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# "Nobody Can #DragMeDown": An Analysis of the One Direction Fandom's Ability to Influence and Dominate Worldwide Twitter Trends

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“NOBODY CAN #DRAGMEDOWN”: AN ANALYSIS OF THE ONE DIRECTION  
FANDOM’S ABILITY TO INFLUENCE AND DOMINATE  
WORLDWIDE TWITTER TRENDS

By

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Bachelor of Arts – Communication Studies  
University of Nevada, Las Vegas  
2013

A thesis submitted in partial fulfillment  
of the requirements for the

Master of Arts –Journalism and Media Studies

Hank Greenspun School of Journalism and Media Studies  
Greenspun College of Urban Affairs  
The Graduate College

University of Nevada, Las Vegas  
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## **Thesis Approval**

The Graduate College  
The University of Nevada, Las Vegas

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This thesis prepared by

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entitled

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## ABSTRACT

### **“Nobody can #DragMeDown”: An analysis of the One Direction fandom’s ability to influence and dominate worldwide Twitter trends**

by

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With more than 25 million followers and counting, One Direction is currently the biggest boy band in the world, and its fans—known as “Directioners”—have become one of the most visible and recognizable fandoms to utilize social media, especially Twitter. Drawing upon an updated version of a fan theory highlighting the interpretive community and social hierarchy that exist within a fandom, this study examines the participatory culture among One Direction fans online that helps them create and dominate worldwide Twitter trends, as well as overshadow what is regarded as more serious news topics. Although previous research studies have examined Directioners and other fandoms’ Twitter relationships, none have done so on a global scale.

This thesis focuses on the Directioner fandom’s Twitter relationships during three significant events in July 2015. The first was during the fandom’s week-long tribute to One Direction’s five-year anniversary, in which fans successfully created worldwide Twitter trends in dedication to the band members. The second focused on the worldwide Twitter trends associated with One Direction’s 2015 “On the Road Again” world tour, where fans live-tweeted the concerts. Lastly, the third was in regards to the successful trending of #DragMeDown after One Direction surprised fans by releasing its first single (via Twitter) as a foursome, months following the departure of band member Zayn Malik.

Using social network analysis to collect tweets related to the relevant worldwide Twitter trends, results showed that the Directioners' Twitter network is made up of many large-sized clusters and a few small ones, proving a strong participatory culture in engaging with and sharing content across the fandom. Next, the characteristics of top influential users were analyzed to find out if Directioners kept their Twitter network limited to those in the same geographic location or similar in the type of Twitter account being run. The fandom proved to be an open network, without any geographical boundaries in the formation of clusters. This unique global connection throughout the network allows for the easy and fast dissemination of news. Furthermore, the existence and prominence of top influential users proves that there is a social hierarchy not only across fandoms, but also within one. Lastly, Directioners use additional hashtags, attach hyperlinks, and mention other Twitter users in their tweets containing worldwide trends to accomplish different motivations and goals, such as gaining direct acknowledgement from the One Direction band members themselves.

Implications can be made suggesting that a large and global fandom like Directioners has the ability to: 1) continue shaping the way social media is used to obtain and spread news; 2) provide valuable insight for industry professionals in terms of marketing and promotion strategies; and 3) potentially make a difference in the world by raising awareness on news topics beyond just One Direction. Future research can be conducted to examine similar fandoms (e.g., Justin Bieber's "Beliebers") in the context of Twitter or other social media platforms like Facebook, Instagram, or Tumblr. Further research suggests looking into how Directioners continue to utilize social media while One Direction is on its hiatus.

Overall, Directioners have a complex system of news trending on Twitter that is built on an intense emotional investment to their idols, where top influencers are able to push out

information to an extensive network of followers. These smaller networks play a key supporting role in the difficult task of executing and maintain worldwide Twitter trends on a regular basis. Directioners use Twitter to maintain One Direction's relevance in pop culture, while establishing their own status as prominent and savvy social media users in the digital era.

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Lots of time and energy was dedicated to this thesis, and I'm proud of the finished product, which has become a symbol of my passion for social media and pop culture research. However, this thesis would not have been possible without the incredible support I received, and I would like to express my deepest appreciation and gratitude to the following individuals.

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## DEDICATION

This thesis is dedicated to Directioners.

“You and me got a whole lot of history.

We could be the greatest team,

that the world has ever seen.”

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## CHAPTER 1

### INTRODUCTION

Twitter has revolutionized news consumption, giving users the ability to obtain and share information instantly and with users from across the globe. These users also have the power to dictate what events are more newsworthy in comparison to others. As an avid Twitter user, I have always been interested in how the platform can be used as a strategic tool in disseminating information to a large, worldwide audience. A global digital fandom like the One Direction fandom—made up of fans known as “Directioners”—has this unique ability to easily and quickly spread news across Twitter, as well as the ability to even overshadow more “serious” news topics that concern topics relating to social issues, politics, foreign affairs, and more. My research looks into the power that the One Direction fandom has to spread and “trend” (make popular) worldwide news through the social media platform Twitter, drawing upon fan theory as a theoretical framework to analyze relationships that take place between fans and their idols, as well as among themselves. Furthermore, this study examines dilemmas relating to why the One Direction fandom makes “going Twitter viral” so easy.

With the typical fandom stereotypically known as simply a group of screaming teenage fan girls, this study examines how a close-knit group of fans from all over the world come together and dominate worldwide news on Twitter, while ultimately succeeding as key players in major promotional efforts, bringing awareness to social issues, and keeping their idols relevant to pop culture. It will contribute to existing research in the fields of social media and fan studies by bringing the two together, to analyze how the network of Twitter users in the One Direction

fandom use social media to trend news worldwide. It seeks to answer the following research questions:

- **RQ1:** What are the most common scenarios that guide the formation of clusters in the One Direction fandom's Twitter network?
- **RQ2:** What roles do top influencers (hubs) within the One Direction fandom's largest clusters play in the creation of worldwide Twitter trends?
- **RQ3:** How do the top hyperlinks, additional hashtags, and mentioned users in the tweets used by Directioners contribute to similar themes found across the fandom?

### Significance of the Study

With the typical fandom stereotypically known as simply a group of screaming teenage fan girls, this study examines how a close-knit group of fans from all over the world come together to dominate worldwide news on Twitter, while also succeeding as key players in major promotional efforts, bringing awareness to social issues, and keeping their idols relevant to popular culture. It will contribute to existing research in the fields of social media and fan studies by bringing the two together to analyze how the network of Twitter users in the One Direction fandom use social media to trend news worldwide. It seeks to answer the following research questions:

- **RQ1:** What are the most common scenarios that guide the formation of clusters in the One Direction fandom's Twitter network?
- **RQ2:** What roles do top influencers (hubs) within the One Direction fandom's largest clusters play in the creation of worldwide Twitter trends?

- **RQ3:** How do the top hyperlinks, additional hashtags, and mentioned users in the tweets used by Directioners contribute to similar themes found across the fandom?

Examining how the Twitter network of One Direction fans spread news through the platform is highly significant in regards to the topic of study. Similar research has been conducted at a regional level, but because of Directioners' impact worldwide, it was important to examine the fandom on a global scale. One Direction's members have credited their worldwide popularity and success to social media, as it has helped to expose them to fans from all over the world. Social media, especially Twitter, has maintained One Direction's relevance in popular culture for the past five years and could be the key to why the band has surpassed the typical boy band lifespan. Additionally, it is important to note that news media outlets and journalists often use trending topics on Twitter as a basis for their news stories because it helps them maintain awareness of community concerns, and keeps them up-to-date on current affairs (Naaman, Becker, & Gravano, 2010). Because One Direction fans are quick to trend breaking news, it is easy for news media to pick up on those topics and use them for their stories. Directioners have the inside scoop, and they have become go-to sources for news media.

There are also several implications that come with this study. The first is that the interactions that take place among Directioners can provide insight into how social media will continue to shape the way people obtain and spread news. Next, with the popularity of social media campaigns as a business and marketing strategy, implications of how industry professionals can improve their social media efforts by learning from Directioners' use of Twitter will be discussed. Lastly, if a large fandom has the ability to spread news at a significant rate and

on a global scale, it has the power to raise awareness on important serious issues that could potentially change the world.

## Background

### Twitter and the New Media Society

Launched in 2006, initially with the shallow purpose of allowing users to broadcast the miniscule details of their lives, Twitter has since transformed, becoming a platform for networked flows of information and allowing for collaborative creation and the spread of news content (Hermida, 2010). With more than 300 million users and 500 million tweets sent out each day, Twitter has become a powerful tool in the dissemination of news (Oreskovic, 2015). Utilized by large news organizations like CNN and The New York Times, Twitter has been in the spotlight for its role as a breaking news source for events that include disasters, uprisings, and deaths of prominent figures (Hermida, 2010). It has also been credited for driving more traffic for breaking news stories than any other social media platforms (MacMillan, 2013). Twitter itself acknowledges its popularity as a news-reporting tool and launched an official Twitter for Newsrooms web guide in 2011, as well as a guideline of the best Twitter practices for journalists that states that “Twitter is a tool all journalists can use to find sources faster, tell stories better and build a bigger audience for their work” (Noguera Vivo, 2013, p. 94). The site played a significant role in the breaking news of high profile events, like the China earthquake in 2008, the Hudson River Plane Crash in 2009, the royal wedding announcement of Prince William and Dutchess Kate Middleton in 2010, Osama Bin Laden’s death in 2011, and the Boston Marathon bombing in 2011 (Elliot, 2013).

Twitter trending topics help users discover breaking news in real-time. If a term is trending, it is a leading topic of discussion amongst users on the site and experiences an increased use among Twitterers (Naaman, Becker, & Gravano, 2010, p. 463). They can be organized and based on their geographic location (e.g., by city, country, or worldwide). Twitter trends can be in the form of a hashtag, or words and phrases. Hashtags are created when the “#” symbol is placed before a relevant keyword or phrase in a tweet, to categorize that particular tweet with others who use the same hashtag (Twitter, 2014). By clicking on the trend, a collection of tweets that include the search term can be found.

Twitter is a fairly recent technology that has changed the way people consume media in the 21<sup>st</sup> century, and this can be attributed to “convergence culture.” In his book, *Convergence Culture: Where Old and New Media Collide*, fandom studies scholar Henry Jenkins (2006) examined how media convergence has become a new model of understanding this change in media. Media convergence offers a chance for people to share important stories and engage with others on the other side of the world. Jenkins (2006) also explained that there is now a cultural shift, as consumers are encouraged to seek out new information and create networks among circulated media content. Therefore, because the spreading of media content is heavily dependent on active consumer participation, users of these new technologies are playing the most important role in dictating what direction media—like Twitter—is heading. Furthermore, he discusses media convergence’s relation to participatory culture, where media producers and consumers are now one in the same, interacting with each other in a revolutionary way.

Furthermore, Twitter is an ideal place for participatory culture to exist. In *Confronting the Challenges of Participatory Culture*, Jenkins (2009) discussed how most teens that use the Internet are actively involved in creating and sharing the content they produce. He defined

participatory culture as having the following five characteristics: 1) low barriers to artistic expression and civic engagement; 2) strong support for creating and sharing content; 3) aspects of informal mentorship between experienced users and novices; 4) members who believe that their contributions matter; and 5) members who feel a degree of social connection with each other and at the very least care about what people think about their creations (Jenkins, 2006, p. 5-6). Jenkins (2006) acknowledges affiliation—membership in online communities—as one form of participatory culture, and that a contemporary participatory culture continues to emerge as our society responds to the emergence of new media technologies that allow people to produce and share content in new and powerful ways.

Overall, my study will show how Directioners embody the characteristics of participatory culture, as they create and spread originally produced content and engage with fellow fandom members to create worldwide Twitter trends. Additionally, it hopes to serve as proof of the convergence culture that is now more relevant than ever, with the popularity and success of social media like Twitter.

## One Direction

Having sold more than 50 million records worldwide as of 2015, One Direction is on track to become the first-ever billion-dollar boy band (Lawrence, 2013). Formed in 2010 on the reality show competition *The X Factor*, the band has performed to more than 7.5 million fans worldwide (Modest, 2015). By 2015, One Direction, made up of band members Niall Horan, Zayn Malik, Liam Payne, Harry Styles, and Louis Tomlinson, set their status as the biggest band in the world. In 2014, One Direction was ranked number 28 on Forbes' Top 100 of the World's Most Powerful Celebrities list, as well as number 7 on Forbes' Social list (Forbes, 2015).

Additionally, their 2014 world tour was the highest grossing tour of the year, earning \$290 million, nearly \$100 million more than the number two spot (McIntyre, 2015). One Direction's fourth and latest album *Four* debuted at number one on the U.S. Billboard 200 album chart in November 2014, just like the band's first three albums. This set a record for One Direction as the only group to have four consecutive number one debuts on the chart (Sinha-Roy, 2014). In March 2015, band member Zayn Malik departed the group, while One Direction continued without him. The group headlined their 2015 world tour called the "On The Road Again" tour, and its fifth album *Made in the A.M.* was released in November 2015.

One direction's true success came as the band began generating a large amount of Twitter traffic (Arvidsson et. al, 2015). One Direction has a strong social media presence, and with more than 24 million Twitter followers and counting, the group's official account was the 25<sup>th</sup> most followed on the site in 2015 (Twitter Counter, 2015). All band members' personal accounts also ranked in the top 100 with millions of followers (Twitter Counter, 2015). Many of One Direction's Twitter followers consist of the band's most dedicated fans, Directioners. Aside from sharing and receiving the latest One Direction news, Twitter has also given Directioners a new direct line of communication between them and their idols, (Stehlik, 2013).

#### Directioners and Twitter: Rise of the Online Fandom

Something new that Twitter added to the aspect of fandom is idea of unlimited contact with fellow fans across the globe. Fans have turned Twitter into a One Direction library, filled with discussions on the endless facts and statistics about the band. Directioners even spend their time talking to each other online and sharing stories about their encounters with the One Direction members, showing off photos and videos of their experiences. Directioners have been

one of the most dominant fandoms on Twitter for the past five years. Their large and global presence has previously been mentioned by the media and discussed in the context of how social media—specifically Twitter—has enhanced their power online.

The popularity of One Direction has been compared to the “Beatle mania” that existed back in the 1960s. While the essence of this type of craze has not changed much in the last 50 years, the main difference between the two phenomena is the existence of social media, which has made the fandom’s obsession far more visible than fandoms of the past (Goldhill, 2014). This real-life enthusiasm has resonated in the Twittersphere in a big way, as Directioners have become a vocal and prominent group on the site. Because they are highly active on Twitter—in addition to other social media platforms—this results in One Direction-related hashtags becoming a constant feature on Twitter’s trending topics list (Arvidsson et. al, 2015). The act of trending is one of the fandom’s ongoing and most popular Twitter practices.

**Figure 1. Fandoms: Beatle mania and Directioners (Goldhill, 2014).**





In 2013, a British documentary titled “Crazy About One Direction” followed the lives of several Directioners to shine a light on the hysteria surrounding the band and their passionate fans. The documentary acknowledged the importance of Twitter and the role it plays in the fandom. As described by Stringer (2013), the “Channel Four documentary *Crazy About One Direction* made one thing clear: Twitter has changed the band fan experience from a manageable part-time obsession to a raging all-consuming addiction.” Because Twitter has become a direct link between One Direction and its fans, it allows Directioners to keep track of the band members and makes them “feel like personal witnesses to the boys’ thoughts” (Stringer, 2013). In the documentary, fans described being in the fandom as a cult and compare their love for One Direction to a drug addiction, with Twitter constantly feeding and fueling that addiction (“Crazy about One Direction,” 2013). Many fans spend their time on the social media site tweeting to the boy band, asking to be followed back or to be acknowledged at the very least. Fans also get creative in an attempt to get the band’s attention, creating artwork or even threatening to kill themselves (“One Direction Twitter: 8 craziest 1D trending topics,” 2012; Stringer, 2013).

While Twitter does see the presence of other digital fandoms, Directioners have been recognized as the most powerful and most active fan group in the world. The fandom won 4Music’s 2015 “Last Fan Standing” battle, beating nine other popular global fandoms: 5 Second of Summer’s “5SOS Fam,” Ariana Grande’s “Arianators,” Nicki Minaj’s “Barbz,” Justin Bieber’s “Beliebers,” Beyonce’s “Beyhive,” Katy Perry’s “Katy Cats,” Rihanna’s “Navy,” Ed Sheeran’s “Sheerios,” and Taylor Swift’s “Swifties” (Wood, 2015). In order to win the competition, fans voted during a two-week period by going to Twitter and tweeted their fandom’s assigned hashtag (#Directioners4Music for Directioners). Directioners represented 33.95% of the votes, with more than 2.8 million votes (“Directioners win Last Fan Standing 2015,” 2015;

Wood, 2015). It is important to acknowledge that the nine other global fandoms that Directioners beat in the 4Music Last Fan Standing battle are also possible groups that can be studied to examine the Twitter relationship of fandoms.

*#AlwaysInOurHeartsZaynMalik*. Directioners have become influential newsmakers, especially when it comes to breaking news, but a particular day in March made One Direction history, as the fandom was once again the center of media headlines and the entire Twittersphere. On Wednesday, March 25, 2015, One Direction announced in a statement via social media that Malik had officially quit the group, one week after he took a temporary break from their 2015 world tour due to stress (Leopold, 2015). The news was posted to the band's Facebook page and shared on Twitter to more than 22.9 million Twitter followers at the time, immediately causing a "spike of sadness" among fans from all over the world and spurring a variety of hashtags including *#AlwaysInOurHeartsZaynMalik* (Leopold, 2015). Devastated fans shared their tears through Vine videos and pictures, with some describing March 25th as "the day the entire world shattered" (Yagoda, 2015; Gilbride, 2015).

Within just an hour of the news, online music streams of One Direction songs were up more than 700% in the United States alone and 330% worldwide (Vain, 2015). Influential celebrities including Jimmy Fallon, Jennifer Lopez, Will Ferrell, and Kevin Hart even took to Twitter and other media sources to weigh in on the news (Yagoda, 2015; Daluisio, 2015; Malec, 2015). In addition, verified brands like Girl Scouts and Denny's also took advantage of the opportunity to create relevant tributes to the boy band member (Truitt, 2015; Boardman, 2015). It was evident that Malik's decision to quit One Direction had caused mass hysteria across media platforms. While he had simply gone back home to England with the intent of carrying on a

normal life, fans all over the world mourned his departure from One Direction as if they had lost him forever.

What baffled many people outside of the fandom was how the news surrounding Malik was able to overshadow an even more tragic event. Amidst the One Direction drama, people seemed to have forgotten about the Germanwings Flight 9525 plane crash that occurred on Tuesday, March 24, 2015. Departing from Barcelona, Spain, 150 passengers were headed to Dusseldorf, Germany when their plane crashed into the Alps shortly after takeoff, killing all on board (Botelho & Smith-Spark, 2015). Little was known on the day of the incident, but new details were revealed on March 25—the same day as the breaking news about Malik’s decision to leave One Direction.

On March 24, the day of the Germanwings plane crash, the hashtag #Germanwings was the number one worldwide Twitter trend with nearly 200,000 tweets, but it was bumped to second-place the following day as #AlwaysInOurHeartsZaynMalik took the top spot (TT History, 2015). According to Twitter analytics via Topsy.com (2015), the hashtag #AlwaysInOurHeartsZaynMalik was tweeted more than 4 million times on March 25. Although #Germanwings was the top trending hashtag on March 24, its impact was nowhere near that of the Zayn Malik related trend. Days following both events, several news pieces were written about how Malik leaving One Direction overshadowed the news of the Germanwings plane crash on Twitter, which was certainly reflective of many people’s news consumption that week (Varghese, 2015; Zaporowska, 2015).

*“Project No Control.”* Another unique feat for Directioners is their aggressive marketing efforts via social media. In May 2015, the fandom launched “Project No Control,” a movement that inspired One Direction fans to come together and release a third single—“No Control”—off

of the band's fourth album, after it was announced that no more singles would be released for the time being following the departure of Malik from the group (Adejobi, 2015; Buenneke, 2015). Believing they could do a better job than the band's management and record label in promoting the band's album, Directioners came together to become One Direction's own publicity and promotion team. Interestingly, this "do-it-yourself" movement is reminiscent of the punk and indie rock scenes, where musicians rely on their fans to get the word out about their music—something that is rarely associated with Top 40 artists (Buenneke, 2015).

One fan explained the reasoning behind the project and raised importance of the fandom and its role in promoting the band, saying: "Fan involvement has always been important to [One Direction and its team], but I think we've been an undervalued resource, and it's time for them to realize just how important we are to the boys' continued success, and how much we want their continued success" (Buenneke, 2015). Directioners took One Direction's promotion into their own hands and planned to get the song trending across various social media platforms. In the end, the fan-driven campaign prevailed as "No Control" was released on May 17 and had already been trending on Twitter in the days prior to the release. It ultimately reached No. 1 on the "Billboard + Twitter Top Tracks" chart (Anderson, 2015). Band member Tomlinson even acknowledged this effort in a *Billboard* interview, explaining that this was "a perfect example of how unique, incredible and passionate" their fans are (Anderson, 2015). Additionally, the excitement surrounding the project also resulted in One Direction adding "No Control" to the set list of their "On the Road Again" world tour (Connolly, 2015).

Selected Time Frame: July 19 - 31, 2015

I chose to focus on the One Direction fandom because I myself am a fan of the band, and I have seen first-hand the role that social media has played in the recent years in the promotion,

popularity, and relevance of the group. Importantly, as a One Direction fan, I am able to easily identify the worldwide Twitter trends that are related to the band.

Ever since Malik left the band, Directioners seemed to be more vocal, especially during the month of July. I chose Sunday, July 19, 2015 through Friday, July 31, 2015 as my time frame for collecting data through a social media network analysis program called NodeXL. I selected this time frame because of the significant amount of One Direction events and headlines that subsequently prompted worldwide Twitter trends between July 1 to July 18, and because of the upcoming One Direction related events that were expected to occur between July 19 and July 31.

It is important to acknowledge that during the week prior to the start of my selected time frame, there was at least one One Direction related worldwide Twitter trend per day, which all became a primary focus of news stories. Below is a list with brief descriptions of the worldwide Twitter trends related to One Direction that appeared from July 1 to July 18, 2016 (PST).

July 7, 2015 - #Action1D, No. 1 worldwide trend

- #Action1D represented a global campaign launched by One Direction in collaboration with Action/2015 to raise awareness to worldwide issues like poverty, climate change, and equality. This was in preparation for important United Nations summits coming up later in the year. As part of the campaign, One Direction encouraged fans to participate in tasks and activities via Twitter and their website, in an effort to raise awareness for the campaign.

July 9, 2015 - #OTRASanDiego, No. 1 worldwide trend

- Fans live-tweeted One Direction's "On The Road Again" (OTRA) tour concert in San Diego, California.

July 11, 2015 - #OTRASantaClara, No. 1 worldwide trend

- Fans live-tweeted One Direction’s OTRA tour concert in Santa Clara, California.

July 12, 2015 - **#ZAYNHASNOCHILL**, No. 1 worldwide trend

- One Direction fans started the trend after former band member Zayn Malik tweeted insults toward British producer “Naughty Boy.”

July 13, 2015 - **#HarryBeCareful**, No. 1 worldwide trend

- Rumors spread that One Direction member Harry Styles was in danger of being assassinated at one of their upcoming concert.

July 14, 2015 - **#OhNoLouis**, Top 10 worldwide trend

- It was rumored that One Direction member Louis Tomlinson was expecting a child.

July 15, 2015 - **#OTRASEattle**, No. 1 worldwide trend

- Fans live-tweeted One Direction’s OTRA tour concert in Seattle, Washington.

July 16, 2015 - **#WeWillAlwaysBelieveInLarry**, Top 10 worldwide trend

- Fans started the trend in support of the popular “shipping” of One Direction members Tomlinson and Styles. However, this trend was also created in protest and shock over Tomlinson’s baby news.

July 17, 2015 - **#ArianaRESPECTLouis**, No. 1 worldwide trend

- Directioners started the trend after it was rumored that singer Ariana Grande insulted One Direction member Tomlinson.

July 17, 2015 - **#OTRAVancouver**, No. 1 worldwide trend

- Fans live-tweeted One Direction’s OTRA tour concert in Vancouver, British Columbia (Canada).

July 18, 2016 - **#ZaynAppreciationDay**, No. 1 worldwide trend

July 19, 2016 - #LouisAppreciationDay, No. 1 worldwide trend

- With One Direction's five-year anniversary approaching, Directioners decided that they would create worldwide Twitter trends in tribute of each band member, including Malik, as part of the "5 Days for 1D" project. For five days, prior to the day of the actual anniversary (July 23), the fandom planned to dedicate one day to a specific member by tweeting about why they love and appreciate him using the format #[Name]AppreciationDay.

Predicted Worldwide Twitter Trends: July 19 - 31, 2015

Because of the headlines surrounding One Direction at the time, there was potential for future news, both expected and unexpected, that could result in the creation of worldwide Twitter trends for the remaining days in July, making my selected time frame for collecting data a significant one. First, because the Action/1D campaign was to continue until the end of the month, #Action1D had the potential to trend additional times because of how successful it was on launch day. Next, several On the Road Again tour shows in the second half of the month, so Directioners were likely to continue live-tweeting the remaining concerts, given the successful live-tweet of all previous tour dates. Next, because fans were awaiting confirmation on Tomlinson's baby news and news regarding the future of Malik's career without One Direction, both were possible causes for future Twitter trends. Lastly, the biggest known event that was planned to occur was the band's five-year anniversary on July 23, in which fans were continuing their fan-dedication days for the band members.

## Theoretical Framework

Based on previous work by fandom studies scholars, my study draws upon a version of fan theory as a framework that has been updated to fit the context of social media, to examine how Directioners have the ability spread and trend worldwide news through Twitter. This section will discuss the history of fandoms, previous fandom research and notable scholars, the evolution of fan theory, and how fan theory can help provide answers to my research questions.

### History of “Fandom”

“Fan,” an abbreviated form of “fanatic,” comes from the Latin word *fanaticus*, which means “of or belonging to the temple, a temple servant, a devotee” (Jenkins, 1992, p. 12). The use of the word “fan” first appeared in journalistic reports of sporting events in the late 19<sup>th</sup> century to describe the followers of the events (Jenkins, 1992). However, according to Cavicchi (1998), the term “fan” did not come into widespread use until the early 20<sup>th</sup> century when mass consumerism started transforming the industrial West. A fan can be described as “a person with a relatively deep, positive emotional conviction about someone or something famous” who “[inhabits] social roles marked out as a fandom” (Duffett, 2013, p.18). With the added suffix – *dom*, as in kingdom, a “fandom” creates a subculture where, “much as in religious worship, the social experience is brought to life” through camaraderie over a common interest (Serazio, p. 305).

### Fandom Studies and Scholars

While fandoms now exist in a wide range of areas including music, sports, movies, television, video games, and politics, fandom scholars originally came from the fields of



sociology, anthropology, and psychology. With the recent evolution of digital media and technologies, however, fandom has entered a new realm for study. Academic journals that have published research on fandoms include: 1) *International Journal of Cultural Studies*; 2) *Communication Studies*; 3) *Media, Culture, and Society*; 4) *New Media and Society*; 5) *Popular Music and Society*; and 6) *Mass Communication and Society*.

Books about fandom studies include Gray, Sandvoss, and Harrington's (2007) *Fandom: Identities and Communities in a Mediated World*, which discusses the background and evolution of fandom studies and brings together a collection of works and ideas by notable fandom scholars in the recent decades. Matt Hills (2002) wrote *Fan Cultures* to draw on case studies of a variety of fan communities like "Trekkies" or "Trekkers" (fans of the television show *Star Trek*) and "X-Philes" (fans of the television show *X-Files*). *Fan Cultures* was the first comprehensive overview of fans and fan theory that discussed the various approaches to fan studies and theories employed to fan cultures between consumerism and "resistance," community and hierarchy, "knowledge" and "justification," and "fantasy" and "reality" (Hills, 2002).

Mark Duffett (2013) wrote *Understanding Fandom: An Introduction to the Study of Media Fan Culture* to explore the phenomenon of fandom and how new technologies and production have made it a fundamental mode for media consumption. Duffett also acknowledged the importance of scholars like Henry Jenkins (1992), who was a part of the first wave of fandom researchers and wrote books like *Textual Poachers: Television Fans and Participatory Culture*, which talks about fans of media as active producers who construct their own culture based on consumption practices.

## Evolution of Fan Theory: Fandom as a Theoretical Framework

The collection of previous studies by fandom scholars resulted in the evolution of theoretical approaches to explain how fandoms are formed, how they work, and what they create. The *Critical Dictionary of Film and Television Theory* provided definitions of various media theories used by scholars, such fan theory, which outlined the theoretical approaches of fandom as 1) an interpretive community and 2) as a form of consumer activity (Pearson & Simpson, 2005). As an interpretive community, fandoms are said to occur and continue “through the social and institutional structures” where “an intense personal experience... is located and re-affirmed within social relationships” (Pearson & Simpson, 2005, p. 232). This raised awareness of fandom as not only a community, but also a social hierarchy in which fans are not as equal as people might be led to believe (Tulloch & Jenkins, 1995; Pearson & Simpson, 2000).

When theorizing fandom as a form of consumer activity, this approach has transformed throughout the years as the gap between fan identities and consumer identities drew closer together, which led Pearson and Simpson (2005) to encourage future studies that address the growing complexity of fandoms, especially in terms of new practices and experiences. For instance, there are now indications of Jenkin’s initial concept of fans as “poachers” now evolving into a new concept of fans as activists, which fandom researchers recently began looking into (Chin & Morimoto, 2013).

As a whole, fan theory highlights the emotional investment that fans devote to the object of their fandom (Grossberg, 1992; Hills, 2002, Barnes, 2014). This important characteristic of a fandom reinforces fans as active participants through the consumption of popular culture (Chin & Morimoto, 2013, p. 98). Fiske (1992) argued that fans have a desire to find meaning and gratification from pop culture, all the while finding a connection and defining their roles within

the fandom. Barnes (2014) provided new implications for the understanding of the online news community and expanded on fan theory, explaining that fans also “compete for knowledge, access to the object of fandom and status” in the social hierarchy of their fandom (p. 132). She also theorized that fan’ interactions take place on online news sites not only for fans to establish themselves within the community’s social ladder, but to connect with others outside of their community as well.

Just as Barnes (2014) pointed out, there is a need for future research using fan theory to examine what hierarchies are produced within new fan cultures that continue to be created, especially in this digital age. Additionally, Chin and Morimoto (2013)—who proposed a transcultural fan theory—acknowledged the lack of fandom scholarship to develop a fan theory that “consistently complexifies fan identity” and “engages emerging popular cultural content” as a result of today’s easy dissemination of information via digital methods (p. 105).

### Fan Theory and My Research

Within the context of popular culture, Chin and Morimoto (2013) expressed the need for a more effective way of explaining the different types of fan practices that exist globally, from both a geographical and cultural point of view. It is important to acknowledge that today’s fans experience an enhanced type of engagement, especially with the immediacy and accessibility that the Internet has provided. While there are a few studies that examine online fandoms and their various roles in the digital age, even fewer have examined these groups in relation to social media. There are also no studies that examine fandoms in terms of their role in spreading and shaping global news stories through social media, specifically Twitter.

According to Chaffee and Berger (1987), a good theory contains the following attributes: explanatory power, predictive power, parsimony, falsifiability, internal consistency, heuristic

provocativeness, and organizing power. With all these characteristics of a good theory, fan theory is the best framework for my study because it can be used to effectively explore the relationship and influence of a fandom through social media. It will be able to provide explanations for how Directioners interact on Twitter and are able to create worldwide trends as a result. It can help to predict phenomena, like when worldwide Twitter trends will appear. It can be proved false, since not all trends created by the Directioners reach a worldwide trending status. Internal consistency can also be examined with fan theory. In regards to heuristic provocativeness, fan theory will allow my study to generate new hypotheses, which will expand the range of potential knowledge regarding online fandoms as well as how social media continues to reshape the dissemination of news. Lastly, in addition to generating new knowledge, fan theory has the ability to organize existing knowledge found in my study.

Because it has mostly been explored in the areas of film and television, fan theory offers new opportunities to further study the online audience and help us better understand how fandoms engage in new platforms. It is the best theory to guide my study in order to find out how a community of One Direction fans can easily and significantly influence worldwide Twitter trends. Hills (2002) once stated that fandoms were not the dominant market for popular culture, but fan theory could help to prove otherwise and show that this may be the beginning of fandoms' dominance in popular culture in the digital era.

## CHAPTER 2

### LITERATURE REVIEW

Past research studies on fandom and Twitter have been conducted at a regional level, but this is the first to examine a fandom and its interactions on Twitter on a global scale. Nonetheless, a range of related research helped serve as a basis for my study.

In a study that examined the networks of connected users on Twitter, Himelboim, Smith, and Shneiderman (2013) developed a method called Selective Exposure Cluster (SEC), which will be further discussed in the Chapter 3, to find patterns of how users are connected and exposed to content—specifically political discussions stemming from the 2012 State of the Union Address from the President of the United States, Barack Obama. The researchers sought to find out if: 1) Twitter users form distinct clusters when contributing to a given topic on Twitter; 2) hubs in a cluster have a consistent ideological standpoint; and 3) hashtags, hyperlinks, and top mentioned usernames used in a cluster clearly identify with one side of a controversial issue. Several definitions provided by Himelboim, Smith, and Shneiderman (2013) are important to define, as they are referenced throughout my study. “Hubs” are users who have an above average number of connections. In other words, they are the most influential and typically at the center of the cluster in which they are located because they capture a significant portion of the attention in comparison to other users in the same cluster. “Clusters” are groups of users that are more connected together in the same community in comparison to the rest of the network. Each twitter user is represented as a “node,” and may also be interchangeably referred to as a “vertex.”

To find patterns of selective exposure, visual maps were created on a program called NodeXL, to examine the networks created by users, as well as the relationship of content

exposure via Twitter. Himmelboim, Smith, and Shneiderman (2013) found that users form medium to high levels of cluster separation when they contribute to a particular topic via Twitter and that clusters were created with consistent conservative ideological standpoints. Lastly, hashtags, hyperlinks, and top mentioned users associated with conservative political views appeared together in the same clusters. However, data containing liberal views appeared in mixed clusters, which the researchers believed reflected “a common perception by conservative individuals that mass media... hold liberal views” (Himmelboim, Smith, & Shneiderman, 2013, p. 190). Overall, they explained how clusters created when Twitter users differentially link to people with shared viewpoints indicates selective exposure and why users can see similar messages from others in their own cluster more easily, in comparison to posts from others in different clusters. Their research suggested that for Twitter users, there is limited exposure to content from an outside cluster but that they may be indirectly exposed to content from diverse sources.

Arvidsson, Caliandro, Airoidi, and Barina (2015) examined the crowd-based dynamics of value creation in social media-based participatory culture by looking at tweets associated with Italian fans of One Direction and similar boy bands. Focusing on participatory culture, the researchers wanted to see how participants contribute through the act of valuing content by investigating how hashtags are used indicate an organizational structure through peer production (production, curation, and integration of content) to put content together and provide a common frame that gives direction to the practice of fan movements. The top 10 fandom-related hashtags that became trending topics on Italian Twitter during a three-day period were followed to gather more than 114,000 tweets (Arvidsson, Caliandro, Airoidi, & Barina, 2015, p. 8). The researchers then followed the Twitter activities of the top five most popular users in the sample—those with the most retweets and mentions—for three days, before all collective data were visualized using

an Open Source data visualization software called Gephi (Arvidsson et al., 2015). Findings showed that the fandom Twitter network was non-hierarchical—i.e., an “egalitarian and dense crowd”—with no influential hubs that dominated the traffic flow (Arvidsson et al., 2015, p. 13).

The researchers also discussed the importance of hashtags and retweets as powerful promoters resulting in the trending of topics, and emphasized how hashtags help to organize an online environment where this collective affect can find topics of investment and create a common direction. Findings showed that active users behaved similar to robots with the extremely high number of retweets, and that the levels of connectivity and activity were distributed evenly overall, leading to the idea of crowds versus community. Arvidsson, Caliandro, Airoidi, and Barina (2015) explained that when it came to creating Twitter trends, a fandom resembles more of a crowd, as opposed to a community, because they fluctuate in size and have a higher turnover rate in participants. They explained that this results in the limited space for personal brands or charismatic qualities to develop among users in the One Direction fandom.

With the One Direction fandom sharing characteristics similar to connected learning environments, such as peer-to-peer sharing and online participation, Korobkova (2014) investigated how learning and networking characteristics that take place in the fandom by looking into its fanfiction community on Wattpad.com. Wattpad is a “free online writing community” that is described as the “world’s largest community for discovering and sharing stories”, and the content shared through the site is all user-generated (Korobkova, p. 7). Over a nine-month period, the researcher conducted in-depth interviews with 25 Directioners from the United States, Australia, India, and Indonesia, who were in the fandom’s community on Wattpad and analyzed artifacts created by those interviewees, e.g., stories, forum posts, and profiles.

Korobkova (2014) found that through writing fanfiction stories through Wattpad, young fandom users developed important literacy skills—like writing skills, editing skills, expanded vocabulary—but they rarely believed their skills and practices in the fandom related to the world of school. While the fans acknowledged that the quality of their writing at school improved, they visualized their fandom activities as a “Directioner-only or teen-only kind of realm” (p. 36).

Korobkova (2014) expressed that the designers of connected learning environments need to find ways to mix education with young people’s cultural worlds without rejecting their autonomy.

Furthermore, in terms of content, Korobkova found that digital tools help in the active creation of media, knowledge, and culture content that is spread throughout online platforms. She emphasized the popularity of GIF-making in the fandom—creating a looping animation image file that has no sound (Korobkova, 2014, p. 22). Fans learn and teach each other to create gifs by taking clips from One Direction interviews and views, and then showing them off as “samples” that take on various forms to achieve a desired effect or message. Korobkova (2014) also discussed sites like Wattpad.com having properties of being openly networked, allowing fans across geographical boundaries to be connected.

Examining music artist Lady Gaga’s relationship with fans, Click, Lee, and Holladay (2013) investigated how fans’ identification with celebrities has changed and increased with the emergence of the new social media environment, giving fans a feeling of closeness with celebrities. The researchers conducted 45 one-on-one interviews with Lady Gaga fans—known as “Little Monsters”—and asked them how social media impacted their interest and relationship with Lady Gaga, what their feelings were about Lady Gaga’s social activism, and what being a Little Monster meant to them. It was found that fans felt they received direct feedback from their idol and believed Lady Gaga’s voice on Twitter seemed to be more authentic than other



celebrities, giving the fans a feeling of a more unmediated connection. Overall, the researchers argued that social media amplifies and enables the fans' strong identification with Lady Gaga. However, they acknowledged that because this relationship takes place in the social media environment, where even the most authentic and reciprocated communications are still constructed, this raises questions about the distinctions between "imaginary" and "real" relationships.

Marwick and Boyd (2010) explained that every participant in a communicative act has an "imagined audience," which suggests that people present themselves differently—often in "fixed, singular, and self-conscious ways"—based on who they are talking to and where the conversation takes place, and investigated how content producers navigate this imagined audience through Twitter (p. 116). This imagined audience is prevalent in social media, where greater interaction takes place and in a way where users are highly conscious of audience. Therefore, people get to know each other on Twitter through their tweets and conversations, and they construct elaborate "performances" that convey appealing preference to anyone they come across online (Marwick & Boyd, 2010). The researchers investigated how content producers navigate this imagined audience through Twitter. To find out how Twitter users imagine their audience, Marwick and Boyd (2010) used the social media platform to ask their followers questions including: "Who do you imagine reading your tweets?"; "Who do you tweet to?"; "What makes an individual seem 'authentic' on Twitter?"; and "What subjects are inappropriate for Twitter?" (p. 118). After receiving 226 responses from 181 Twitter users through direct messages or tweet replies, the researchers found that Twitter users maintain impressions of their audience by balancing personal and public information, avoiding certain topics, and maintain authenticity.

Overall, social media combines characteristics of broadcast media and face-to-face communication, creating a networked audience in social media that becomes a place where person-to-person conversations take place amongst large audiences, which creates further opportunities for connection, tensions, and conflict. Through Twitter, the user network has become an agent in the identity and content of the speaker, and the imagined audience becomes visible when it influences the information Twitter users choose to broadcast. Some users design their profiles and construct their tweets to become relevant other users are looking to follow those who appeal to their specific interests. When it comes to prominent Twitter users like celebrities, there is a disconnect between followers and those being followed. It is also important to add that Twitter users' follower count is only an indication of its potential audience, as not all followers read its tweets (Marwick & Boyd, 2010). Marwick and Boyd (2010) point out that Twitter users don't know exactly which followers read their tweets, so they do not know the audience and therefore imagine it. What is special about Twitter is that it consists of both real and potential viewers of digital content that exist within a larger social graph (Marwick & Boyd, 2013). Users who have a significant amount of followers (100,000+) imagine their audience as a fan base and have an understanding of what appeals to their audience (Marwick & Boyd, 2013).

Asking how and why Brazilian fans create and maintain hashtags in Brazil's Top Ten list of trending topics on Twitter, Recuero, Amaral, and Monteiro (2012) emphasized Putnam's (2000) idea of "social capital"—the connections between individuals and the values built as a result—to study hashtags created by the fandom of the Brazilian pop rock band Restart using a quanti-qualitative approach. The researchers conducted online and offline ethnography, with 71 interviews consisting of 43 fans during two Restart concerts and 28 through social network sites. Additionally, through the social network analysis program NodeXL, they conducted an analysis

on 20 trending topics and further examined six networks by creating NodeXL graphs to visualize and analyze the fandom's clusters. Restart fans created five types of trending topics—tribute, promotion, response, requests, and war—and often use the word “family” to describe the relationship and strong, connected bond they have with each other. “Fan wars” were also a highlighted finding in the study, where the researchers found that fans dispute with other groups of fans to 1) show who is the “strongest, largest and more loving of their idols”; and to 2) fight against anti-fans who tweet hashtags against the idols to anger the fandom. Overall, the researchers concluded that participants in the fandom are able to connect with each other, connect with their idols, negotiate values, and create visibility to their goals. Because Twitter provides users with new social practices, users are able to create a collective identification that increases social capital and clusterization, therefore influencing top trending topics in order to bring awareness to their intended messages.

Bastos, Raimundo, and Travitzki (2013) examined the structure of gatekeeping on Twitter by taking a look at top political Twitter trends. Gatekeeping is “the process by which the billions of messages that are available in the world are winnowed down and transformed into the hundreds of messages that reach a given person on a given day” (Bastos et al., 2013, p. 261). This is based on the literal idea of a gatekeeper being the person who decides what can pass through the gate. Gatekeeping is vital in online networks and has turned gatekeepers into gateways of information. It involves users participating in a story and redesigning the process in which ideas and information are filtered and posted. Because of Twitter's ability to spread real-time information to a number of users, the researchers acknowledged that the platform is ideal for disseminating breaking news directly from the source. They also discussed that Twitter users

with a large number of followers, hubs, typically account for a main source of spreading a particular message because of their aspect of connectivity to a network.

For their study, Bastos, Raimundo, and Travitzki (2013) analyzed three political hashtags that became number one worldwide trending topics on Twitter and examined the connection between the Twitter network connectivity and message diffusion. The researchers focused on three types of networks within each hashtag, in order to analyze gatekeeping structure: 1) network of mentions; 2) network of retweets; and 3) network of followers and followees. Statistical correlations were performed to analyze various metrics in each data set, and analysis was focused on a data collection of retweets. Overall, this study concluded that there is no statistically significant correlation between the rate of retweets and the network of followers and followees. However, the significant correlation between retweets and the number of tweets posted per Twitter user suggested, “gatekeeping in Twitter political hashtags is not reliant on the network connectivity, but rather on the features and properties of the message itself” (Bastos et al., 2013, p. 268).

In studying social awareness streams (SAS), Naaman, Becker, and Gravano (2010) aimed to advance the understanding of SAS (i.e., social media platforms) and essentially how Twitter trends work. Social media has changed the way society communicates and receives information in the past few years, and SAS systems allow hundreds of millions of users to share real-time messages within and across local and global online communities. The researchers acknowledged that Twitter is the most studied SAS system because of its “wide global reach and popularity”, and because content is easily accessible (Naaman et al., 2010, p. 902). To gain an understanding of how Twitter trends become a significant source of information for a local community, the

researchers collected trends and then categorized them to find out if those from different categories display distinct differences in their computed features.

Naaman, Becker, and Gravano (2010) were able to show the value in understanding of Twitter trends and SAS systems, which they explained was an important aspect to “enabling applications and activities, like user-driven real-time information services for local communities” (p. 917). When it came to breaking news events, they found that a large number of tweets using those specific trends were retweet messages, and a small proportion of them were reply messages, meaning there was more of a focus to disseminate breaking news rather than have conversation about it. In local event trends, however, the researchers explained that people engage in more in discussions. Additionally, results showed that endogenous trends grow and develop within Twitter and do not reflect external events. Naaman, Becker, and Gravano (2010) concluded that patterns in SAS systems, especially the way trends are spread via Twitter, are important to the way people obtain and spread information. Overall, they found that trends have many different purposes from the way they can be characterized into a range of categories, and the characteristics of the messages associated with trends can be used to better understand the context and origin of the trend. The data and results collected in this research through the characterization process can help increase the usefulness of social media for individuals, organizations, and local communities.

In a critical television study that examined the emergence of fan practices on Twitter by those in the *Glee* fandom, Wood and Baughman (2012) looked into what those practices mean for producers and consumers of the media. Using a theoretical framework of transmedia convergence, the study aimed to find out how the *Glee* fandom participates in transmedia storytelling through social interactions between fictional Twitter “character” accounts, as they

watch the television show. The researchers asked 1) whether these fan practices benefit the fan, the producer, or both; and 2) whether the convergence is a means by which audiences break away from media texts, or a means by which the audience is drawn in to reinforce real-time viewing by producers and advertisers. Wood and Baughman (2012) emphasized the importance of convergence culture and acknowledged the fact that media convergence strongly focuses on fans and consumers, “representing a cultural shift from media holding the upper hand to grassroots participation on the part of those who consume this new media in their daily lives” (p. 331).

Through cross-platforming examination of the *Glee* fandom and Twitter, the researchers investigated how fan-operated character accounts interacted with each other and aligned with the show’s narrative. They also examined how the same accounts interact with other fans (also known as “low level” fans) in order to “enhance the general fan experience and personal connection to the characters in the show” (Wood and Baughman, 2006, p. 333). They found that *Glee* fans “were part of a highly interconnected network linked by the ways in which they interacted with one another” and created a world outside of the television show’s narrative through Twitter, a new non-traditional medium (Wood & Baughman, 2006, p. 334). Through this process, users enhanced the fan experience, as well as personal connections, to the show’s characters. While the fandom watched the show, Twitter users helped to create a captive audience for *Glee* because those who follow the role-play fan accounts would want to perhaps watch the program in real time in order to keep up with any tweeting taking place during the show. While Wood and Baughman also found that the role-play accounts sometimes stepped out of the narrative, the users mostly stayed on script. Overall, the research found that as a whole, convergence “creates a process of watching that encourages an association between commodities

and characters,” therefore turning fans into a “source of free marketing labor” (Wood & Baughman, 2006, p. 340). Wood and Baughman suggested that there is a shift in fandoms’ roles, especially through new media like Twitter.

In 2010, Olympic figure skater Evan Lysacek posted an offensive comment on Twitter about rival skater Johnny Weir, which resulted in a failed crisis management situation. Colapinto and Benecchi (2014) used this event between Lysacek and Weir as a case study to provide insight into how celebrities should manage a communication crisis caused by the misuse of social media. The researchers analyzed the online communication that took place on Lysacek and Weir’s Twitter pages during August 2010, after the scandal to see how information affected the flow of discussion, and “to [analyze] the actions and reactions of all actors involved in the new interactive media environment” (Colapinto & Benecchi, 2014, p. 221). The reactions and feedbacks from users, especially fans, play an important role in the shaping of a person’s reputation, especially celebrities. Colapinto and Benecchi explained the three factors of why athletes continue to use social media sites like Twitter, regardless of PR incidents like Lysacek’s. The first is because social media provide a valuable platform for media contact and the ability to develop a relationship with followers. Second, “the rewards of social networking are concrete and immediate while the costs are abstract and ideological” (Colapinto & Benecchi, 2014, p. 230). Lastly, athletes are able to attract new sponsors due to social media’s increasing visibility. While Lysacek’s reputation was ultimately damaged due to his mistake, Weir on the other hand benefitted from the incident as he increased his follower count on Twitter and gained new sponsors. Colapinto and Benecchi (2014) concluded that social media “is both an explosive opportunity and a disruptive change to the fundamental parameters of crisis management,”

therefore increasing the opportunities for the subject of the scandal and the audience to receive and present information (p. 231).

With Twitter being prominently used in the discussion of popular televised events—especially by fandoms—Highfield, Harrington, and Bruns (2013) examined the patterns of participation on Twitter during the 2012 internationally televised event: the Eurovision Song Contest, one of the largest annual music competitions in the world. The researchers acknowledged the importance of research on “audiencing,” which is “the public performance of belonging to the distributed audience for a shared media event” (Highfield, Harrington, & Bruns, 2013, p. 315). The researchers used an open-source tool called ‘yourTwapperkeeper’ to collect and analyze data on Eurovision-related hashtags. In addition, they analyzed the Eurovision broadcast and hashtags during a minute-by-minute basis to examine which events during the broadcast results in an increased level of tweeting. Furthermore, using the social network analysis program Gephi, networks formed by Twitter users through mentions, replies, and retweets were visualized to examine clusters and identify groups of users who are organized by shared interests, languages and ethnicity, or around the celebrities or broadcasters Tweeting about the Eurovision event. Findings showed that while tweets came from an international audience, users in Europe were more prevalent and formed more distinct clusters. In their study, the researchers saw the importance of hashtagged activities, which allow fan communities with a common goal to gain greater visibility and even takeover a hashtag. Overall, Highfield, Harrington, and Bruns (2013) acknowledged that Twitter has become a complex technology for “long-term fandom” and an important tool for audiencing, facilitating the connection and communication among fans and audiences (p. 339).



Guschwan's (2012) article examined participatory culture pertaining to the supporters of sports teams by taking into consideration two aspects: 1) branding, which defines supporters as loyal customers and potential commodities; and 2) fandom, which understands supporters as agentive meaning-producers who use fandom for their own uses. Guschwan (2012) juxtaposed the language of fandom with the language of brands, using the term "brandom" in reference to brand-controlled 'fan' communities that lack genuine independence. Acknowledging that sports team brands have the power to infiltrate culture in the 21<sup>st</sup> century, he explained that the primary consumer "products" are live, ticketed performances (matches), television/media content, and licensed merchandise. He conducted a case study on the fans of the S.S. Lazio soccer team in Rome, Italy who were led by an organized group called Irriducibili, "one of soccer's most exuberant and notorious groups of supporters" during the late 1990s and into the 2000s, who were a model of participatory culture with their fan activities and acts of socialization inside and away from the stadium (Guschwan, 2012, p. 19). The researcher aimed to demonstrate the potential of organized fans to create and promote branded commodities, and used the case study to show how a group of organized fans can also threaten the symbolic and financial legitimacy of sports team/brand ownership and the relationship that exists between fans and their teams. Guschwan (2012) explained that fans of any sports teams are an asset of the brand and add an important element to the experience of the product and that the power to make a brand is ultimately in the hands of consumers. However, he acknowledged that there would continue to be a constant struggle for power between fans, consumers, and producers in all realms where the three exist.

## CHAPTER 3

### METHOD

With people communicating more through social media sites than through face-to-face interactions, complex social network structures are created that bring about important meanings to the intricate patterns that exist in online communities, and their relationships with one another. NodeXL, a free open source software tool designed to provide methods of social network analysis through visualization, helps to provide insight into these relationships (Hansen, Shneiderman, & Smith, 2010, p. 54). Itai Himelboim from the University of Georgia is a leading researcher when it comes to using methods like NodeXL to analyze data on Twitter.

Based on Himelboim's previous work with Smith and Shneiderman, (2013) my study utilizes similar processes and implements them in regards to fandom and Twitter news trends. NodeXL will help me examine complex patterns and trends that appear within those fan communities. This method is best in regards to the investigation of answers for my research questions, as it easily identifies top influencers, provides beneficial metrics and statistics regarding Twitter trending topics and users who utilize them, and gives a better idea of social network interactions through customizable visualization data. Rather than simply analyzing metrics, I decided to take it a step further by implementing the Selective Exposure Cluster (SEC) method into my study, to examine the way Directioners expose themselves to other fandom users on Twitter.

Using NodeXL is advantageous when attempting to collect a large amount of data on the activity of users on Twitter, in comparison to more common methods that could be used, i.e., surveys, experiments, and interviews. The SEC method is based on the direct interaction with

other Twitter users, and surveys could also be ideal for this because I could simply ask respondents about their Twitter interactions. However, while surveys and other methods can provide information based on self-reports, the possibility of bias and recall are potential drawbacks (Babbie, 2012). NodeXL overcomes these limitations by focusing on the details of the social connections and shared content that describe each cluster. This makes the network's clusters the main unit of analysis in contrast to, for instance, the unit of analysis of a survey being the individual. NodeXL is also able to capture indirect exposure to information (i.e., friend of a friend), which is difficult to capture through methods that primarily focus on the individual. By capturing the social boundaries of exposure of information allows for the evaluation of users' potential for exposure beyond their network of directly connected social contacts (Himmelboim, Smith, & Shneiderman, 2013). This is significant on a platform like Twitter, where users can pass along content by retweeting it.

Other alternative programs that could be used in place of NodeXL are Pajek, UCInet, and Gephi (Marin et. al, 2011). Gephi is better known of the three and is worth looking into also, as it can also be utilized for social network analysis. It is very similar to NodeXL, providing various metrics, centrality data, and creates visualization tools—although it has been around longer than NodeXL and has a little more complicated features. I chose NodeXL over Gephi to better replicate the SEC method used by Himmelboim, Smith, and Shneiderman (2013). It is important to acknowledge a downside to NodeXL, in that it is not compatible with a Mac operating system, while Gephi is offered on various operating systems, i.e., Linux, Windows, and Mac OS X. Nonetheless, NodeXL is certainly an efficient tool for social network analysis of Twitter and its users.

## NodeXL and the SEC Method

Briefly explored in the literature review, Himelboim, Smith, and Shneiderman (2013), developed the Selective Exposure Cluster (SEC) method to study the networks of connected users on Twitter to find patterns of how users were exposed to content pertaining to United States President Barack Obama's 2012 State of the Union Address. This method looks for similarities in the characteristics of users connected together in the same clusters, in terms of their political point of views. Through the SEC method, the researchers used NodeXL to collect topic-network data. Tweets from January 26 to 28, 2012 that included the search terms "SOTU" and "State of the Union" were selected. A data set containing posts from approximately 1,000 recent users were analyzed, including their self-descriptions on Twitter and statistics about their activity, e.g., number of tweets by the user, when the user joined Twitter, and follower count. The data was processed to "generate information about the ways these users connected to one another through follow, mention, and reply relationships" (Himelboim, Smith, & Shneiderman, 2013, p.178).

NodeXL and the SEC method fit the purpose of my study, as it measures the boundaries of a social group of Directioners and their similarities to each other. While we already know that Directioners likely expose themselves on Twitter mostly to like-minded individuals since they are a part of the same fandom, social network analysis via NodeXL and the SEC method will give meaning to whether they expose themselves only to specific types of One Direction fans, i.e., based on geographic location or type of Twitter account. Because I will be able to compare the characteristics of the most influential users in the fandom, I will be able to display the existence of social hierarchy within the fandom and provide better meaning to the way users engage in worldwide Twitter trending topics.

The researchers used the SEC method and utilized it in five steps. The first step was to identify major clusters of connected groups of users using the Clauset-Newman-Moore algorithm, available through NodeXL, in order to “measure the quality of the divisions imposed on the topic-network” (Himmelboim, Smith, & Shneiderman, 2013, p. 179). For the second step, Himmelboim, Smith, and Shneiderman (2013) selected the top five hubs—or influential users—in the largest clusters, based on the number of connections with other users, before political orientations were assigned to each: conservative, liberal, neutral, or unclear. The third step was to identify the most frequently posted hyperlinks, as “users in all clusters often posted messages containing hyperlinks to external resources on the web” (Himmelboim et al., 2013, p. 181). These hyperlinks were classified based on the content of the web page. Identification of hashtags and mentioned usernames in the exchanged messages took place in step four, where the most frequently mentioned were classified based on the four political orientations. The fifth and final step consisted of mapping and visualizing the data to examine the network created by users, as well as their relationship of content exposure via Twitter, to find patterns of selective exposure.

### Using NodeXL and SEC Method in My Research

When analyzing the data sets created through NodeXL for One Direction-related Twitter trends, I implemented the SEC method to examine Directioners’ relationship on Twitter that helps find meaning in the way they interact with each other and create worldwide Twitter trends. This section will provide step-by-step guidelines outlining my method, serving as the basis for identifying and analyzing One Direction-related Twitter terms that trended worldwide from the morning of Sunday, July 19, 2015, to the morning of Friday, July 31, 2015.

## Monitoring One Direction Worldwide Trending Topics

Using the Twitter mobile app and the Trend Monitor app (for cross-referencing purposes), I monitored the worldwide Twitter trends list (top 10) to keep track of all One Direction related hashtags or terms. When a One Direction trending topic appeared on the “top 10 worldwide list” during the 12-day period, it was run through NodeXL using the program’s “Twitter Search Importer.” Each data set created topic-networks for each trend. The Twitter mobile app allowed me to see how many tweets have been published for each trend. Using that feature, I monitored trends that reached significant numbers, especially those that exceeded one million. If a One Direction-related trend was tweeted at least one million times, it was run through NodeXL for a second time. For every million tweets the trend reached following the first million, it was run through NodeXL again. It was important to create additional network data sets for trends that were tweeted in the millions to effectively explore how Directioners were able to maintain trending status and to identify the characteristics in the Twitter relationships of trending topics that go viral.

## Classifying Twitter Trends into Categories

After all One Direction related Twitter trends were identified, they were each sorted into identifiable categories. The purpose of creating categories was to find any similarities and differences when comparing Twitter trends to each other. By placing trends into categories, valuable data can also be analyzed in a more organized manner. Below were the initial six categories:

**1) Marketing and Promotional Trends:** Twitter trends were utilized as a marketing tool that promoted a One Direction-related product.

**2) Live-tweets (radio/TV):** Twitter trends were used for real-time discussions about One Direction programming on radio or television.

**3) Live-tweets (concerts):** Twitter trends were used to discuss One Direction’s “On the Road Again” tour concerts as they were happening, in real time.

**4) Gossip and News Trends:** Twitter trends were used as a platform to discuss breaking news or gossip surrounding One Direction.

**5) Fan-dedicated trends:** Twitter trends were created by fans to celebrate One Direction and its members, especially during the band’s five-year anniversary.

**6) One Direction-created Terms:** Twitter trends were created unintentionally by members of One Direction, where a word or phrase in their tweets became a trending topic.

While the greater amount of data collection is ideal, analyzing a total of more than 30 data sets can be overwhelming. As a result, the six initial categories were narrowed down to the final three that I decided to use for this study: 1) Fan-dedicated trends; 2) Live-tweets (concerts); and 3) Marketing and Promotional Trends. I selected the three specific ones for particular reasons.

First, fan-dedicated trends were selected because they were essentially the heart of my time frame. As discussed in Chapter 1, fans pre-planned these worldwide trends, so it was important to analyze how Directioners were able to make this fan-driven project a success. Next, live-tweets pertaining to One Direction’s “On the Road Again” (OTRA) tour concerts were selected because all OTRA-related Twitter trends, prior to collecting data, all became worldwide Twitter trends—which is quite an accomplishment. It is important to acknowledge that when

looking at the entire OTRA worldwide tour as a whole (February 7, 2015, to October 31, 2015), all 80 OTRA tour dates' respective hashtags became a worldwide Twitter trend.

Marketing and promotional tweets were selected because of the impact that the particular worldwide trend had on Twitter during a short period of time. On the final day of my time frame (July 31, 2015), One Direction—starting with band member Liam Payne—surprisingly released their first single as a foursome via Twitter, entitled “Drag Me Down.” Without any pre-planned marketing, fans made the new song a success and created the hashtag #DragMeDown. Within 15 minutes, the hashtag landed in Twitter’s top ten worldwide trending list, and then became the number one worldwide trend after half an hour. After about one hour, “Drag Me Down” was the number one song on Spotify and the iTunes chart, becoming the fastest-selling single in history (Burke, 2015; Shilliday, 2015). The hashtag was used approximately 22,000 times per minute (Freeth, 2015), tweeted more than 4 million times within 15 hours, and within 24 hours, “Drag Me Down” became the number one song in 82 countries (Burke, 2015; Freeth, 2015). Additionally, the song became the best-selling debut of 2015 (Vickie, 2015) and One Direction’s most successful debut in the history of the band (Freeth, 2015).

### Collecting Data Through NodeXL

Step by step instructions on how I obtained network data using NodeXL are as follows. I first opened NodeXL file, then clicked on the NodeXL tab at the top of the document. I then selected the “Import” dropdown menu, and chose “From Twitter Search Network.” A pop-up appeared and asked for the term(s) to search for, which was typed in. Next, in the “What to import” section, I selected “Basic network” to prompt the program to also display which users replied to or were mentioned in recent tweets, without adding some of the users’ friends. The



tweet limit was set to the maximum 18,000 tweets, and the “Expand URLs in tweets” box was checked. Due to Twitter API limits, NodeXL can only retrieve and download approximately 18,000 tweets per data set. Although 18,000 is small in comparison to the number of tweets that are potentially spread by worldwide trends, the data collected through NodeXL for all One Direction related trends combined will provide insight into the social network relationship of Directioners on Twitter.

Lastly, in the same pop up, NodeXL will ask to authorize a Twitter account that will be used to import Twitter networks. By selecting the first option, NodeXL will go to Twitter’s authorization Web page. Once the authorization process is complete, select “OK” and wait for NodeXL to finish gathering a list of tweets with the specific search terms. Waiting times can vary from seconds to even up to an hour or more, depending on how much data is being retrieved by the program.

### Selective Exposure Cluster (SEC) Method

The following NodeXL instructions were followed as part of the SEC method in order to capture selective exposure network measures.

#### Step One: Identifying Clusters

In the NodeXL tab, go to the “Analysis” section and select the “Groups” drop down menu. Once the “Groups” drop down menu is opened, choose “Group by Cluster.” Select the “Clauset-Newman-Moore” algorithm option, and check the “Put all neighborless vertices into one group” box before clicking “OK.” To generate network metrics, the “Graph Metrics” option needs to be selected from the Analysis section, where there will be many graph metrics to choose

from. The boxes that need to be checked are: 1) overall graph metrics; 2) vertex in-degree; 3) group metrics; and 4) Twitter search network top items. Once all four boxes are checked, click “Calculate Metrics.”

Himmelboim, Smith, and Schneiderman (2013) explained that it is important to identify clusters as a first step because “each of the following selective exposure indicators are identified and evaluated within their respective clusters” (p. 179). Since the Newman-Clauset-Moore algorithm can efficiently analyze large network data sets and identify sub groups within the network, this algorithm will be used to find clusters of relatively more connected groups of Twitter users in each topic-network. Networks are typically divided by a few major clusters and many small ones, and can be easily seen by going to the “Vertices” worksheet. The number of users assigned to each cluster will serve as a basis for ranking. This algorithm will create a “Scree Plot,” where the clusters containing most of the users in the network will be examined. These clusters account for the majority of connected users and relationships.

Clusters were noted by size to identify the ratio between large and small clusters in the network, and to more easily identify any social hierarchy that exists within the fandom. Large clusters were the most identifiable and were made of the most connections, with 1,000 or more connected users. Next, medium clusters were identified as those that contained 100 to 999 connected users. Lastly, small clusters had the least connections, with 0 to 99 connected users in each group.

In the process of identifying clusters, an overall modularity measurement is also calculated by NodeXL to determine the extent of how socially bounded clusters are (Himmelboim, Smith, & Shniederman, 2013). The higher the modularity value, the more distinct or separated clusters in the network are. In other words, clusters are less connected to each other. For this

study, I used the same threshold as Himelboim, Smith, and Shneiderman (2013), where any modularity value less than 0.4 is considered a low separation among clusters, a value between 0.4 and 0.6 is considered medium separation, and anything above 0.6 means a high separation. A high modularity or more divided cluster network indicates more selective exposure, where users within a cluster are more exposed to each other and less exposed to users who are outside of the cluster.

### Step Two: Identifying Hubs

A small number of influential users in a network, hubs, will usually prove to be the most influential and attract a large number of connections disproportionate from other users (Himelboim, Smith, Schneiderman, 2013; Newman, 2001). According to Newman (2001), this is because of a process of special attachment, which is the idea that new connections made to nodes depends on how many connections it already has. This theory is common in Twitter communities where a few influential users will have an above average number of connections. As a result, these users will have more engagement and interactions (mentions, retweets, followers, etc.) than majority of others. These hub users are typically in the center of the cluster that they are in and are likely to gain a significant portion of attention of the rest of the users in the cluster.

Hubs are identified as users with the highest vertex in-degree numbers. This measure of social activity demonstrates the prominence of each user in terms of the exposure of their content, which includes follows, mentions, and replies. The top five hubs of each of the largest cluster in every data set were identified and then compared within and across worldwide Twitter trend categories. Like Himelboim, Smith, & Shneiderman (2013), I chose to focus on the hubs of

top largest cluster, rather than the entire network. This was to identify the most influential cluster network and local leaders, regardless of the size of other hubs in other clusters.

The geographic location of each hub was identified to find out if users in the same cluster exposed themselves more to users in the same geographic location. NodeXL provides the location description and time zone for each user in NodeXL's Vertices worksheet. Both were cross-referenced to determine an accurate location for each hub. Hubs were also classified based on the type of Twitter accounts run by the users: 1) Fan account; 2) News account; 3) Fan account; 4) One Direction; 5) Personal account; or 6) Other. Below are brief descriptions for determining the hubs' Twitter account types:

**1) Fan account:** Directioners were classified as “fan” accounts if their Twitter photo was not of themselves and/or their Twitter username was in reference to One Direction.

**2) News account:** I labeled Directioners as “news” accounts if their Twitter username and/or description identified themselves as such. These accounts have at least one of the following words in their username and/or description: “news,” “official,” “update,” “alerts,” or “report.”

**3) Project account:** Twitter users who identify as “project” accounts will be labeled as such. These actions typically aim to head up fandom projects, including the promotion of One Direction's music or the planning of worldwide Twitter trends.

**4) One Direction:** This label describes a hub as being either One Direction's official account or one of its band members' accounts.

**5) Personal:** Some Twitter users may call themselves Directioners and tweet about One Direction-related topics, but use photos of themselves as their profile pictures. Additionally, their Twitter usernames do not contain any reference to One Direction.

**6) Other:** “Other” Twitter accounts are users outside of One Direction, its members, and its fans. They are not associated with a personal account either. Other accounts are associated with those associated with organizations and entities (e.g., news organizations or companies).

### Step Three: Hyperlinks and Attached Media

Attached media and hyperlinks can be viewed through worksheets at the bottom of the NodeXL document. Go to the “Twitter Search Ntwrk Top Items” worksheet to view the top URLs in Tweets, and go to the “Edges” worksheet to click on the “Twitter Page for Tweet” link to view any attached media in the post. For this study, I examined the top hyperlinks and media used overall by Directioners in the largest clusters and then compared them within and across worldwide Twitter trends categories. I wanted to examine how often these resources are utilized within the One Direction fandom, as tweets that include attachments—especially photos—are proven to receive higher engagement in comparison to tweets with just plain text (Stadd, 2014). Additionally, these top links and media content will help to identify any common themes or characteristics within and across Twitter trending categories. In my findings, the most used media and links from each data set will be reported, and they will be classified and coded by the domain and type (i.e., photos, GIFs, videos, or One Direction links). External media can be specifically identified when visiting the attached hyperlinks.

### SEC Method Step Four: Hashtags and Mentioned Users.

Tweets published by users will often contain additional hashtags and mentioned users, which will identify any motivations, or purposes Directioners may have through tweeting,

whether it is promotional, a type of call to action, or a hope of acknowledgement. The frequencies of top hashtags and mentioned users will be noted and used to further determine the growing complexity of fan practices. The top hashtags and mentioned users can also be viewed in the Twitter Search Ntwrk Top Items worksheet.

Based on hashtag categories identified by Recuero, Amaral, and Monteiro (2012) in their study on a Brazilian fandom's use of Twitter trends, hashtags used in the largest clusters will be identified and counted based on the following:

**1) Tribute:** Hashtags that fit into this category describes the fandom's motivation to show their love for One Direction. Trending topics that became worldwide trends on other days were not counted, as that is likely the results of users in later time zones catching up with the Twitter trends. Examples include:

**2) Promotion:** Directioners create hashtags that help to promote something that One Direction is doing or something that they believe is important. Examples include using #BuyDragMeDownOnItunes to promote and signify that "Drag Me Down" is available, or by using #1Dbalkanpeninsulaproject to promote a fan project.

**3) Requests:** Fans often use hashtags to request a call to action, especially when it comes to voting for One Direction for award shows or fans requesting One Direction to perform a concert in their country. Examples include: #kcamexico and #Israelisstillwaitingfor1D.

In addition to the three hashtag categories, I created a fourth category:

**4) Reference:** Reference hashtags associate the tweet with Directioners, One Direction, or a specific band member. Examples include #directioners, #onedirection, #harrystyles, #niallhoran, #liampayne, and #louistomlinson. Additionally, it can reference any event

that One Direction is associated with. One example is using #xfactor to reference how the band was once a part of the show.

#### Step Five: Visualizing Social Network Maps

The social networks created by Twitter users can be organized using a mapping and visualization process that will display the relationship and patterns of connections and exposure in the One Direction fandom. Using NodeXL, I created a customizable visualization graph of each individual data set. A visual map for each data set can be found in the Appendix.

## CHAPTER 4

### RESULTS

I collected 18 sets of data containing tweets from 10 different One Direction worldwide trends from July 19 to July 31. However, one data set (#OTRAWinnipeg) became corrupted and was not able to be used, so I analyzed 17 total data sets. For each data set, up to the maximum amount of data the Twitter API allowed was collected, generating up to 18,000 of the most recent relationships (original tweets, mentions, and replies) for each Twitter trend. When examining NodeXL metrics, only unique tweet relationships were taken into consideration, eliminating any of those with duplicates, in order to obtain a true representation of the data. The worldwide trends that were analyzed are listed below in their respective categories, with a label in parenthesis next to each that will be used for charts in the results:

#### **Fan-Dedicated Tweets worldwide trends**

July 19 – 6 p.m. – #LiamAppreciationDay (A1)

July 20 – 11:55 p.m. – #NiallAppreciationDay (A2)

July 21 – 4 p.m. – #HarryAppreciationDay (A3)

July 22 – 12 p.m. – #5YearsOfOneDirection (A4)

July 22 – 12 p.m. – #5YearsOfOneDirection, 1 million tweets (A5)

July 22 – 4 p.m. – #5YearsOfOneDirection, 2 million tweets (A6)

July 22 – 11:30 p.m. – #ThankYou1Dfor (A7)

July 23 – 9:45 a.m. – #ThankYou1Dfor, 1 million tweets (A8)



**Figure 2. Example of tweet for One Direction's five-year anniversary.**



**2) Live-Tweets (1D Concerts) worldwide trends**

July 21 – 9 p.m. – #OTRAEdmonton (B1)

July 24 – 8:45 p.m. – #OTRAWinnipeg(not included)

July 26 – 9:15 p.m. – #OTRAMinneapolis (B2)

July 26 – 11:15 p.m. – #OTRAMinneapolis, 1 million tweets (B3)

July 28 – 8 p.m. – #OTRAKansasCity (B4)

**Figure 3. Example of live-tweet for One Direction concert.**



### **3) Marketing and Promotional Trends**

July 30 – 10:30 p.m. – #DragMeDown (C1)

July 31 – 12:30 a.m. – #DragMeDown, 1 million tweets (C2)

July 31 – 3:45 a.m. – #DragMeDown, 2 million tweets (C3)

July 31 – 6:30 a.m. – #DragMeDown, 3 million tweets (C4)

July 31 – 11 a.m. – #DragMeDown, 4 million tweets (C5)

**Figure 4. Example of marketing and promotional tweet by One Direction.**



### Research Question 1

RQ1: What are the most common scenarios that guide the formation of clusters in the One Direction fandom's Twitter network?

In regards to the first research question, it was clear that there were distinct clusters formed when Directioners contributed to each trending topic on Twitter. The Clauset-Newman-Moore algorithm on NodeXL clustered the networks into subgroups based on the number of connections they have. To better organize the data, clusters were labeled based on size. Large clusters consisted of 1,000 or more connected users, medium clusters consisted of 100 to 999 connected users, and the smallest clusters consisted of 0 to 99 connected users.

Table 1 interprets the cluster separation found in each data set and displays the following: the number of Twitter users (# users); the number of unique Twitter relationships (# UR); the modularity value (Mod.); the number of large clusters (#LC), medium clusters (#MC), and small clusters (#SC) in each data set; and the percentages that the different sized clusters account for in all connected users (%ACU) and all relationships in the entire network of the data set. All relationships in the entire data set also include Twitter users who are not connected with any others in the network. Visualization graphs can be found in the Appendix.

**Table 1. Cluster separation and sizes.**

Trend	#users	#UR	Mod.	#LC	%ACU	%AR	#MC	%ACU	%AR	#SC	%ACU	%AR
A1	6,386	12,486	0.46 (M)	1	20.2%	23.0%	13	71.1%	51.1%	119	8.7%	25.9%
A2	6,033	13,300	0.48 (M)	2	16.8%	20.8%	9	48.3%	30.5%	172	12%	25.5%
A3	6,139	10,736	0.46 (M)	1	25.8%	30.6%	9	76.3%	57%	105	6.9%	21.5%
A4	6,793	14,725	0.54 (M)	1	25.8%	30.6%	8	65.5%	50.1%	158	8.7%	19.3%
A5	9,827	16,622	0.63 (H)	4	55.7%	32.9%	9	28.9%	17.1%	424	15.4%	50.0%
A6	8,066	14,182	0.63 (H)	3	60.6%	35.5%	5	19.7%	11.2%	400	19.7%	53.3%
A7	8,289	16,389	0.53 (M)	2	38.0%	30.7%	9	42.7%	43.6%	249	19.2%	18.7%
A8	10,615	17,664	0.66 (H)	3	44.2%	26.6%	9	20.4%	12.6%	1,457	35.4	60.8%
B1	5,838	10,322	0.47(M)	3	74.3%	42.0%	4	14.4%	8.1%	104	11.3%	49.9%
B2	5,534	9,455	0.45 (M)	2	53.1%	31.1%	5	35.9%	20.9%	77	11%	48%
B3	6,835	14,493	0.56 (M)	2	65.3%	30.8%	4	26.6%	12.6%	117	8.1%	56.6%
B4	9,048	14,465	0.60 (H)	3	50.7%	31.7%	12	33.6%	21.0%	322	15.7%	47.3%
C1	7,687	12,510	0.66 (H)	1	18.2%	11.1%	13	53.4%	32.8%	350	28.4%	56.1%
C2	10,602	16,763	0.64 (H)	3	43.4%	27.7%	15	44.8%	28.4%	258	11.8%	43.9%
C3	10,096	15,880	0.60 (H)	3	41.5%	26.4%	14	41.5%	29.9%	365	17%	43.7%
C4	10,096	15,820	0.60 (H)	4	38.8%	24.8%	13	32.3%	20.6%	416	28.9%	54.6%
C5	10,746	15,299	0.57 (M)	3	56.5%	39.7%	6	24.0%	12.6%	564	43.5	47.7

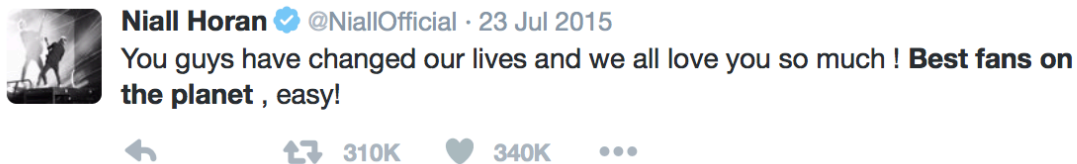
All visualization graphs for all 17 data sets were made up of many medium size clusters, and few large and small clusters. While many clusters are formed and are separated from one another, many users still share connections with individuals from outside clusters. Modularity values suggested mainly a moderate level of separation among clusters in the One Direction fandom network. However, this was until the worldwide Twitter trend exceeded more than 1 million tweets. After surpassing one million tweets, the modularity values rose and indicated high levels of separation among clusters—with the exception of the modularity value declining in data set C5, when #DragMeDown surpassed 4 million tweets. This is perhaps due to conversation using the Twitter trend beginning to decline. Results revealed that clusters became more separated or less connected to each other the more tweets were created for the Twitter trends. This also indicates selective exposure, where Twitter users within the same cluster are more exposed to one another and less exposed to the content by users from other clusters.

It is important to acknowledge the significance of smaller clusters across the data sets. Results showed that the rise in modularity value for Twitter trends that eventually exceed 1 million tweets correlates with the rise of small clusters, in which they accounted for the highest percentage of relationships in the data sets (A5, A6, A8, B, B4, C1, C2, C3, C4, and C5). This implies that while they may not have enough influence to start worldwide Twitter trends, they play an important assisting role in the popularizing and maintaining of the trends. This is especially true when One Direction-related worldwide Twitter Trends exceed 1 million tweets and many more users are joining in on the conversation during an extended period of time, even for several hours.

Some background information may also explain why there were spikes in modularity values, especially in A5 (#5YearsofOneDirection – 1 million data set) and A8 (#ThankYou1Dfor

– 1 million data set). Prior to #5YearsofOneDirection reaching the 1 million tweets mark, band member Niall Horan (@nialloficial) tweeted the following:

**Figure 5. Tweet by Niall Horan in response to #5YearsofOneDirection.**



While it is unclear if Horan tweeted Figure 5 in reference to Directioners creating the fan-dedicated worldwide Twitter trends, or if he was simply thanking them on the band's five-year anniversary, this consequently caused Twitter engagement among Directioners to increase—therefore also resulting in the increase in modularity value. The same correlation was found for the #ThankYou1Dfor worldwide Twitter trend that also saw increased engagement and a higher modularity value after band member Louis Tomlinson acknowledged that he had seen some of the content Directioners were producing in their tweets (see Figure 6).

**Figure 6. Tweet by Louis Tomlinson during five-year anniversary Twitter trends.**



## Research Question 2

RQ2: What roles do top influencers (hubs) within the One Direction fandom’s largest clusters play in the creation of worldwide Twitter trends?

As mentioned earlier, users with the highest in-degree centrality are the most prominent in terms of exposure to Twitter content. In other words, these hubs were identified based on the number of users who followed, mentioned, and replied to them during the time that network data was captured. The top five hubs from each data set’s largest cluster were identified from each data set—40 hubs total for fan-dedicated worldwide Twitter trends, 20 hubs total for live-tweets of One Direction concerts, and 25 hubs total for marketing and promotional Twitter trends. Tables 2, 3, and 4 display the following: the number of Twitter users in the largest cluster (LC users); the number of connections that link users in the largest cluster (LC conn.); the top five hubs (Hubs); hubs’ Twitter follower counts (Followers); hubs’ in-degree centralities (IDC); hubs’ geographical locations (Location); and the type of Twitter account associated with each hub. In the “Location” column, labels are colored if hubs in the same largest cluster share the same geographical locations.

**Table 2. The top hubs for fan-dedicated Twitter trends.**

Trend	LC users	LC conn	Hubs	Followers	ICD	Location	Type
A1	1,290	2,875	Dianamendes9	6,521	238	Portugal	Personal
			Updates1d_news	14,873	226	USA	News
			louisenses	3,935	182	Brazil	Fan
			curlsdied	41,703	164	England	Fan
			penguinniallxr	62,380	100	Greece	Fan
A2	1,389	4,089	inarryhoodie	34,330	231	Unknown	Fan
			jtaimenialler	33,223	223	Netherlands	Fan
			heartsljp	33,223	217	Jakarta	Fan
			5daysfor1d	31,142	194	Australia	Project
			sunblushlouis	12,175	191	Australia	Personal
A3	1,029	2,228	94hesxstyles	45,666	310	China	Fan
			hestyleslrh	5,730	139	USA	Fan
			lookatnialler	49,402	133	Morocco	Fan
			7upziall	74,473	131	Greece	Fan
			djdmsngl	27,980	128	Philippines	Personal
A4	1,755	4,505	photozayntesis	143,247	341	China	Fan
			i69lxrry	29,507	205	Armenia	Fan
			zjmskaterkid	32,227	268	Netherlands	Fan
			talice965	28,154	253	USA	Personal
			definedmalik	22,614	195	Unknown	Fan
A5	1,780	3,524	1dnoticia	66,785	262	Brazil	News
			zouisclarity	30,447	182	USA	Fan
			thelouisoccer	49,910	122	Brazil	Fan
			officialwith1d	24,893	113	USA	News
			liamcombr	19,621	95	Chile	Fan
A6	1,694	2,851	1dlatinoa	314,286	334	Latin Am	Fan
			niallspanish	378,503	126	Latin Am	Fan
			larryyziam	62,639	117	Latin Am	Fan
			li4mf4ncy	14,567	101	Latin Am	Fan
			10ssol	28,102	95	Latin Am	Fan
A7	1,610	1,278	blackleatherhes	75,485	468	USA	Fan
			darkparadishes	5,564	312	Mexico	Fan
			5feet9lwt	16,784	146	Australia	Fan
			tommocheekbon	11,536	133	USA	Fan
			es malandisicalum	6,457	131	Philippines	Fan
A8	1,724	3,373	sugarbabyijp	62,630	277	Mexico	Fan
			kamkitty8	55,372	216	USA	Fan
			1dcolupdates	55,461	139	Columbia	News
			4frxppeniall	25,415	138	England	Fan
			fortunezjm	105,231		Lebanon	Fan



**Table 3. The top hubs for live-tweeted Twitter trends.**

Trend	LC users	LC conn	Hubs	Followers	ICD	Location	Type
<b>B1</b>	1,686	3,757	1dnoticia	66,380	620	Brazil	News
			teamdirectionbr	266,231	368	Brazil	News
			bst1dupdates	35,949	291	Brazil	News
			choosezaynbr	67,409	218	Brazil	News
			niallhbra	16,541	132	Brazil	News
<b>B2</b>	2,507	4,936	onedrecti0nfans	309,969	752	England	Fan
			93niallsderby	159,691	438	Ireland	Fan
			nakedmagic	134,816	289	USA	Fan
			nocontrolprojec	21,441	235	Russia	Project
			shirelaurents	10,909	181	USA	Fan
<b>B3</b>	1,939	3,596	1dziamnews	23,336	267	Italy	News
			lookatnialler	49,848	235	Morocco	Fan
			tamedliam	81,123	172	USA	Fan
			sassymcluke	59,199	171	Korea	Fan
			louist91updates	4,953	150	USA	News
<b>B4</b>	1,480	2,601	1dupdateotra	34,901	294	USA	News
			nikekinknih	18,338	161	Unknown	Fan
			1dziamnews	23,577	153	Italy	News
			nakedmagic	76,769	132	USA	Fan
			i69lxrry	30,139	129	Armenia	Fan

**Table 4. The top hubs for marketing and promotional Twitter trends.**

Trend	LC users	LC conn	Hubs	Followers	ICD	Location	Type
<b>C1</b>	1,398	2,295	all1dalerts	34,622	295	Germany	News
			1d_beards	83,932	234	USA	Fan
			shazamtop20	171,457	185	Australia	Other
			1dinsidereport	128,259	180	Philippines	News
			littleredcactus	9,897	163	Canada	Personal
<b>C2</b>	1,731	2,598	onedirection	24,362,260	1,225	England	1D
<b>C3</b>	1,533	2,932	93niallsderby	160,606	228	Ireland	Fan
			hxrrytumblr	35,326	136	Ireland	Fan
			herostyles	87,867	123	Greece	Fan
			crtchgrabharry	14,526	119	England	Fan
			proudlilogirl	42,723	115	Italy	Fan
<b>C4</b>	1,430	2,429	skylightzaynie	47,662	240	India	Fan
			proudlilogirl	42,626	162	Italy	Fan
			narrymccuddly	39,462	135	India	Fan
			pop_ruth	47,034	124	UK	Fan
			daggertattoooh	143,135	114	India	Fan
<b>C5</b>	3,317	4,111	onedirection	24,374,258	3,656	England	1D
			gma	2,751,219	959	USA	other

As mentioned in Chapter 3, I chose to focus on the hubs of top largest cluster, rather than the entire network, in order to identify the most influential cluster network and local leaders, regardless of the size of other hubs in other clusters. Therefore, it is important to also acknowledge that although hubs I identified belong to the largest clusters, it does not mean that those users are all the most influential in the entire network as a whole.

Findings showed that the hubs in the largest clusters across the 17 data sets (85 total hubs) primarily identified themselves as One Direction fan accounts or One Direction news accounts and appeared together in clusters. There were three instances where hubs were identified as “personal accounts” and two instances of hubs identifying themselves as “fan projects.” Several Directioners also appeared in multiple data sets (@lookatnialler,

@nakedmagic, @1dnoticia, @i69lxrry, and 1dziamnews), indicating their continuous influence in contributing to worldwide Twitter trends.

Hubs of Directioners in the largest clusters all had significant Twitter follower counts as a group, ranging from 3,935 (@louisenses in the #LiamAppreciationDay data set, A1) to 309,969 (@onedrecti0nfans in the #OTRAMinneapolis data set, B2). While some users fell in the lower thousands or ten thousands when it came to Twitter follower counts, it is important to note that this is still a significant amount of followers, in comparison to the “normal,” “everyday” Twitter user who is not a “verified” Twitter account (e.g., celebrities and official accounts of business or organizations). This shows that the fandom’s hubs are connected to a large enough network that could potentially trend news on Twitter, especially if they work together and promote each other’s tweets. This is seen in the promotion of tweets produced by hubs with lower follower counts by hubs with higher follower counts. In some instances, the least followed hubs were retweeted by higher followed hubs, and this consequently shares the lower hub’s tweet to an extended, larger network of Twitter users in the fandom. Overall, hubs in the One Direction fandom are more visible and essentially have the power to control or steer the direction of worldwide Twitter trends.

When it came to the geographical locations, there were several instances of two or more hubs sharing the same locations. There was only one instance of all five hubs in a large cluster sharing the same geographical location (#OTRAEdmonton data set, B2). This shows that Brazilian fans exposed themselves to each other in that particular discussion. However, for the most part, majority of hubs were from different countries, across different time zones. This indicates that the fandom—in terms of the top influencers—is highly openly networked, which allows for the dissemination of news past a regional level and on a worldwide scale.

Additionally, while some countries appeared more times than others, e.g., USA, it was not consistent enough within and across clusters to prove that any particular countries are more influential than others. It is important to acknowledge the significance of hubs being identified and not located in the country where the concerts were taking place. This indicates that fans value content sharing to those who are unable to experience the show in person. For instance, #OTRMinneapolis is no longer just a show for local fans, but a show for all fans around the world who are tuning in via Twitter.

Hubs in the marketing and promotional Twitter trends category were different in comparison to the other two trending categories, in the sense that One Direction's official Twitter account (@onedirection) was a top hub in the largest cluster of two data sets (C2 and C5). In the largest cluster of C2 (#DragMeDown – 1 million data set), @onedirection was the only hub listed in my data because other in-degree centrality values for other Twitter users were far insignificant in comparison. It is important to note that @onedirection became a hub after it began using the fan-created Twitter trend #DragMeDown in its tweets. Its high in-degree centrality (1,225) indicates that fans in the same cluster were mainly interacting with the band's tweets (i.e., retweeting or replying), rather than creating their own content. This is the same for the largest cluster of C5 (#DragMeDown – 4 million data set), where @onedirection and @gma (Good Morning America) were the top, significant hubs in the cluster. One Direction's tweets were receiving increased engagement at a quick rate because the band shared it to their extensive network of more than 24 million Twitter users, who then shared it to their network, and so forth— which explains why its in-degree centrality jumped from 1,225 to 3,656 from C2 to C5 over a period of time. Good Morning America's official Twitter account, which had more than 2 million followers, saw a significant in-degree centrality after it used the #DragMeDown hashtag

to announced that One Direction would be performing on the show in the upcoming week (see Figure 7). Their tweets were retweeted by One Direction's official Twitter account, which exposed @gma to its more than 24 million followers.

**Figure 7. Example of tweet by @gma using #DragMeDown.**



### Research Question 3

RQ3: How do the top hyperlinks, additional hashtags, and mentioned users in the tweets used by Directioners contribute to similar themes found across the fandom?

For each data set, the top hyperlinks, additional hashtags, and mentioned users tweeted by the network were identified through NodeXL. It is important to remember that NodeXL only provides information for the top ten hyperlinks, hashtags, and mentioned users in each cluster. Therefore, while cluster counts for the hyperlinks may seem low, it is possible that many other Twitter users in the cluster utilized hyperlinks and media as well.

*Hyperlinks and Attached Media.* Across all 17 data sets, four prominent media types were found after examining the top ten hyperlinks found in each network's largest cluster: photos, GIFs, videos, and One Direction links. Hyperlinks were identified as One Direction links (1D links) if it was associated with a website that is officially managed by band team. Table 5 indicates how many of each media type were used by Directioners in the largest clusters.

**Table 5. Media content of top hyperlinks.**

<b>Trend</b>	<b>LC users</b>	<b>LC conn</b>	<b>Photos</b>	<b>GIFs</b>	<b>Videos</b>	<b>1D links</b>
<b>A1</b>	1,290	2,875	0	123	75	0
<b>A2</b>	1,289	4,089	0	281	373	0
<b>A3</b>	1,029	2,228	0	67	72	0
<b>A4</b>	1,755	4,505	0	83	104	0
<b>A5</b>	1,780	3,524	13	74	369	0
<b>A6</b>	1,694	2,851	0	31	244	0
<b>A7</b>	1,610	1,278	0	0	13	0
<b>A8</b>	1,724	3,373	0	266	115	0
<b>B1</b>	1,686	3,757	7	0	245	0
<b>B2</b>	2,507	4,936	0	39	348	0
<b>B3</b>	1,939	3,596	4	116	108	0
<b>B4</b>	1,480	2,601	0	133	91	0
<b>C1</b>	1,398	2,295	0	429	40	96
<b>C2</b>	1,731	2,598	0	0	667	484
<b>C3</b>	1,533	2,932	0	44	14	21
<b>C4</b>	1,430	2,429	0	116	6	14
<b>C5</b>	3,317	4,111	0	0	643	1,197

The two most used media were GIFs and videos (majority Vine videos). While there were some instances of Directioners using still photos in their tweets, they were insignificant in comparison to GIFs. GIFs had different themes across the three trending categories. For the fan-dedicated trends (A1 to A8), GIFs and videos were used to reminisce on memorable One Direction moments in the past five years. For live-tweets of One Direction concerts (B1 to B4), GIFs were used to express a reaction they had to something that a band member did or said on

stage, while Vine videos were posted and shared of moments during the concert. Reaction GIFs were also used in the marketing and promotional trending category (C1 to C5) to express how Directioners felt after One Direction released their single “Drag Me Down.”

Many videos were also shared in the marketing and promotional trending category, especially in C2 and C5, where @onedirection was the top hub. The hyperlinks shared by Directioners in the same cluster linked to videos of One Direction and its members announcing their new single and encouraging fans to download the song. This correlates to the high use of hyperlinks in the cluster that directed anyone who clicked on the link to One Direction’s iTunes or Spotify account, where “Drag Me Down” could be downloaded or streamed.

*Additional Hashtags.* A wide range of additional hashtags were used by Directioners across 17 data sets and the most prominent categories—Tributes, Promotional, Requests, and Reference—were used to organize the top used in the clusters. Table 6 displays how many users in the largest cluster of each data set used the specific additional hashtags.



**Table 6. Types of additional hashtags used by Directioners.**

<b>Trend</b>	<b>LC users</b>	<b>LC conn</b>	<b>Tribute</b>	<b>Promo</b>	<b>Request</b>	<b>Reference</b>
<b>A1</b>	1,290	2,875	54	0	39	20
<b>A2</b>	1,289	4,089	10	0	52	57
<b>A3</b>	1,029	2,228	62	0	0	11
<b>A4</b>	1,755	4,505	344	0	0	6
<b>A5</b>	1,780	3,524	109	0	0	271
<b>A6</b>	1,694	2,851	8	0	11	0
<b>A7</b>	1,610	1,278	20	0	0	26
<b>A8</b>	1,724	3,373	54	4	0	0
<b>B1</b>	1,686	3,757	0	346	0	497
<b>B2</b>	2,507	4,936	0	60	300	0
<b>B3</b>	1,939	3,596	0	8	686	0
<b>B4</b>	1,480	2,601	67	39	153	0
<b>C1</b>	1,398	2,295	0	267	82	6
<b>C2</b>	1,731	2,598	17	52	140	0
<b>C3</b>	1,533	2,932	0	348	431	0
<b>C4</b>	1,430	2,429	4	96	314	9
<b>C5</b>	3,317	4,111	0	1,125	0	113

Various hashtags were used more often and for different purposes, depending on the Twitter trending category. In the fan-dedicated Twitter trends, Directioners used mainly “tribute” hashtags. These included #5Daysfor1D, which was promoted by the creator of the “5 Days for

1D” project (@5daysfor1D). However, the Twitter trend did not gain popularity during any of the days. When it came to “reference” hashtags, there were instances of Directioners using the hashtag #xfactor, and attaching a GIF or video of when One Direction was on the show. This allowed Twitter users to relive past One Direction moments in honor of the five-year celebration. In the live-tweets category, a number of fans used “promotional” hashtags as they live-tweeted the band’s “On the Road Again” tour by using the hashtags #vine or #video, to make other users aware that their tweet contains a link to that particular media content. There was one instance of country-based promoting in B1, where Brazilian fans made up all top five hub users in the cluster. Some of the most used hashtags included #cobertura1dbracom. “Cobertura” translated in English is “coverage,” so those users are letting fellow Brazilian fans know that they are covering the concert live. Promotional hashtags were popular in the marketing and promotional category, which was to be expected. Fans used hashtags like #BuyDragMeDownOnItunes to promote the song and to encourage others in their Twitter network to download it. Data set C5 experienced a higher promotional hashtag count, as fans began using and sharing posts that contained #1DonGMA. Before fans took over the hashtag, it was initially promoted by @gma (Good Morning America) to announce that One Direction would be appearing on the show.

There were a few notable similarities across all three Twitter trending categories. At times, fans used “reference” hashtags, i.e., #onedirection or the band members’ names. This was most common in the fan-dedicated Twitter trends category, where each band member’s name was a top hashtag during his particular fan-dedicated trending day. It’s important to point out that including hashtags of their names or #onedirection is useful as reference for Twitter users outside of the One Direction fandom, who may be wondering why something like #LiamAppreciationDay is trending they don’t know who “Liam” is. Lastly, “request” hashtags

were predominantly country-based and commonly used to bring attention to two things: fan-voting activities (e.g., #mtvhottest, #kcamexico,, #kcacolombia) and requests for One Direction to come to visit a particular country (e.g., #1dcometoJordan and #Israelisstillwaitingfor1D). This essentially is the concept of “killing two birds with one stone” that fans take advantage of. By using the top worldwide Twitter trends in their post, users immediately appeal to a larger network. So, Directioners from all over the globe will retweet the post because it is relevant to them, and as a result, the tweet will garner more votes for the particular award competition or raise more awareness for the particular country making the request.

*Mentioned Users.* Lastly, the act of mentioning other Twitter users in tweets can also indicate any possible themes or motives in the One Direction fandom. Table 7 indicates how many individuals in the data sets’ largest clusters mentioned the most Twitter users in the following categories: One Direction’s official Twitter account (1D); a One Direction band member’s official Twitter account (1D member); other Directioners (Directioners); or other.

**Table 7. Top mentioned Twitter users.**

<b>Trend</b>	<b>LC users</b>	<b>LC conn</b>	<b>1D</b>	<b>1D member</b>	<b>Directioners</b>	<b>Other</b>
<b>A1</b>	1,290	2,875	0	462	1,209	0
<b>A2</b>	1,289	4,089	0	426	1,557	0
<b>A3</b>	1,029	2,228	0	207	1,282	0
<b>A4</b>	1,755	4,505	205	0	1,939	0
<b>A5</b>	1,780	3,524	366	0	1,399	0
<b>A6</b>	1,694	2,851	0	0	1,268	0
<b>A7</b>	1,610	1,278	0	0	0	0
<b>A8</b>	1,724	3,373	0	0	1,379	0
<b>B1</b>	1,686	3,757	0	0	3,838	0
<b>B2</b>	2,507	4,936	0	0	2,798	0
<b>B3</b>	1,939	3,596	0	0	2,937	0
<b>B4</b>	1,480	2,601	0	0	1,427	0
<b>C1</b>	1,398	2,295	127	0	1,142	0
<b>C2</b>	1,731	2,598	1,250	0	198	485
<b>C3</b>	1,533	2,932	78	0	869	0
<b>C4</b>	1,430	2,429	74	0	896	0
<b>C5</b>	3,317	4,111	4,687	0	0	1,674

Across all Twitter trending categories, Directioners were highly active in mentioning each other in their tweets. This displays how engaged they are with each other's posts and the

participatory culture in the fandom. Significant mentioning of other Directioners is clear during live-tweeting of concerts, where fans discuss the events of the show with each other and also reply to users who are live-tweeting the events. The only instance of fans mentioning band member's official accounts was during #LiamAppreciationDay, #NiallAppreciationDay, and #HarryAppreciationDay, which is expected since the Twitter trends are dedicated to them. However, results show a significant amount of mentions directed toward @onedirection in the marketing and promotional Twitter trends category. This is especially so in data sets C2 and C5 where @onedirection is the number one hub of the cluster. This shows that fans are highly engaged with One Direction's Twitter account (i.e., replying to the tweets), or they are mentioning One Direction in reference to the release of the band's new single. It is important to note that in C5, the "other" category count is fairly high. This count includes @itunes, @spotify, and @applemusic—three platforms that made "Drag Me Down" available for purchase or download. However, @gma (Good Morning America), received most mentions during the time that C5 data was captured, after the show promoted #1DonGMA. Overall, by mentioning other users, Directioners show that they are paying attention to other individuals who are engaged in the same discussion, not ignoring it.

It is necessary to discuss figures 5 and 6 in relation to Directioners' use of mentioned users, as it may also give insight into why Directioners are motivated to mention One Direction or specific band members in their tweets. When examining the top mentioned users in the largest cluster of each data set, only A1, A2, and A3 showed signs of Directioners mentioning band members. However, when the entire graph counts for mentioned users for fan-dedicated trends were examined, the top mentioned users across all data sets included the mention of at least one band member. This can imply that fans take part in projects not only with the goal of celebrating

their idols, but to gain acknowledgement from the idols themselves. Celebrities, especially at One Direction's level, receive Twitter notifications each second. When Directioners mention the band members in the same tweets containing the fan-dedicated trends, this increases the chance of One Direction noticing their efforts. The result is something similar to figure 5 and especially figure 6, where Tomlinson acknowledged that he was looking through the fan-produced content that was being shared.

## CHAPTER 5

### DISCUSSION

#### General Discussion

In support of fan theory, which reinforces fans' roles as active participants through the consumption of pop culture, Directioners created a new digital world where they have united through their common interest. Their devotion to and love for One Direction is a driving force in their creation of worldwide Twitter trends. It is difficult for fandoms to create Twitter trends, especially at the worldwide level, unless fans in the global network share similar goals. Furthermore, this study demonstrated the aspects of the One Direction fandom as a social hierarchy, an interpretive community, and as a form of consumer activity.

#### Directioners as a Social Hierarchy

As mentioned in Chapter 1, fan theory highlights fandoms as having aspects of a social hierarchy. As a whole, it is clear that Directioners are at the top of the fandom hierarchy. However, results from my study also prove that within the fandom, it may not be as equal as it seems.

Arvidsson, Caliandro, Airoidi, and Barina (2015) found that the Twitter network of Italian fans was dense and egalitarian, due to its crowd-like characteristic. My study found that although Directioners displayed crowd-like characteristics as fans were all tweeting at once, a hierarchy existed in support of fan theory, with some Directioners showing as having more influence than others. Himelboim, Smith, and Shneiderman (2013) discussed that Twitter networks were

typically made up of very few large clusters and many small ones. The same is found in my study, where there were indeed significantly more small-sized clusters across all data sets in comparison to larger clusters. The researchers also explained that while there were typically fewer large clusters, these made up the largest percentage of the network relationships. This was only true some of the time in my study, as there were some instances where small clusters together made up more than 50% of the Twitter network relationships. This shows that Directioners are able to create worldwide trends, not solely because of the influence of top influential users, but because they work together in numbers and are all engaging in one common conversation.

Korobkova (2014) found that because online sites like Wattpad.com have properties of being openly networked, this allows fans from across geographical boundaries to be connected. The same was found for Directioners on Twitter, especially with how top hubs interacted with users from different countries. Most One Direction fans do not limit themselves to interactions with only users from the same regional area, allowing for a broader dissemination of news. Highfield, Harrington, and Bruns (2013) discussed that while tweets from the Twitter trends they examined represented an overall international audience, European users were more prevalent and formed more distinct clusters. In contrast, my study showed that no specific regions were more prevalent than others across all data sets. Wood and Baughman (2006) explained that fans in the *Glee* fandom are a part of a highly interconnected network and create a world outside of the television show's narrative through Twitter, consequently creating enhanced fan experiences and personal connections to the show's characters. My study found similar characteristics in Directioners who were interconnected and essentially creating their own worlds through Twitter trends, which enhanced their fandom experience and personal connections to One Direction.



## Directioners as an Interpretive Community

Coinciding with the outlining of fan theory as an interpretive community, Directioners display this characteristic when creating worldwide Twitter trends through the specific content they produce. Arvidsson, Caliandro, Airoidi, and Barina (2015) also explained that hashtags can be powerful promoters and help to organize an online environment that allows users outside of the group to find topics of investment and create a common direction. This is true as worldwide Twitter trends created by Directioners expose people from outside of the fandom to their world. Arvidsson, Caliandro, Airoidi, and Barina (2015) also described that the fandom engages mostly in retweeting other users' posts, suggesting that they acted like "robots." My study found that hubs were retweeted many times as well, but the existence of many small hubs—some with no connections—indicate that a fair amount of users still created original content.

Similar to Arvidsson, Caliandro, Airoidi, and Barina (2015), Naaman, Becker, and Gravano (2010) found that when it came to breaking news events, Twitter content consisted mainly of retweets and suggested that users focused more on disseminating the message, as opposed to having a conversation about it through replies. In contrast, my study found that in a breaking news situation, like the "Drag Me Down" surprise release on Twitter, Directioners were more inclined to have a conversation about their excitement and promotional efforts—which can be seen by their use of promotional hashtags and mentioning of other users. Naaman, Becker, and Gravano (2010) also acknowledged that Twitter trends have many different purposes that can be characterized into a range of categories and that the characteristics of messages associated with the trends can be used to better understand the context of trends. The Twitter trends obtain for my study were also able to be categorized to identify different purposes that Directioners had

for tweeting, and I was able to better understand the context of fans' tweets through additional metrics. Bastos, Raimundo, and Travitzki (2013) noted that while Twitter hubs usually account for a main source of spreading the message in a network, the gatekeeping is reliant on the features and properties of the content of tweets themselves. My study also found that while hubs were a main source of gatekeeping of worldwide Twitter trends, the content of their tweets were always meaningful and relevant to the fandom's overall messaging. Korobkova (2014) explained that knowledge about One Direction is spread as Directioners use digital tools to create GIFs and videos that are meaningful and entertaining to other similar users. My results found the same, as hubs created or shared tweets that were attached with media content that played on the fandom's emotions, e.g., themes of nostalgia, and reminded Directioners of why they have continued to love and support One Direction the past five years.

It is important to point out as well that the interpretive community that Directioners have built for themselves in the fandom is almost like a new world outside of their normal life, in which they invest their time creating a new identity. Wood and Baughman (2006) found that fans create a world outside of the original narrative when they enter the Twittersphere, by way of role-play. While Directioners analyzed in my study did not engage in role-play, characteristics of their Twitter accounts mirrored the activity in a way, as most displayed usernames and profile pictures that were in reference to the world of One Direction. Korobkova (2014) also found that Directioners kept their life in the fandom—a "Directioner-only" realm—separated from their real life. The same was found in this study, where many Directioners little to no clear references to their personal lives in their profile descriptions. Click, Lee, and Holladay (2013) explained that Twitter users with a significant amount of followers imagine their audience as a fan base and have an understanding of what appeals to their audience. This true for the many hubs found in

my study who identify themselves as One Direction fan and news accounts, to perhaps ensures that they stay relevant to fellow Directioners. In support of this, Marwick and Boyd (2010) discussed the imagined audience and concluded that Twitter users tend to design their profiles and construct tweets to become relevant to other users. Lastly, Colapinto and Bencchi (2014) explained that celebrities use social media because it gives them the ability to develop a relationship with their followers. On the other hand, fans use social media like Twitter for the same reason, because it gives them the ability to develop a relationship with their idols. Click, Lee, and Holladay (2013) found that fans believed their idol, Lady Gaga, embodied authenticity as a Twitter user, and they felt that they received direct feedback from her whenever she tweeted. Similarly, Directioners feel as though the band members are speaking directly to them (examples in figures 6 and 7), which resulted in an increase response and engagement through Twitter trends.

#### Directioners as a Form of Consumer Activity

Fan theory also claims that a fandom can be outlined as a form of consumer activity, where fans have taken on a role as key promoters and aim to raise awareness. Social media has no allowed for a new kind of consumerism, evident in the One Direction fandom.

Highfield, Harrington, and Bruns (2013) saw the importance of hashtagged activities in allowing fan groups to be more visible if they come together with a common goal. This is supported in my study, where Directioners are able to create worldwide Twitter trends because they all share a love for One Direction. Recuero, Amaral, and Monteiro (2012) explained that Twitter provides users with new social practices that allow fandom participants to connect with each other, connect with their idols, negotiate values, and create visibility to their goals. This is

evident in my study, as Directioners were able to plan the creation of worldwide Twitter trends as a connected group and successfully execute the plan. Click, Lee, and Holladay (2013) explained that social media amplifies and enables fans to have strong identification with their idols. Similarly, Twitter gives fans a direct line of communication with One Direction. Therefore, knowing that they are connected to their idols and are in the same space enhances their social media engagement. Highfield, Harrington, and Bruns (2013) acknowledged that Twitter allows for the existence of “long-term fandoms” and facilitates the connection and communication among fans and audiences. With Directioners celebrating One Direction’s five years as a group, the creating and domination of worldwide Twitter trends by the fandom emphasizes the long-term loyalty to the band and strong, global network connections created among fans. Receuro, Amaral, and Monteiro (2012) found that fandom users create a collective identification that increases social capital and clusterization, which therefore influences top trending topics that bring awareness to their intended messages. One Direction fans have also created a solid identity for themselves, which has increased their connections with each other and values built within the group as a result.

Colapinto and Bencchi (2014) discussed that the rewards from social media are immediate. This was seen in the results found when I examined marketing and promotional Twitter trends (#DragMeDown data sets), where the fandom immediately created the worldwide Trend minutes after One Direction band member Liam Payne tweeted about the group’s new single. Guschwan (2012) explained that while fans have traditionally only been seen as meaning-producers who use fandom for their own uses, he concluded fans (in sports) have now become assets to branding and that they ultimately have the power to continue building on a brand. In the realm of pop culture, the same is true for brands like One Direction who ultimately rely on fans

to continue building on their brand on Twitter—regardless of any personal motives to creating worldwide Twitter trends. Furthermore, Wood and Baughman (2006) suggested that fans on Twitter have become a new source of free marketing for their idols. The same can be said for the Directioners, who regularly promote One Direction on their own, essentially saving the band’s management time and money on any alternative options of social media advertising.

### Limitations

It is important to address the various limitations that come with any study, and there are a few that should be acknowledged in my research. As far as my method goes, using NodeXL is beneficial for analyzing large data sets, but it can also be overwhelming to analyze. On the other hand, the maximum API Twitter limit of 18,000 tweets when collecting data also poses as a limitation because that number is still a significantly small portion of the amount of tweets that are usually sent out by Directioners for a particular worldwide Twitter trend—which can exceed more than one million tweets. When it comes to identifying hyperlinks, hashtags, and mentioned users in a cluster, a limitation of using NodeXL was that it only listed the top ten used by each cluster. Therefore, because of the number of connected users in the Directioners’ large network clusters I am unable to determine the true total and types of hyperlinks, hashtags, and mentioned users used by all users, unless I manually go through the metrics of each individual Twitter user in the cluster.

While I found that there was more selective exposure in higher modularity networks where worldwide Twitter trends’ tweet counts exceeded one million, it is important to note that “selective exposure” may not be the most accurate term when describing this happening. With more than one million tweets in a particular discussion, it is highly unlikely that Twitter users

will be able to see all one million tweets created. Therefore, the selective exposure is unintentional, and users are more likely to only see tweets that are posted or shared by the individuals they follow on the site. Additionally, to see if these patterns are consistent throughout a network, additional clusters aside from just the largest in the data set could potentially be examined using my same method.

Another limitation is the fact that this study was limited to one social media space—Twitter. By examining other platforms where Directioners are also highly visible, like Instagram or Tumblr, I can compare any similarities or differences in the way Directioners—especially hubs—interact with each other on those sites. However, with that said, results for a type of study like that may need to be generalized, as it could be potentially difficult to capture the complete activity of any given user since people have different user names across various platforms. Reliability is also another challenge when using NodeXL. As pointed out by Himelboim, Smith, and Shneiderman (2013), the patterns of interactions between Twitter users in the One Direction fandom in a given point of time may or may not repeat for further examination of a specific network beyond the window of time in which it was collected. This is a significant challenge when studying such a large global fandom, where interactions are continuous and among a widespread group of users. However, this is why I examined NodeXL multiple times over several days, in order to obtain a more representative picture of Directioners' Twitter interactions.

## Conclusion

Overall, this study on Directioners and how they engage on Twitter to influence and dominate worldwide Twitter trends shows that fandoms are a strong force in social media.

Digital fandoms like Directioners continue to shape the way people spread and obtain news—especially pop culture-related news— via social media. Platforms like Twitter help to maintain the relevance of pop culture news and perhaps proves that fandoms are becoming a dominant market for pop culture. One Direction and its fans celebrating five years of success is a rarity in the history of boy bands. Groups like New Kids on the Block, Nsync, and the Backstreet Boys had similar global success, but by the time they reached the five-year mark, their popularity was on the decline. This is quite the opposite with One Direction, where after five years and the loss of a band member, it seems that the British boy band only continues to reach new peaks of success. A lot of what people regard as “important” or relevant news is based on what they hear about in the media, and the relevance of music artists in today’s era is no longer based on traditional media, i.e., radio, television, print, and word-of-mouth. It can be concluded that what is keeping One Direction alive in pop culture is the fact that its fans continue to be emotionally invested in the band. This will be vital to the future success of the One Direction, as its members announced in late 2015 that they would be taking an 18-month hiatus. While no one knows if the band can come back and have the same popularity, this will mainly be dependent on whether Directioners will still be around to talk about them.

Next, with social media now becoming an important asset in the professional realm, people continue to struggle in using platforms like Twitter as an effective tool. This study contributes to insight directed to industry professionals, in terms of marketing and promotional strategies—especially when it comes to hub users. Hubs in the One Direction fandom are the heart of the Directioners’ Twitter network, and this is parallel to business consumers. In order for businesses, organizations, and other entities to succeed in social media campaigns, it is necessary to target or identify influential customers and build a devoted fan base starting with them.

Establishing this loyal fan base of consumers is a key to the success of marketing any products—especially since social media followers are only a potential audience, not necessarily an actual one. In other words, a Twitter account may have a large social media following, but it is not impressive without a proportionate amount of engagement. NodeXL can be a very useful tool for industry professionals, as they can target key influencers that will be able to expose the intended product to a larger network, by identifying who is positively engaging with and receptive to the business' social media content. Strategies can be created around these influential consumers who will be able to share content to their own networks.

Lastly, online networks like Directioners prove that because of their size, they have a significant power in social media and they can potentially make a global impact on the world if they use that power to raise awareness on important issues (e.g., social, environmental, and political issues) beyond One Direction. While they receive negative reception from the general public for supposedly not caring more about more “important” issues, this can be countered with One Direction's philanthropic efforts. For instance, each year during the weeks prior to One Direction band members' birthdays, the fans come together from all over the world and take part in fundraising efforts. A goal is set, and on the day of a band members' birthday, all of the money raised is donated to various charities. For example, on Style's birthday in 2015, \$16,000 was raised for the London Lesbian and Gay Switchboard (Roth, 2015). This philanthropic effort is associated with a group of Directioners called “1D Fans Give” that was created in 2013, and they have since then raised an impressive \$104,000 for charities like Bluebell Wood Childrens Hospice, Believe in Magic, The British Asian Trust, The Katie Pipe Foundation, Women's Aid, and Eden Dora Trust (Flanagan, n.d.).



One Direction themselves have acknowledged the power of its fan base and as mentioned in Chapter 1, the band launched the Action/1D campaign in July 2015 as part of the Action/2015 initiative dedicated to bringing awareness and combating climate change, poverty, and equality (Davidson, 2015). Activists who took part in the initiative include Nobel Prize winner Malala Yousafzai. During the Action/1D campaign, not only One Direction encouraged its fans to talk about the world they want to live in, but encouraged them to submit videos and photos showing how they helping a difference in order to reach that goal. For instance, one of One Direction's "action" missions asked fans to upload simple videos of themselves as they take steps to conserve energy, e.g., turning off a light switch. While this act is by no means enough to guarantee global change, the goal of the campaign was to raise awareness, and discussing these issues is indeed a first step in making any change. One Direction is aware of the voice that Directioners have as a group, and the idea was that, if world leaders hear their voice, they would more likely take action. At the end of the campaign in fall 2015, a short film was created featuring Directioners' Action/1D submissions, and it was submitted to the United Nations Summit for the Adoption of the Post-2015 Development Agenda as well as the 2015 United Nations Climate Change Conference, where world leaders gathered together to discuss these important issues.

### Recommendations for Future Research

Suggestions can be made for future research to further explore fandoms and social media. Other popular global fandoms like Beliebers, Arianators, and Swifties, can also be examined in the same context, to compare fandom interactions on Twitter to that of Directioners. Additionally, as mentioned earlier, social network interactions within fandoms can be examined

on other platforms like Facebook, Instagram, and Tumblr. Exploration of different platforms aside from Twitter can provide inside into the different and similar ways social media users utilize a range of social media types, and perhaps give meaning into the purposes and advantageous of using one medium over another. Further research on Directioners can also be done during One Direction's hiatus, to examine if or how the fandom continues to create worldwide Twitter trends, even when One Direction news is limited.

This study also raises an important question of whether a fandom should be regarded as a community or an audience. The role that social media is playing in the way people interact with each other could now be considered, as digital audiences are possibly revising the definition of what a community is. It may no longer solely describe the traditional sense of in-person, neighborhood groups built around their strong connections and sense of culture. It can perhaps now includes online groups who share the same intense bond, even though they are thousands of miles apart and have never met in person. Audiences simply listen, while communities engage and empower each other through one common purpose. This issue is important to address as we go forward and advance into the digital era.

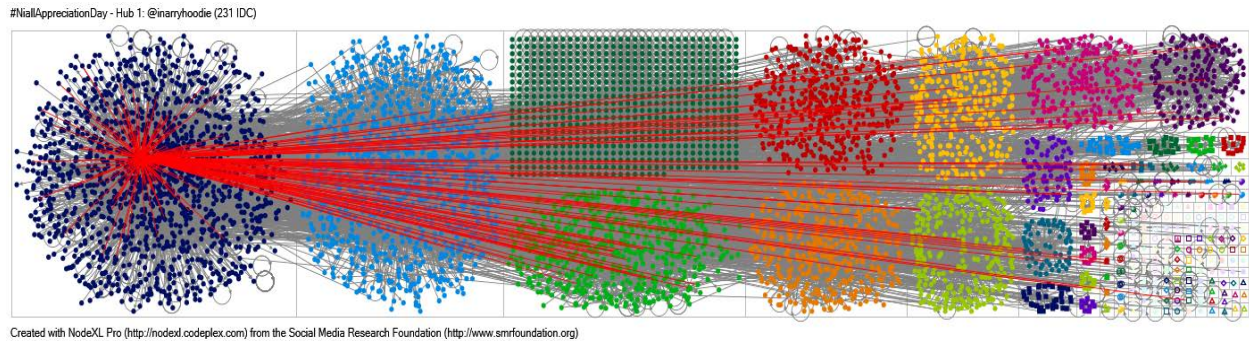
## APPENDIX A

### NODEXL VISUALIZATION GRAPHS

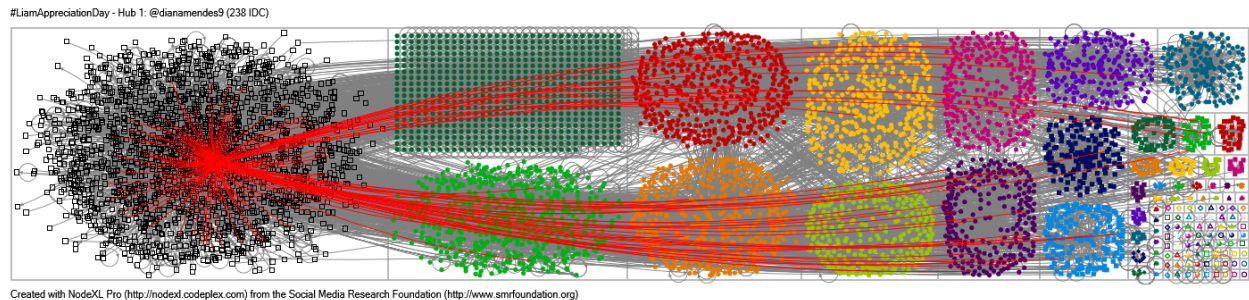
Below are snapshots of 17 visualization graphs created through NodeXL. Because of the amount of Twitter users in each data set, labels were not created for each user to avoid cluttering the graph. The red lines originate from the top hub in the largest cluster of the network, and lead to its connections in the entire network. This provides a better idea of how hubs' connections with other Twitter users extend within and across clusters, allowing for information to be disseminated to larger network. These graphs can be referenced to the clusterization data and top hubs list found in Chapter 4 (Results).

#### Fan-dedicated Worldwide Twitter Trends

**Figure 8. Visualization for data set A1 (#NiallAppreciationDay).**

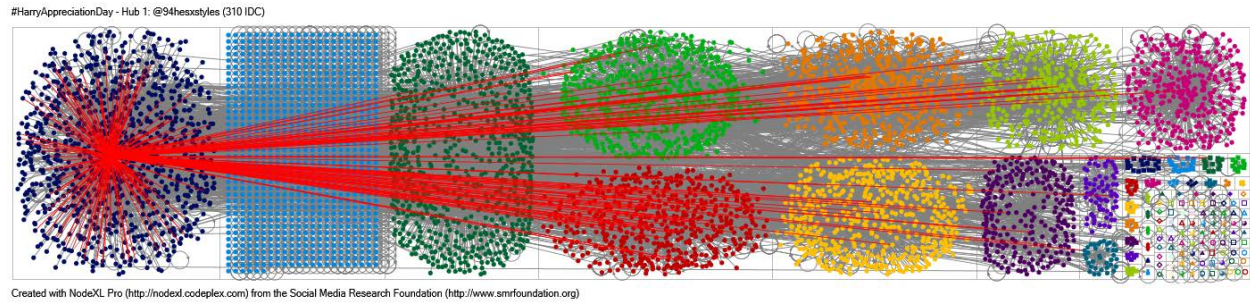


**Figure 9. Visualization for data set A2 (#LiamAppreciationDay).**

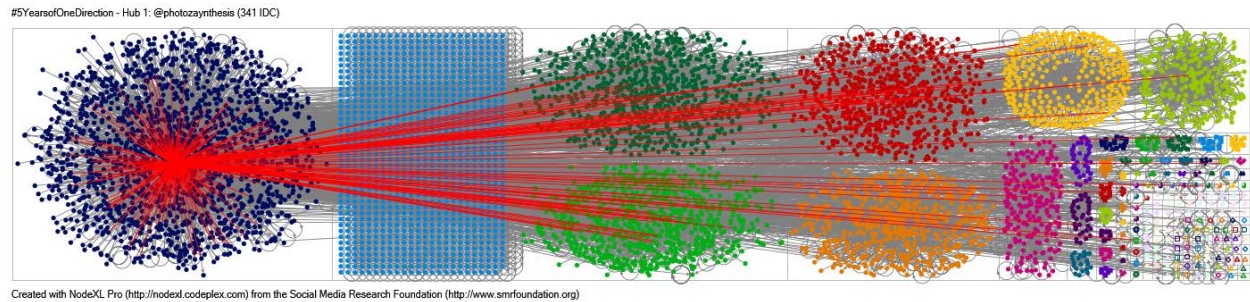




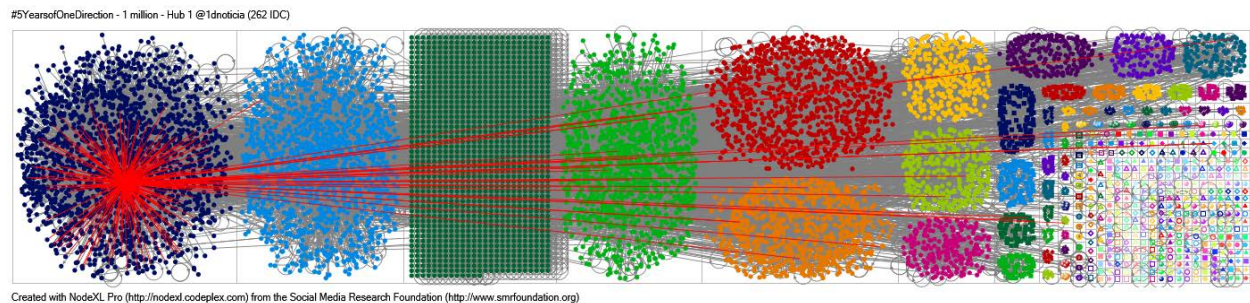
**Figure 10. Visualization for data set A3 (#HarryAppreciationDay).**



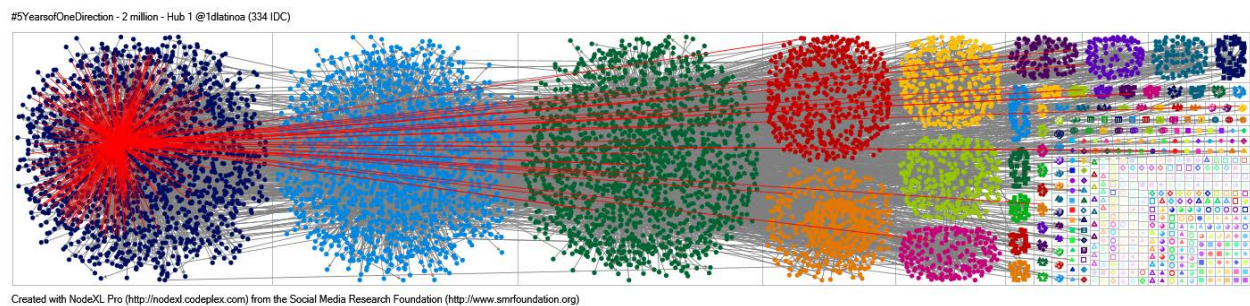
**Figure 11. Visualization for data set A4 (#5YearsofOneDirection).**



**Figure 12. Visualization for data set A5 (#5YearsofOneDirection, 1 million).**

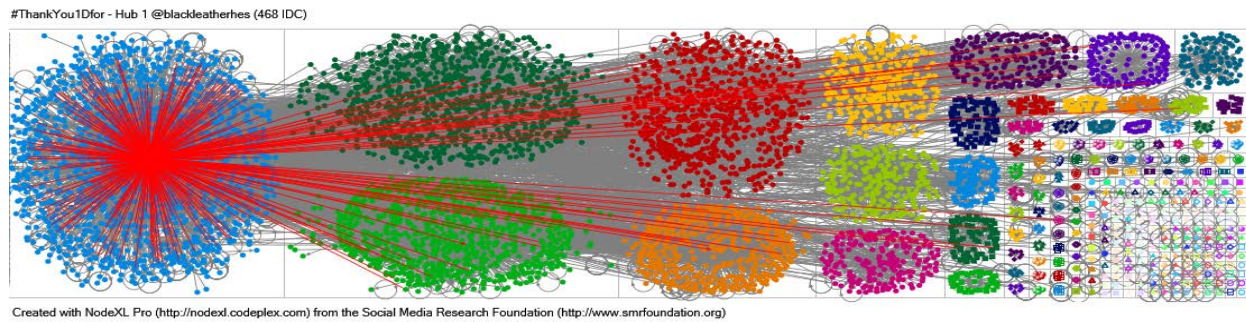


**Figure 13. Visualization for data set A5 (#5YearsofOneDirection, 2 million).**

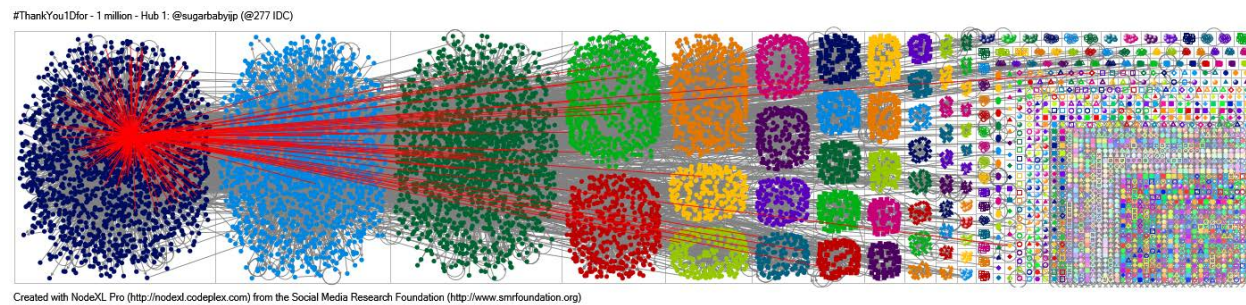




**Figure 14. Visualization for data set A6 (#ThankYou1Dfor).**

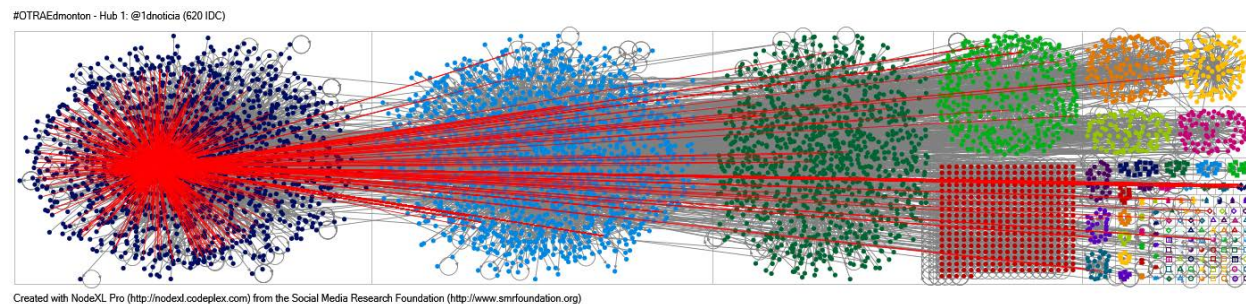


**Figure 15. Visualization for data set A7 (#ThankYou1Dfor, 1 million).**



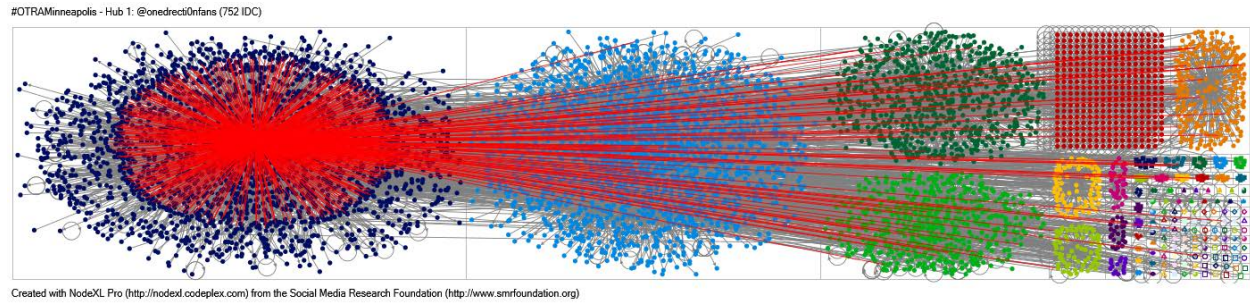
Live-Tweets (One Direction concerts)

**Figure 16. Visualization for data set B1 (#OTRAEdmonton).**

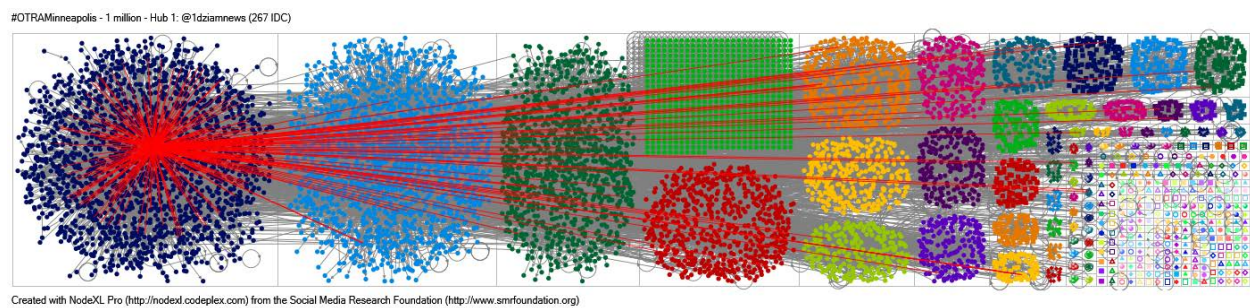




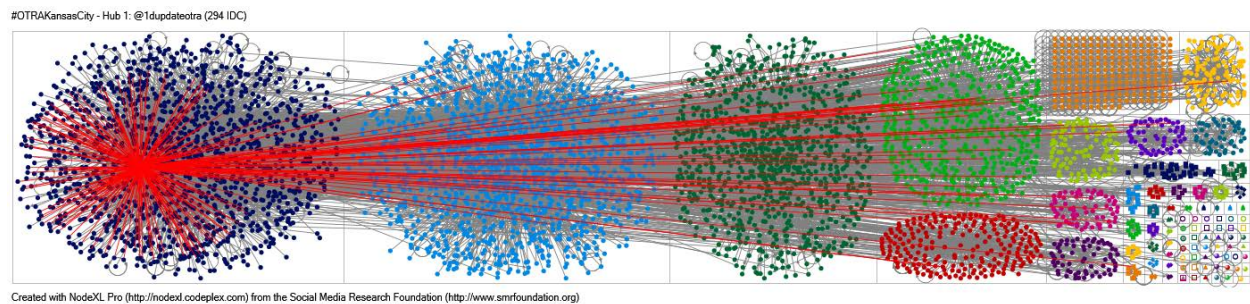
**Figure 17. Visualization for data set B2 (#OTRAMinneapolis).**



**Figure 18. Visualization for data set B3 (#OTRAMinneapolis, 1 million).**



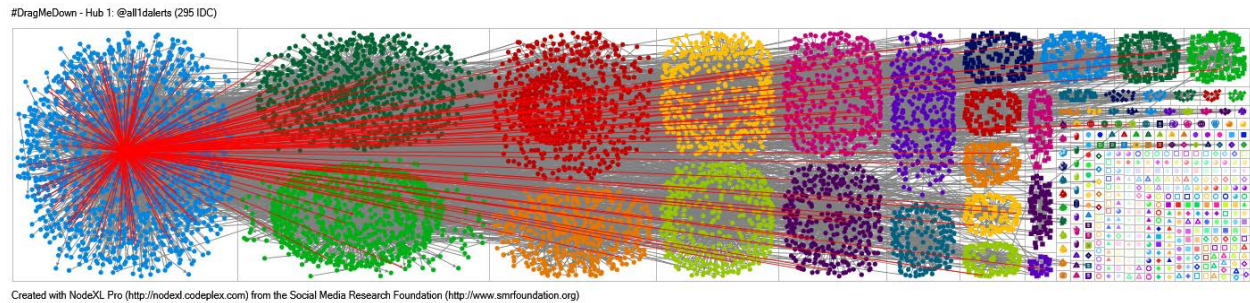
**Figure 19. Visualization for data set B4 (#OTRAKansasCity).**



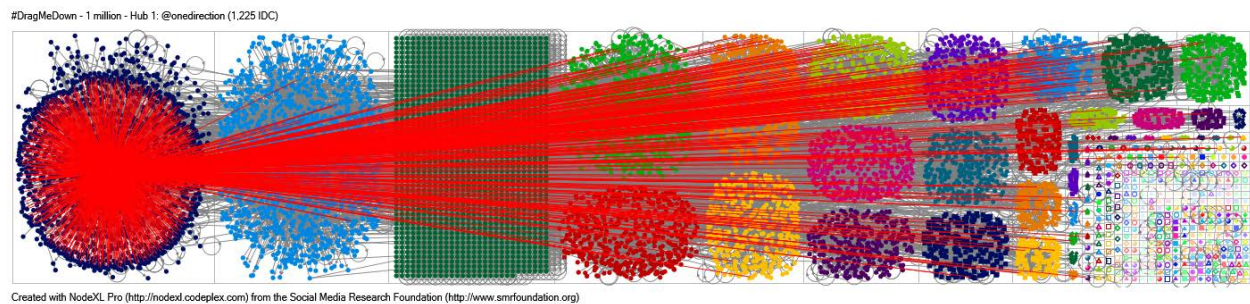


## Marketing and Promotional Twitter Trends

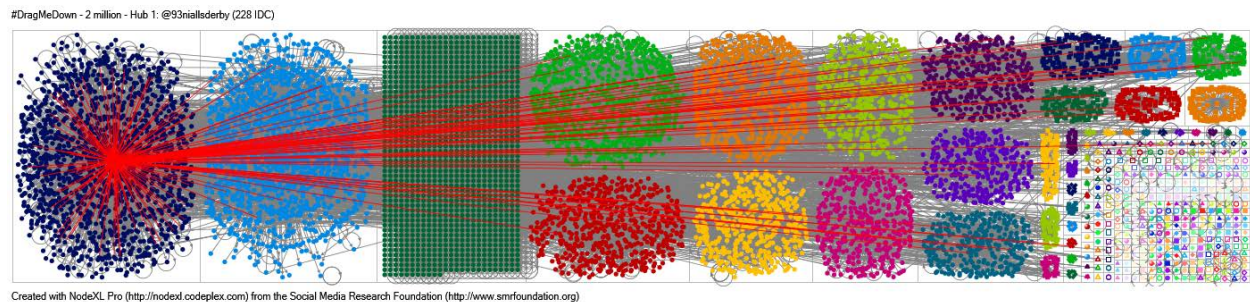
**Figure 20. Visualization for data set C1 (#DragMeDown).**



**Figure 21. Visualization for data set C2 (#DragMeDown, 1 million).**

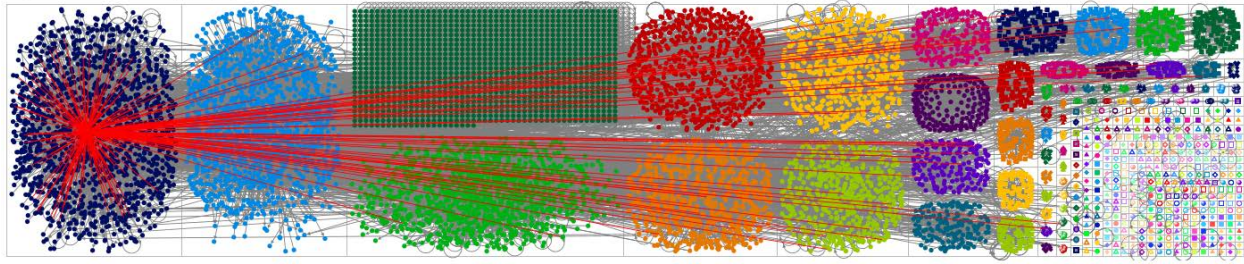


**Figure 22. Visualization for data set C3 (#DragMeDown, 2 million).**



**Figure 23. Visualization for data set C4 (#DragMeDown, 3 million).**

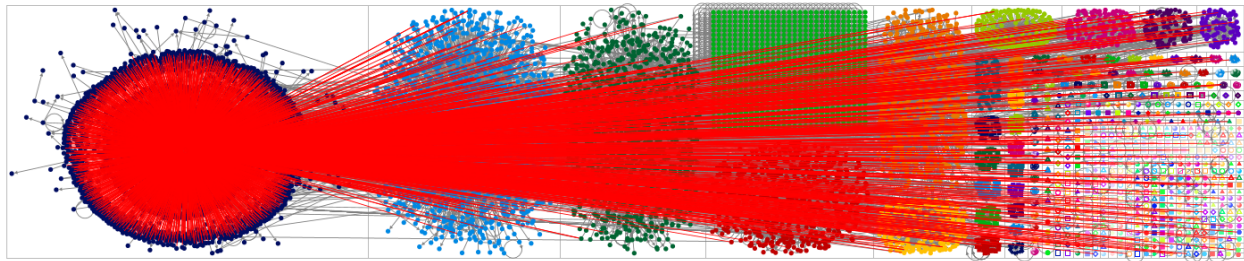
#DragMeDown - 3 million - Hub 1: @elkyfhtzaynie (240 IDC)



Created with NodeXL Pro (<http://nodexl.codeplex.com>) from the Social Media Research Foundation (<http://www.smrfoundation.org>)

**Figure 24. Visualization for data set C5 (#DragMeDown, 4 million).**

#DragMeDown - 4 million - Hub 1: @onedirection (3,656 IDC)



Created with NodeXL Pro (<http://nodexl.codeplex.com>) from the Social Media Research Foundation (<http://www.smrfoundation.org>)



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## CURRICULUM VITAE

### NICOLE SANTERO

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#### ACADEMIC INFORMATION

##### **Master of Arts, Journalism and Media Studies**

**May 2016**

University of Nevada, Las Vegas

GPA: 4.0

##### ***Master's Thesis:***

- “Nobody can #DragMeDown”: An analysis of the One Direction fandom’s ability to influence and dominate worldwide Twitter trends

##### **Bachelor of Arts, Communication Studies**

**Dec. 2013**

University of Nevada, Las Vegas

Minor: Journalism and Media Studies

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#### RESEARCH PRESENTATIONS, AWARDS, AND RECOGNITION

Santero, N. (Nov. 2015). An analysis of the One Direction fandom’s ability to create (and dominate) worldwide Twitter trends. Presentation at the UNLV Rebel Grad Slam Research Rumble (Three-Minute Thesis Competition), 3<sup>rd</sup> Annual Competition, Las Vegas Nevada.

- Top ten finalist/scholarship winner

Santero, N., & Venger, O. (Feb. 2016). #FiveYearsofOneDirection: An analysis of the One Direction fandom’s ability to create worldwide Twitter trends. Paper presented at the Far West Popular Culture Association, 28<sup>th</sup> Annual Meeting, Las Vegas Nevada.

Santero, N. (Mar. 2016). An analysis of the One Direction fandom’s ability to influence and dominate worldwide Twitter trends. Presentation at the UNLV Inspiration, Innovation, and Impact: A Celebration of Graduate Student Research, 3<sup>rd</sup> Annual Event, Las Vegas Nevada.

- One of seven featured graduate students
- Event highlighted the best of graduate student research at UNLV

Santero, N. (Mar. 2016). #FiveYearsofOneDirection: An analysis of the One Direction fandom’s ability to influence and dominate worldwide twitter trends. Poster presented at the UNLV Graduate & Professional Student Research Forum, 18<sup>th</sup> Annual Forum, Las Vegas Nevada.

- 2nd place/scholarship winner (Social Science and Hotel Poster Session)

Santero, N. (Apr. 2016). “Nobody can #DragMeDown”: An analysis of the One Direction fandom’s ability to use Twitter as a successful promotional tool. Poster presented at the UNLV Greenspun College of Urban Affairs Graduate Symposium, 7<sup>th</sup> Annual Symposium, Las Vegas Nevada.

- 3<sup>rd</sup> place/scholarship winner

Santero, N. (Apr. 2016). “Nobody can #DragMeDown”: An analysis of the One Direction fandom’s ability to use Twitter as a successful promotional tool. Poster presented at the Broadcasters Education Association Convention, 21<sup>st</sup> Annual Convention, Las Vegas Nevada.

- Among top-selected “Student Research-In-Progress” papers

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## ACADEMIC ORGANIZATIONS

### UNLV Graduate & Professional Student Association (GPSA)

**2015-16 Academic Year**

- Council member/department representative
- GPSA Awards Committee member
  - UNLV’s graduate and professional student government

### Phi Kappa Phi Honor Society

**Spring 2016**

- Member
  - Recognizes outstanding scholastic achievement among university students
  - Membership into Society by invitation only to the top 10% of graduate students

### Golden Key International Honour Society

**Fall 2015**

- Member
  - Recognizes outstanding scholastic achievement among university students
  - Membership into Society by invitation only to the top 15% of university students

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## STUDENT/PROFESSIONAL DEVELOPMENT

### UNLV Journalism & Media Studies faculty meetings

**Jan. 2015 - May 2015**

- Graduate student representative

### 2015 Hack the Gender Gap USC Women’s Hackathon

**Oct. 2015**

- Participant/competitor
  - Women’s hackathon focused on immersive journalism and virtual reality

### Graduate Research Certificate

**May 2016**

University of Nevada, Las Vegas

- Professional development program that provides graduate students with skills and knowledge necessary to initiate, conduct, and successfully conclude research projects
-

## **TECHNICAL SKILLS**

- Social network analysis utilizing NodeXL
  - Data entry and analysis utilizing SPSS
- 

## **RELEVANT PROFESSIONAL EXPERIENCE**

### **Clark County School District (Feb. 2014 – present)**

- Communications assistant/social media coordinator
  - Assisted in media relations duties.
  - Managed the social media for the fifth-largest school district in the nation, aiding efforts to increase positive engagement and transparency between CCSD and the community.
  - Provided training to district departments and administration in using social media.