participation in social networks. It is argued that social capital can bring great benefits to people. In this dissertation, it is hypothesized that social capital generation is a natural byproduct of the rational-critical discourse and deliberative democracy present in public sphere-like discussions.

Delimitations

Sport fans congregate on many social media sites, but this study is delimited to Twitter users. Furthermore, as a study of the potential of sport-themed hashtags to create dialogue akin to a public sphere, enthusiastic users of the social media site who do not happen to deploy hashtags would be excluded. The critical framework suggests hashtag use is a critical component of participants’ engagement in this type of discourse.

To truly assess the potential of sport-themed hashtags creating communities where deliberative democracy exists, it is important to pick the right hashtags. Hashtags such as #irony are simply observations of everyday life and not connected to a phenomenon that includes true rational-critical debate. In a sporting context, a hashtag professing support for a team, or connected to a single event or contest, are also not likely to elicit discussion among Twitter users that has as an end byproduct of the formation of public opinion. Therefore, the empirical studies will relied on specially selected hashtags which touched on an issue of societal concern connected to sport—#CurtSchilling for the qualitative paper, and #MarchMadness, #Deflategate, and #MoreThanMean for the quantitative social capital study. The success in finding public sphere-like discussion in sport-themed Twitter hashtags depended on looking in a hashtag where there was likely to be a diversity of passionate opinion, opinion which starts a discussion. The
sample of Twitter users being questioned for the two empirical studies is also limited to participants of these hashtags, in the proscribed window when data were collected, in an effort to focus the discussion on topics germane to this dissertation.

**Limitations**

This study is limited in a few obvious ways. Active Twitter users comprise less than 15 percent of the U.S. population and the demographic of its active users skews younger and more male, meaning that the study of hashtags does not encompass the full representativeness of society articulated as a necessary condition of a true public sphere. Also, the medium itself, consisting of 140-character bursts of text, is limiting in the depth of analysis that can be conducted to test any critical framework, including the public sphere. As well, Twitter is only one social media site, and we cannot generalize its findings to other, popular social media sites. The research design of the two empirical studies to test the conceptual model in paper one is an effort to address the shortcomings of the medium. However, since both studies rely on self-reported survey information, responses are subject to self-selection issues that survey respondents typically employ to portray themselves in the best possible light. Since the test of social capital as a byproduct of public sphere-like interactions on Twitter relies on a new instrument being developed for that purpose, the measure faces the typical questions of reliability and validity of all new research instruments.

Another limitation that is far beyond the control of this study is the health of the social media site itself. Recent financial news about Twitter has been negative — its stock prices has plummeted and senior executives have left the company (Chandler, 2016) — and observers suggest the company is in peril because of a change in the tone of discourse (Haque, 2015; Meyer, 2015). Despite the company having a significant amount of cash to weather a stock
slump (Krantz, 2016), it is possible that Twitter may diminish in its impact, or even disappear. However, it is argued here that the unique interface that Twitter offers, presenting an unfiltered timeline for users in reverse-chronological order (Koh, 2014) is a technological affordance that social media users cannot do without. If Twitter disappears, the demand for this type of real-time, topic-specific interactivity will almost certainly be met by another social media site.
CHAPTER 2

Sport, Twitter Hashtags and the Public Sphere: A Model for the Generation of Public Sphere-like Activity

It was hours before the long-awaited fight between Floyd Mayweather and Manny Pacquiao was set to begin in Las Vegas on May 2, 2015, and news began to emerge about a controversy around media access. Two widely respected female journalists, Rachel Nichols of CNN and Michelle Beadle of HBO Sports and ESPN, sent posts via the social media microblogging site Twitter that their credentials had been revoked (Deitsch, 2015). Previously, Beadle had made public statements deploring Mayweather’s history of domestic violence, and Nichols had aggressively questioned the American boxer about the misdeeds; both were denied media passes for the welterweight world championship fight (Roberts, 2015). In the hours after news about the denial of media access broke on Twitter, the social media platform became a forum for debate. Twitter users upset with the reporter banning, and with Mayweather’s violent past in relations with women, voiced displeasure with thousands of posts. Many of those utilized hashtags, the unique website architecture that groups tweets of interest together through the use of “#” before a word or phrase (Murthy, 2013). As a result, the hashtags #teambeadle and #teammichols, and even the “official” fight hashtag #maypac, featured many insightful posts about domestic violence, society’s misplaced priorities, and freedom of the press. Within hours, the credential banning had been rescinded. Of course, the fight still went ahead as scheduled, and broke all previous pay-per-view records. Mayweather won a unanimous decision over Pacquiao (Goff, 2015). The Twitter discussion, connecting strangers from around the world about issues of far greater societal import than a boxing match, is an event that is worth examining in more detail. It contradicts what is, for many, a popular notion about the user-generated content found
on Twitter. It suggests that the interconnected nature of the real-time interactions, plus the technological affordances of hashtags—which create organic, topic-specific conversations of interest—can result in collective action.

The current mindset of many critics is that Twitter is dying (Haque, 2015) because of a dark change in that tone of discourse. It is not hard to find some of society’s very worst impulses within the posts on the microblogging site. For every instance of Twitter users rallying to promote a worthy cause, there are examples of ugliness, including racism (Cisneros & Nakayama, 2015), sexism (Chess & Shaw, 2015), homophobia (Ford, 2012), bullying (Bellmore, Calvin, Xu, & Zhu, 2015), and outright flouting of the truth (Berko, 2013). However, the site is still popular worldwide, particularly among sport followers, who comprise a sizable portion of the population of active Twitter users (Burns, 2014). Sport and Twitter use align because of the real-time aspect to spectatorship on television (Hull & Lewis, 2014), the forum for athletes to speak directly to their fans (Pegoraro, 2010), and the parasocial relationships that Twitter can create for users and those they follow (Sanderson, 2011). Like in other topic areas on Twitter, the discourse is not exempt from the propensity for rhetorical excess. Hockey writer Julie DiCaro was sent anonymous vitriol through her Twitter account for her coverage of the rape allegations of star Chicago Blackhawks forward Patrick Kane (Mandell, 2015). University of Michigan punter Blake O’Neill received death threats following his mistake late in the rivalry game with Michigan State University in October 2015 which led to a loss by Michigan (Murphy, 2015). Intemperate tweets about openly gay football player Michael Sam (Yanity & Pegoraro, 2015), female broadcasters (Sanderson, 2014a), rival teams, and on-field controversy (Hay, 2015) serve as graphic reminders of the negative potential of this type of public discourse in sport.
Twitter’s structure as an international, instantaneous, interconnected network ensures this negative commentary receives full airing, which would be part of the spectrum of interactions that comprise a public sphere. The negative tone of the discourse has been identified as one of the key weaknesses of the platform (Haque, 2015; Meyer, 2015). But could that infrastructure also act as an amplifier for the very best impulses of society? The tweets in support of the female journalists banned from covering Mayweather-Pacquiao, and decrying Mayweather’s behavior, suggest there is potential for that type of enlightened discussion involving any individual with a free Twitter account who chooses to participate. The virtual assault on Michigan punter Blake O’Neill was quickly countered by Twitter users. Sentiment analysis of tweets directed at O’Neill in the 24 hours after his mistake found that 78% of tweets were positive in nature (Buchheim, 2015).

Scholars have examined Twitter in connection to sport in numerous ways. Many of these studies have focused on hashtags, a function created by Twitter in 2007 that places a “#” at the beginning of a word or phrase, making it into a clickable link. Today, hashtags are an integral part of Twitter’s ability to link the conversations of strangers together (Murthy, 2013), and have been adopted on other social media platforms such as Facebook and Instagram (Castillo, 2013). Use of the word “hashtag” has been adopted in conversation outside of social media platforms as well, to suggest the addition of editorial content to a statement, or suggest the creation of community. The unique architecture of Twitter hashtags can help create a virtual town hall, where ideas can be shared back and forth in real time. This can help organize dissent (Gleason, 2013; Khondker, 2014) and reinforce the value of participation (Dewey, 2014). Social sharing through hashtags can also aid in the rapid generation of public opinion, something which has
been extensively studied by scholars over the past decade (Combs & Pitts, 2014; Gleason, 2013; Kaye & Johnson, 2014; Murthy, 2013).

In sport, hashtags have been studied from a marketing and sales perspective (Gibbs, O'Reilly & Brunette, 2014), for formation of identity by fans and competitors (Hambrick, Simmons, Greenhalgh, & Greenwell, 2010; Pegoraro, 2010; Sanderson, 2011), and to create a typology of online interactions themselves connected to sport (Blaszka, Burch, Frederick, Clavio, & Walsh, 2012). However, sport and social media scholarship has so far not included extensive examination of the hashtag itself as a medium for debate. The public sphere provides a critical framework that offers a point of entry to analyze discourse through sport-themed hashtags, adding a layer of understanding to the collective conversations connected to sport.

Therefore, the purpose of this study was to determine what role hashtags can play in facilitating this discourse among sport fans, particularly when the issues discussed reflect society beyond the field of play. Better understanding the motivation and rationale for participation, as well as the outcome of such online chatter, can be informative in several ways. From a sociological standpoint, additional understanding of mega-participation events is important in the ongoing quest to frame sport’s role in modern society. For sport organizers, better understanding of the discourse that connects to a particular event through Twitter hashtags can aid in the processes such as improved engagement (Lim, Hwang, Kim, & Biocca, 2015), crisis management (Brown & Billings, 2013), and harnessing fandom (Smith & Smith, 2012). For individual fans, whose online actions personify the popularity of any event or cause, an analysis of hashtag conversation can provide insight into the views of others while participation occurs.

Given the immense attention paid to sport, as well as its impact on the economics and well-being of society, it is worth considering Twitter hashtags as a mechanism through which
public opinion is generated in this context. In effect, the collective body of tweets create a form
of online, topic-specific discourse, which suggests the need to include critical theory in the
analysis. This can help better ground this discussion, something which has been demanded by
scholars as the field of sport and social media research matures (Filo, Lock, & Karg, 2015;
Hardin, 2014). To start with, it is important to consider what constitutes public opinion.

Among the leaders in this attempt to define and characterize the concept is Jürgen
Habermas. Habermas, a 20th Century philosopher and sociologist, and author of the German-
language masterwork, “The Structural Transformation of the Public Sphere: an Inquiry into a
Category of Bourgeois Society” (Habermas, 1962 [1989]), envisioned the public sphere as an
accessible space for deliberative democracy, through the “traffic in commodities and news” (p.
15). The public sphere has been distilled by scholars into four key principles: (a) a space for the
formation of public opinion; (b) with access for all citizens; (c) unrestricted conference through
freedom of assembly, freedom of expression and publication of opinions about matters of general
interest; and (d) debate over the general rules governing relations (Fuchs, 2014a). The concept
has been debated vigorously by critical theorists. With the advent of interconnected computer
technologies, the scholarship of Habermas has been re-examined, with scholars suggesting the
potential for the creation of public spheres on the Internet (Papacharissi, 2002). The
popularization of social media sites such as Facebook and Twitter accelerated worldwide virtual
connectivity between independent actors, and was hailed by some scholars as the public sphere
come to life (Benhabib, 2011).

The public sphere has been studied occasionally in connection to sport. Habermas
himself suggests sport clubs can be among the associations which can facilitate public debate, a
pillar of the creation of public spheres (Habermas, 1962 [1989]). Studies utilizing the public
sphere framework have analyzed online sport blogs (Galily, Tamir, & Muchtar, 2012), national Olympics committees (Brownell, 2012) and soccer fandom (Sandvoss, 2004). Yanity and Pegoraro (2015) studied the Twitter debate in connection to gay football star Michael Sam. These single-issue studies have largely been yes-or-no examinations, analyzing how closely an event comes to realizing the Habermasian public sphere ideal. The conceptual framework is not focused on a single issue, but instead is an analysis of the potential of Twitter, and especially hashtags, to host and encourage sphere-like discussions. This framework could be used to suggest why and how a Twitter hashtag linked to an issue of societal concern in sport can be the venue for opinion-forming, deliberative discourse.

The model suggests aspects of the relationship between sport fans and Twitter, and affordances of the site itself can, in certain ways, help facilitate public sphere-like behavior. Within the unique architecture of Twitter—and especially hashtags, as well as the way society both cares about and consumes sport—there is significant potential to realize the ideals of the public sphere. A single, 140-character post on Twitter, viewed on its own, does not come anywhere close to a public sphere. However, through this framework, the argument is made that when selecting events that relate to sport, but that also touch issues of societal concern, the collective body of tweets can display markers of the public sphere, with evidence of rational-critical debate, the emergence of societal norms, and the power to form and influence public opinion. This study offers a framework to explain why Twitter hashtags and sport can combine to create the preconditions for sphere-like activity among users, discussing factors that can amplify and inhibit their development. This can then open avenues to study online debate through sport-themed Twitter hashtags, grounded in public sphere theory. The outcome of a sporting match may evoke passion, but issues like domestic and sexual violence may provoke
action. Finding a way to further unpack these sometimes emotionally charged debates would be a valuable contribution to sport and social media scholarship.

**The Public Sphere**

In his defining work on the public sphere, Habermas traced the history of public opinion through the rise of European bourgeois society, stressing the role that economic developments such as the long-distance trade played in promoting liberal thought. The enlightened rational-critical debate, “transcending the barriers of social hierarchy” (p. 34-35) within bourgeois society helped shape European democracies through the vehicle of public opinion. The critical functions of the public sphere were significantly weakened as the 20th Century progressed, as the mechanisms of mass communication, increasingly became subject to corporate control, and the “secret policies of interest groups,” (Habermas, 1992, p. 404). However, Habermas maintains that the spirit of a public sphere can be created from inside the system, through the maintenance of a “democratic dam” to help ensure the power of these networks (Habermas, 1992, p. 444).

The scholarship of Habermas represents a fairly sizable target for critics. Fraser (1992) assailed the Habermasian public sphere’s hegemonic, male-dominated version of what constitutes the public. Other critics point out the exclusion of ethnic minority groups and gays (Mouffe, 1999), and note that 19th Century bourgeois society, while a step forward from feudal life that preceded it, left voiceless working-class populations of the time (Negt & Kluge, 1993). This fact was recognized by Habermas himself as he lamented the diminishment of the public sphere because of the entrenched power of the moneyed elite, quoting the Karl Marx maxim that public opinion “hid before itself its own true character as a mask of bourgeois class interests” (Habermas, 1962 [1989], p. 124).
After the popularization of integrated, computer-to-computer technologies researchers envisioned this stateless, virtual world as a bold new frontier of democracy (Negroponte, 1996; Rheingold, 1996). Benkler (2006) suggested that the Internet and the emerging networked information economy offered “distinctive improvements in the structure of the public sphere over mass media” (p. 177). Papacharissi (2002) suggested the Internet created a “new space” for public discussion, but noted that does not guarantee the renewal of the “culturally drained” public sphere (p. 22). Others worried networked communication was simply promoting increasing group polarization, “because like-minded people are deliberating with greater ease and frequency with one another, and often without hearing contrary views” (Sunstein, 2007, p. 69).

This field of scholarship exploded as the twin social media giants of Facebook and Twitter achieved widespread societal adoption. Papacharissi (2009) noted the phenomenon she called virtual sphere 2.0 allowed citizens to express dissent through user-generated content. Some enthused that these new tools “are a better fit for our native desires and our powers for group effort” (Shirky, 2008, p. 48), and “offer the possibility for largely unfettered deliberation and coordination of action” (Castells, 2012, pp. 9-10). Others did not share that optimism. The networked public described by boyd (2010) is one where the public loses any critical dimension, therefore failing to address asymmetry in power and other downsides of social media platforms. Dean (2005) goes further, suggesting participating in a so-called democratic act on the Internet—sharing a file, signing a petition—is not the emergence of a political private sphere, but rather “a refusal to take a stand, to venture into the dangerous terrain of politicization” (p. 70). Fuchs examined social media (2014b), and Twitter specifically (2014a), for its potential to create
Habermasian public spheres, raising doubts about the viability of the platforms to do so, because of corporate ownership and capitalist stratification of social media.

Criticisms aside, the Habermasian public sphere has proven a popular critical framework for researchers analyzing social media across the social science spectrum. Studies have examined its role in the determination of U.S. healthcare entitlements (Grogan, 2015), the role of social media in the creation of public spheres tied to newsworthy incidents in emerging democracies (Hoskins, 2013), and whether the protests on a Romanian university’s Facebook page constituted a functional, virtual public sphere (Girgorasi, 2015). In each case, researchers found ample evidence of sphere-like activity among social media participants, even if it didn’t meet the strict definition of a public sphere elucidated by Habermas.

This is an important point about the public sphere. Habermas himself shares much of the critique of the concept as impractical. In fact, following the spread of connected Internet technologies he warned its democratizing access can negatively affect the public sphere principle of broad-based debate and deliberation: “In the context of liberal regimes, the rise of millions of fragmented chat rooms across the world tend instead to lead to the fragmentation of large but politically focused mass audiences into a huge number of isolated issue publics.” (Habermas, 2006, p. 420). Habermas termed this “decentering of unedited inputs,” noting that those seeking enlightened discourse can no longer gather at a focal point (Habermas, 2006, p. 420). But Habermas also asserts that the public sphere can act as a regulative ideal to guide any public, pro-democratic discussion. Even striving for a public sphere can lead to a sphere-like discussion—allowing open access, unrestricted conference for matters of public interest, and the self-regulating mechanism of ideas being in the public and open to comment from anyone. A true
public sphere will almost certainly never be realized, but its building blocks can be an
aspirational goal for online discussion participants, and for society.

The hold of sport on the Western consciousness and the enthusiastic adoption by fans of
social media sites such as Twitter suggest there is the potential for the creation of public spheres.
Habermas included sport clubs among the voluntary associations that could generate informed
public opinion, but at the same time, lumped sport with pop culture as lacking in the gravitas
required for true rational-critical discourse (Habermas, 1962 [1989]). Others draw a more direct
connection. McGuigan (2010) lumps sport into what he terms the cultural public sphere, a
construction reflective of the greater importance mass media plays in modern lives. Sandvoss
(2004) suggested television consumption of soccer could create public spheres among fans of
popular teams.

There is a small collection of sport research about the public sphere. A survey of readers
of Israel’s most popular sports blog found an open and accessible social community being
formed through discussion and engagement, though with a tendency for rhetorical excess (Galily,
Tamir, & Muchtar, 2012). Brownell (2012) found that despite a transnational public sphere
formed by activists worldwide to place pressure on China in the run-up to the 2008 Beijing
Olympics, the non-governmental International Olympic Committee had little power to enact
desired change. In Kenya, the Mathare Youth Sports Association provides the benefit typically
afforded to young people typically denied access to public sphere. Wamucii (2012) found uneven
results from the use of sports as a substitute for public sphere participation. Yanity and Pegoraro
(2015) conducted the first known study of the intersection of Twitter, sport and the public
sphere, examining a sample of tweets connected to football player Michael Sam, who announced
he was gay a few months before the 2014 National Football League draft. They found that in
practice, Twitter does not establish nor maintain a Habermasian public sphere through the actions of its users. But as Papacharissi (2002) notes, at the very least, connected Internet technologies provide a public space for debate. With only single-issue studies of sport connected to the public sphere, a system-wide look at the potential within sport for interactions to mimic the pillars of the public sphere is warranted. Twitter, one of the most popular social media sites, as well as arguably the most public, intersects strongly with mass media sport consumption (DiMoro, 2015). Greater understanding of the interactions facilitated through the construct of Twitter itself can provide new insight into the public sphere, and sport and social media research. The proposed framework can also be utilized to study social media interactions while incorporating other critical theories, and connecting to other events.

**Twitter Hashtags**

Among Twitter’s 316 million annual monthly users (“By the numbers,” 2015) hashtags are such a popular feature that one half of all mobile device users employ them in their social media posts (Zak, 2013). The way Twitter forms instant communities by making hashtags their own clickable link has resulted in their use to express collective identity (Sharma, 2013) or to organize politically (Small, 2011). Events such as the Super Bowl rely on “official” hashtags for Twitter users to interact in a topic-specific domain. Other hashtags emerge organically, in response to pop culture and celebrity happenings (Marshall, 2014), breaking news (Kaye & Johnson, 2014) or as part of protest movements (O’Hallarn & Shapiro, 2014).

In the nine years that Twitter hashtags have existed, they have proven popular to scholars in many academic fields. It has provided forums to analyze Presidential elections (Combs & Pitts, 2014) and the Occupy Wall Street movement (Gleason, 2013). Twitter hashtag scholarship has evolved to include more sophisticated text mining techniques (Hao, 2015), and has begun to
rely more heavily on surveys to seek deeper understanding (Ross, Maninger, LaPrairie, & Sullivan, 2015).

In the field of sport, hashtag research has been broadly employed, with new studies published at a rapid rate. An analysis of Tweets containing hashtags during baseball’s College World Series found that hashtags help fans create social identity with teams (Smith & Smith, 2012). This connection suggests users seek gratifications through hashtag use connected to their favorite teams (Gibbs et al., 2014). Widely tweeted events such as the World Series allow users to express fanship through hashtag use (Blaszka et al., 2012). Events with an international scope such as the Olympic Games provide opportunity through hashtags for nation-building and marketing (Pegoraro et al., 2014), as well as protest movements such as the #NBCFail hashtag protest by Twitter users about U.S. host television network NBC (O’Hallarn & Shapiro, 2014).

As evidence of the growth of the scholarship, three studies about #NBCFail alone were published in 2015, asking whether NBC failed audiences as a gatekeeper (Nee, 2015), providing a thematic analysis of public discourse around the way NBC covered women’s gymnastics (Moore, Hesson, & Jones, 2015), and utilizing #NBCFail to seek deeper understanding of the Olympic movement as an emergent hypermedia event (Girginova, 2015). So far, only Yanity and Pegoraro (2015) have explored the connection between Twitter, sport, and the public sphere, but their study represented a case study snapshot of a single, polarizing event, the coming out of college football star Michael Sam as gay before the NFL Draft. They found tweets about Michael Sam to be akin to leaving a magazine in a waiting room—almost exclusively one-way discourse of views. The findings are intuitive, and reflect a common critique that Twitter discourse trends toward 140-character speeches instead of back and forth dialogue (Fuchs, 2014a). But a single-
issue study seeking a yes or no answer about the existence of public spheres in Twitter discussions about sport is incomplete.

Even if the conversation on Twitter connected to a particular event is largely unidirectional, the collective discourse can still meet many of the requirements of a public sphere—allowing open access, unrestricted conference about matters of general interest, and informal debate on the rules governing relations. A broader examination of the connection between the social media network, sport, and its potential to generate sphere-like discussions is warranted. Sport itself has been held up as a democratizing force (Kidd, 2008), and Twitter has been hailed for its potential to help promote the type of collective action that can be the outflow of sphere-like activity (Castells, 2012; Murthy, 2013). Given the immense size and scope of sport organizations, a worldwide industry estimated at being worth more than $14 billion (Burrow, 2013), research that can help harness this collective will could be of significant benefit to leaders of any sport organization. However, Fuchs (2014a) and even Habermas (1962 [1989]) himself have issued warnings about the inhibiting effect of corporate control on true public discourse.

While Twitter interactions have been found by scholars to fall short of a true public sphere (Fuchs, 2014a; Papacharissi, 2009; Yanity & Pegoraro, 2015), even the most ardent critics of Twitter admit there is some power to the asymmetric, connected conversation threads on Twitter, whether to form a collective identity (Tremayne, 2014), to bypass traditional media (Frederick, Hambrick, & Clavio, 2014), or to achieve political aims (LaMarre & Suzuki-Lambrecht, 2013). The urgency of real-time interactions that occur with every live event can provide many opportunities to discuss deeper societal issues through the lens of sport. Using the introduction of a model to map the potential for sphere-like activity within Twitter and sport, and
suggesting the factors that can work to amplify or inhibit it, this paper suggests approaches to test the byproducts of these interactions empirically.

Finally, it is worth considering the outcomes of sphere-like discussions for society. Many scholars support the idea that there can be pro-democratic power of online networks created through social media (Benhabib, 2011; Castells, 2012; Khondker, 2011). These outcomes could be quantified through the use of other social science theories like social capital, defined as a way of assessing the intangible resources of community, shared values and trust upon which we draw in daily life (Field, 2008). By participating in a sport-themed hashtag reflecting an issue of societal concern, individual citizens using their own reservoir of capital, in formal or informal alliances with others with the goal, or the byproduct, of their association being collective good.

Sport researchers have studied Twitter hashtags broadly, using many different critical frameworks (Abeza, O’Reilly, Seguin, & Nzindukiyimana, 2015). However, sport and social media research has been critiqued for its overreliance on content analysis (Hardin, 2014) and has been challenged to incorporate of different critical frameworks, particularly from outside of sport (Filo, Lock, & Karg, 2015) to advance the discipline. Hashtag studies have focused on mega-events (Blaszka et al., 2012), on activism (Hull, 2014), on users’ sense of identity (Smith & Smith), and what they gain from the process of participation (Gibbs et al., 2014). What is missing are frameworks that can speak to hashtag participation connected to sport in a broader sense. The critical framework developed in this study will allow an opportunity for sport and social media research to connect to more universal themes of engagement and citizenship, beyond simply single-event analysis.
Model for Public Sphere Activity through Twitter and Sport

Twitter has evolved in a fashion unique among its industry peers. It is theorized that the architecture of Twitter and sport consumption patterns can work in tandem to generate public sphere-like activity. Because of the passion of fans, the way they consume contests, the virtual town hall created through hashtags, and Twitter’s reverse-chronological timeline, preconditions exist for Habermasian public spheres. This can affect the public discourse and, it is proposed, cause an impact on the participants in the debate. Figure 1 provides a concept map illustrating the potential that exists within the subject matter and medium to create public spheres. This paper suggests four “amplifiers” aid in the creation of public spheres through the use of hashtags:

(a) Our passion about sport itself;

(b) The fact sport is consumed simultaneously around the world;

As well as technological affordances of the website itself, such as:

(c) The way that Twitter hashtags link the conversations of strangers together into issue-specific virtual town halls; and

(d) Twitter’s unique architecture, which displays the most recent tweet in users’ feeds, prompting a running, real-time conversation.

These amplifiers act on their own to encourage the generation of sphere-like activity, but are also strengthened by each other in certain instances. Barriers do exist to the creation of spheres. The tendency for the activity to incite what Suler (2004) deemed the Online Disinhibition Effect can inhibit this creation of spheres. Other threats include the 140-character limitations of the medium, and the site’s tendency to give disproportionate impact to already high-profile users, and the potential for inauthentic expression through anonymous posts, or simple regurgitation of
others’ thoughts. These barriers can prevent the realization of public spheres, or sphere-like conditions.

Ultimately, this model could be used to assess the generation of behavior within a public sphere-like construct. Criticism of Habermas suggests it is impossible today to create and maintain true public spheres because of factors such as the flaws that exist within individuals, corporate interests and the power of celebrity. However, this proposed model can serve as a foundation for a more detailed discussion of the outcomes of such sphere-like activity. If conditions akin to a virtual public sphere can be realized through this model, it is hypothesized that byproducts can result from the interactions, affecting both society and the participants.

**Examining the Theoretical Model**

**Sport as Cultural Touchstone**

The act of running fast, or scoring points in a contest, seems trivial in comparison to serious issues affecting the world. But Perryman (2013) suggests it isn’t the particulars of any specific sporting event, “rather it is the grand emotional narrative sport can help construct, arguably in the early twenty-first century more effectively and more internationally than any single other cultural pursuit” (para. 2). Proponents of the positive role sport can play in society suggest participation and spectatorship in these contests can have benefits such as improving relations in divided societies (Kidd, 2008). They say it can generate direct and indirect impacts such as economic development and political and sociocultural awareness (Schulenkorf & Edwards, 2012), promote social impact and social capital (Lee, Cornwell, & Babiak, 2013), and foster a sense of kinship among sport fans that extends further than fans of non-sporting activities (Reysen & Branscombe, 2010).
Habermas wrote that public debate can be brought to life by voluntary, “opinion-forming associations” of which he included sports clubs with churches, grassroots movements and trade unions (Habermas, 1962 [1989], p. 292). Habermas does lump sport with pop culture as a form of infotainment, therefore not a true reservoir of rational-critical discourse of matters of general interest. However, others have been more explicit in suggesting links between the public sphere and sport. McGuigan (2010) includes sport along with melodrama and reality television in a cultural public sphere, which “trades in pleasures and pains that are experienced vicariously through willing suspensions of disbelief,” (p. 16). Sandvoss (2004) more strongly links the public sphere and sport in his book on the sport of soccer’s relationship with television. He writes that fans of the football club Chelsea illustrate the relationship between football fandom and the public sphere, saying team affiliation: “gives rise to citizenship as fans actively sport or team can have an outsized impact within their social circles, with the potential to yield this type of discourse.”

Society’s overarching interest in sport is on abundant display on Twitter. The most tweeted event in the microblog’s history was Germany’s semifinal rout of host Brazil in the 2014 World Cup, with 35.6 million tweets being sent worldwide (Chase, 2014). Eight of the top 10 most tweeted events of 2014 were sport-related (MacLeod, 2014), affording ample opportunity for online discourse to intersect with issues of societal concern. The overriding passion of sport fans also influences the consumption of the product, live or on television. As a society, we care greatly about sport, and on Twitter, we care simultaneously about sport. That can amplify discussion between like-minded fans.

**Sport Consumption Patterns**
With rare exceptions, televised sport represents the “last bastion of appointment TV” (Van Riper, 2012, para. 3). In an era when TV viewers record shows to watch at their convenience, an event that demands real-time attention is irresistible to advertisers. Therefore, rights fees to broadcast sports on television have skyrocketed. The National Basketball Association will receive $24 billion in the nine-year television rights deal it signed in 2014; the National Football League earns nearly $7 billion per year from broadcasters (Sandomir, 2014). This heightened, real-time interest in sport has seen, in tandem, a rise of the second screen phenomenon, where consumers follow the event not only on their television, but on an Internet-networked device, which turns programming events into a shared social experience (Mancuso & Stuth, 2013). A study of the brains of consumers who engaged in social media while watching related television programs significantly enhanced neural indicators of viewer engagement (Pynta et al., 2014). An entire dataset of tweets related to Italian political talk shows found interlinked forms of communication created by the audience during high points of the season (Giglietto & Selva, 2014). In sport, the use of social media allows for parasocial relationships between viewers and the athletes they follow to become more robust (Sanderson, 2011). Hull and Lewis (2014) suggest Twitter could one day displace local sport media, relying on social-impact theory to explain the effect of Twitter on sport fans. They suggest that besides the obvious factor of timeliness, Twitter’s ability to allow a peek behind the curtain, and its potential to promote community building, can draw fans away from traditional television media into social media for their sport consumption.

The potential impact of the second screen within sport was presented graphically when a power outage in the Mercedes-Benz Superdome temporarily stopped Super Bowl XLVIII on February 4, 2013. The game would become the most tweeted event in history at that point, and
the 18 minutes of the power outage saw 3,858 tweets per second, the highest spike during the broadcast (Katz, 2013). Nimble advertisers capitalized on the unexpected event, sending blackout-themed tweets which proved popular among users (Ives & Parekh, 2013). A simple pause in the nation’s most popular sporting event provided a unique opportunity to demonstrate the power of the shared experience on Twitter. It also amplified the water cooler aspect to sport fandom, a phenomenon that can be accelerated through the use of Twitter hashtags.

Hashtags as Virtual Town Hall

Among the myriad purposes that hashtags serve, the aggregation of tweets into a searchable community of shared interest is most important in the potential creation of public spheres. Use of this technological affordance makes any hashtag part of a larger conversation on the topic by hyperlinking the hashtag into a community accessible with a single click (Murthy, 2013). This provides users an ability to go beyond their self-curated stream of accounts that they follow, allowing multidirectional conversation opportunities, transforming “interactions from dialogic conversations into ones with multiple connections” (Hull and Lewis, 2014, p. 24). The result is that the collective body of topic-specific posts takes on meaning beyond single posts of 140 characters or less. “As a corpus, they begin to resemble a more coherent text. Granted, the corpus is disjointed, but narratives can and do emerge” (Murthy, 2013, p. 8). Among social media sites, Twitter’s emphasis on threaded communication makes it unique. Hashtags can also start interactions among users who share similar goals and views as the original poster, helping foster a sense of community, interaction, and shared purpose among users.

Hashtags have served an activist function in campaigns such as #BringBackOurGirls, a worldwide Twitter campaign to advocate for the freedom of a group of kidnapped Nigerian children (Olutokunbo, Suandi, Cephas, & Abu-Samah, 2015). Critics have assailed the practice
as close to meaningless, with social media posts serving as proxy for real action on a cause (Morozov, 2010). Fuchs (2014a) noted in an analysis of Wikileaks-themed hashtags that far more users employed them to issue 140-character soliloquies, than engage in meaningful dialogue. Dewey (2014) countered critics’ claim that hashtag awareness does nothing. “(I)t almost always does something—something small, perhaps, but something measureable” (para. 17). She added that hashtags also provide a voice, through numbers, to actors frequently shut out of mainstream media channels. It can work. When the Susan G. Komen Foundation announced its intention in January, 2012 to cut off funding to Planned Parenthood, the hashtag #standwithPP was used more than 100,000 times in a week. After the decision was quickly reversed, Planned Parenthood’s president Cecile Richards was quick to credit collective social media advocacy as the reason why (“The latest from,” 2012). Hashtag conversations do not always create rational-critical discourse. However, there are instances where hashtags can be a significant help in the generation of informed public opinion.

In the field of sport, hashtags are used to express fanship (Blaszka et al., 2012; Smith & Smith, 2012), but they can also advocate for a cause. With #NotBuyingIt, a hashtag created to protest gender inequality in mass media (Clark, 2014), Twitter’s democratizing effect has helped encourage more coverage of women’s sport (Vann, 2014). Among other instances of successful advocacy via hashtags, a campaign by student-athletes at the University of North Carolina-Wilmington helped to save swimming and diving as a varsity sport (Hull, 2014). Dedicated activists “hijacked” a marketing hashtag created by fast food giant McDonalds for the 2014 Sochi Olympics to spotlight discrimination against gays and lesbians in the Games’ host country of Russia (Pegoraro et al., 2015). The potential of Twitter hashtags to join activists together
worldwide can help facilitate the creation of topic-specific spheres. This can promote movements such as the ones outlined above, impacting policymakers.

Another technological affordance, unique to Twitter, can work with hashtags to promote online, sphere-like activity. Twitter provides, a rolling, real-time, reverse chronological interface, where the tweet sent most recently appears at the top of users’ list of tweets. This occurs both in general Twitter timelines for users, and in searches of particular hashtags. This list of hashtags—with the most recently sent tweet on top—keeps the narrative constantly refreshing. It can facilitate the use of hashtags as an organizing function (Khondker, 2011; Small, 2011), for editorial comment (Sharma, 2013), or to identify users as part of a motivated group (Smith & Smith, 2012). This reverse-chronological interface is the final amplifier of sphere-like activity in the model this paper proposes.

Twitter Architecture

In 2014, anxiety spread through Twitter after CFO Anthony Noto indicated that the company may experiment with an algorithm to alter the reverse-chronological feed that the social media site had employed since its creation (Koh, 2014). Avid users decried the plan as the end of Twitter (Frank, 2014), but company CEO Jack Dorsey stressed that the reverse-chronological timeline is “no longer getting the job done” (Oremus, 2015, para. 2), and said its proposed timeline would balance currency with relevance. Users have begun to notice more curation in their Twitter feeds, however the discussion on Twitter hashtags is still displayed in true, reverse-chronological fashion. That stream of topic-specific tweets is available through a single click. For two years, Twitter has placed promoted, or paid, tweets in users’ timelines, threads conversations so that they run together, and has an opt-in process whereby a selected list of highlighted tweets will appear in newsfeeds once per day (Lepage, 2014). Proponents say
tweets appearing in timelines in reverse chronological order is one of the intrinsic benefits of Twitter, generating history in real time. As a social media site, rather than a social network (like Facebook) Twitter is a form of broadcast media “whose intention is to publish content known and unknown to the author” (Murthy, 2013, pp. 9-10). The reverse-chronological aspect of Twitter can also more readily elicit dialogue, especially in connection to televised events (Highfield, Harrington, & Bruns, 2012). Zappavigna (2012) conducted a quantitative discourse analysis—or the study of the language behaviors linked by social practices—of 100 million tweets on a variety of topics, finding the unfolding content helped accelerate interaction.

Sport managers attempt to steer the narrative through their own use of Twitter, leveraging the popularity of public figures (Burns, 2014). But the real power of Twitter comes through harvesting the conversations of sport fans on the social network, through inspiring them to share and retweet material (Boehmer & Tandoc Jr., 2015), resulting in a discussion that can transcend the field of play, into issues such as cultural citizenship (Norman, 2012) and activism (Schmittel & Sanderson, 2015). This collective action can help realize the potential of Habermasian public sphere discourse, and is helped considerably by the fact that every time a Twitter user interested in a particular topic opens the social media site, they receive the very latest information from their curated list of followed accounts.

It is important to note that these amplifiers do not work independently. Fans’ passion for sport is driven in part by the fact that it is a simultaneous, shared experience. The second screen experience is enhanced by fellow fans are on social media sites such as Twitter, consuming the same sporting event, no matter where they are in the world. For a rapidly evolving sport story away from the field of play, such as the protest by University of Missouri football players about
race relations on that campus (Izadi, 2015), the hashtag-as-town-hall phenomenon intersects with society’s outsized passion for sport, lending urgency to these debates.

Revisiting the useful description of the public sphere articulated by Fuchs (2014a), this model shows how each of the amplifiers can be a manifestation of the different aspects to the public sphere construct. Because Twitter is—for anyone with access to an Internet network—a space for the formation of public opinion with access for all citizens, the passion of fans, topic-specific town halls of hashtags, and especially the simultaneous consumption of sport can aid in this process. The unrestricted conference that the website architecture permits can be reflected through the collective action of strangers interacting through in real time. However, the unrestricted conference that allows any Twitter user to join a hashtag discussion can also invite participants who, purposefully or unintentionally, harass or hector in a manner that prevents the creation of rational-critical discourse. Given the widely discussed negative impacts of Twitter discussion (Haque, 2015; Meyer, 2015) the conceptual model also requires discussion of the factors that can inhibit public sphere-like discussion.

**Public Sphere Inhibitors**

As critics (Dean, 2005; Morozov, 2010; Fuchs, 2014a) have pointed out, there are limitations within Twitter’s construct that work against the ideals of Habermasian deliberative democracy. These critiques can be broken down into three major thrusts:

(a) The potential for Twitter users to engage in disinhibited behavior;

(b) The limitations of the medium architecture in promoting meaningful conversation;

and

(c) The tendency for inauthentic expression through retweets instead of original generation of content.
The most obvious barrier to the creation of spheres is the existence, some would say proliferation, of individuals whose Tweets can be threatening, destructive, or simply mean (Haque, 2015; Meyer, 2015). Suler’s (2004) Online Disinhibition Effect stands as an example of “anti” sphere-like behavior. Fueled by anonymity, invisibility, different metrics of authority, and a potential for misconstrued messages, Suler suggests there is an impulse within connected Internet users to exhibit aggressive behaviors online. The lack of eye contact has been found to be the leading trigger of disinhibited reactions (Lapidot-Lefler & Barak, 2012), and participants tend to disclose less about themselves when they maintain anonymity (Hollenbaugh & Everett, 2013). Both are aspects of Twitter participation, and a possible explanation why hashtag users frequently stray far from Habermasian ideals. Dean (2003) writes that the “Web is a site of conflict,” (p. 107) and this contested dimension needs to be emphasized, because it contradicts the norms of Habermasian public discourse: equality, transparency, inclusivity, and rationality. No known studies link the Online Disinhibition Effect to social media and sport, but Morehead, O’Hallarn, and Shapiro (2016) examined the phenomenon in connection to newspaper message boards about the planned construction of a football stadium. Online disinhibition can prevent the creation of sphere-like discussion by countering each of the amplifiers of the proposed conceptual model. The same passion for sport that spurs fandom can lead to fans acting in an aggressive fashion (Hay, 2015; Mandell, 2015; Schmittel & Sanderson, 2015) which can act as a barrier to the creation of pro-democratic discourse. Aggressive, disinhibited behavior online can also negatively impact the real-time communal experience of sport consumption, like the person at the Super Bowl party who gets intoxicated. There are not supposed to be barriers to participation in a public sphere. The fact that a hashtag can invite real-time editorial comment
from anyone, no matter how inflammatory their views, could turn an amplifier of sphere-like activity into an inhibitor.

The other two inhibitors—limitations of the medium, and inauthentic expression—are more likely to provide barriers through the amplifiers of sphere-like interaction connected to the site architecture of Twitter itself. Fuchs (2014a) notes social media site’s celebrity focus (most of its most-followed tweeters have a celebrity platform) results in a social stratification on the site. “Highly visible users determine what gets amplified and what does not. Twitter’s reality is one of asymmetric visibility” (p. 192). A tweet from Kanye West is more likely to be retweeted into a user’s timeline because of the sheer size of the musician’s online network, whether or not it reflects the views of the users, or is thoughtful discourse. This can counter Habermas’ contention that ideas should win favor through the strength of the argument itself. As well, the brevity of the posts, which does encourage broadcasting of one’s thoughts, is less conducive to the generation of true, multidirectional dialogue between participants, encouraging 140-character polemics over reasoned debate.

Finally, some critics suggest that Twitter’s website design has made it simple for users to simply express a “me too” sentiment to tweets, through retweeting and favoriting of others’ words. Both Fuchs (2014a), and Yanity and Pegoraro (2015) in their analysis of a subset of tweets connected to a particular topic, found a large percentage of the posts to be of the retweeted kind. However, those interactions can also represent sphere-like activity themselves, like a politician in a parliamentary setting shouting support during a speech by someone else.

Despite clear challenges to the formation of public spheres on Twitter through sport, this model suggests reasons why online discussion and debate through sport-themed hashtags can take on importance beyond the field of play. The real-time consumption pattern of popular sport
news through an instantaneous, international network that displays posts in a rolling narrative, and provides a mechanism for topic-specific conversations, is indeed the public space that Papacharissi (2002) suggests the Internet can provide to create the preconditions for public spheres. And because of the ubiquity of sport on Twitter, this model suggests indicators of what could trigger this type of rational-critical discourse, leading to the generation of meaningful public opinion. In order to provide a true test the model, selecting the right hashtag is of pivotal importance.

**Testing the Model**

This conceptual framework is not meant to be determinative. The intention is not to assess a hashtag’s worthiness as a form of public sphere. Instead, the model is intended as an explanatory framework, suggesting ways the collective actions of hashtag users related to a particular phenomenon can be better understood. The model is also meant to be a starting point. It is far less important to ascertain whether any hashtag movement meets the strict definition of a public sphere (clearly, that is an almost impossible task) than it is to better understand what factors contribute to the type of discussion that most observers would agree is thoughtful, respectful, and pro-democratic. As well, once the model has been used to analyze the factors that influence the participatory nature of the hashtag-based discussions, it suggests there will be effects of taking part on participants themselves. The byproducts of public sphere-like discussion are an important aspect of considering any hashtag phenomenon.

While deliberative democratic discourse can occur on many topics, certain sport-themed events are more likely to exhibit dialogue that mimics a Habermasian public sphere. If the intention of a study is to gauge both the creation of such activity, and its effect of participants and society, delimiting inquiry into events with an obvious social imperative is likely to yield
more fulsome results. The suspension, then ban, then reinstatement of football player Ray Rice for assaulting his then-fiancée, now wife, Janay Palmer (McManus, 2014) is an example where sport-themed hashtags appeared to further discussion on issues of concern. After video surfaced of Rice knocking Palmer out in an Atlantic City hotel elevator, Beverly Gooden saw herself reflected in the victim (Kaplan, 2014) and sent three tweets with the hashtag #WhyIStayed, pointing out the no-win situation where victims of domestic abuse can find themselves.

A hashtag that features a true, online debate is #Paterno. More than five years after revelations of a massive sex abuse scandal at Penn State forced the resignation of iconic football coach Joe Paterno, and four years after his death in December 2012 (Sobleski, 2014), the hashtag is used on Twitter hundreds of times per month, to defend the late coach’s reputation and the school, and to attack the institution for its role in the allegations taking so long to be made public. A democratic consensus may be impossible with such a polarizing issue, but at least the forum provides access for all citizens with Twitter to participate fully in the discussion.

Responding to criticism that social media research needs to go beyond simple content analysis of posts (Hardin, 2014), and the need to incorporate different critical frameworks into social media and sport scholarship (Filo et al., 2015), these interactions could be examined for how the amplifiers and inhibitors of the model promote or prevent the creation of an online environment where Habermasian principles can be evident. The preponderance of empirical research utilizing public sphere critical theory relies on content analysis, but an important element of classic sphere behavior is its impact on participants. Advocates of the power of social networks suggest the actions of organization and advocacy online bring their own intrinsic value (Castells, 2012). Since participants are accessible through their Twitter profile, examining the model through participant survey data would represent a new contribution to the literature. Other
studies could combine this critical framework with studies of marketing and pricing, the shared experience of tragedy or humor, and be linked with other theories to seek deeper understanding.

**Conclusion**

Despite persistent criticism, the Habermasian public sphere has remained a popular subject for scholarly research in many disciplines, including sport. This theoretical paper suggests that sport, and particularly the interconnected sharing of information by fans through Twitter hashtags, is worth considering through the lens of the public sphere. Twitter has been criticized for fomenting opinion that is the antithesis of the equal, transparent, inclusive discourse that marks the public sphere, prompting commentary to suggest that Twitter is dying as a source of free and open debate (Haque, 2015). Analysis of tweets suggests that limitations of access to the medium, its capitalist construct, the pattern of often omnidirectional discourse, and the potential for disinhibited behavior mean that Twitter hashtags fall short of the true Habermasian model (Fuchs, 2014a; Yanity & Pegoraro, 2015).

However, proponents of the power of social networks suggest that these interactions still result in “a net improvement for democracy” (Gladwell & Shirky, 2011, 154). With the development of this critical framework, this study seeks to join those voices, suggesting that within Twitter hashtags connected to issues of societal concern in sport there exists the potential for the generation of public sphere-like activity. Attributes exist within Twitter’s architecture, and within the passion and consumption patterns of sport fans, to make public sphere-like interactions possible. The four amplifiers of the theoretical model—our passion for sport, its simultaneous consumption, the utility of hashtags in creating virtual town halls, and Twitter’s reverse-chronological interface—offer a guide to analyze hashtag discussions for evidence of public sphere-like activity, and explain how they can occur.
A shared passion for sport can foster a sense of kinship that extends from the field of play (Reysen & Branscombe, 2010), and promote citizenship as fans actively participate in discourse, that sometimes takes on a political nature (Sandvoss, 2004). The real-time connectivity adds urgency to democratic debate, resulting in activism that can accompany the conversation (Hull, 2014). The virtual town hall created through the use of hashtags joins Twitter users in communities of interest (Murthy, 2013). Within sport, this can promote causes through the collective action of sharing hashtagged tweets. The rolling narrative that can be created has the potential to harness the conversations of sport fans, resulting in a shared discourse that can transcend sport.

In the face of these attributes, the sharply negative tone of some Twitter discourse, suggested in part by the Online Disinhibition Effect (Suler, 2004) can work against each of these four public sphere amplifiers. A true barrier to the open, accessible, respectful discourse that marks the Habermasian ideal, aggressive or hateful activity is a threat to not only the potential of Twitter to reach its lofty goals (Benhabib, 2011) but to the social media site itself (Haque, 2015; Meyer, 2015). This framework also suggests aspects to Twitter’s site architecture that can inhibit the creation of public spheres. These include the disproportionate impact some voices have on the online debate, and the ways Twitter makes it too easy for discussion participants to listen passively, or simply offer assent or agreement. However, it is argued that a “like” or a “retweet” is, in its own way, participation in a public sphere.

**Applicability of the Model**

Utilizing the public sphere as a critical framework to create a theoretical model about Twitter hashtags and sport helps respond to the demand that social media research in sport move beyond content analysis and use different, more sophisticated theoretical grounding (Filo et al.,
2015; Hardin, 2014), particularly from outside of sport. Murthy’s (2013) distinction that Twitter is better classified as a social media site than a social networking site also neatly aligns with the contention by Hull and Lewis (2014) that social media are displacing traditional, mediated news coverage of sport, particularly at a local level. Combined with society’s outsized passion for sport (Burns, 2014; Burrow, 2013) and the potential for online interactions to spiral into negative territory (Suler, 2004), a better understanding of the power of group effort to effect change is necessary for any manager of a sport organization likely to be the subject of tweets.

More broadly, the prevalence of social media in society, and the impact it can have on shaping societal discourse (Giglietto & Selva, 2014), as well as the asymmetrical popularity of particular issues going viral (Fuchs, 2014a), demands greater understanding. It is noteworthy that widespread social media adoption is only a decade old, and technological platforms are emerging and going away. Understanding the principles that underpin online engagement can serve society (Benkler, 2006; Shirky, 2008). Negroponte (1996), Rheingold (2006), and even Habermas (1992) himself predicted the blurring distinction between in-person and virtual. Some may state that social media, and Twitter, have gone to a place detrimental to society (Haque, 2015; Meyer, 2015). Rather than decry the decay in discourse, making an effort to learn as much as possible from the sometimes-messy interactions can be informative and could enhance online community. This could lead to potential solutions to moderate the tone of conversations, or simply point to examples where the discourse works in a pro-democratic fashion. In the tweets of 316 million users, there are doubtless many posts that could add thoughtfully to a discussion on a particular topic, or simply allow the sender to feel empowered that they are part of a broader discussion.

The individual amplifiers in the model can also each provide a point of entry to better understand online participation. If the abundance of tweets with a particular hashtag is a
demonstration of the passion of sport, information can be learned from the discourse on the topic about online engagement and the shared experience of sport fandom. Real-time analyses of hashtags, using data mining tools such as tweet aggregators or social networking software can help expand on themes that emerge through discussion on a single hashtag, and how participation affects the aspirational goal of the public sphere. The technology itself provides the platform for these open, real-time exchanges, but is there a mechanism within the platform—when considered in a public sphere context—that can help combat the strong vein of negativity that runs on Twitter?

Finally, the model suggests that if discourse becomes sphere-like in nature, aided by the amplifiers in the conceptual model, possible byproducts can be created from the interactions. One possible outcome of a sphere-like discussion is the creation of what is known as social capital. Initially defined as a narrow form of maximization of utilities (Fine, 2010), social capital has been interpreted throughout the social sciences for more than 40 years. Scholars have analyzed the weak ties of economic and social entanglements (Granovetter, 1973), the different forms of cultural capital that individuals possess (Bourdieu, 1986), and the bonding and bridging that can occur through voluntary association (Putnam, 2000). Taken together, these actions could result in individual citizens using their own reservoir of capital, in formal or informal alliances with others with the goal, or the byproduct, of their association being collective good. This same collective action can occur through activity in the public sphere. With the spread of social media sites, social capital theory has been re-examined, with potential being identified for this networked connectivity to increase social capital (Hofer & Aubert, 2013). Proponents of social media sites such as Twitter are already predisposed to believe in the power of online networks (Benhabib, 2011; Khondker, 2011). Studies involving populations of sport-themed hashtag users,
testing the generation of social capital through the loose ties of affiliation in activist movements online, may yield new insight into the byproducts of the generation of sphere-like activity in these domains.
CHAPTER 3

Sport, Twitter Hashtags and the Public Sphere: A Qualitative Test of the Phenomenon through a Curt Schilling Case Study

Curt Schilling has always been outspoken. The three-time World Series-winning pitcher (Browne, 2014) has been forthright about his conservative views since his playing days, delivering a high-profile endorsement of George W. Bush days before the 2004 Presidential Election (Mooney, 2004), and using his celebrity profile following his retirement to speak about hot-button issues such as radical Islam, the Confederate flag, and evolution (Otterson, 2016). On April 20, 2016, Schilling was fired by ESPN for sharing a post on his personal Facebook wall offering commentary about HB2, the North Carolina law which prohibits transgender people from choosing which bathrooms to use, and prevents cities from passing anti-discrimination laws (Alter, 2016). The meme, which Schilling did not create, contained a picture of a large man dressed in ill-fitting women’s clothing, with the caption: “Let him in! To the restroom with your daughter or else you are a narrow minded, judgmental, unloving, racist bigot who needs to die!!!” (Otterson, 2016). In a statement announcing the firing of Schilling, who had been employed in an on-air role since 2010, ESPN noted that it is an inclusive company: “Curt Schilling has been advised that his conduct was unacceptable and his employment with ESPN has been terminated” (White, 2016).

While the firing made national news (Deitsch, 2016; Sandomir, 2016), it was perhaps an even larger event on social media. On Twitter, the popular microblogging site, more than 5,000 tweets were sent using the hashtag #CurtSchilling in the 24 hours after his sudden ouster, according to commercial hashtag aggregator Hashtags.org. The #CurtSchilling tweets reflected a polarization of opinion that has marked many recent debates in the United States (Hopper, 2016).
Approximately an equal number of Twitter users voiced opinions in support of Curt Schilling, or in support of ESPN for firing him. Thanks to the use of hashtags, the tweets appeared on the social media site in real-time, reverse chronological conversation about the topic, viewable with a single click. Social media’s role as a virtual water cooler for discussion has been well established (Sanderson, 2011; Shirky, 2008). The power of social networks has been hailed for its ability to influence society (Castells, 2012; Benhabib, 2011). One way the discussions can be focused on a single topic is through the use of hashtags.

Suggested in 2007 by a Twitter user named Chris Messina (“The short and,” 2010), hashtags are a technological affordance that has proven so popular they have spread to other social media platforms (Castillo, 2013). Through the use of “#” before a word or phrase, Twitter users can offer editorial comment (Frederick, Burch, & Blaszka, 2015), disseminate topic-specific information (Small, 2011), organize (Khondker, 2011), or identify as part of a group (Sharma, 2013; Smith & Smith, 2012). The architecture of Twitter itself also organizes hashtags to create a topic-specific, virtual town hall on the social media site (Murthy, 2013). This can help the process of forming or gauging public opinion rapidly, something which has been extensively studied by scholars over the past decade (Combs & Pitts, 2014; Gleason, 2013; Kaye & Johnson, 2014). The clustering of thoughts through Twitter hashtags provides a unique perspective through which to analyze the sentiment of sport fans about an issue that provokes strong feelings, such as the firing of Curt Schilling.

Research about social media and sport has been criticized for its over-reliance on content analysis (Hardin, 2014), and challenged to incorporate new theoretical frameworks, especially from outside of sport (Filo, Lock, & Karg, 2015), to better understand the phenomena that are occurring through the popular online networks. This study seeks to address both critiques,
providing a two-pronged analysis of debate through hashtags about the firing of Curt Schilling, and incorporating a critical theory rarely used in the study of sport—the public sphere.

Jürgen Habermas, the German sociologist and philosopher, created the concept of the public sphere (Habermas, 1962 [1989]), an open space for deliberative democracy, through the “traffic in commodities and news” (p. 15). Widely studied throughout the social sciences, the public sphere can be distilled into four principles:

(a) A space for the formation of public opinion;

(b) With access for all citizens;

(c) Unrestricted conference through freedom of assembly, freedom of expression and publication of opinions about matters of general interest; and

(d) Debate over the general rules governing relations (Fuchs, 2014a).

The concept has been attacked as exclusionary and overly optimistic (Eley, 1992; Fraser 1992), but there has been renewed interest in the scholarship of Habermas with the popularity and spread of connected Internet technologies and social media (Benhabib, 2011; Benkler, 2006; Papacharissi, 2009). This includes a small number of studies that intersect with sport (Sandvoss, 2004; Wamucii, 2012; Yanity & Pegoraro, 2015). Utilizing a Habermasian framework, this Curt Schilling case study investigates how sport and Twitter hashtags can integrate to create a form of open-access, deliberative discourse. Through the use of a model (O’Hallarn, 2015) the study can offer new insight into the potential power of these interconnected interactions, and their impact on participants.

It is theorized that the evolution of Twitter as a social media site, along with the passion of sport fans and their real-time consumption pattern, can combine to generate activity akin to a Habermasian public sphere. The following model (O’Hallarn, 2015) illustrates the potential that
exists within Twitter discussions connected to sport, the virtual town hall created through hashtags, and Twitter’s reverse-chronological timeline. Figure 1 provides a concept map illustrating the potential that exists within the subject matter and medium to create public spheres. Four suggested “amplifiers” aid in the creation of public spheres through the use of hashtags:

(a) Our passion about sport itself;
(b) The fact sport is consumed simultaneously around the world;
(c) The way that Twitter hashtags can create issue-specific virtual town halls; and
(d) Twitter’s unique architecture, which displays the most recent tweet in users’ feeds, prompting a running, real-time conversation.

Barriers, do exist to the creation of spheres. The tendency for social media activity to incite what Suler (2004) deemed the Online Disinhibition Effect can inhibit their creation. Other barriers include limitations of the medium itself, such as the 140-character ceiling on tweet length, and the disproportionate impact that high-profile individuals can have on the debate, as well as the ability for inauthentic expression by anonymous Twitter users.

The passion of sport fans, simultaneous consumption, and interconnected social media technologies afford an opportunity to examine online sport discourse via Twitter hashtags through the lens of the public sphere. Therefore, the purpose of this paper is to examine discussion about Curt Schilling through hashtags on the social media site as a case study, to ascertain if the critical framework of the public sphere can better explain the online interactions, utilizing the conceptual model as a starting point (O’Hallarn, 2015). As well, through a two-part analysis of the discourse and its participants, this study seeks to extend the well-canvassed content analysis to better understand the phenomenon. Very few studies of Twitter and sport
include interviews with users, to “turn the lens” and ask about their online participation (Clavio & Walsh, 2014; Gibbs, O’Reilly, & Brunette, 2014; O’Hallarn & Shapiro, 2014). Therefore, this study also seeks to extend previous studies of Twitter and sport through incorporating a new element to accompany content analysis—motivations for participation among Twitter users themselves.

The two-pronged analysis offers the opportunity to assess the role of the public sphere principles of open access, freedom of expression, generation of informed public opinion and the general rules governing relations in the motivations of Twitter users to participate in the #CurtSchilling hashtag, and their tweets themselves. Guided by literature about the public sphere, and the study of Twitter hashtags connected to sport, the following research questions were developed to guide the investigation:

**RQ1** – How does the discussion of issues of societal concern through sport-themed Twitter hashtags reflect the Habermasian public sphere?

**RQ2** – Do users feel like their participation in hashtags of this nature represents rational-critical discourse in a free and open space, leading to the generation of informed public opinion?

**Review of Literature**

**The Public Sphere**

In 1962 (in German), Habermas published *The Structural Transformation of the Public Sphere: an Inquiry into a Category of Bourgeois Society*. Translated into English in 1989, the book represents possibly the most comprehensive effort to define and characterize the concept of public opinion (Habermas, 1962 [1989]). Habermas extended concepts articulated by Tönnies (Tönnies & Harris, 2001), and Arendt (1958) of social life, envisioning the public sphere as a place, “transcending the barriers of social hierarchy” (p. 34-35), helping “put the state in touch
with the needs of society” (p. 31) through the vehicle of public opinion. Habermas traced the history of public opinion from the middle ages, through the rise of European bourgeois society, stressing the role that economic developments such as the long-distance trade in news and commodities played in promoting liberal thought. Habermas suggested the critical functions of the public sphere were significantly weakened as the 20th Century progressed, as the mechanisms of mass communication, notably the media, increasingly became subject to corporate control, by the “secret policies of interest groups,” (Habermas, 1992, p. 404). In fact, Habermas did not intend for the concept of the public sphere to be a pass/fail assessment of whether discourse rises to the level of pro-democratic and deliberative. Rather, he envisioned his concept as a regulative ideal for society to strive for in public interactions (Habermas, 1962 [1989]). His numerous critics misread or disregarded Habermas’ intent in creating the concept as a “democratic dam” (Habermas, 1992, p. 444), assailing the public sphere as hegemonic and male-dominated (Fraser, 1992), exclusionary (Eley, 1992; Mouffe, 1999; Negt & Kluge, 1993), or simply unnecessary in a time of mass media (Keane, 1995).

The creation of virtual worlds opened up many possibilities of the pro-democratic power of online interactions (Negroponte, 1995; Rheingold, 1996). This led to a reconsideration of cyberspace as a place where Habermas’ vision might come to light. Benkler (2006) suggested that the Internet and the emerging networked information economy offered “distinctive improvements in the structure of the public sphere over mass media” (p. 177). Papacharissi (2002) wrote that the Internet and its connective technologies “have managed to create new space for public discussion. This public space facilitates, but does not ensure, the rejuvenation of a culturally drained public sphere” (p. 22). Others shared her ambivalence, wondering how much effect networked communication was truly having on democracy (Bimber, 2003), or whether it
was simply promoting increasing group polarization, “because like-minded people are deliberating with greater ease and frequency with one another, and often without hearing contrary views” (Sunstein, 2007, p. 69). Habermas (2006) himself worried that the Internet’s democratizing access can threaten the public sphere principle of broad-based debate and deliberation.

The popularity and spread of social media technologies such as Facebook and Twitter has elicited yet another round of Habermasian scholarship. A persistent critic, Fraser (2007) is also one of many scholars to suggest the public sphere is worth reexamining with the advent of widespread Internet adoption and social media. Papacharissi (2009) noted virtual sphere 2.0 allowed citizens to express dissent through user-generated content. Scholars predisposed to believe in the pro-democratic power of social networks suggest they could enable public sphere-like discourse because the new technology is “a better fit for our native desires and our powers for group effort” (Shirky, 2008, p. 48), and “offer the possibility for largely unfettered deliberation and coordination of action” (Castells, 2012, pp. 9-10). Others do not share that enthusiasm, suggesting online activity causes the public to lose any critical dimension to its discourse (boyd, 2010), and is a statement of politicization, not a public sphere (Dean, 2003). In his critical study of social media, Fuchs specifically addresses the idea that Twitter could create Habermasian sphere, summarily dismissing it as a celebrity obsessed forum where users issue 140-character soliloquys in lieu of actual debate (Fuchs, 2014a).

The social media activity that helped support and encourage the Arab Spring uprisings of 2011 framed public sphere-like activity in a far more positive fashion, with scholars suggesting the organizing and deliberative strengths of social media were on display during that turbulent time (Benhabib, 2011; Khondker, 2011). Shirky, one of the highest profile proponents of the
power of online networks, suggests that these social media interactions still result in “a net improvement for democracy,” despite issues that have arisen (Gladwell & Shirky, 2011). That enthusiasm is also reflected in the large body of scholarship that utilizes the public sphere as a critical framework, in areas such as health policy (Grogan, 2015), education (Girgorasi, 2015), and emerging democracies (Hoskins, 2013), among many others.

Habermas lumps sport with pop culture as a form of infotainment, which acts as a barrier to rational-critical discourse (Habermas, 1962 [1989]). However there is a small body of scholarship that considers the concept of the public sphere in connection with sport. Sandvoss (2004) links the public sphere to the sport soccer’s relationship with television. He writes that fans of the football club Chelsea illustrate the relationship between football fandom and the public sphere, which “gives rise to citizenship as fans actively participate in a discourse of political nature” (p. 65). A survey of readers of Israel’s most popular sports blog found they formed an open and accessible social community online, though with a tendency for rhetorical excess (Galily, Tamir, & Muchtar, 2012). A transnational public sphere was formed by human rights activists worldwide in the run-up to the 2008 Beijing Olympics, but did not impress upon the International Olympic Committee the need for it to demand change (Brownell, 2012). The Mathare Youth Sports Association in Kenya uses sports to provide a proxy for the public sphere access typically denied to young people, with uneven results (Wamucii, 2012). Yanity and Pegoraro (2015) examined activity on Twitter around the drafting of openly gay football player Michael Sam, suggesting the discourse falls short of Habermasian ideals, being more akin to leaving a magazine in a doctor’s office than true, rational-critical discourse.

Like Yanity and Pegoraro, the current study looks at Twitter discussion about a single event. However it is positioned theoretically along a broader spectrum of public sphere-like
activity, rather than being designed as a simple yes-or-no assessment of whether the debate constitutes a true public sphere. This is a recognition, shared by Habermas himself (1962 [1989]), that the public sphere has always intended to be a regulative ideal for society, a goal that will never truly be reached because of cross-currents ranging from capitalist stratification (Habermas, 1962 [1989]), to interest groups (Habermas, 1992), to the Internet’s effect on societal discourse (Habermas, 2006). In addition, the use of a conceptual model to probe more deeply into how each principle of the public sphere is reflected in the hashtag interactions allows for the Curt Schilling case study to be more broadly analyzed. Finally, the current study relied on participant surveys, something rarely done in sport and social media research that explores any critical framework.

**Twitter Hashtags**

Twitter’s growth has slowed, causing some concern about the company’s long-term viability (Chandler, 2016; Krantz, 2016) but the social media site remains immensely popular, with more than 316 million active monthly users (“By the numbers,” 2015). The brevity, immediacy and social sharing aspects of Twitter have made it a favorite of athletes, sport fans, and sport journalists (Clavio & Kian, 2010; Hambrick, Simmons, Greenhalgh, & Greenwell, 2010; Pegoraro, 2010; Sanderson & Hambrick, 2012).

Hashtags are an integral part of Twitter’s ability to link the conversations of strangers together (Murthy, 2013) and have become immensely popular, spreading to the point that one half of all mobile device users employ them in their social media posts (Zak, 2013). There is a robust field of academic study of the Twitter innovation. In the nine years that Twitter hashtags have existed, scholars in many fields have analyzed their usage patterns in an attempt to determine which hashtags will go viral (Ma, Sun, & Cong, 2013; Tsur & Rappoport, 2012),
including by studying the power of celebrity users to affect the discourse of Twitter (Page, 2012). Hashtags have been a forum through which Presidential elections are analyzed (Combs & Pitts, 2014), and have provided exposure and scrutiny to organizations such as Occupy (Gleason, 2013) and Black Lives Matter (Carney, 2016). As it has evolved, Twitter hashtag scholarship now includes more advanced data mining protocols, and has begun to rely more heavily on surveys to seek deeper understanding of fields such as civic activism (Tully & Ekdale, 2014) and teacher professional development (Ross, Maninger, LaPrairie, & Sullivan, 2015).

Hashtags have been broadly studied in sport, with studies probing subjects like fandom and identity, rather than societal intersections with a predisposition for conflict, such as Occupy and Black Lives Matter. Still, many sport researchers have heeded the call for different theoretical approaches to seek deeper understanding of the online phenomena. Among the foundational studies in the discipline, Smith and Smith (2012) analyzed a dataset of tweets with hashtags sent during baseball’s College World Series, finding that they help form a sense of social identity among fans of teams. A similar study found fans could express fanship through hashtag use (Blaszka, Burch, Frederick, Walsh, & Clavio, 2012), while other studies suggest users seek social gratifications through hashtag use (Gibbs et al., 2014).

The deployment of hashtags frequently accompanies events with wide scope, something which has been studied widely by sport researchers. These events afford an opportunity for nation-building and marketing (Pegoraro et al., 2014). They also foment protest movements such as the “hijacking” of the #CheersToSochi hashtag created by McDonalds for sponsorship purposes, using the marker to spotlight human rights abuses in Russia. The #NBCFail hashtag protest by Twitter users about U.S. host television network NBC was analyzed as a social movement (O’Hallarn & Shapiro, 2014). As evidence of the growth of the scholarship, three
studies about #NBCFail alone were published in 2015, asking whether NBC failed audiences as a gatekeeper (Nee, 2015), providing a thematic analysis of public discourse around the way NBC covered women’s gymnastics (Moore, Hesson, & Jones, 2015), and utilizing #NBCFail to seek deeper understanding of the Olympic movement as an emergent hypermedia event (Girginova, 2015). Other studies connected to specific mega-events include an analysis of Twitter conversations about sponsors of FC Barcelona and Juventus at the 2015 UEFA Final (Jensen, Limbu, & Spong, 2015), and hashtagged tweets mentioning sponsors at the French Open tennis tournament (Delia & Armstrong, 2015). Both studies found scant mention of official sponsors in hashtags sent by followers of the event itself. A study of the London Olympics found the official Twitter handle of the Games (@London2012) was used for agenda-setting by Games organizers, while use of the hashtag #London2012 was largely by fans for informal commentary (Frederick et al., 2015). Other studies have utilized a broader, big data approach to analyze Twitter sentiment connected to events such as the 2014 World Cup (Yu & Wang, 2015).

A small collection of academic research has relied on participant surveys to further analyze social media. Witkemper, Lim, and Waldburger’s (2012) survey of more than 1,110 social media users attempted to unpack motivations behind Twitter usage for sport fans, suggesting ways it can be used by sport organizations to capitalize on the unique end-user-to-consumer contact. Clavio and Walsh (2014) found a desire among users of social media for embedded or live video, something which has been realized with changes to the technological marketplace. A study of fans of Canadian Football League teams relied on participant surveys, content analysis and practitioner interviews to attempt to determine what gratifications fans seek and receive from Twitter (Gibbs et al., 2014). Akin to the current study, O’Hallarn and Shapiro (2014) interviewed a purposive sample of a hashtag that emerged in response to an issue—in this
case, Olympic television coverage problems—finding that users of the #NBCFail hashtag formed a loose social movement, but one that quickly dissipated when the Games ended.

By incorporating the uncommon (within sport) theoretical framework of the public sphere, and through use of participant interviews, this study adds to the current body of Twitter research by providing further understanding of what users gain from participation in a hashtag discussion, and what the collective body of their tweets represents in discourse. This can help further explain what can cause a hashtag to become a *cause celebre* online, information that can be useful to sport organizers attempting to promote events, or to simply be mindful of the types of online discussions that can derail them.

The popularity of both sport and social media, as well as the demand for better understanding of their intersection—particularly because of the rapid advancement of technology—calls for more study. Using different frameworks, especially from outside of sport, can offer insight into the popularity and impact of hashtags, at a time when sport and society is intersecting with some regularity. The refusal by Colin Kaepernick to stand for the Star-Spangled Banner during the San Francisco 49ers preseason National Football League games (Peter, 2016) is just one example of a sport-themed event extending beyond the field of play that has been discussed vigorously through Twitter hashtags (Renzetti, 2016). This case study can offer a snapshot of how discourse of that nature can unfold, what elements of the public sphere it can represent, and the impact it has on participants.

**Method**

This case study of the Twitter hashtag engagement connected to the firing of Curt Schilling by ESPN relied on two qualitative methodologies to provide a two-pronged empirical examination of the activity in the sport-themed Twitter hashtag. Case studies involve in-depth
examination of a bounded site (Yin, 2014), in this case, narrowly confined to Twitter users who interacted through the #CurtSchilling hashtag in a proscribed time window. This case study’s two-pronged design added depth to the analysis (Stake, 1995).

Most empirical studies of the public sphere involve qualitative data analysis (Girgorasi, 2015; Grogan, 2015; Hoskins, 2013). Few of these studies involve feedback gathered from participants in the rational-critical debate themselves (Reese et al., 2008). A conceptual model suggested an approach for considering public sphere-like interactions to be promoted through the passion and simultaneous consumption of sport, as well as the technological affordances of Twitter hashtags themselves, provided barriers to such discourse can be overcome (O’Hallarn, 2015). Utilization of this framework allows for the Curt Schilling discussion and questionnaire data to be examined for its adherence to public sphere principles, and what this discussion does to engage and motivate participants.

**Data Collection and Procedure**

Following the firing of Curt Schilling by ESPN being made public on Wednesday, April 20, 2016, the commercially available software program Hashtags.org was used to collect every tweet where the hashtag #CurtSchilling was used through the end of Sunday, April 24, comprising 101 hours of hashtag capture. Tweets with #CurtSchilling hashtags sent between 7 p.m. on April 20 and midnight on April 24 were placed in an Excel spreadsheet for analysis. Prior studies suggest decay of a hashtag’s popularity begins within minutes or hours, depending on the scope of the event (Lehmann, Gonçalves, Ramasco, & Cattuto, 2012; Ruhela, Bagchi, Mahanti, & Seth, 2016), or the breaking of a conversation into micro-communities which talk amongst themselves, eventually discarding the hashtag as an unnecessary marker (Bruns, 2012). Therefore, data collection was cut off at midnight the following night, after 29 hours. The dataset
for analysis comprised 5,853 tweets. The sharp drop in the number of hashtags in subsequent days (745 uses of #Curt Schilling on Friday, April 22; 224 on Saturday, April 23; 136 on Sunday, April 24) suggests that the incident was quickly losing cultural currency as an event to be analyzed through the lens of the public sphere. This is a common critique of social media discourse—the shortness of the attention span of discussion participants has accelerated the news cycle, even on issues that, objectively, should elicit more debate.

Once hashtag collection was complete, purposive sampling was undertaken of users who deployed the #CurtSchilling hashtag during the tweet capture interval. Respondents were contacted through direct “@” solicitation on the social media site. Their Twitter handle was collected along with the content of their tweet which contained a #CurtSchilling hashtag, allowing for their individual solicitation through the social network. Because the request to complete the study questionnaire was delivered to Twitter users with whom there had been no previous interaction, careful attention was paid to identify the survey pitch as coming from a university-based researcher. The online survey link—which took respondents to a page in online survey software Qualtrics—was sent to users only if they indicated a willingness to participate in the study. Still, fewer than one-quarter of survey links sent via Twitter netted completed survey responses. A $50 Visa gift card was offered as a prize for one survey respondent, provided they completed every question in the survey and included an email address for follow-up inquiries.

Instrumentation

An eight-item questionnaire was given to the purposive sample of #CurtSchilling hashtag users. The survey, which was reviewed by qualitative experts, was designed to gauge motivations for participation in the hashtag, but also to test the specific suppositions of the conceptual model about amplifiers and inhibitors of discourse through sport-themed Twitter
hashtags. Following IRB approval, eight open-response questions asked of de-identified participants. The questions are indicated in Table 1.

**Data Analysis**

Following collection of the online questionnaires, a two-step data analysis was conducted on the Twitter hashtag and survey data. As a first step, content analysis was conducted on the tweets extracted from Twitter during the 29-hour data collection window. Content analysis is used to refer to any qualitative data reduction that attempts to induce core consistencies and meanings from a volume of qualitative material (Patton, 2002). Sport content analytic research about Twitter has relied on the emergence of themes (Pegoraro, 2010; Sanderson & Hambrick, 2012) or frames (Blaszka et al., 2012) treating each tweet as a unit of analysis, consistent with the well-established constant comparative methodology (Miles & Huberman, 1994). The lead researcher and a second coder familiar with the Curt Schilling finding, and the public sphere, reviewed the entire dataset of tweets. They identified themes in the tweets, which were compared in a manner consistent with constant comparative methodology (Hays & Singh, 2011; Glaser & Strauss, 1967).

Once the content analysis was complete for the dataset of tweets, it was utilized to conduct a directed content analysis of the interview transcripts of the survey subjects. When prior research exists about a phenomenon, which would aid in further describing data that is gathered for a study, a directed content analysis is well-suited (Hsieh & Shannon, 2005). The goal of a directed approach is to extend conceptually a theoretical framework or theory—in this case, the public sphere as expressed through the use of sport-themed hashtags on Twitter. Prior knowledge of the issue informed the question line sent to respondents, as well as the analysis of the #CurtSchilling Twitter conversation, before the interview transcripts themselves were
analyzed. This process helped with the identification of dominant content and themes in the questionnaire responses (Potter & Levine-Donnerstein, 1999). Following review of the transcript, and consistent with the view that case study research is an iterative process where new information can be incorporated in the analysis (Yin, 2014), the researcher then reached out to the respondents who had provided email addresses for amplification of key public sphere concepts. This information added a layer of context to this case study analysis of the discourse through #CurtSchilling tweets.

Finally, the themes that emerged from the analysis were then reflected back on both the classical definitions of the public sphere, and the suggested amplifiers and inhibitors of sphere-like activity on Twitter developed in the conceptual model (O’Hallarn, 2015). Ultimately, the analysis sought to determine how the discussion of in the #CurtSchilling hashtag reflected the tenets of the public sphere, and how users felt their participation in hashtags of this nature is helping create and maintain a free and open space for discourse that can lead to the generation of informed public opinion.

**Results**

**Hashtagged Tweets Descriptive Overview**

The hashtag #CurtSchilling proved very popular in the immediate aftermath of his termination by ESPN. A total of 5,853 tweets with the hashtag were deployed in the 29 hours after the news was made public, 2,900 of which were original tweets, almost exactly half of the total. The rest were retweeted words of others. The partisan split among users of original tweets in the hashtag was wide, and quite even. After the first few hours, when news reports of his firing were retweeted along with the #CurtSchilling hashtag, very few hashtagged tweets simply
reported the news of the event, or referenced a different topic. Participants had picked sides, and the teams were of about even numbers.

To confirm the anecdotal belief that the split of pro- to anti-Curt Schilling tweets was about even, a descriptive analysis of five, 100-tweet samples of original (non-retweeted) messages was conducted. On each small dataset—chosen to reflect a sample of sentiment at the time of the firing announcement, then at six hour intervals following—the researcher coded tweets into positive, negative or unknown sentiment about Curt Schilling. The analysis found a relatively equal rate of response from supporters and opponents of Schilling, as indicated in Table 2.

Among the retweeted hashtags, a more than 80% were supportive of Curt Schilling and critical of ESPN, accusing the company of restricting free speech, and caving into pressure from liberal interest groups.

**Inferential Analysis of Tweets**

Through a systematic analysis, several obvious themes emerged, marked by one consistent thread—discussion participants aligned either with Schilling, or against him, referencing familiar polemics of today’s current polarized political climate. Saturation of themes occurred well before the first initial read-through of the data was complete; similar thoughts were repeated abundantly in the comments. Examples of tweets that reflect the themes that emerged are listed below in unedited form, as they appeared on Twitter. The tweets of supporters of Curt Schilling reflected the following dominant themes:

(a) ESPN and America are being hurt by progressive policies
“@espn firing #CurtSchilling is prove enough that free speech is only wanted as long as it doesn't go against the liberal agenda”; “#ESPN fired #CurtSchilling for having an opinion on a divisive issue. Wasn't even his post. Welcome to America... #LiberalBias #apologetics”

(b) The world has become too politically correct

“Liberals want you to believe that equality is men dressed like women sharing a bathroom with real women. Y'all crazy as hell #CurtSchilling”; “It's official---the #politicallycorrect left decided that the #Constitution is done. #FreedomofSpeech is tossed. #ESPN cans #CurtSchilling”

(c) Curt Schilling was exercising his right to express his opinion

“Too bad we live in a world where you can't say how you feel for fear of hurting some weirdos feelings. #CurtSchilling”; “The firing of #CurtSchilling shows the left wants to do away with free speech. Unbelievable.”

(d) ESPN and its parent company Disney should see some sort of sanction or boycott

“This #CurtSchilling thing has me so upset, I'm boycotting @espn. You cannot talk me out of this so don't try”; “The @Disney corp owns @ESPN. What's next? A cross-dressing Mickey Mouse? Time to Boycott these companies. #CurtSchilling #NotWalt'sDisney”

The tweets in support of Schilling also frequently referenced God, the Constitution, Islamic extremism, the decision by retailer Target to oppose HB2, suggest irony in presenting Caitlyn Jenner a courage award for transitioning from a man to a woman, and use assorted epithets to describe LBGTQ people. Notably, there is not an abundance of lauding Schilling as a hero; instead the bulk of the energy is directed at criticizing ESPN for the firing.

The individuals who sent tweets with the #CurtSchilling hashtag in support of ESPN for the step it took in the firing were also marked by the repetition of several dominant themes. Among the major thrusts of the pro-ESPN commentary were:
(a) The fact that Curt Schilling and his allies are bigoted and hateful

“Happy to hear of the news on firing of @gehrig38 -- it's 2016, the world has no room for your hate and bias. #CurtSchilling #LoveNotHate”; “Thank you #ESPN. #HitTheRoadJack #CurtSchilling #NoPlaceForHate”

(b) Mention of Schilling’s personal politics and/or business failure

“A criminal who stole 75 million from the people of Rhode Island. #CurtSchilling should be in prison! A bigoted man & Criminal”; “Don't worry Curt! You can take you and your dumb, bloody sock to Fox News & be their sports analyst. Good riddance! #CurtSchilling #bigot”

(c) Supporters of the firing hectored comments by supporters of Schilling about his free speech being curtailed

“Reminder- free speech does not apply to your job. #CurtSchilling was not jailed for what he said, his 1st amendment right was not violated”; “When your employer fires you for something you said on Facebook, that's not a violation of free speech. Obviously. #CurtSchilling.”

(d) The celebration of the events of April 20, because in addition to the ESPN decision, it was announced by the U.S. Department of the Treasury that African-American heroine Harriet Tubman would replace Andrew Jackson on the $20 bill

“Between #HarrietTubman and #CurtSchilling, a lot of people who deserve to be unhappy are unhappy today”

The tweets supporting the firing reflected lukewarm support for ESPN itself (“I criticize you a lot @espn, but well done on firing @gehrig38. Bigotry has no place in our media or our society. #CurtSchilling #bigot”). The tweets also mentioned common liberal talking points such as the conservative bias of media company Fox News, the candidacy of Donald Trump, and made dozens of jokes at Schilling’s expense.
Interestingly, tweets with the hashtag canvassed other topical subjects, some with an obvious partisan divide, and others that were merely happening at the same time. They include the death of the musician Prince, the suspension levied on National Hockey League player Andrew Shaw for being caught on camera using a homophobic epithet, Presidential politics, and the fact that the firing occurred April 20—the day that marijuana enthusiasts celebrate an unofficial holiday.

**Public Sphere-like Dialogue**

The collective body of #CurtSchilling tweets was analyzed against the four foundational principles of the public sphere. Fuchs (2014a) suggests they are: (a) a space for the formation of public opinion; (b) with access for all citizens; (c) unrestricted conference through freedom of assembly, freedom of expression and publication of opinions about matters of general interest; and (d) debate over the general rules governing relations. It is clear there is open and unfettered access to the discussion, and unrestricted conference of opinions. Among users of the hashtag, no pressure to withhold sentiment seemed to be present; the diversity of views was on full display in the hashtag.

The second two principles of the public sphere are less present in the discourse. The generation of informed public opinion could be seen as partially achieved, provided the dialogue on both “sides” of the debate received full airing. That highlights the key shortcoming of the collection of hashtagged tweets in meeting public sphere ideals—there is a relative shortage of direct engagement between participants in the discussion. Less than one tweet in 100 was sent directly to another user via an “@” reply. Proponents of the benefit of interconnected networks say the power of instantaneous worldwide interaction is a key component of the pro-democratic power of social media networks (Castells, 2012; Shirky, 2008). Critics of the value of social
media interaction indicate that one of the key problems of Internet-created communities is group polarization, whereby individuals predominantly seek out opinions that reinforce their previously held views (Sunstein, 2007). The interface of Twitter hashtags displaying tweets in reverse-chronological fashion without regard to content may allay some concerns about not being exposed to contrary views. However, it does not suggest a rationale for the reluctance of participants to engage in debate. Unpacking this finding is an important part of understanding why this discussion did not succeed in realizing a public sphere in its entirety.

**Interview Transcripts**

After a large number of purposive solicitations of subjects who had used the hashtag #CurtSchilling in the proscribed data collection window, a sample of useable responses was collected for analysis \( n = 27 \). To the eight questions posed, respondents provided an average of 200 words, total—consistent with methodology that online qualitative survey responses are more brief (Mann & Stewart, 2000). However, there was a wide variance among the respondents, with some typing only a few words, total, and other respondents answering each question with 100 word responses or more.

Based on an understanding of public sphere theory, and the analysis of the dataset of #CurtSchilling tweets, the interview transcripts were predicted to reveal: (a) diversity of opinions; (b) nothing restricting the airing of views; (c) a clear sense that there is a wide range of views present in the discussion; and (d) a reluctance to engage with others, based on the lack of direct “@” reply tweets. The analysis was centered on determining how users felt their participation in hashtags of this nature is contributing to the type of discourse that models the best of the public sphere.

**Benefits for Participants**
Among the hashtag users interviewed for this study, there was a clear belief that utilizing the affordance on Twitter offers benefits in different areas:

(a) Users felt that hashtags served an organizational purpose. It was a way to simply cut through the mass of information to keep the conversation on topic for those following the Curt Schilling story: “Hashtags keep the discussion focused to those who want to engage”

(b) Participants believe Twitter and the hashtag give a voice to everyone who chooses to take part. Supporting a key requirement of the creation of public spheres, the ability to join, or not join, the conversation was valued: “I, by myself, carry little weight in these national debates, but felt like I could at least join other, less dominate voices in countering his stances”; “They connect me to a huge crowd of people with similar or different opinions”

(c) Just as scholars have explored hashtags for their use in multiple ways by the Twitter audience—for organization, for identity, for editorial comment—#CurtSchilling users noted that there is more than one use for the affordance: “One is pure sarcasm, the other is signpost. If I write something about the Cardinals I want to attract other Cardinals fans”

(d) Users recognize the arena that hashtags can provide. On a charged issue like the Schilling firing, participants know that there is not unanimity of opinion. There is an awareness, frequently a dismissal, of opinions contrary to users. At the same time, Twitter provides a space for online citizens to assess the landscape of the debate: “Not only voice an opinion but open it up to people who don’t follow me. It allows for a broad network to see or join in when a specific subject is at hand”; “The use of
hashtags is a way to connect with other people that have an opinion on the same topic.”

This final benefit also reflects one of the key weaknesses of the Twitter platform, according to #CurtSchilling users. Participants can find out what the contrary opinions are, even learn who is expressing them. But there was a real reluctance among the interview subjects to actually debate the issue through Twitter.

Limitations of Discussion

Rather than engaging in discussions with those expressing contrary views, the full extent of many participants’ interaction was reading other tweets on the topic. There was a belief among many respondents that Twitter was not the forum to have a discussion about a heated topic. “Rarely do I engage with others, for opinions are very personal.”

Respondents saw value in Twitter hashtags, ranging from finding out about a topic quickly, to the real-time narrative that can be organized and disseminated, to providing an opportunity to toss barbs at those who disagree. Most participants, however, did not view the exchanges as a true, multidirectional public forum. “The idea of any interchange of different perspectives is rare...usually I find it as a reinforcing element of my beliefs.” This would represent the key failure of these discussions to realize the Habermasian ideal. Two of the key shortcomings of the medium mentioned by respondents are two of the three inhibitors to the creation of public spheres identified in the conceptual model being tested—limitations of the medium, and online disinhibition: “Superficial subjects flourish while important ones die or are suppressed”; “It can be a double edge sword. I try and keep it light, but sometimes I call people out on hurtful, hate speech when it concerns my community”; and “Twitter mainly serves as a cesspool of awfulness in general.”
Follow Up

There was near universal acknowledgment among survey respondents that they had the tools to engage in discussion and debate with other hashtag users, but had chosen not to. Therefore, respondents who had provided email addresses along with their survey responses. Two additional questions were asked, to further amplify the extreme reluctance of hashtag users to engage with others:

1. Why did you largely choose not to engage with other Twitter users in the discussion about Curt Schilling’s firing by ESPN?

2. Is there any way Twitter could be altered, or any adjustment in the way participants use the social media site, that would make you more likely to converse with other users of the #CurtSchilling hashtag?

This was an opportunity to more deeply understand the themes that emerged through the collective body of tweets and, especially, the initial analysis of the interview transcripts. The tweets reflected polarization between relatively equal-sized groups on the topic of Schilling’s firing. Participants were eager to express views that also frequently touched on other issues relevant in the current political discourse, as well as offer commentary on other topical issues.

In their responses to the questionnaire, study participants found benefits such as information synthesis, organization of opinions, and assessment of the range of opinions on the topic. However, most respondents indicated that they rarely used Twitter with the intention of engaging in conversation. The follow-up questions were an attempt to better ascertain why.

Some participants believe the construct of Twitter as a social media itself has the effect of discouraging debate: “I believe that Facebook is set up for more of a forum for discussion. Twitter seems to be more of a way to express an in the moment thought,” adding this isn’t a
criticism of Twitter. “One Facebook is enough in my opinion.” Another respondent suggested Twitter is home for quick news and opinion, or pithy remarks. “It's the equivalent of passing gossip in the school halls.”

Another common refrain of the responses to the follow-up inquiries was that the tone of Twitter discourse is a disincentive to participation. “I largely choose not to engage with others as it usually is only the comments I disagree with that would cause enhancement and I am not a keyboard warrior so usually ignore them.” The individual added that they might use a Twitter “dislike” button, but worried they would “come off as a troll.” Other respondents declined to partake in debate because of the “echo chamber” nature of comments in the hashtag-identified groups. “Engaging someone else, someone that supported Curt, the conversation would eventually turn into a debate about politics, the notion of what PC is, etc. It would become a longer discussion that wouldn't be conducive on Twitter.”

These findings are interesting in they are dichotomous in nature. Respondents affirmed in their questionnaire responses and especially when responding to the follow-up questions that they draw real value from topic-specific hashtag conversations on Twitter. These same individuals express extreme reluctance to engage or debate these issues with strangers on Twitter. So despite valuing the array of opinions they can find through the hashtag, it does not motivate them to offer their own views. This would seemingly run counter to the Habermasian principles of open access, deliberative democracy. But when considered another way, it is not completely contradictory. Just as retweeting or liking others’ tweets can be its own personification of public sphere-like activity, the decision not to engage with someone recognized as a foe can be considered actions within the sphere. The users of a particular hashtag
can constitute a form of arena—an audience for the discussion, even if individual members choose not to add their own voice.

**Discussion**

This study involved a two-pronged analysis of a hashtag that emerged on Twitter following a sport story that intersected with broader societal issues. The firing of Curt Schilling for sharing a meme seen as transphobic led to his dismissal by ESPN, and an instantaneous discussion through use of the #CurtSchilling hashtag on the microblogging site Twitter. The adoption of Twitter as a social medium of choice by sport fans (Burns, 2014) is clear with the abundance of tweets connected to any major sport event or controversy (MacLeod, 2014). In a little over a day following the termination of Schilling by ESPN, nearly 6,000 tweets were sent containing the #CurtSchilling hashtag.

Numerous studies have examined Twitter hashtags and their connection to sport, through the formation of identity by event followers (Smith & Smith, 2012), expressions of fanship (Blaszka et al., 2012) and the gratifications fans of sport seek through their use (Gibbs et al., 2014). Hashtag deployment has been studied through a marketing lens (Pegoraro et al., Witkemper et al., 2012), as an aide to sponsorship (Delia & Armstrong, 2015; Jensen et al., 2015), and for their use in protest and activism (Frederick et al., 2015; Hull, 2014; O’Hallarn & Shapiro, 2014). This study was an attempt to further explain online interactions connected to sport through the use of both content analysis and participant surveys, analyzing discussion about Curt Schilling’s firing through the lens of the public sphere.

Since the spread and popularity of social media, its advocates have hailed its potential to enact groundbreaking change as a worldwide, interconnected network where everyone can have a voice. Castells (2012) wrote of the importance of social networks in bringing social change
during the Arab Spring, and periods of economic unrest in Spain and Iceland. “They deliberated on Facebook, coordinated through Twitter, and used blogs extensively to convey their opinion and engage in debates” (p. 57). Critical scholarship about social media has cast doubt, or at least stated limitations, on its transformative ability, suggesting the online nature of the interactions robs them of critical dimension (boyd, 2010) and has a polarizing effect, rather than being pro-democratic (Dean, 2003). The ubiquity of social media use, and its importance as a facet of communications for individuals and organizations demands that attempts continue to assess the true impact of these online interactions.

This study examined the Curt Schilling hashtag discussions through the critical framework of the Habermasian public sphere. It involved analyzing a dataset of more than 5,000 tweets, then surveying users of the hashtag during the proscribed time interval, to assess how the conversation measures up to the regulative ideal of the public sphere. Previous examinations of Twitter have found it fall short of the rational-critical ideal of public sphere discourse (Fuchs, 2014a), including in connection to sport (Yanity & Pegoraro, 2015).

This study relied on a framework to suggest that consumption and broadcasting of opinions of sport through Twitter hashtags can provide the preconditions for the creation of public spheres. The model indicates four amplifiers—the passion for sport in society, its simultaneous consumption model, the ability for Twitter hashtags to create topic-specific town halls, and the social media site’s reverse-chronological interface—can align to foment the creation of public sphere activity (O’Hallarn, 2015). In addition to assessing whether the #CurtSchilling discussion reflected the pillars of the public sphere, an effort was made to ascertain what role each construct of the model played in the nature of the interactions.
Previous examinations of Twitter hashtags connected to sport have largely lacked the dimension of the participants themselves. Through surveys of users of the hashtag, this study was able to do far more than assess through content analysis how closely the discussion was coming to realizing the ideals of the Habermasian sphere. The responses to the eight survey questions also allowed for a far deeper understanding of what motivates participants to engage through a hashtag, and how they feel about these public-sphere ideals—whether they are being met; whether they even want them to be met.

Analysis of the #CurtSchilling tweets lined up with previous research about hashtags and the public sphere. It found parallel communities of supporters of Curt Schilling and proponents of the firing making strong statements of fact and opinion—but rarely to each other. Hashtagged tweets with direct engagement between users comprised a tiny fraction of the total number that were sent in the 29 hours after Schilling’s April 20 firing. However, the siloed nature of the interactions did not prevent rich discussion from occurring within the #CurtSchilling hashtag. As the conceptual model suggests, the real-time nature of the news of Curt Schilling’s firing prompted a flood of commentary on the hashtag. Users shared the news through links and commentary, frequently retweeting other material as the discussion broadened to incorporate many players. Curt Schilling is far from the first public figure to express an opinion described by some observers (including his employer) as insensitive and homophobic or transphobic. However, reflective of the nature of sport’s outsized role in society, his firing attracted a flood of opinions and commentary from Twitter users. As the model suggests, sport’s connective power helped encourage participation in the discussion.

The reverse-chronological interface and instant community created by hashtags also encouraged sphere-like discussions. Users’ timelines would likely have been filled with Curt
Schilling tweets whether they were following the hashtag or not in the moments after 7 p.m. Eastern on April 20 (when the firing was announced). News moves fast, however, and within a few hours the Twitter timelines of sport fans would have migrated to discussion about the National Basketball Association or National Hockey League playoffs, or the looming National Football League draft. This is where the hashtag becomes useful as a filtering device. Searching the #CurtSchilling hashtag allowed users to observe or participate in a lively discussion that continued in that topic-specific community. The logged tweets that were analyzed for this study demonstrate that hundreds of Twitter users deployed the #CurtSchilling hashtag throughout the night of the firing. The reverse-chronological cataloguing of discussion became, as Murthy (2013) suggests, a collective corpus with a form of narrative.

Previous examinations of Twitter engagement, including the one study of Twitter’s potential as a public sphere (Yanity & Pegoraro, 2015) have lacked the critical dimension of the participants themselves. This is the real value in these findings. The debate participants interviewed for this study readily admit that, while they have the tools to engage in fulsome discussions on this or any topic, they are disinclined to do so. They cited aggressive behavior by Twitter users, the difficulty of debate because of the brevity of the posts, and a desire to use the platform passively, to “see what everyone else is saying.” These responses speak to two of the inhibitors to public sphere-like debate identified in the theoretical model being tested—the Online Disinhibition Effect, and limitations of the medium. The tendency for individuals to express outsized opinions in a manner not conducive to rational-critical debate prevents entry into the forums, and the inability to do more than type 140 characters at a time, or simply pass “gossip in the school halls.”
While not reaching an idealized public sphere—something Habermas (2962 [1989]) has always maintained was an aspirational, rather than realistic, goal—the words of the respondents suggest durable benefit is being generated through participation in the hashtag. By using hashtags as “sarcasm and signpost,” and by “joining other voices,” Twitter users feel empowered that they are part of a broader conversation. As one respondent noted: “It gives purpose to my tweet rather than it just being sent into the ether that is the internet.” The power of hashtags comes not through any one interaction (or lack of interaction). As these respondents suggest, there is value for participants to be part of a broader conversation, even a siloed one. And for sport organizers or advocates, seeking to use hashtags to promote or engage, the message this—people are listening. Even if they don’t respond directly.

**Limitations and Suggestions for Further Research**

Like all case studies, this project is limited in scope and its findings cannot be assumed to be generalizable across different online phenomena. Twitter itself is a social media site used by fewer than 15% of the North American population. Users of #CurtSchilling are likely to be those most predisposed to having strong opinions about an issue involving “America’s pastime” and the “worldwide leader” in sport broadcasting. While sociological in nature, this study is not intended to target a broad swath of society. Even among those who used the #CurtSchilling hashtag, the willingness to complete a qualitative survey would in all likelihood skew toward those most enthusiastic about the issue, again affecting the representativeness of the sample.

The process of unpacking motivations for hashtag participation is worthwhile, however, because of their popularity on Twitter and other platforms (Castillo, 2013). And this study raises many more questions than it answers. Is it possible to unlock the key to direct engagement between Twitter users, to “amplify our capabilities, as we modify our tools to improve that
amplification” (Shirky, 2008, p. 187)? If hashtag users aren’t inclined to engage in online debate with others, what are they more likely to do? How can the value found in using hashtags be translated into actions that benefit causes and organizations? The answers to these questions are not known. However, the degree of engagement that Curt Schilling hashtag users felt about the discussion, even if they did little to add their own voice, is an indication that a marketplace of ideas exists through Twitter hashtags, and is under-examined. More studies that make an effort to turn the lens and examine the benefit of online participation would be a valuable contribution to sport and social media scholarship.
CHAPTER 4

Sport, Twitter Hashtags and the Public Sphere: Exploring Social Capital Generation through Different Hashtag Types

If German sociologist Jürgen Habermas was a sport celebrity, he would be a figure like retired English soccer star David Beckham. Just as Beckham has been subject to outsized publicity and unsparing criticism throughout and after his playing career (Turner, 2015), the scholarship of Habermas has been simultaneously widely cited, and highly critiqued. Habermas envisioned his conceptual creation, the public sphere, as an accessible space where participants can gather, in person or virtually, to argue rationally and critically about issues of societal import (Habermas, 1962 [1989]). According to public sphere theory, these discussions, governed by rules of respect and arguments winning favor through their own virtues, can yield a form of deliberative discourse seen as pro-democratic (Habermas, 1962 [1989]).

Since the translation of “The Structural Transformation of the Public Sphere: an Inquiry into a Category of Bourgeois Society” into English in 1989 (Habermas, 1962 [1989]) critical scholarship has attacked the public sphere as male-dominated, exclusionary, and overly idealistic (Eley, 1992; Fraser, 1992; Keane, 1995). Still, the concept has been widely studied across the social sciences (Benkler, 2006; Girgorasi, 2015; Hoskins, 2013) including a modest body of sport research (Brownell, 2012; Galily, Tamir, & Muchtar, 2012; Yanity & Pegoraro, 2015). However, even scholarship that takes a positive view of the public sphere as a practical concept is quick to point out the limitations for such a construct to exist in society. This is not surprising. Habermas himself envisioned the public sphere as a regulative ideal for society, not a threshold to be reached (Habermas, 1962 [1989]).
Yet, in order for the Habermasian ideal to move beyond its lofty goals into providing durable societal benefit, study of its rational-critical debate must provide analysis of outcome. What does a public sphere—or discussions akin to a public sphere—accomplish? To examine that, it is worth considering another critical theory deployed across the social sciences in the past 40 years—social capital. Social capital has evolved from reflecting more commercial concerns in the aftermath of the Second World War (Fine, 2010) to encompass collective societal benefits ranging from cohesive ties, to social trust, to the generation of informed public opinion (Bourdieu, 2011; Granovetter, 1973; Putnam, 2000). Curiously, despite an apparent intuitive link that social capital could be considered a potential byproduct of discussion within the public sphere, there is limited scholarship connecting the theories. By analyzing the small body of linkages in the literature (Dahlgren, 2006; Rasmussen, 2014), this study suggests that if discussion is found to mimic the pillars of the public sphere, an outcome or byproduct could be the generation of social capital.

As the public sphere has been transformed by emerging technologies such as the Internet, social capital is seen by some as a way to explain its evolution (Friedland, Hove, & Rojas, 2006). The advent and spread of connected Internet technologies in the 1990s elicited a new round of Habermasian scholarship, with critical theorists such as Papacharissi (2002) suggesting the Internet and its connective power facilitates a public space that “could provide a rejuvenation of a culturally drained public sphere” (p. 22). Some scholars have hailed the power that interconnected online interactions possess (Benkler, 2006; Castells, 2012; Shirky, 2008) while others are skeptical of the potential for public sphere-like outcomes through these new networks (Bimber, 2003; Dean, 2005; Morozov, 2010). A measure of social capital generation through interactions that mimic the principles of the Habermasian public sphere could demonstrate
measurable societal value being generated online. One place to look for this is at the nexus of sport and the social media site Twitter, particularly through the affordance known as the hashtag.

The popularity of the social media site Twitter among sport fans is abundantly clear (Burns, 2014). From live-streaming National Football League (NFL) games (Soshnick, Frier, & Moritz, 2016), to the innovative way National Basketball Association (NBA) teams have insinuated themselves into the social media conversation (Neely-Cohen, 2016), to connecting sport fans around the world (Melanson, 2016), the instantaneous, worldwide microblog has an avid sport fan following. According to Navigate Research, 67% of sport fans are more likely to use Twitter to enhance their live or televised viewing experience compared to non-sport fans (DiMoro, 2015). The acceleration of sport media culture has swept up high-profile athletes, teams, major events and the media (Frederick, Lim, Clavio, & Walsh, 2012; Gibbs, O’Reilly, & Brunette; Hutchins, 2011; Sanderson, 2014).

If sport and Twitter move in unison, the hashtag could be considered the hinge. Suggested by a user in Twitter’s early days (“The short and,” 2010), hashtags are so popular that half of mobile Twitter users deploy them (Zak, 2013), and they have been adopted by other social media platforms (Castillo, 2013). The popularity of the hashtag could be attributed to its nimbleness. Twitter users organize (Khondker, 2011), cluster (Small, 2013; Smith & Smith), advocate (Hull, 2014), make jokes (Rentschler, 2015), and market (Burton, Dadich, & Soboleva, 2013)—in fact hashtags can help amplify the full range of online interactions.

O’Hallarn (2015) suggested a model of sphere-like activity empowered by sport-themed hashtags, with the byproduct of these interactions being social capital. Figure 1 provides a concept map illustrating how the subject matter (sport) and the medium (Twitter hashtags) can work in tandem to create public sphere-like outcomes. Four suggested “amplifiers” can aid the
process: (a) our passion about sport itself; (b) the fact sport is consumed simultaneously around the world; (c) the way that Twitter hashtags can create issue-specific virtual town halls; and (d) Twitter’s unique architecture, which displays the most recent tweet in users’ feeds, prompting a running, real-time conversation. Barriers do exist to the creation of spheres especially the tendency for conversations on the Internet to result in what Suler (2004) has termed the *Online Disinhibition Effect*. Other barriers to the creation of public sphere-like conditions include the 140-character limit of communication on Twitter, and the asymmetrical outcome of Twitter conversations—whereby individuals with a higher profile are more likely to have their voices heard. If public sphere-like conditions can be realized, the model suggests byproducts can be created through the interactions, notably social capital (O’Hallarn, 2015).

However, this construct is in need of empirical evidence, to support the meaureable value—in the form of social capital—being created through the interactions. Sport scholarship has examined hashtag usage as a tool for agenda-setting (Frederick, Burch, & Blaszka, 2015) and its use by fans in a tribal nature (Blaszka, Burch, Frederick, Clavio, & Walsh, 2012; Smith & Smith, 2012). Activist movements have utilized hashtags as counterculture protest (O’Hallarn & Shapiro, 2014; Pegoraro, Burch, Frederick, & Vincent, 2015) as eagerly as event organizers have used them for sponsorship and promotion (Delia & Amrstrong, 2015; Jensen, Limbu, & Spong, 2015). The current study measured engagement of users through hashtags between the three hashtag types in three broad categories of social capital engagement through social media that are frequently assessed and measured: (a) the exchange of information; (b) the creation of an online community; and (c) the motivation to take collective action, inspired by Putnam’s (2000) conceptualization of the bonding and bridging social capital that can develop online.
The current study relied on the creation of a modified instrument to test social capital generation from a population of users of three different Twitter hashtag types—one from the use of Twitter hashtags in connection to a live event, and two hashtags created through issues arising organically in sport that connect to broader societal concerns. Large analyses of Twitter usage patterns (Giglietto & Selva, 2014; Zappavigna, 2012) demonstrate the popularity of the platform for activist uses, both outside (Carney, 2016; Gleason, 2013) and inside (Hull, 2014) of sport. Critics say using the pound sign attached to words in tweets is merely symbolic; its impact is negligible, serving as proxy for real action on a cause (Morozov, 2010). In an analysis of WikiLeaks-themed hashtags, Fuchs (2014a) argued hashtags were merely punctuation on 140-character soliloquys, akin to shaking a fist. Dewey (2014) countered critics’ claim that hashtag awareness does nothing, arguing that hashtags provide a voice, through strength in numbers, to actors frequently shut out of mainstream media channels.

Determining whether hashtags with an activist bent have a larger impact on participants’ perception of engagement and citizenship could help explain how social capital manifests in different types of sport and Twitter conversations. This in turn could help ascribe tangible, measurable benefit to interactions within a public sphere-like environment. Within sport and social media research, there is also a recognized need for research to rely on more than content analysis to better explain online phenomena (Hardin, 2014), to engage with research in nonsporting sociocultural contexts (Hutchins, 2014) and utilize different, more sophisticated, critical frameworks to examine the popular online activity through an academic lens (Filo, Lock, & Karg, 2015). This study is a response to those entreaties.

Assessing levels of social capital generation through sport-themed hashtags could be helpful to sport managers using hashtags for marketing purposes, for public officials gauging
sentiment on an issue that is sparking online conversations, and simply to aid in the further explanation of these popular, relatively new online affordances. This study also represents the first known attempt to assess the generation of social capital through the use of Twitter hashtags, in or outside of sport.

Guided by literature about the public sphere and social capital generation through online activity, this study proposes the following research questions:

**RQ1** – How do levels of social capital generation compare between Twitter hashtags used in connection with a calendar event and hashtags created in response to an issue of societal concern?

**RQ2** – Among hashtags created by sport fans on Twitter in response to an issue, what difference exists in social capital generation between hashtags directly connected to on-field activity, and those that use sport to discuss broader societal concerns?

**Review of Literature**

**The Public Sphere and Social Capital**

The Habermasian public sphere is defined succinctly by Fuchs (2014a) as: (a) A space for the formation of public opinion; (b) with access for all citizens; (c) unrestricted conference through freedom of assembly, freedom of expression and publication of opinions about matters of general interest; and (d) debate over the general rules governing relations. Critical scholarship has examined the theory, for its strengths in describing civil society throughout Western European history, and for its weaknesses. Fraser (1992) notes that “Habermas’s idea of the public sphere is indispensable to critical social theory and democratic political practice” (p. 111), but attacks its construction as a hegemonic, male-dominated version of what constitutes the public. Other critics point out its exclusions of ethnic minority groups, gays, and working-class
populations (Eley, 1992; Mouffe, 1999; Negt & Kluge, 1993). Habermas himself lamented that because of flaws in societal construction such as “secret policies of interest groups,” (Habermas, 1992, p. 404), his regulative ideal of a free and openly accessible space for deliberative democracy has not been realized. Habermas quoted the Karl Marx maxim that public opinion “hid before itself its own true character as a mask of bourgeois class interests” (Habermas, 1962 [1989], p. 124) in creating a barrier to truly accessible, unfettered, rational-critical discourse. Habermas did maintain that the spirit of a bona fide public sphere can be created from inside the system, through the maintenance of a “democratic dam” to empower citizens’ interconnected communication (Habermas, 1992, p. 444).

The advent and spread of connected Internet technologies in the 1990s elicited a new round of Habermasian scholarship. It led Papacharissi (2002) to ponder whether interconnected online technologies could create a virtual public sphere. Criticism followed consideration of Habermasian theory into cyberspace. Some scholars wondered how much effect networked communication was truly having on democracy (Bimber, 2003), or whether it was simply increasing the frequency with which like-minded individuals shared complementary views online (Dean, 2005; Sunstein, 2007). Others characterized the virtual public sphere more optimistically. Benkler (2006) suggested that the Internet and emerging social networks offered “distinctive improvements in the structure of the public sphere over mass media” (p. 177). The advent of the social media era, with twin giants Facebook and Twitter achieving worldwide popularity, has compounded public sphere scholarship. Proponents of the power of social networks suggested new online tools empowered our inherent desire as a society to work collectively to take action (Shirky, 2008; Castells, 2012). Rainie and Wellman (2012) suggested the sites help create a new “social operating system” called networked individualism. “Societies—like computer systems—
have networked structures that provide opportunities and constraints, rules and procedures” (Rainie & Wellman, 2012, p. 7). Fuchs has examined social media (2014b), and Twitter specifically (2014a), for its potential to create Habermasian public spheres. He suggests it is strongly threatened by factors such as corporate ownership and government surveillance (Fuchs, 2014b), and the asymmetrical visibility of tweets due to stratification by popularity (Fuchs, 2014a). Fuchs argued the power of platform trumps the strength of ideas on social media, countering a key pillar of the public sphere.

Criticisms aside, the Habermasian public sphere remains a popular critical framework in social media research, with studies published in fields such as diverse as health care (Grogan, 2015), emerging democracies (Hoskins, 2013), and political protest (Girgorasi, 2015). In sport, a survey of readers of Israel’s most popular sports blog found evidence of open and accessible social community, but one with a tendency for inflamed opinions (Galily, Tamir, & Muchtar, 2012). A study of the run-up to the 2008 Beijing Olympics found a transnational public sphere created by human rights activists was thwarted in its effort to pressure China by that nation’s cozy relationship with the International Olympic Committee (Brownell, 2012). Yanity and Pegoraro (2015) conducted the first known study of the intersection of Twitter, sport and the public sphere, examining a sample of tweets about Michael Sam, the college football star who revealed he was gay a few months before the 2014 National Football League draft. They found Twitter provided a platform for a true public sphere, but does not establish nor maintain one through the actions of its users. The common denominator of almost all of these studies is that researchers found evidence of sphere-like activity, but not a true public sphere being created. This is not surprising. Habermas himself conceptualized the public sphere as an aspirational goal, not a how-to guide (Habermas, 1962 [1989]).
The transformation in the public sphere by emerging technologies has included a study suggesting social capital is a way to explain its evolution (Friedland, Hove, & Rojas, 2006), part of a “new model for understanding the flow of communication in highly complex, interlinked environments” (p.24). This relationship has not been broadly explored, however. Few scholars have attempted to make concrete links between social capital and the public sphere, despite an intuitive belief that the former could be a byproduct of the latter.

Defined by Field (2008) as an attempt to assess the intangible resources of community, shared values and trust upon which we draw in daily life, social capital has been inserted in social science scholarship in many contexts, with different thrusts by leading scholars. Granovetter’s (1973) work on weak ties suggests collective goodwill can be generated through citizens seeking progress in some fashion, which resembles the characterization of social networks by proponents more recently. Bourdieu (1986) suggests four forms of capital—economic, cultural, symbolic, and social—represent social power hierarchies. He believes each individual occupies part of a social space, and utilizes their own reservoir of economic, cultural, symbolic, and social capital. Putnam, most recognized for bringing social capital into mainstream study, sees the diminishment of social capital as a threat to civil society, suggesting connected computer technologies, if used to break down barriers, can be an antidote to increasing isolation in society (Putnam, 2000).

The relationship between social capital and an inclusive democracy, or Habermas’ civil society, has long been studied, but Paxton (2002) suggests there is little quantitative notion to support the idea that these discussions are pro-democratic. Case studies of the public sphere are almost always descriptive or theoretical in nature, and therefore provide little empirical evidence of this relationship (Kubik, 1998). However, Dahlgren (2006) argues there is a learning by doing
element to the civic engagement that can be created within networks, suggesting social interaction, rhetoric and the definition of issues can emerge through public sphere participation.

The examination of public engagement through social media borrows from both social capital and the public sphere in attempting to understand the democratic implications of user-generated social media content (Goode, 2009). Halpern and Gibbs (2013) examined citizen communication through the official White House Facebook and YouTube channels, analyzing more than 7,000 messages to assess the impact of online communication on the principle of deliberation, vital to both the public sphere and social capital. Carlisle and Patton (2013) considered whether Facebook is changing how society enables citizen engagement. They found in an analysis of the 2008 Presidential election that the size and passion of the networks of users does not correlate with greater social capital development.

Rasmussen (2014) makes a comprehensive attempt to link the public sphere and social capital, arguing that it is more than a “space” produced by communication about public matters (p. 1315). He suggests this social engagement can be analyzed through the lens of social capital. Widening the potential scope of the public sphere dramatically can result in the loss of rational-critical debate of arguments on their own merits. Habermas terms this “decentring of unedited inputs,” noting that there is no online town square where everyone can gather to exchange opinions in a respectful fashion (Habermas, 2006, p. 417). Because of the division of opinion of whether unfettered access to social networks actually can uphold public sphere principles or generate social capital, an objective measure of social capital is a way to arbitrate that divide.

**Measuring Social Capital**

A common critique of social capital as a critical framework is that it is difficult to measure. From its early adoption, attempts have been made to assess the generation of social
capital quantitatively, with uneven results (Fine, 2010). The lack of a unified working definition of social capital, combined with its multidisciplinary appeal, has led to many different interpretations of the concept, each with its own measurement metric (Grootaert & Van Bastelaer, 2002). Measurement scales have been developed to reflect the work of influential social capital scholars such as Granovetter, Bourdieu and Coleman, but the field of social capital measurement really accelerated with the publication of *Bowling Alone*, Putnam’s analysis of the decline of social capital in modern society and his hope for its renewal (Putnam, 2000). In his interpretation of social capital, Putnam distinguished two types: bonding and bridging capital. Bonding involves socializing with those who are like you, while bridging involves crossing boundaries to form associations. This, Putnam suggested, is the key to engender social trust (Putnam, 2000). Putnam’s popularity coincided with the spread of online connectedness, so scholars give more weight to bridging capital because it requires trust and reciprocity to advance pro-democratic goals (Lambert, 2015).

As is prevalent in scale development of evolving phenomena, each new instrument has incorporated elements of previous efforts at developing, validating and deploying social capital measures. Putnam himself suggested the best method to measure social capital was to “triangulate among different sources of evidence, any one of which is imperfect” (Putnam, 2001, p. 3). Williams (2006) created a widely cited measure that attempted to marry social capital and emerging Internet technologies, arguing that the frameworks being utilized to compose social capital scales did not adequately reflect these new technological affordances. Scholars adapting Williams’ scales for social capital measurement have been mindful of this evolution, and their instruments have reflected unique aspects to the new technology (Ellison, Gray, Lampe, & Fiore, 2014; Hofer & Aubert, 2013). The measurement of social capital also has evolved into assessing
different constructs, or aspects, of the theory. Multi-dimensional measures incorporating social capital attributes such as collective agency, sense of community, and online communication are commonplace (Lochner, Kawachi, & Kennedy, 1999). In fact, there is somewhat of a consensus that has aligned with the preference for a multi-dimensional social capital measure of online activity (Sum, Mathews, Pourghasem, & Hughes, 2008).

**Social Capital and Sport**

Social capital’s myriad interpretations in academic literature include its broad use as a critical framework in studies of sport. The creation of voluntary associations, commonplace in sport, is seen as helping the process of social capital generation (Seippel, 2006). Taking part in recreational sport programs can result in its creation (Walseth, 2008), and proponents of the concept—as well as policymakers and sport administrators—suggest a range of positive outcomes for participants, from social mobility (Spaaji, 2009), to population health (Folland, 2007), to the construction of community (Coalter, 2007). Misener and Mason (2006) argue that hosting sporting events has the potential to create community networks, which in turn can generate social capital. However, Nicholson and Hoye (2008) note that despite the concept being enthusiastically endorsed, and intuitively present, “these propositions and related policy decisions are often not supported by a significant body of research” (p. 2). Therefore, attempts have been made to measure social capital generation through sport.

Onyx and Bullen (2000) included sport in an analysis of five Australian communities surveyed for social capital among its population, finding some evidence of that it can be created. Preuss (2007) used a social capital framework to create an instrument to measure the host city legacy from mega-events such as the Olympics, finding there is a legacy through tourism, if not direct investment in the event. Recent investigations that involve social capital demonstrate the
difficulty of establishing the existence of social capital empirically. A study of amateur tennis players found no evidence that bonding or bridging social capital was generated through association with fellow players (Legg, Wells, & Newland, 2016). A quasi-experimental study using images of famous athletes found that social capital played a role in forgiving fictitious transgressions, but with limited effect on overall impressions of the athlete (Marshall & Billings, 2016). Phua (2012) examined social networking sites for their ability to create and maintain social capital, suggesting bridging capital was harder to create online. Regardless of the success at measuring tangible outcomes of sport in generating social capital, there is widespread agreement that sport “does have substantial social value” (Skinner, Zakus, & Cowell, 2008). This supports the need for more measurement metrics to be developed to assess its potential generation, particularly in social media, which continues to become more prevalent and pervasive in society. Twitter’s evolution as a social media site connected to events happening in real time could lead to the generation of social capital among participants in discussions on a particular topic. This process is aided greatly through hashtags.

**Twitter Hashtags and Sport**

In an essay tracing the history of hashtags, technology writer Jose Castillo (2013) suggested context is the most important part of their utility. “The hashtag has scratched the surface on providing two-way, contextually relevant conversations. I can find out exactly how many #DaleJr fans are watching the next NASCAR race and have an instant communication channel open with them,” Castillo (2013, para. 6) wrote. Instant communities are formed on Twitter through the use of hashtags, making them a clickable link into a topic-specific conversation. Organizations such as the American Red Cross and events such as the Super Bowl rely on “official” hashtags for Twitter users to interact in an online community. But the simple
utility of the Twitter tool has also enabled users to rally around a collective identity (Sharma, 2013), organize politically (Small, 2011), and create impromptu protests about causes of the day (Meuleman & Boushel, 2014; Hull, 2014).

The different uses of hashtags have prompted a variety of academic studies. Beginning with content analysis of tweets as expressions of fandom and sporting identity (Blaszka et al., 2012; Smith & Smith, 2012), the studies have broadened to analyze how users seek gratifications through hashtag use connected to teams (Gibbs et al., 2014), and how they offer opportunity for marketing and nation-building (Pegoraro et al., 2014). The ease with which hashtags create communities makes it an advocacy vehicle of choice in sport. Hull (2014) noted the effectiveness of the approach by users of #Fight4UNCWSwimandDive at preventing the cancellation of the swimming and diving program at the University of North Carolina-Wilmington. Hashtags can backfire as well. #CheersToSochi was meant as a promotional hashtag by fast food giant McDonalds. Instead, the hashtag was “hijacked” by activists seeking to spotlight Russia’s poor record of LBGTQ rights (Pegoraro et al. 2015). The hashtag #NBCFail, popularized during the 2012 London Olympics, reappears during every large event broadcast by the U.S. network, most recently the 2016 Summer Olympics in Rio de Janeiro. That hashtag has been the subject of several studies, analyzing it as a social movement (O’Hallarn & Shapiro, 2014), in response to NBC’s gatekeeping role as a broadcaster (Nee, 2015), offering an opportunity for thematic, gendered analysis of gymnastics coverage (Moore, Hesson, & Jones, 2015), and to provide deeper understanding of the Olympics as an emergent hypermedia event (Girginova, 2015).

Participant surveys have been used very occasionally in the study of social media. More than 1,100 users suggested ways sport organizers can better target their tweets by analyzing the motivations behind sport fan usage (Witkemper, Lim, & Waldburger, 2012). Social media’s
evolution to include more live video in content was called for loudly by respondents to a survey of college sport fans by Clavio and Walsh (2014). A detailed Canadian Football League study, relying on participant surveys, content analysis and practitioner interviews, attempted to ascertain what gratifications are received by fans from Twitter connected to the league (Gibbs et al., 2014).

This study extends the sport and social media literature in a few ways. There have been few studies of social media relying on surveys, to turn the lens and gauge motivations for participation in the shared phenomena. This study also relies on two critical frameworks rarely used in sport, and never used in tandem, in an effort to unpack meaning behind the interactions by sport fans through the “hinge” of hashtags. The broad intersection of Twitter with sport also suggests many sport fans are social media engaged, and more likely to take part in discussions of this nature. A survey of users of the “two-way, contextually relevant conversations” (Castillo, 2013, para. 6) helps better understand social media interactions which represent an important component of the $14 billion global sport industry (Burrow, 2013). As well, no known studies in any discipline have made the effort to measure social capital generation through Twitter hashtags. Given the ubiquity and impact of hashtags, greater understanding of the motivation for participation in discussions through the technological affordance, and possible outcomes for participants, represents an important contribution to sport and social media scholarship.

Method

The present study utilized a quantitative research design to compare the generation of social capital through different hashtag types—a hashtag connected to a calendar event, and two hashtags that emerged organically, from events arising through sport. A modified instrument to test the generation of social capital was used to survey participants, who had used one of the
three hashtags being analyzed. There is a paucity of sport and social media research involving survey data, with only a few published studies asking questions of participants themselves (Clavio & Walsh, 2014; Gibbs et al., 2014; O’Hallarn & Shapiro, 2014; Witkemper et al., 2012). This important element of social media phenomena demands more study. This design was also developed to fill a gap in the literature about social capital, and its possible generation as a byproduct of public sphere interactions.

The ability of Twitter hashtags to form topic-specific communities of interest, as well as the social media site’s interface, which allows users of a specific hashtags to find each other with a single click, helps explain the popularity of the innovation (Castillo, 2013; Murthy, 2013). This investigation tested a conceptual model which suggests a byproduct, social capital, can be created via public sphere-like interactions that can be created through Twitter hashtags and sport (O’Hallarn, 2015). Given the strong connection between Twitter users and sport fandom (Burns, 2014; DiMoro, 2015) a study of potential social capital generation through sport-themed hashtags can further explain the complex interrelations that can develop connected to issues of sport, and what effect they have on users.

Participants

Collecting surveys from users of three different types of Twitter hashtags, this study analyzed engagement from the participants’ point of view. For an “evergreen” hashtag—one created to organize discussions around and promote a regularly scheduled calendar event, #MarchMadness was chosen. The NCAA men’s basketball tournament—commonly referred to by its nickname “March Madness”—is one of America’s most popular annual sporting events, both in terms of spectatorship and on social media. Also, as a three-week tournament, the event
allowed for a larger data collection window, because Twitter user sport fans sent tweets with the hashtag throughout the three weeks of the NCAA Tournament.

As a point of comparison, two “organic” hashtags were chosen, and surveys collected from their users. One organic hashtag, #Deflategate, was selected because it emerged in response to an event that occurred during the field of play. The NFL’s New England Patriots advanced to Super Bowl XLIX against the Seattle Seahawks by virtue of their emphatic 45-7 win over the Indianapolis Colts in the American Football Conference championship game on January 18, 2015 (Pennington, 2015). In the hours after the victory, news emerged that the Patriots may have slightly deflated the footballs given to them by the NFL to use while on offense. This is seen as a competitive advantage (Schwartz, 2015), and resulted in a lengthy investigation by the league. As the case went through nearly 18 months of twists and turns, finally culminating with Patriots quarterback Tom Brady declining to appeal his four-game suspension (“Tom Brady ends,” 2016), the developments were accompanied by significant use of the #Deflategate hashtag by Twitter users each time.

The other organic hashtag, #MoreThanMean, was created in response to an issue of societal concern connected to sport, but not in direct response to in-competition issues. #MoreThanMean was unveiled in tandem with a video released in April 2016 by sport and social issues publication Just Not Sports. In the video, which has been viewed more than 3.5 million times, men sit across from two female sport journalists—Julie DiCaro and Sarah Spain—and read hateful and threatening real tweets that the two writers have received from anonymous Twitter users (“#MoreThanMean,” 2016). The video focused attention on the negative feedback public figures receive online, particularly women, pointing out that the words are more than mean, they comprise a form of harassment that could be considered criminal (Macur, 2016). The
hashtag #MoreThanMean was included in the tagline of the piece. Just Not Sports suggested the hashtag be used as a forum to discuss issues of harassment and bullying. Since the video has been unveiled, the hashtag has continued to be used in that fashion on Twitter.

As the research design indicates, this study sought to compare users of an evergreen hashtag with organic hashtags, deployed by users as a form of commentary (Pegoraro et al., 2015), or as an organizing (Khondker, 2011), or activist function (Hull, 2014). The study also sought to compare social capital engagement between on- and off-field organic hashtags. Respondents were delimited to a purposive sample of users of the hashtags being analyzed for this study, so many respondents were screened out even though they were willing to participate by simply indicated they had not used any of the three hashtags being studied. Following wide sampling of the #MarchMadness, #Deflategate, and #MoreThanMean hashtags, a total \( n = 269 \) of valid surveys was compiled and analyzed.

**Instrumentation**

The survey administered to study participants included a total of 17 questions. Section one requested demographic information. Section two focused on measuring social capital through the hashtag interactions. Prior to this study, no known scale existed to measure the generation of social capital through interactions via Twitter hashtags. As well, no consensus exists about the appropriate measure of social capital, since it comprises several different facets. Sum et al. (2008) state it is a multidimensional concept and needs to be measured using various items. Therefore, this study relied on an instrument modified from three scales created to measure the generation of social capital on the social media site Facebook. This approach has been utilized in other scale development measures, and is reflective of the allusive nature of social capital as a concept (Pi, Chou, & Liao, 2013). The instrument sought to measure three
different dimensions of social capital: (a) the exchange of information; (b) the building of a community online; and (c) the expression and desire for collective action among participants in the hashtag.

To test the exchange of information through Twitter hashtags, the instrument developed by Pi et al. (2013) to assess Facebook Group members’ knowledge sharing was adapted and used. To test the building of community among users of Twitter hashtags, a portion of the Facebook Social Connectedness Scale (Grieve, Indian, Witteveen, Anne Tol, & Marrington, 2013) was adapted. The Facebook Organizing Utility Scale—part of a three-dimension instrument to test social capital on Facebook—was used to assess the desire for collective action by users of Twitter hashtags (Ellison et al., 2014). Facebook and Twitter are constructed differently as social media sites, with different core users and purposes. However, both sites share the same networked connectivity. It is reasonable to utilize and adapt scales designed for Facebook to gauge social capital generation on Twitter. In addition, scale development efforts by Ellison et al. (2014) and her team have largely relied as a starting point on an instrument designed by Williams (2006) that looked at social capital generation on the Internet in a general sense, and not connected to Facebook interactions in particular.

Though this measure adapted existing validated instruments, the process involved significant alterations, so Churchill’s (1979) five-step procedure for creating and validating an instrument was followed: 1) specification of the construct domain; 2) generation or modification of sample items; 3) data collection; 4) purification of the measure; and 5) assessment of instrument reliability and validity. Following the modification of questions asked in the scales used as the foundation of this instrument (Ellison et al., 2014; Grieve et al., 2013; Pi et al., 2013), the proposed constructs were reviewed by three experts in the study of social capital. Each
provided suggestions for rewording and adding or deleting questions, resulting in the initial list of 17 items. Seven were adapted from the Pi et al. (2013) instrument designed to test Facebook users’ knowledge sharing. Five came from Grieve et al.’s (2013) scale to measure Facebook connectedness. Five items had as their source the Facebook Organizing Utility Scale (Ellison et al., 2014), a measure of the desire for collective action by users. Modified to ask about Twitter, with each requesting answers on a six-point Likert-type scale, these 17 items comprised the first pilot test.

Pilot 1 was conducted with a class of sport media students. Students—who had used a class hashtag during the semester to debate sport-related issues on Twitter—completed the survey utilizing online survey software program Qualtrics. Respondents (n = 29) were asked for their view of 17 statements on a six-point Likert-type scale, with responses ranging from 1 = strongly disagree to 6 = strongly agree. A six-point scale was chosen for every question for consistency, and because literature suggests odd-numbered scales elicit a disproportionate number of middle-value responses (DeVellis, 2012).

In order to assess the underlying structure of the data, and whether it matched with the proposed constructs that were modified from existing social capital instruments and altered through expert review, a principal component analysis (PCA) with oblimin rotation was conducted, the recommended procedure for a proposed instrument where the items are likely to be correlated, and the goal is an operational instrument that utilizes a well-established theory (Field, 2009). The results were then analyzed for fit with the proposed constructs, and to refine and edit the items to provide parsimony.

A KMO measure of .771 and a chi-square statistic was analyzed. The Bartlett’s $x^2$ value (434.07) was statistically significant at $p < .00$ ($df = 136$) indicating the data were appropriate for
PCA (DeVellis, 2012). While the Kaiser criterion, which considers all eigenvalues greater than one as common factors, suggested four dimensions, factors are suggested to have at least three items for robustness of analysis (DeVellis, 2012). Therefore, a three-factor model was chosen, which produced the most readily interpretable and theoretically sensible pattern of results. The resulting model explained 73.24% of the variance. PCA results for Pilot 1 are indicated in Table 3. Cronbach’s Alpha scores were examined as part of the scale’s reliability analysis. DeVellis (2012) recommends a reliability value of at least .70 for widely used scales. The initial 17-question scale had a Cronbach’s $\alpha = .940$, and the suggested dimensions which emerged had Cronbach’s $\alpha$ values of .912 (Factor 1, six items); .887 (Factor 2, three items); and .899 (Factor 3, five items). Due to a below optimal sample size for Pilot 1, a second pilot test was conducted, with a modified, refined and edited instrument, containing 13 items.

The refined survey was administered to an online sample of Twitter hashtag users, utilizing purposive sampling methodology that would later be employed during data collection for the main study. The population for Pilot 2 was the users of two distinct hashtags, #IronBowl (the annual college football game between Auburn University and the University of Alabama) and #concussion. This dichotomy of responses was sought to mimic the different types of hashtag users that would be surveyed during the study data collection phase. Following purposive and snowball sampling, an $n = 35$ was gathered, 20 users who indicated they had used #IronBowl, nine who said they had used #concussion, and six respondents who didn’t indicate they had used either hashtag. Respondents gave answers to items on the same six-point, Likert-type scale, but with the question order rearranged. Following data collection, responses were once again analyzed for their fit to the proposed constructs, and validity and reliability testing was done on the modified instrument constructs that emerged from the second pilot.
A KMO measure of .819 and a $p < .00 (df = 78)$ significant Bartlett’s $x^2$ value of 370.42 indicating the data were appropriate for PCA (DeVellis, 2012). The Kaiser criterion suggested only two dimensions, however a Scree-Plot test indicated that three factors were appropriate for analysis. All 13 items were kept for the analysis, resulting in a model explaining 77.09% of the variance, and the primary factor loadings from the pattern matrix for the 13 items ranging from .971 to .421. PCA results for Pilot 2 are indicated in Table 4. The full scale of 13 items had a Cronbach’s $\alpha = .944$. Factors 1, 2, and 3 had Cronbach’s $\alpha$ values of .925, .857, and .85, respectively, suggesting they are all reliable measures (Churchill, 1979). While the two pilot tests are not directly comparable because Pilot 2 involves respondents being asked four fewer questions, items clustered into near identical factors. Two items loaded nearly identically onto different factors, so they were eliminated from the final, 11-item instrument. Three suggested constructs of social capital, based on theoretical understanding of the theory, Twitter hashtag use motivations, and the information gleaned from two pilot tests, comprised the instrument used for the main study. The three social capital dimensions that were tested, along with their operational definitions, are:

(a) **Information Exchange** (three items), the transaction of knowledge gained or imparted through the use of Twitter hashtags;

(b) **Online Community** (three items), the sense of connectedness and belonging from participating in a community of Twitter hashtag users; and

(c) **Connective Action** (five items), the desire for or achievement of personal or shared goals through the use of Twitter hashtags.

The final Twitter Hashtag Social Capital Engagement scale, with factors, factor descriptions, and items, is listed in Table 5.
Data Collection

Following IRB approval, the dissertation survey instrument was distributed through a link on Twitter, which took participants to a page in the online survey software program Qualtrics. Consistent with studies that demonstrate the difficulty of sampling social media populations (Gibbs et al., 2014; O’Hallarn & Shapiro, 2014; Vooris, 2015), snowball sampling was utilized, and the lead researcher’s social media network was activated to distribute links to the surveys. Sampling was purposive and delimited to users of topic-specific hashtags, so direct “@” replies were sent to users of the hashtags being studied. For each hashtag, normal distribution of data under Central Limit Theorem (Field, 2009), and a sample size of more than five respondents per item in a scale, the desired threshold for a valid, reliable survey instrument (DeVellis, 2012), was sought and achieved. A total $n = 269$ of valid surveys was compiled and analyzed.

Procedure

A social capital number produced from survey data is not meaningful unless compared against a second figure (Pi et al., 2013; Williams, 2006). So for this study, social capital generation was compared in each dimension between different types of hashtags. Descriptive information was compiled from the survey data, and responses with missing or incomplete data, were eliminated. To answer RQ1, a one way multiple analysis of variance (MANOVA) was performed, comparing social capital levels for the three dimensions of the scale between the evergreen hashtag (#MarchMadness) and a pooled sample of the organic hashtags (#Deflategate and #MoreThanMean). To answer RQ2, a second, one-way MANOVA compared social capital generation in the three dimensions between responses from the two organic hashtags. Together, these two analyses comprise what is believed to be the first quantitative examination of social
capital in users on the social media site Twitter. It is certainly the first such exploration in the field of sport.

**Results**

Though a total $n = 269$ of valid responses was analyzed for this study, nearly double that number of participants took one of the three surveys. In addition to respondents providing incomplete data, the first question asked to participants was whether they had used the specified hashtag. Two hundred respondents answered “no” to that question, and their survey ended at that point, because this was a study of hashtag usage.

Among valid responses there was an approximately equal number of #MarchMadness participants ($n = 133$) as the pooled sample of #Deflategate ($n = 59$) and #MoreThanMean ($n = 77$) survey participants. In addition to the 11 social capital questions, clustered into three factors, study participants were asked demographic questions about gender, age, ethnicity, education, and income level. Distributions of respondents in the demographic groups is indicated in Table 6.

The data presented a slight negative skew, but within acceptable tolerances. The negative skew can partly be explained by what appears to be overall enthusiasm for using hashtags expressed by participants in all three groups. Means for each item of the survey ranged between 4.08 and 5.07 out of 6, with higher values in this survey instrument reflecting greater agreement with the statements about Twitter hashtag use and social engagement. A list of mean responses to each item of the survey is indicated in Table 7.

**Instrument Validity and Reliability**

Following data collection, a confirmatory factor analysis (CFA) was conducted on the proposed constructs of the Twitter social capital engagement instrument, based on a pooled sample of users of all three hashtags—#MarchMadness, #Deflategate, and #MoreThanMean.
Multiple measures of fit were used to examine the factor structure of the instrument. The model fit which best fit the data kept the original 11 items in the proposed constructs that emerged in the pilot tests, adding covariance of two pairs of items in the Connective Action construct and one pair of items in the Online Community construct.

Overall goodness of fit was assessed using a robust chi-squared test. The results indicated that the data fit the model reasonably well: $X^2 (38) = 101.66; p = < .001$. The chi square to degrees of freedom ratio was higher than optimal, $X^2/df = 2.67$. However, a problem with this fit index is that there is no universally agreed upon standard as to what is a good and a bad fitting model (Kenny, 2015), so other fit indices were used. Root mean square residual (RMR), root mean square error of approximation (RMSEA), and comparative fit index (CFI) were examined to provide additional sources of fit that are widely accepted analysis tools for proposed survey instruments. RMR values close to .08 or below, RMSEA values close to .06 or below, and CFI values near .95 or greater provide evidence of an adequate model fit (Hu & Bentler, 1999). For the CFA performed on the study instrument, RMR of .057, RMSEA of .083 and CFI of .943 provide evidence of adequate model fit.

Convergent validity was assessed on the instrument with reference to average variance extracted (AVE). Here the model fit was not ideal. For Information Exchange (.412) and Connective Action (.414) AVE values fell below the desired validity value of .5. The Online Community dimension narrowly met the threshold for model fit, with an AVE value of .502. In addition, internal consistency of the Information Exchange, Online Community, and Connective Action dimensions was examined with Cronbach’s alpha estimates. Internal consistency was above the standard .70 cutoff (Cronbach, 1951) for Online Community and Connective Action,
with coefficient alphas of .78 and .76 respectively. For Information Exchange, the coefficient alpha of .65 felt slightly below the cutoff figure.

The indication from CFA that the fit for this modified social capital measure is adequate but not ideal. This is reflective of the difficulty in creating valid, reliable measures of what can be a difficult concept to quantify in social capital (Ellison et al., 2014; Putnam, 2000). The field of scale development for social capital measurement for online interactions has advanced inconsistently, with new measures being validated and then adapted by other scholars, and testing and concerns about these instruments. The widely cited and adapted Internet Social Capital Scales (Williams, 2006), was challenged by Appel et al., (2014), who said the ISCS is “not a valid measure of social capital,” and “does not measure perceived or actual social capital” (p. 408). Addressing the concerns raised by Appel et al., (2014), Ellison et al. (2014) narrowed the scope of their attempt to design a Facebook-based, social capital scale, zeroing in on resource mobilization requests through the social media site, a form of connective action. Because of this delimitation by scale developers, creating a preferred, multi-dimension scale (Lochner et al., 1999; Sum et al., 2008) for Twitter social capital measurement involved adapting three different existing Facebook scales (Ellison et al., 2014; Grieve et al., 2013; Pi et al., 2013). The issues with reliability and validity of the adapted Twitter instrument utilized in this study are reflective of challenges in measuring social capital online, and are not uncommon.

**Data Analysis**

One-way MANOVAs were performed on the hashtag user subgroups to answer the two proposed research questions. Responses from users of the #MarchMadness (evergreen) hashtag were compared to a pooled sample of the #Deflategate and #MoreThanMean (organic) groups. Then responses were compared between the two organic hashtags, #Deflategate and
#MoreThanMean. Assumptions of normality, homogeneity of variance/covariance matrices, and independence of variables were considered when running the MANOVA tests. In addition, MANOVA assumes that there is a linear relationship (linearity) between the dependent variables. The data presented no apparent violations of MANOVA assumptions. There were a small number of univariate outliers present, as assessed by inspection of a boxplot. This is a common finding with large datasets, and MANOVA is robust to small deviations from normality (Field, 2009). However, two multivariate outliers were also found in the data, as assessed by Mahalanobis distance ($p > .001$). Since these two data points were also present as univariate outliers through boxplot inspection, they were eliminated from the analysis, leaving an $n = 267$ for MANOVA analysis.

A one-way MANOVA was run to determine the difference in levels in the three dimensions of social capital between users of the #MarchMadness hashtag, and a pooled sample of the #Deflategate and #MoreThanMean hashtags. Three measures of social capital were assessed: Information Exchange, Online Community, and Connective Action. For the Online Community construct, users of #MarchMadness ($M = 4.64$, $SD = .97$) scored higher than users of the two organic hashtags, #Deflategate and #MoreThanMean ($M = 4.44$, $SD = .97$). For the other two constructs, responses by users of #MarchMadness for Information Exchange ($M = 4.36$, $SD = .93$) and Connective Action ($M = 4.86$, $SD = .73$) were almost identical to reported scores for Information Exchange ($M = 4.37$, $SD = 1.02$) and Connective Action ($M = 4.84$, $SD = .75$) for the #Deflategate-#MoreThanMean group. With these responses, it is not surprising that the difference between the response groups on the combined dependent variables was not statistically significant, $F(1, 265) = 2.121$, $p = .098$; Wilks' $\Lambda = .976$; partial $\eta^2 = .024$. 
The second one-way MANOVA analyzed difference in engagement levels with the three social capital dimensions between the two organic hashtags, #Deflategate and #MoreThanMean. The same three measures of social capital were assessed. Among these two hashtag subgroups, the mean responses for #MoreThanMean were higher than #Deflategate in Information Exchange ($M = 4.46$, $SD = 1.01$ versus $M = 4.26$, $SD = 1.02$), Online Community ($M = 4.53$, $SD = .94$ versus $M = 4.33$, $SD = 1.00$), and Connective Action ($M = 4.96$, $SD = .64$ versus $M = 4.69$, $SD = .85$). The difference between the response groups on the combined dependent variables was not statistically significant $F(1, 133) = 1.705$, $p = .169$; Wilks' $\Lambda = .962$; partial $\eta^2 = .038$. However, a statistically significant difference was found between the hashtag groups in the Connective Action dimension of social capital, $F(1, 133) = 4.472$, $p = .036$; partial $\eta^2 = .033$.

**Discussion**

While it is clear there is much to be done to better explain societal phenomena unfolding in the rapid, responsive, and sometimes rancorous discussion that occurs through social media (Filo et al., 2015; Hardin, 2014), the process can be painstaking. From the need to better articulate the connection between the public sphere and social capital, to the absence of a valid social capital measure for Twitter hashtags, to the challenges of online surveying of social media participants, to the uneven results in social capital instrument design and validation across the social sciences, this study is an indication of the difficulty of doing such work. It also, despite largely non-significant findings of differences between hashtag groups, suggests that such research can comprise part of a valuable contribution to better articulating the sociology of Twitter participation connected to sport.

This study involved modifying three different social capital instruments for Facebook users into what is believed to be the first multi-dimensional measure of social capital generation
through hashtag participation on Twitter. Relying on guidance that social capital is an amorphous concept best measured through multiple dimensions (Sum et al., 2008), and the broad categories of measurable social capital that have emerged through the work of Putnam (2000) and others, the modified instrument used for this study attempted to measure social capital through three metrics—Information Exchange, Online Community, and Connective Action.

An 11-question survey, which was expert reviewed and pilot tested, was administered to a purposive sample of users of three Twitter hashtags—#MarchMadness, #Deflategate, and #MoreThanMean. The instrument compared social capital generation between groups. The study asked whether social capital generation between an event-specific (or evergreen) hashtag differed from the social capital gleaned from hashtags that emerge organically, in response to issues in sport. A second research question involved testing social capital generation between two types of organic hashtags—emerging in relation to on-field and off-field sport issues.

Statistical analysis found no significant differences between social capital engagement levels between hashtag groups, save for a slightly larger score in the Connective Action social capital subdimension for users of the #MoreThanMean hashtag than users of the #Deflategate hashtag. It is not known whether a larger sample of Twitter hashtag survey respondents, a slightly better instrument, or different hashtags would yield significant findings. Social capital proved hard to conceptualize and even harder to measure, during this study, a similar challenge encountered during countless other studies across the social sciences (Appel et al., 2014; Ellison, et al., 2014; Fine, 2010).

The survey responses on all three hashtags collected for this study suggest real value being drawn from participation in discussion through hashtags, whether respondents came via the NCAA Basketball Tournament, the controversy around deflated footballs, or the harassment
female sport journalists endure. Mean response rates show survey participants agree with every statement about Twitter hashtag use leading to greater online engagement, strongly in some instances. As Dewey (2014) wrote of hashtag engagement for activism: “(I)t almost always does something—something small, perhaps, but something measureable” (para. 17). This study represented one of the first attempts within sport to unpack that “something” participants receive.

The starting point for this study was a framework developed suggesting that Twitter, sport and hashtags can combine to create conditions that mimic the principles of the public sphere. Habermas (1962 [1989]) envisioned the public sphere as an accessible space for deliberative democracy, through the “traffic in commodities and news” (p. 15). Despite frequent criticism, Habermasian ideals have remained a popular framework to analyze societal discourse, including in sport (Brownell, 2012; Galily et al., 2012) and on social media connect to sport (Yanity & Pegoraro, 2015). In countering critics, Habermas maintains the public sphere is an aspirational goal for society, rather than a strict test of conformity to norms (Habermas, 1962 [1989]). The struggles of social capital theorists to accurately and validly measure its generation could use a similar reimagining. Instead of asking, “Is there social capital, and if so, how much?” studies such as this can point to enthusiasm for the online engagement as reinforcement of the benefit of participation. Then the challenge becomes further unpacking exactly what the benefit is.

There is a severe shortage of participant survey data in sport and social media research. Problems with selection bias in sampling, as well as the labor-intensive nature of soliciting survey responses, could act as a disincentive for researchers. The few studies that have been done have found abundant evidence of online community being formed, whether through fan allegiance (Gibbs et al., 2014) or shared activism (O’Hallaran & Shapiro, 2014). A finding of
non-significant differences in social capital generation between hashtag types asks many more questions than it answers. If respondents are drawing value from participation in online discussion, how can this information be synthesized to better explain these interactions from the participants’ point of view?

As long as sport has been sorted into associations, leagues, and events, organizers have sought more information about its participants and fans. With this new tool of social media platforms opening communication channels between various publics, volumes of marketing and customer engagement studies have sought to understand motivations that support decisions made by target audiences. Frankly, the lack of participant survey research in sport and social media scholarship is surprising. An exploratory study such as this represents an important step into a broadly under-studied field.

Limitations and Suggestions for Further Research

There are limitations to this study, from potential issues with hashtag selection, sampling, instrument modification, reliability and validity and the largely uncharted territory of linking social capital to the public sphere. It simply isn’t known if different hashtags, or other modifications to the social capital instrument, or a larger sample would have resulted in a significant finding of social capital generation.

These very challenges could well be the inspiration for many other studies. The under-explored link between the public sphere and social capital affords an opportunity to dissect the words of Habermas and Putnam (as well as other social capital theorists), using the former as a way to reconsider measuring the latter, and using the later to reframe well-canvassed discussions of the former. If there is some alchemy in the interactions between online participants, as proponents suggest (Benkler, 2006, Castells, 2012), than any study seeking to unpack those
themes would be well received within social media scholarship. This is especially true in the field of social media participant surveys, a largely under-studied field. If this instrument could be considered a starting point for better understanding the effect participation has on Twitter users, it could represent early work in an important dimension in the study of social media.
CHAPTER 5

Conclusion

This dissertation analyzed the popular social media site Twitter, and the technological affordance known as hashtags, in part to respond to two salient critiques of the existing body of sport and social media research. Hardin (2014) suggested it is time for researchers to move beyond content analysis, to find new ways to unpack meaning from the online interactions. Filo, Lock, and Karg (2015) challenged researchers to find new approaches in studies of sport and social media, employing more sophisticated critical frameworks, including from outside of sport. The prevalence and impact of sport on social media activity is obvious, resulting in concerted effort by sport organizers to engage online publics. The intersection of sport and Twitter’s 316 million regular monthly users is especially strong, with sport content making up as much as half of the activity on the entire site during large, shared events (Burns, 2014). In particular, the hashtag (#), suggested by a Twitter user after the site was launched in 2007 (“The short and,” 2010), plays an important role in the creation of communities of topic-specific interest (Murthy, 2013).

Seeking to tap into a reservoir of sport-related activity online, and to respond to criticism of existing sport and social media research, this dissertation relied on a critical framework rarely deployed in the discipline—the public sphere. The public sphere is a physical or virtual space, envisioned by German sociologist Jürgen Habermas, where any member of society can gather to discuss issues of the day. The enlightened discussions that comprise the rational-critical debate within the sphere, Habermas envisions, can lead to an informed public opinion, which can be a pro-democratic normative force for society (Habermas, 1962 [1989]). The concept has faced a barrage of criticism for being exclusionary and unrealistic, but Habermas himself envisions the
concept not as a directive, but as an aspirational goal for society, and that the spirit of the public sphere can be maintained from inside the system through its use as a “democratic dam” to preserve the power of these networks (Habermas, 1992, p. 444). The dissertation begins with a premise, supported through the creation of a conceptual model. It is argued that the unique architecture of Twitter hashtags, and passion and simultaneous consumption of sport fans, can unite, leading to the creation of public sphere-like conditions on the social media site. This supposition is a response to suggestion that additional understanding be gleaned from the short, interconnected messages through the utilization of different theoretical approaches. Using the public sphere as a framework for understanding Twitter hashtags in sport is the focus of this model, which can then be used to gain greater understanding of interactions connected to individual topics and societal trends.

Chapter 2 of this dissertation—Sport, Twitter Hashtags and the Public Sphere: A Model for the Generation of Public Sphere-like Activity—laid the foundation for two empirical studies. It suggested an approach, grounded in the theory of the public sphere, to consider sport and Twitter hashtags as a place to look for conversations that reflect its pillars: (a) A space for the formation of public opinion; (b) with access for all citizens; (c) unrestricted conference through freedom of assembly, freedom of expression and publication of opinions about matters of general interest; and (d) debate over the general rules governing relations (Fuchs, 2014). The model suggests four factors combine to act in a way to amplify activity in the public sphere: (a) our passion about sport itself; (b) the fact sport is consumed simultaneously around the world; (c) the way that Twitter hashtags can create issue-specific virtual town halls; and (d) Twitter’s unique architecture, which displays the most recent tweet in users’ feeds, prompting a running, real-time conversation. In order for conversations to be sphere-like in nature, they must overcome barriers
within the social media site and human interaction. These include the *Online Disinhibition Effect* (Suler, 2004), the tendency for online interactions to be overly aggressive. Other barriers to the creation of public sphere-like discourse include the 140-character limit of communication on Twitter, and the asymmetrical outcome of Twitter conversations—whereby individuals with a higher profile are more likely to have their voices heard.

The conceptual examination also suggested which type of sport-themed hashtags to assess in an attempt to see evidence of Habermasian, public sphere-like discourse. These include hashtags that include an obvious social imperative beyond the field of play, such as #WhyISTayed, a hashtag created by a domestic abuse survivor following the suspension, then ban, then reinstatement of football player Ray Rice for assaulting his then-fiancée, now wife, Janay Palmer (Kaplan, 2014). Inspired by sport, that particular hashtag housed a wellspring of thoughtful, sometimes heartbreaking, revelations about what it is like to be the survivor of domestic assault, yet stay in the partnership.

The prevalence of social media in society, as well as the impact it can have on discourse in society (Giglietto & Selva, 2014) along with the unknown factors that cause particular issues to accelerate in importance online (Fuchs, 2014a) calls for further investigation. It is notable that social media technologies are just into their second decade of widespread use. New technological platforms are gaining and shrinking in popularity, there is even discussion how the dark turn in Twitter discourse could someday threaten the viability of this social media site (Haque, 2015; Meyer, 2015). Understanding the principles that underpin online engagement can provide valuable service to society, especially since social media use is so ubiquitous (Benkler, 2006; Shirky, 2008). Critics suggest social media has become so negative in some places, notably Twitter, it is now a net negative for to society. Instead of lamenting this exceedingly debatable
fact, learning as much as possible about the interactions, even if they may be messy or ugly, could lead to potential solutions to moderate their tone. More than 316 million Twitter users need to be providing some pro-democratic value to the discourse.

In addition to relying on the public sphere as a critical framework, the empirical studies included in this dissertation—Chapter 3 and Chapter 4—attempted to “turn the lens.” Few studies of sport and social media rely on survey responses from participants to discover motivations and rationale for participation in the popular, online forums. This represents a key, understudied dimension to connected social media conversations. These studies represent an attempt to assess the nature of the discourse connected to particular phenomena, and attempt to gauge value being derived by participants taking part in hashtag conversations.

Chapter 3, entitled Sport, Twitter Hashtags and the Public Sphere: A Qualitative Test of the Phenomenon through a Curt Schilling Case Study, was an attempt to analyze the conceptual model introduced in Chapter 2. Thousands of tweets containing the hashtag #CurtSchilling were sent by Twitter users in the aftermath of the retired star pitcher being fired by ESPN for sharing homophobic content on his personal Facebook page. Tweets with the hashtags sent in the day following the firing were analyzing, comprising half of a two-part analysis of the conceptual model of the public sphere connected to sport and Twitter hashtags.

A dataset of more than 5,000 tweets containing the hashtag was examined for themes, and for evidence of public sphere-like discourse. In addition, a purposive sample of Twitter users who had deployed the hashtag during the collection interval was solicited through the social media site via “@” replies. Participants completed an eight-question, qualitative survey designed to test the suppositions of the conceptual model. This analysis was guided by understanding
gleaned through examining the hashtagged tweets, and prior knowledge of the public sphere as a critical construct.

What the responses showed is that participants in the #CurtSchilling conversation were drawing real value from the discussion, through the ability to learn and disseminate information, offer opinions, quickly synthesize information on the topic, and engage in forms of online play such as sharing jokes. What participants were disinclined to do was engage others in debate, citing the limitations of 140-character posts and the aggressive expression of views by those who disagreed. Twitter offered participants “sarcasm and signpost,” still valuable, and reflective of some Habermasian principles, but not a true public sphere.

Among the key findings of Chapter 3 is the discovery that Twitter users feel empowered to be part of a broader conversation when utilizing hashtags connected to sport and societal issues. As one respondent noted: “It gives purpose to my tweet rather than it just being sent into the ether that is the internet.” Murthy’s (2013) statement about topic-specific tweets resembling a disjoined corpus of conversation is applicable here. Despite many angry tweets from supporters of Curt Schilling, as well as supporters of the firing, the collective body of tweets do reflect the spirit of Habermasian debate, providing a spectrum of opinion and value for participants. The fact the polarized discussion occurred in parallel, rarely intersecting siloes—in support and opposition to Curt Schilling—should not detract from the forum that is present in the hashtag. Despite not addressing them directly, participants in the hashtag were well aware of oppositional views. Sport organizers using hashtags to engage or promote must be mindful that followers are listening raptly, even if they keep their own counsel about a particular topic.

As well, previous studies of Twitter hashtags and sport have largely not included participant input. Through surveys of users of the hashtag, more than content analysis could be
used to ascertain how closely the conversation was coming to realizing the ideals of the Habermasian public sphere. In their responses to the eight survey questions, respondents provided a far greater understanding of the motivations of hashtag discussion participants, and how they feel about Habermas’ idealized belief in the pro-democratic power of rational-critical discourse.

In Chapter 4, titled Sport, Twitter Hashtags and the Public Sphere: Exploring Social Capital Generation through Different Hashtag Types, an attempt was made to quantitatively assess byproducts of potential sphere-like debate through the introduction of another theory—social capital. Defined as a way to assess the intangible resources of community, shared values and trust upon which we draw in daily life (Field, 2008), social capital has been extensively studied across the social sciences. The scholarship has accelerated with the advent of connected Internet technologies such as social media, seen as a potential antidote to Putnam’s (2000) lament about the diminishment of social capital in society.

This paper involved several steps. A connection between the public sphere and social capital first needed to be established, by canvassing the surprisingly small body of literature linking the two theories. Then an instrument was created to measure it, relying on three separate Facebook social capital measures as a starting point. The reliance on the other social media giant as source material for the instrument was necessitated by the fact there is no known instrument to measure social capital generation through Twitter interactions. This is consistent with the understanding that social capital measures evolve as new technologies appear (Williams, 2006), and that a multi-dimensional measure of the phenomenon is preferable (Sum, Mathews, Pourghasem, & Hughes, 2008).
Following instrument modification, expert review, and pilot testing, three discrete samples of Twitter hashtag users were contacted through the social media site. Users of three distinct hashtags—#MarchMadness, #Deflategate, and #MoreThanMean—were asked to complete identical, 11-question surveys about their hashtag use. The survey tested the three constructs of social capital identified in the instrument modification process: (a) information exchange; (b) online community; and (c) connective action. The study sought to compare self-reported levels of social capital generation in three different hashtag types. #MarchMadness was typed by survey respondents who are fans of the NCAA Men’s Basketball Tournament; it is a standard hashtag deployed in connection to a calendar event, called an evergreen hashtag for the purpose of this study. The two other hashtags were created by Twitter users in response to non-scheduled issues that arose in sport. #Deflategate was the moniker given to the investigation of the deflation of game balls by the New England Patriots during the 2015 AFC Championship game. #MoreThanMean was created by website Just Not Sports as a tagline for the video it released in April, 2016 where female sportswriters sat across from men as they read hateful tweets that had been sent to them anonymously. Operationally, these two tweets were defined as organic-on field (#Deflategate) and organic-off-field (#MoreThanMean) for this study. Following collection of survey responses \( n = 269 \) to the three hashtags, a confirmatory factor analysis (CFA) was run on the dissertation data, to test the validity and reliability of the modified instrument. The CFA yielded less than ideal values, but this is not surprising. The field of social capital measurement has been marked by difficulty assessing the concept through quantitative means through the four decades it has been widely studied. As an experimental study seeking to measure the generation of social capital through sport themed-Twitter hashtags, an instrument
with ideal validity and reliability figures was unlikely to be produced initially. The instrument constructs and design will be reassessed following completion of this dissertation.

For the main study, two one-way MANOVAs were run on the data. One compared the social capital generation on the three constructs between the evergreen hashtag (#MarchMadness) and a pooled sample of the organic hashtags (#Deflategate and #MoreThanMean), seeking to ascertain if social capital generation levels were different between the two groups. The second MANOVA looked for mean differences in social capital generation between the on- and off-field organic hashtags. The study, in fact, found no significant differences between groups. Means for hashtag use were almost identical between hashtag groups. This is particularly true when comparing the event hashtag #MarchMadness with the two organic hashtags.

A non-significant result still is a worthwhile addition to the sport and social media academic literature. As discussed, there are relatively few academic studies that seek to turn the lens and gather information about participants, either demographic or motivational. The challenges in recruiting study subjects—frequently one at a time through Twitter “@” solicitations—is a possible reason for the lack of published sport and social media research featuring participant surveys. This was also noteworthy: within each construct, the reported levels of social capital from study participants was exceedingly high. This resulted in a strong negative skew to the data (and a violation of one of the assumptions of MANOVA) but is also reflective of the fact that participants were ascribing positive feelings to the act of interacting through hashtags. Responses were a lot closer, on average, to “strongly agree” than “strongly disagree” for each of the 11 items in the survey.
From an academic perspective, this study was needed to introduce new critical frameworks to sport and social media academic literature. The public sphere is scarcely used in sport; social capital has never been used in connection to Twitter and sport. Utilizing these critical theories adds needed depth to the study of social media interactions connected to sport. The critical framework which argues that sport and Twitter hashtags can combine to create activity akin to public spheres can counter claims that the discourse on Twitter has turned overtly destructive and negative (Haque, 2015), and offer insight to sport managers seeking to harness the power of these conversations for benefit. In addition, the use of participant surveys is rare in the study of sport and social media. Much more research is needed to better understand sport and Twitter interactions from the perspective of the millions of participants in these forums.

This dissertation also opens many avenues for further study of these interactions. The critical framework which argues that sport and Twitter hashtags can be combined with other domains. An example would be regressing Twitter hashtag mentions with marketplaces, to ascertain if the sphere-like quality of hashtag discussions has a relationship to economic activity or prices. A key finding of the qualitative study is that many respondents didn’t just enjoy, but found intrinsic benefit from the rapid, crowd-sourced generation of humorous comments on Curt Schilling. Sociological studies of the public sphere and benefits like humor and camaraderie is vastly unexplored in the sport and social media literature. Finally, a study that incorporates a social capital measure from Twitter interactions—despite issues with the modified instrument, and largely non-significant findings—still represents a plunge into a completely new area of research. Social capital generation from Twitter hashtag interactions has not been studied in sport, and maybe in any other discipline. If ongoing modification, testing and purification efforts result in a valid and reliable social capital instrument, it could be used across the social sciences,
including in sport. In fact, given the strong association between sport fans and Twitter use, sport might be the best place to look for social capital generation on Twitter in the first place.

Together, the three studies that comprise this dissertation offer new insight into the impact of online interactions through sport-themed hashtags, particularly from the participants’ point of view. The shortage of participant survey data in sport and social media research is troubling. Despite concerns about selection bias in sampling for studies, as well as the labor-intensive method by which survey respondents are recruited, researchers should have published far more survey-based research about sport and social media by now. The rare studies that do employ participant surveys have demonstrated there is a robust online community being formed, that is full of information that can by analyzed and synthesized (Gibbs et al., 2014; O’Hallarn & Shapiro, 2014)

Sport organizations constantly search for more information about their constituency of interest, whether it is fan surveys, data collection at point of purchase, or even attendance figures at live sporting events. Marketing and sales research has dived into this new tool of social media, used by a large percentage of potential fans and customers. Yet research that seeks to understand motivations that underpin the decisions made by supporters has largely omitted one huge aspect—the online discussants themselves. The more studies that are published unpacking the motivations of fans, the more useful sport and social media research can be to the entire industry.
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APPENDIX A

Qualitative Informed Consent

Thank you for participating in this online survey. Your feedback is important. Please answer the following questions as honestly as possible. These questions concern the interaction through hashtags of sport fans through the social media site Twitter.

This study is looking at the discussion created through sport-themed Twitter hashtags. This qualitative questionnaire is designed to help the researcher assess what impact this online discussion is having on participants.

Each of the following questions can be answered as briefly, or as comprehensively, as participants wish. There will be a space provided after each question to type in a response.

You are being offered an opportunity to participate because you sent a tweet using the hashtag #CurtSchilling during the time interval of this study.

I do not anticipate that taking this survey will contain any risk or inconvenience to you.

Furthermore, your participation is strictly voluntary and you may withdraw your participation at any time.

For respondents who complete the survey, there will be an opportunity to provide an email address to enter a draw for a $50 Visa gift card. The email address provided will also be used in the event the researcher needs clarification on any aspect of the responses given.

All information collected will be used only for this research and will be kept confidential. There will be no connection to you specifically in the results or in future publication of the results.
APPENDIX B

Qualitative Questionnaire

1. What motivated you to send a tweet or tweets containing the hashtag (indicate hashtag)?
   (Space for response)

2. How do Twitter hashtags assist you in voicing your opinion on this issue?
   (Space for response)

3. What do you gain from the process of participating in discussions of this type on Twitter?
   (Space for response)

4. What impact do the tweets of other users have on your participation in the (indicate hashtag) discussion?
   (Space for response)

5. In what ways (if any) do you engage with other participants utilizing this hashtag?
   (Space for response)

6. What role does Twitter play in providing a forum for discussing this and other issues through hashtags?
   (Space for response)

7. What are the major benefits of this forum for promoting and encouraging debate?
   (Space for response)

8. What are the major drawbacks of discussion through Twitter hashtags?
   (Space for response)
Thank you for participating in this online survey. Your feedback is important. Please answer the following questions as honestly as possible. These questions concern the interaction through hashtags of sport fans through the social media site Twitter.

The purpose of this survey is to help the researcher measure the effect of that interactivity on the participants, and what participants are gaining or losing from the process of using sport-themed Twitter hashtags.

I do not anticipate that taking this survey will contain any risk or inconvenience to you.

Furthermore, your participation is strictly voluntary and you may withdraw your participation at any time without penalty. All information collected will be used only for my research and will be kept confidential. There will be no connection to you specifically in the results or in future publication of the results.

As an enticement to participate, two $50 Visa gift cards will be awarded following a random drawing among participants who complete the survey. To enter the draw, please provide a valid email address in the space provided at the bottom of the survey.
APPENDIX D
Quantitative Survey

Have you used the hashtag (#MarchMadness, #Deflategate, #MoreThanMean) in a tweet?

Yes (to continue with survey)

No (to exit survey)

Please answer the following demographic questions

Please indicate your gender

Male

Female

Please indicate your age

25 or under

26-35

36-45

46 or over

Please indicate your ethnicity

White

Black or African American

Asian

Other

Please indicate your highest earned level of education

High School

Some College

Bachelor’s Degree
Post-Graduate Degree

Please indicate your household income level

$25,000 or less

$25,001 to $50,000

$50,001 to $75,000

$75,001 to $100,000

More than $100,000

For each of the questions below, circle the response that best characterizes how you feel about the statement, where: 1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Moderately Agree; 6 = Strongly Agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often make an effort to share information and links with others on Twitter through the use of hashtags.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Twitter hashtags alert me to issues that I might not have otherwise known about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags helps me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I support the culture of connecting and sharing that the use of Twitter hashtags enables.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Using hashtags allows me to feel closer to others on Twitter.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Using hashtags makes me feel like part of a community on Twitter.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags enhances my visibility on social media.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using hashtags enables me to connect with other people on Twitter.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags is an effective way to locate and organize people with shared interests.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags is an effective way to organize discussions online.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags enables me to share my knowledge with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

Figure 1 — Theoretical model of public sphere creation through sport-themed Twitter hashtags
## APPENDIX F

**Table 1 — Questionnaire given to participants in Curt Schilling hashtag study**

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What motivated you to send a tweet or tweets containing the hashtag #CurtSchilling?</td>
</tr>
<tr>
<td>2. How do Twitter hashtags assist you in voicing your opinion on this issue?</td>
</tr>
<tr>
<td>3. What do you gain from the process of participating in discussions of this type on Twitter?</td>
</tr>
<tr>
<td>4. What impact do the tweets of other users have on your participation in the #CurtSchilling discussion?</td>
</tr>
<tr>
<td>5. In what ways (if any) do you engage with other participants utilizing this hashtag?</td>
</tr>
<tr>
<td>6. What role does Twitter play in providing a forum for discussion of this and other issues through hashtags?</td>
</tr>
<tr>
<td>7. What are the major benefits of Twitter hashtags for promoting and encouraging debate?</td>
</tr>
<tr>
<td>8. What are the major drawbacks of discussion through Twitter hashtags?</td>
</tr>
</tbody>
</table>
**APPENDIX G**

**Table 2** — Descriptive analysis of Curt Schilling tweets (100-tweet samples)

<table>
<thead>
<tr>
<th>Time of sample collection</th>
<th>Pro-Curt Schilling</th>
<th>Pro-firing</th>
<th>Neutral, undetermined, off-topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 20, 7 p.m.</td>
<td>33</td>
<td>47</td>
<td>20</td>
</tr>
<tr>
<td>April 21, 1 a.m.</td>
<td>37</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td>April 21, 7 a.m.</td>
<td>45</td>
<td>44</td>
<td>11</td>
</tr>
<tr>
<td>April 21, 1 p.m.</td>
<td>29</td>
<td>51</td>
<td>20</td>
</tr>
<tr>
<td>April 21, 7 p.m.</td>
<td>40</td>
<td>43</td>
<td>17</td>
</tr>
</tbody>
</table>
### APPENDIX H

**Table 3 — Factors and primary factor loadings for Pilot 1**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1*</th>
<th>Factor 2*</th>
<th>Factor 3*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Twitter hashtags is an effective way to locate and organize...</td>
<td>.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using hashtags enables me to connect with other people on Twitter.</td>
<td>.886</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags is an effective way to organize discussions...</td>
<td>.778</td>
<td>.347</td>
<td></td>
</tr>
<tr>
<td>Twitter hashtags alert me to issues that I might not have otherwise...</td>
<td>.719</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags enhances my visibility on social media.</td>
<td>.709</td>
<td>.302</td>
<td></td>
</tr>
<tr>
<td>Using hashtags makes me feel like part of a community on Twitter.</td>
<td>.629</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags is always an enjoyable experience.</td>
<td>.426**</td>
<td>.371**</td>
<td></td>
</tr>
<tr>
<td>I often make an effort to share information and links with others on Twitter.</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to share information and links through Twitter hashtags.</td>
<td>.907</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags is always beneficial.</td>
<td>.609**</td>
<td>.387**</td>
<td></td>
</tr>
<tr>
<td>Twitter hashtags enable me to discover information that helps me to solve problems.</td>
<td>.536**</td>
<td>.413**</td>
<td></td>
</tr>
<tr>
<td>I feel comfortable sharing with strangers on Twitter through the use of hashtags.</td>
<td>.355**</td>
<td>.497**</td>
<td></td>
</tr>
<tr>
<td>Using hashtags allows me to feel closer to others on Twitter.</td>
<td>.864</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags enables me to share my knowledge with others.</td>
<td>.843</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags helps me.</td>
<td>.814</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter hashtags motivate me to take action.</td>
<td>.677</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support the culture of connecting and sharing that the use of Twitter hashtags enables.</td>
<td>.401</td>
<td>.634</td>
<td></td>
</tr>
</tbody>
</table>

*Primary factor loading from Pattern Matrix

**Item eliminated for Pilot 2
**APPENDIX I**

**Table 4 — Factors and primary factor loadings for Pilot 2**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1*</th>
<th>Factor 2*</th>
<th>Factor 3*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Twitter hashtags is an effective way to locate and organize people with shared interests.</td>
<td>.971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags enhances my visibility on social media.</td>
<td>.789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using hashtags enables me to connect with other people on Twitter.</td>
<td>.738</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags is an effective way to organize discussions online.</td>
<td>.703</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Twitter hashtags enables me to share my knowledge with others.</td>
<td>.667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support the culture of connecting and sharing that the use of Twitter hashtags enables.</td>
<td>.598</td>
<td>.566</td>
<td></td>
</tr>
<tr>
<td>Using hashtags allows me to feel closer to others on Twitter.</td>
<td>.656**</td>
<td>.568**</td>
<td></td>
</tr>
<tr>
<td>Using hashtags makes me feel like part of a community on Twitter.</td>
<td>.807</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter hashtags motivate me to take action.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often make an effort to share information and links with others on Twitter through the use of hashtags.</td>
<td>.537</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter hashtags alert me to issues that I might not have otherwise known about.</td>
<td>.342</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags helps me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to share information and links through Twitter hashtags.</td>
<td>.387**</td>
<td>.421**</td>
<td></td>
</tr>
</tbody>
</table>

*Primary factor loading from Pattern Matrix

**Item eliminated from final scale
**APPENDIX J**

**Table 5** — Final Scale for Twitter hashtag social capital engagement with factors, factor descriptions, and items.

| Information Exchange — *The transaction of knowledge gained or imparted through the use of Twitter hashtags.* (Adapted from Pi, Chou, & Liao, 2013) |
|---|---|
| 1. I often make an effort to share information and links with others on Twitter through the use of Hashtags. |
| 2. Twitter hashtags alert me to issues that I might not have otherwise known about. |
| 3. Sharing my knowledge through Twitter hashtags helps me. |

| Online Community — *The sense of connectedness and belonging from participating in a community of Twitter hashtag users.* (Adapted from Grieve et al., 2013) |
|---|---|
| 1. I support the culture of connecting and sharing that the use of hashtags enables. |
| 2. Using hashtags allows me to feel closer to others on Twitter. |
| 3. Using hashtags makes me feel like part of a community on Twitter. |

| Connective Action — *The desire for or achievement of personal or shared goals through the use of Twitter hashtags.* (Adapted from Ellison et al., 2014) |
|---|---|
| 1. Sharing my knowledge through Twitter hashtags enhances my visibility on social media. |
| 2. Using hashtags enables me to connect with other people on Twitter. |
| 3. Using Twitter hashtags is an effective way to locate and organize people with shared interests. |
| 4. Using Twitter hashtags is an effective way to organize discussions online. |
| 5. Using Twitter hashtags enables me to share my knowledge with others. |
### APPENDIX K

**Table 6 — Profile of respondents broken down by hashtag**

<table>
<thead>
<tr>
<th></th>
<th>#MarchMadness</th>
<th>#Deflategate</th>
<th>#MoreThanMean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>86</td>
<td>42</td>
<td>23</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>17</td>
<td>54</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 or under</td>
<td>56</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>26 – 35</td>
<td>37</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>36 – 45</td>
<td>23</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>46 or over</td>
<td>17</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>105</td>
<td>51</td>
<td>63</td>
</tr>
<tr>
<td>African American</td>
<td>22</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Some College</td>
<td>47</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>42</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>37</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td><strong>Income Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$25,000 or less</td>
<td>26</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>$25,001 - $50,000</td>
<td>27</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>$50,001 - $75,000</td>
<td>27</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>$75,001 - $100,000</td>
<td>22</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>31</td>
<td>20</td>
<td>24</td>
</tr>
</tbody>
</table>
### APPENDIX L

**Table 7 — Means and Standard Deviations for survey item responses**

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Exchange</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often make an effort to share information and links with others on Twitter through the use of Hashtags.</td>
<td>267</td>
<td>4.24</td>
<td>1.39</td>
</tr>
<tr>
<td>Twitter hashtags alert me to issues that I might not have otherwise known about.</td>
<td>267</td>
<td>4.78</td>
<td>1.19</td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags helps me.</td>
<td>267</td>
<td>4.08</td>
<td>1.23</td>
</tr>
<tr>
<td><strong>Online Community</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support the culture of connecting and sharing that the use of hashtags enables.</td>
<td>267</td>
<td>4.21</td>
<td>1.12</td>
</tr>
<tr>
<td>Using hashtags allows me to feel closer to others on Twitter.</td>
<td>267</td>
<td>4.37</td>
<td>1.33</td>
</tr>
<tr>
<td>Using hashtags makes me feel like part of a community on Twitter.</td>
<td>267</td>
<td>5.04</td>
<td>.98</td>
</tr>
<tr>
<td><strong>Connective Action</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing my knowledge through Twitter hashtags enhances my visibility on social media.</td>
<td>267</td>
<td>4.91</td>
<td>1.06</td>
</tr>
<tr>
<td>Using hashtags enables me to connect with other people on Twitter.</td>
<td>267</td>
<td>4.64</td>
<td>1.06</td>
</tr>
<tr>
<td>Using Twitter hashtags is an effective way to locate and organize people with shared interests.</td>
<td>267</td>
<td>4.87</td>
<td>1.03</td>
</tr>
<tr>
<td>Using Twitter hashtags is an effective way to organize discussions online.</td>
<td>267</td>
<td>5.07</td>
<td>.99</td>
</tr>
<tr>
<td>Using Twitter hashtags enables me to share my knowledge with others.</td>
<td>267</td>
<td>4.77</td>
<td>1.04</td>
</tr>
</tbody>
</table>
VITA

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