#METOO: NETWORKED CELEBRITY ADVOCACY AS CAPITAL PERFORMANCE

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Abstract

Celebrity advocacy scholars have studied how social movements utilize celebrity appeal to attract media and public attention for decades. Some researchers have found that celebrity advocacy failed to achieve exceptional performance in the legacy media age. Moreover, only a very few top-class celebrities have successfully attracted legacy media attention regarding advocating social causes. This dissertation introduces the concept of networked celebrity advocacy to illustrate a new route on networked social media. Employing theories of capital and the framework of social network analysis, I test networked celebrity advocacy in the case of the #MeToo movement on Twitter. This dissertation analyzes the performance of top influencers in the Twitter #MeToo community from October 2017 to January 2018. The results provide evidence that networked celebrity advocacy functions on networked social media through the migration of celebrity capital and social capital, which encourages future research on underlying mechanisms of celebrity advocacy. Celebrities perform as brokers in online information traffic regarding social causes. This finding suggests that celebrities’ structural advantages in the online topic communities possibly affect their chance of attracting media attention for the public good, of which social activists can make use.

Keywords: Networked celebrity advocacy, celebrity capital, social capital, online activism, the #MeToo movement, social network analysis
#METOO: *NETWORKED CELEBRITY ADVOCACY AS CAPITAL PERFORMANCE*

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Dissertation  
Submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy in Mass Communications.

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August 2020
Acknowledgements

I'm deeply indebted to my kindest advisor, Dr. Carol Liebler. Any success in my dissertation project would not have been possible without the regular meetings with you. Seven years at Syracuse, you are the one I always feel I can rely on.

I want to express my most profound appreciation to my committee members, Drs. Anne Mosher, Robert Thompson, Caroline Haythornthwaite, Hua Jiang, and Michael Schoonmaker. My wonderful committee always provide me with encouragement and guidance throughout this project. Your smiles are the best gifts I ever received in my life. Many thanks for your invaluable insights and extreme patience.

I would also like to extend my gratitude to all my Newhouse friends whose help cannot be overestimated. You never let me down when I was confused, worried, depressed, or vulnerable. This lonely journey becomes endurable and even enjoyable because of your precious contribution to my research and learning.

Finally, thank you, my dearest father. Thanks for tolerating me for so many years. I miss you every day.
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Chapter I: *Networked Celebrity Advocacy in the #MeToo Movement*

On October 15, 2017, Alyssa Milano, an actor, producer, and an activist, posted a message on the social media platform Twitter following her sexual abuse allegations against film producer Harvey Weinstein:

If you’ve been sexually harassed or assaulted write ‘me too’ as a reply to this tweet.

Me too.

Suggested by a friend: “If all the women who have been sexually harassed or assaulted wrote ‘Me too.’ As a status, we might give people a sense of the magnitude of the problem.” (Alyssa Milano, Twitter post, 2017/10/15)

Her tweet has been regarded as a relaunch of the social movement “#MeToo” with the phrase originally created by social activist Tarana Burke in 2006 to help women and girls of color who had survived sexual violence (Rodino-Colocino, 2018). Well-known celebrities’ involvement in using this phrase on Twitter has made it viral since 2017 (Khomami, 2017) and the #MeToo movement’s global effect is ongoing (*Me Too Rising*, 2020).

The #MeToo movement seeks to raise awareness of the systematic oppression and the pervasive sexual harassment and assaults that women experience (Earle, 2019; Gill & Orgad, 2018). It has become a worldwide internet phenomenon with the hashtag #MeToo on various social media platforms (Anderson & Toor, 2018). This dissertation investigates celebrities’ social media involvement in the #MeToo movement. Particularly, I explore how celebrities use Twitter and other social media platforms to promote the #MeToo information, how their celebrity status as influencers on social media conversations helps distribute the #MeToo
messages, and how their positions in social networks give them opportunities to attract public attention to #MeToo.

Celebrities, especially pop stars, have taken an especially important role in diffusing information about the #MeToo movement. Many celebrities, such as actors Alyssa Milano, Busy Philipps, Sally Field, Mira Sorvino, Ashley Judd, and comedian Ellen DeGeneres, to name but a few, have showed their support through social media with the hashtag #MeToo (Thorbecke, 2018). It should be noted that not all celebrity involvement in social movements is praised. On the contrary, celebrity advocacy has been criticized as public fashioning of performing compassion added to their commercial profile (Littler, 2008), skewing radical activism statements to the form of non-radical philanthropy (Meyer & Gamson, 1995), and actually intensifying the public’s political alienation during the mass media era (Couldry & Markham, 2007). Therefore, it is of question whether celebrity advocacy on social media has distracted or attracted public attention to certain social movements. Considered as a prerequisite and warranting examination is if online celebrity advocacy is substantially related to mobilize social media users’ involvement in the movements.

Celebrity advocacy contains a complicated relationship between celebrities, the media, and social causes, and public attention is a key element in this complexity (Ellcessor, 2018). In other words, the information flow associated with celebrity advocacy is unique because of celebrities’ ability to attract media and public attention. Although this social phenomenon has been researched through various case studies (e.g., Ellcessor, 2018; Hunting & Hinck, 2017), empirical survey research (e.g., Brockington & Henson, 2015; Couldry & Markham, 2007), and theoretical essays (e.g., Meyer & Gamson, 1995; Wheeler, 2018), its underlying mechanism has not been explored through a social network analysis perspective based on theories of capital.
Therefore, I propose the concept of *networked celebrity advocacy* to analyze celebrities’ involvement in the #MeToo movement on Twitter. The study aims to identify various influencing social factors, demonstrate the composition of *networked celebrity advocacy*, and then contribute to the scholarly debate around celebrities’ social-cultural involvement. In this sense, the overarching research question is:

**Main RQ:** How does *networked celebrity advocacy* function in #MeToo?

### 1.1 The #MeToo Movement

Ten years after social activist Tarana Burke started using the phrase *Me Too*, this term has become an incredibly popular hashtag on social media like Twitter, Facebook, and Instagram (Mendes et al., 2018; Piacenza, 2018). This consistently trending hashtag #MeToo has evolved from a word expressing empathy to a political movement in order to help sexual harassment survivors, raise awareness of systematic sexual assaults, and fight against sexual violence (De Benedictis et al., 2019; Earle, 2019; Rodino-Colocino, 2018).

Since October 5, 2017, more than one hundred women, actors, models and other employees, including actors Ashely Judd, Gwyneth Paltrow, Cate Blanchett, Daryl Hannah, Uma Thurman, Rose McGowan, and Alyssa Milano, have accused Harvey Weinstein, a famous American film producer and director, of sexual misconduct (Khomami, 2017). In this context, Milano’s tweet to encourage other women to share their stories using #MeToo has obtained enormous attention across various social media platforms. By the end of October 15, 2017, the hashtag had been used on Twitter more than 200,000 times (Sini, 2017). Over 12 million Facebook posts, comments, and reactions using the hashtag were made in a 24-hour period
(Santiago & Diekema, 2017). The Pew Research Center reports that 19 millions of tweets had been posted with the hashtag in one year (Anderson & Toor, 2018).

Celebrities continue their supportive advocacy of #MeToo both online and offline. Hundreds of celebrities have replied #MeToo with their own stories while many of them wore black at the 75th annual Golden Globes Awards to show the solidarity with victim-survivors of sexual harassment and assaults (Khomami, 2017). Oprah Winfrey’s speech in this Golden Globe event, publicly supporting the #MeToo movement, has inspired many audience members and attracted great attention both online and offline (Gill & Orgad, 2018; Russonello, 2018). In only one year, the #MeToo hashtag with different language translations had been spreading across the world from America to Europe to Asia including at least 85 countries (Me Too Rising, 2020; A. Park, 2017).

Celebrity advocacy of #MeToo has inspired other offshoots, such as the Time’s Up movement (#timesup) in the fall of 2017 (Time’s Up Now, 2018a). More than 300 women celebrities in the entertainment industry collectively published an open letter in the New York Times on January 1, 2018. The Time’s Up movement is considered as a collaborative solidarity between entertainment celebrities and 700,000 female farmworkers across the US (Time’s Up Now, 2018a). It is a further step of the #MeToo movement, displaying collective effort when #MeToo shows empathy at an individual level (Earle, 2019). The objective of the Time’s Up movement focuses on gender equality in the workplace, as the open letter states,

We remain committed to holding our own workplaces accountable, pushing for swift and effective change to make the entertainment industry a safe and equitable place for everyone and telling women’s stories through our eyes and voices with the goal of shifting our society’s perception and treatment of women. (Time’s Up Now, 2018b)
As of the summer 2020, both #MeToo and #Timesup remain trending hashtags on Twitter and the two movements continue their effect globally. For example, in January 2019, British actor Emma Thompson quit the production of Skydance’s animation film *Luck* and publicly expressed her concerns about working for American animator John Lasseter who was accused of sexual misconduct (McNamara, 2019).

It is also worth noting that celebrity involvement in #MeToo conversation is not just taking a role as advocating #MeToo. Some celebrities were involved in the movement because of sexual misconduct accusations. Film producer Harvey Weinstein, actor Kevin Spacy, singer R. Kelly, comedians Bill Cosby and Aziz Ansari, CBS chief Les Moonves, lawyer Brett Kavanaugh, and even President Trump ---- these names were repeatedly mentioned on social media and mass media. Their presence were not due to their support of social justice, but because of their alleged sexual misconduct (Earle, 2019; Worthington, 2020). These celebrities are not part of celebrity advocacy but demonstrate a different layer of celebrity involvement in the #MeToo movement. In March 2020, Harvey Weinstein was sentenced to serve 23 years in prison. In April 2020, Alyssa Milano removed the #MeToo hashtag from her Twitter bio, instigating a bursting social media discussion about her authenticity in the #MeToo movement. These activities increase the complexity of celebrity advocacy.

Although it has been widely accepted that celebrities’ involvement in the #MeToo conversation was a key to this hashtag going viral, their impact on #MeToo and #Timesup has also been criticized, particularly regarding mass media coverage of these two social movements (De Benedictis et al., 2019; Earle, 2019; Gill & Orgad, 2018; Worthington, 2020; Zarkov & Davis, 2018). The #MeToo movement is limited to sexual harassments and assaults in workplaces, whereas other settings have not received sufficient attention (Gill & Orgad, 2018).
Even in media coverage of sexual assault or harassment in workplaces, perpetrators have not been framed in an equal way because of their social status, increasing uncertainty and fear of victim-survivors (Earle, 2019).

Mass media have more focused on celebrity news about white, privileged Hollywood women and rarely on women of color, LGBTQ, disabled, and other minority women groups (De Benedictis et al., 2019; Earle, 2019). Women celebrities have been framed as individual, beautiful victims in media coverage, which is a distorted representation of the #MeToo movement. It should be noted that sexual harassment and assault are not scandals of famous celebrities, but more importantly, are part of everyday life, which is a systemic societal issue (Zarkov & Davis, 2018).

Scholars have argued that the #MeToo media coverage at the beginning of the movement is depoliticized (De Benedictis et al., 2019) but re-politicized and polarized as conflict between democrats and republicans after the case of Brett Kavanaugh, currently the Associate Justice of the Supreme Court of the United States (Earle, 2019). The ordinary people or minority groups speaking out with their personal #MeToo stories are rarely reported in legacy news media. The working-class women, whom the Time’s Up movement wants to support with financial funds, have also been marginalized in mass media coverage (Earle, 2019).

Therefore, it is of question that if the #MeToo conversation on social media also shows similar problematic trends as mass media coverage. Celebrities’ involvement in the #MeToo movement has been identified as an important accelerator of information diffusion (Kaufman et al., 2019; Xiong et al., 2019). However, Twitter’s intendency of focusing on entertainment field and celebrities’ class privilege instigated concerns about the further development of the #MeToo
movement (Munshi-Kurian et al., 2019). Therefore, it is crucial for social activists to critically comprehend celebrities’ Twitter performance in the #MeToo conversation.

1.2 Networked Celebrity Advocacy

The #MeToo movement is one prominent case of celebrities’ political and social involvement in social causes, which has gained insufficient research attention according to Panis (2015). Among others, actors Angelina Jolie, George Clooney, and Charlize Theron have successfully endorsed global charities organized by the United Nations (Wheeler, 2018). Bono, lead singer of rock band U2, has become a well-known celebrity activist according to his effort in the initiative Product (RED) to promote the idea of doing good while shopping (Bulck, 2018; Farrell, 2012). Actor Ian Somerhalder continues to campaign in environmental issues and has created a non-profit organization to mobilize his social media followers (Alexander, 2013). In 2020, Lady Gaga helped the World Health Organization to organize “One World: Together At Home” concert to inspire the world to combat the Covid-19 virus (Pareles, 2020). All these examples have shown that celebrity advocacy has been a social phenomenon of significance in contemporary mediated societies (Panis, 2015; Wheeler, 2016, 2018).

The relationships between celebrity advocacy and a social media environment have raised interest in communication scholarship. Social media is considered as an essential platform supporting celebrities to advocate political issues. Studies on media representation (e.g., Alexander, 2013), hashtag feminism (e.g., Duvall & Heckemeyer, 2018), and social activism geography and history (e.g., Howell & Parry-Giles, 2015) have touched on the communicative significance of celebrities and digital communication in social media movements. Celebrity advocacy on social media has been researched from various perspectives including cases studies (e.g., Tufekci, 2013), image analysis (e.g., Kharroub & Bas, 2016), quantitative and qualitative
content analyses (e.g., Harlow & Benbrook, 2019), and social network analyses (e.g., Buente & Rathnayake, 2016).

However, communication and celebrity scholarship using a social network analysis perspective has been insufficient to systematically and completely identify communicative patterns embedded in celebrity advocacy on social media. Only three research projects have used social network analysis as the primary methodology to study celebrity advocacy (Buente & Rathnayake, 2016; S. Park et al., 2015; Sturgess & Burns, 2018). For instance, Park et al. (2015) analyzes the celebrity appeal of South Korean public figures in audiences’ political engagement on Twitter. In addition, research on the communicative strategy of social movement organizations also touched on celebrity influence through a network perspective, but does not treat it as a central focus (Wang et al., 2016; Xiong et al., 2019). For example, an analysis of the hashtag movement *Occupy Wall Street* indicates the possibility of using celebrities’ name as co-occurring hashtags to amplify the visibility of the social movement (Wang et al., 2016). Yet, these empirical studies have lack analytical power in integrally and comprehensively explaining the role of celebrity status in constructing new paths to conveying messages and advocating activism on social media.

In this dissertation, I put forward an analytic concept of *networked celebrity advocacy* to examine how celebrity advocacy functions on social media in the social movements such as #MeToo. I set out *networked celebrity advocacy* as well-known celebrities using hashtags or other networking functions on social media to advocate social causes. This concept is not entirely new. Tufekci (2013) utilizes the analytic category *microcelebrity networked activism* to investigate the new emergent media ecology and social movements on the participatory media. Ellcessor (2018) uses the term *connected celebrity activism* to analyze the case of deaf American
actor Marlee Matlin’s involvement in media reform activism. Both scholars have paid special attention to social media’s characteristic of connectivity in celebrity advocacy: Tufekci (2013) puts an emphasis on celebritification of activists achieving microcelebrity status on social media whereas Ellcessor (2018) concentrates on connected texts from various sources embedded in star image. My proposed concept networked celebrity advocacy also emphasizes connectivity as these two precedents, but specifically focuses on relationship building between well-known celebrities and other social actors involved in social-cause advocacy. Particularly, the concept is built on the analytical framework of social network analysis, which determines both the theoretical basis and methodological applications for the current research project.

Celebrity advocacy refers to a social phenomenon that social activists utilize the power of celebrity status to boost media coverage and public attention (Thrall et al., 2008; Treme & Craig, 2013; Wagemakers & Dhaenens, 2015). The trend of celebrity-advocacy-related media coverage from 1981 to 2006 indicates the effect of the traditional strategy used in celebrity activism had been overestimated in the political domain (Thrall et al., 2008). The growth of the internet and social media has caused a transition from the old strategy to a new model of celebrity activism. The mainstream media might not give enough attention to celebrity advocacy, but political groups can use social media to reach smaller but more homogeneous audiences, such as the celebrity-follower communities (Tufekci, 2013).

Historically, celebrity advocacy and activism have triggered debates about whether celebrities are authentically and effectively engaged in political actions for social justice (Arthurs & Shaw, 2016; Franke & Schiltz, 2013). Fandom studies have found that celebrities influence their fans cognitively, culturally, and politically (Jenkins, 2006, 2016). However, it is hard to say that celebrity influence on fans can be easily transferred to social activism issues. Scholarship on
celebrity advocacy has pointed out a precarious signal: celebrities’ endorsement might distort the real goal of social movement organizers but reallocate it to a different zone, such as from radical to charity, or from activism to marketing (Littler, 2008; Meyer & Gamson, 1995; Wheeler, 2018).

It is important to explore if the emergence of the internet has offered an alternative resolution to end the debate. Social media provide a new platform for a new form of online communities containing celebrities and their fans. The characteristics of celebrities on social media (directness, broadness, self-production, authenticity, and intimacy) have the potential to influence celebrity activism to some extent (Baym, 2010). Bennett (2012) points out that both activist groups and celebrities now use social media platforms such as Facebook, Twitter, and YouTube to communicate with mass but fragmented audiences. In another article, Bennett (2014) uses Lady Gaga’s publicizing of a social justice project to identify a clear path of her fans’ collective organization through social media.

The inquiry of networked celebrity advocacy demands research attention to the role of connectivity of influential actors in social media activism. Social network analysis has been credited as a valid methodology to study connectivity on social media (Gruzd & Haythornthwaite, 2013, 2016; Haythornthwaite, 2012) and in social movements (Diani, 2003, 2016; Krinsky & Crossley, 2014; Malinick et al., 2013). In addition, Bennet’s (2012) arguments also suggest an expansion of investigating celebrity advocacy and activism in a social network analysis direction. Marshall, Moore, and Barbour (2015) point out that social network analysis should be a new direction in the study of celebrities, utilizing the technique of data visualization and mapping the dynamics of celebrities’ networked selves. They further highlight the significance of Twitter data in celebrities’ self-production and self-presentation on social media.
with an in-depth look into the associations between tweets and retweets, mentions and hashtags, and following accounts and followers (Marshall et al., 2015). Therefore, in the current project, employing the analytical concept networked celebrity advocacy, I utilize social network analysis to investigate the controversy underlying celebrity advocacy in a networked social media environment. Particularly, I emphasize on the form, not the content, of social relations embedded in networked celebrity advocacy.

1.3 Networked Celebrity Advocacy in the Twitter #MeToo Movement

Using social network work analysis to research the leadership or the bridge role of activists has been widely acknowledge in social movements scholarship (Diani, 2003; Krinsky & Crossley, 2014). Research conducted specifically on the #MeToo movement has included thematic analysis on tweets content (Li et al., 2020; Xiong et al., 2019); content analysis (De Benedictis et al., 2019); theoretical exploration (Munshi-Kurian et al., 2019); critical discourse analysis (Hsu, 2019); and social network analysis (Hosterman et al., 2018; Sturgess & Burns, 2018; Xiong et al., 2019). Celebrity appeal has also become a debated topic in the #MeToo scholarship, showing its power and ambiguity in content analysis (De Benedictis et al., 2019), critical discourse analysis (Earle, 2019; Worthington, 2020), and critical review (Gill & Orgad, 2018). No research has been done on the function of celebrity advocacy in the #MeToo movement from a social network analysis perspective.

The examined networked celebrity advocacy in the #MeToo movement on Twitter can be visualized in Figure 1. Twitter users have constructed special community clusters around #MeToo to express their attitudes towards sexual misconduct in everyday life. This topic community cluster includes various subgroups, which construct the ongoing conversations around various influential entities, such as media outlets, social activism organizations,
politicians, celebrities, and other public figures. Among those subgroups, conversations around celebrities build up a special kind of conversation overlapping the #MeToo topic community and personal communities around celebrities. In this way, the research object of the current project is the overlapping area in Figure 1, which I have demonstrated as networked celebrity advocacy.

![Figure 1](image)

_Figure 1._ The research object of the dissertation project.

Scholars at the Pew Research Center have identified six different kinds of conversational crowds based on topics, sources, leaders, and network structures on Twitter (M. Smith et al., 2014). Among them, they suggest _Broadcast Network_ describe conversations originated from media outlets and famous people with loyal followers. In this way, media companies and these famous personalities might operate as agenda setters or conversation starters and make an impact on these _Broadcast Network_ conversational crowds.

In these _Broadcast Networks_, media companies and well-known personalities are influential entities in the Twitter conversations, who are called influencers defined by the
frequency of Twitter activities, such as tweeting, replying to, retweeting, and posting with hashtags. Sources, media outlets, and influencers (such as celebrities) are different social actors in any topic conversations on social media. They can reach various parts of audience/users via directed associations. It is worth noting that influencers on social media are not only consisting of well-known personalities and organizations. Although celebrities have more chances of acting as influencers because of their fan-bases, ordinary people can also become influencers in a topic community if their posts go viral.

The concept of community has gradually been freed from location or neighborhood but more evolved according to social interactions or networks because of the development of transportation and communication technologies (Chua et al., 2016). The contemporary form of community is considered as networked individualism (Wellman, 2001), which means now human society might mainly be seen as constituted by individuals with their personal communities. Each influencer (e.g., a celebrity) and their connected users can build up a personal network or personal community (Chua et al., 2016; Wellman, 2001, 2007). These personal communities are sub-networks of the whole network with given topics on social media. They are represented as a center social actor and all other actors being around the center with direct ties. Personal communities are dispersed as to their locations; they have more loosely connected ties than densely bonding (Chua et al., 2016). This description can appropriately describe any person who has a network built around “Me” (Chua et al., 2016), but is especially suitable to demonstrate a celebrity-follower community when any other actors are gathered because of the central celebrity.

Celebrity communities are a special kind of personal communities. The assumption is that the celebrity community entails a unique shared interest in celebrities. Celebrity
communities are unique because a substantial number of followers actively connect the celebrity but the center celebrity in a good chance does not connect back to those followers. Among sources and social media users, celebrities are powerful agents as natural influencers on social media because of their fan base (Marshall et al., 2015) and their unique ability of field migration (Driessens, 2013a, 2013b).

One characteristic of celebrity communities that needs to be mentioned is the strength of celebrity-follower associations. Marwick and boyd (2011) provide three dimensions to explore the characteristics of celebrity-follower associations. They argue that celebrities perform on Twitter around the following aspects: (a) affiliation, which shows how language, cultural symbols, and norms are performed between celebrities and followers, and which is represented as links and retweets; (2) intimacy, which means a celebrity has performed proximity, familiarity, and closeness via self-disclosure; (3) authenticity, which means that, although the Twitter actions of celebrities are more in the nature of performance than natural production, followers still feel an imagined authenticity as a result of the self-disclosure trend on Twitter. These characteristics signal celebrities affective capacity, which demonstrates how celebrities “may command credibility through a conjunction of imagery, personalization, and para-social familiarity to transcend the other agencies of social authority” (Wheeler, 2018, p. 299).

Indeed, celebrity advocacy derives from celebrities’ affective capacity, This affective capacity is also illustrated in Street’s (2004) work on celebrity politics as constructing an intimacy with their fans and thus building up a base to make engage in the political performance. In a broad view, celebrities’ affective capacity affects not only the public who identify as fans, but also those who consider themselves as audiences. Brown’s (2015) article explores four processes of audience involvement with mediated personalities (both real stars and fictional
characters): transportation, para-social interaction, identification, and worship. These processes vary in their degree of involvement with mediated celebrities. Therefore, in an age of the social media environment, a celebrity and followers can be considered as a social network with various tie strength because of their different degree of identification with the celebrity. No matter how broad their effect is, celebrities’ affective capacity is vital in a potential success of attracting public attention to support social causes. This capacity helps celebrities migrate from one social field to another not by moving their star power but by redirecting the affected public attention from entertainment issues to social causes.

Moreover, the social trends of mediatization (Couldry, 2003, 2015; Driessens, 2013b) allow the increasing possibility of ordinary individuals becoming celebrities online. Therefore, based on celebrity culture’s increasing impact on modern societies, it is important for communication scholars to pay special attention to communicative patterns of celebrity communities in social media conversations around #MeToo.

1.4 Summary

To summarize, this chapter has introduced the significance of networked celebrity advocacy in the #MeToo movement. In this project, I use the social network analysis paradigm to explain the structure of celebrity communities and how celebrities’ structural positions influence information diffusion in online social movements like #MeToo on Twitter.

In the following literature review chapter, I first illuminate the concepts of celebrity, celebrity advocacy, and networked celebrity advocacy based on the demonstration of media transformation. Then I pose a theoretical model of celebrities’ field migration based on theories of capital (Bourdieu, 1984, 1986; Bourdieu & Wacquant, 2013) and raise my hypotheses to understand various associations in the networked celebrity advocacy of the Twitter #MeToo
movement. Finally, I propose a series of research questions on the social capital of networked celebrity advocacy based on Lin’s (1999a) theories of social capital.

Chapter III demonstrates the methodology used in the dissertation project. First, I identify the #MeToo movement as my research object in this dissertation to explore networked celebrity advocacy. Then I clarify my research design as three related phases to investigate three research questions and six hypotheses. Next, I demonstrate the sampling strategy of this project: using Crimson Hexagon’s algorithm of top influencers in the Twitter conversations to identify a list of top influencers who controlled a substantial proportion of the #MeToo conversation traffic. Finally, I demonstrate the software I used for data analysis and the limitations and ethical considerations of the study design.

In Chapter IV, I explicate the Phase One on the #MeToo involvement network. Phase One uses social network analysis to interpret the composition of the #MeToo involvement network created by the posting activities of the top influencers. It also explores the structural positions of celebrities and social activists in the network through the comparison with other influencers.

Chapter V investigates the #MeToo followed-following network in Phase Two. Using the same approach in the first phase, this chapter explores the composition and structural positions of a long-term relationship network in the #MeToo movement: the network created by followed-following activities among the top influencers. Chapter V also compares the #MeToo involvement network and the #MeToo followed-following network in order to understand the engagement of celebrities and social activists with the #MeToo movement.
Phase Three in Chapter VI explore the impact of external factors on the network-building of the top influencers and tests the hypotheses raised in the literature review. The investigation in Phase Three contains both a perspective of matrices and a perspective of vectors.

The discussion in Chapter VII relates the results in the above three chapters to the concept of networked celebrity advocacy and the model of field migration as capital performance. This chapter also touches on the limitation and future research, concludes the whole project, and highlights the contribution of the dissertation to celebrity advocacy scholarship.
Chapter II: Literature Review

Since the 1990s, celebrity influence on mobilizing resources for social causes has emerged as one of the important interdisciplinary topics in social activism research, celebrity studies, and media sociology research. This research has indicated that the role of celebrity mobilization is tightly associated with the development of contemporary media environments. Hence, since social media are continually challenging traditional mass media, celebrity mobilization is also transforming its forms, reach, and power in social activism. Therefore, it is crucial for social activism researchers and practitioners to delineate the pathways that celebrities use to distribute messages advocating for social causes in this hybrid media environment. It is also critical to explicate an underlying mechanism between celebrity, media, and social activism which, historically, has caused an ambiguity of celebrity influence in social movements. In some researchers' view, celebrities’ close association with the media and the public may cause both mobilization and underestimation of social movement topics in information distribution.

Celebrity advocacy can be seen as a form of field migration (Driessens, 2013a, 2013b). Celebrities' special symbolic power lies in their ability to migrate from one field to another. The process of celebrities’ field migration needs accumulation of at least two forms of capital: social capital, as the resources embedded in a social actor's networks (Lin, 1999a), and celebrity capital, as repeated media occurrence (Driessens, 2013a, 2013b). Therefore, it is important to analyze the function of social capital and celebrity capital in a celebrity’s contribution to a social cause such as #MeToo.

From a network viewpoint, celebrities can be identified as special social actors who are continuously accumulating social and celebrity capital. Therefore, celebrities occupy special positions in their multiple social networks, especially acting as a center and bridge
simultaneously. Being a center and a bridge together is a representation of celebrities’ connective ability and a measurement of celebrities’ social capital, which is influenced by their celebrity capital. In networked celebrity advocacy, celebrities’ connectivity is a signal of how powerful they are in advocating social causes.

In the following literature review I first examine the scholarship on celebrity in relation to media transformation, then highlight the role of celebrity capital and social capital in celebrity status and its influence. Next I propose a model of celebrity advocacy based on the theory of field migration. Lastly, I emphasize social capital in networked celebrity advocacy from a social network analysis perspective.

2.1 What Is Celebrity?

To understand how celebrity advocacy functions in online social movements, it is necessary to examine definitions of celebrity and identify the influencing factors on celebrity production in contemporary mediated societies. Celebrity can refer to an individual or a status. Historically, the modern meaning of celebrity stems from the 19th century alongside the development of industrialization, democracy, capitalism, and individualism (Marshall, 2014).

Different types of celebrity have emerged along with historical developments of modern societies. Rojek (2001) has classified celebrities based on ways in which individuals become famous: ascribed, achieved, and attributed. Ascribed celebrity has the "bloodline," achieved celebrity shows their "talent," but attributed celebrity "is largely the result of the concentrated representation of an individual as noteworthy or exceptional by cultural intermediaries" (Rojek, 2001, pp. 7–8). Those cultural intermediaries, when Rojek writes another book on celebrity and fame, are considered as "fan clusters and the PR-Media hub" (Rojek, 2012, p. 58). Notably, Rojek (2001) concludes that the mass media's rapid expansion and their profit-motivated needs
in sensational media coverage are the catalysts that develop those new forms of attributed celebrity.

In this sense, celebrity in modern societies is regarded as a cultural product created by celebrity industry managers and public promotion experts (Lieb, 2018). Gamson (1994) argues that "as carriers of the central commodity (attention-getting capacity), celebrity performers are themselves products" (p. 64). Gamson in this way defines celebrity around the development of the publicity industry where the media's role is regarded as a platform (technology) for the industry to display celebrity texts to attract a mass audience. Dyer (1998) refers to this cultural product around Hollywood films stars as star image, which is a combination of star performance, images, and various kinds of texts. Film stars are the embodiment of capitalism and consumer culture, and meanwhile, Hollywood star images are always carrying the representations of capitalist ideology (Dyer, 1998).

Celebrity is also seen as the production of the media (Giles, 2000; Rojek, 2001; Turner, 2014). Marshall points out:

In a very real sense, the media traverses all the studies of celebrity: the specificity of media form (from popular music to television, to film and the Internet) situates the reach of celebrity culture as well as the form of connection. (Marshall, 2014, Kindle Locations 385-387)

Echoing Marshall’s view, Driessens (2014) asserts that the associations between media and celebrity cultures are parallel whereas "celebrity cultures can be seen as a specific kind of thickening of media cultures" (p.115).

Thus, the celebrity industry and the media together create modern celebrities. Celebrities attracting public attention is not through their real human-being-ness or their professional roles,
but rather via a mediated public persona or popular persona (Driessens, 2013a, 2013b; Marshall, 2014). The attention celebrities attract necessarily originated not from the audience in a specific arena but the mass audience because of the media’s meta-societal effect (Couldry, 2003). A public persona is a mask behind which a real individual is hidden. Separating real individuals from their public personas but keeping certain authenticity is a process using the media to construct a mediated self. This process is important for celebrity advocacy because it affects celebrities’ authenticity and the identification of followers with the celebrity, which will influence the mobilization of celebrities on social media (Marwick & boyd, 2011).

Moreover, individuals who have obtained celebrity status are “a group that occupies a privileged social position but derives status not from institutionally based social power, but the fact of public attention” (Meyer & Gamson, 1995, p. 184). In this sense, celebrity status can be seen as a system of social status with which people will enjoy various privileges (Kurzman et al., 2007). Derived from Max Weber’s writings in 1978, social status can be defined as “the accumulated approvals and disapprovals that people express toward an object, a collectivity, or an object” (Milner, 2010, p. 381). Status is a hierarchical social structure representing a group characteristic constructed by a collective of social actors (Kurzman et al., 2007). Individuals with celebrity status may enjoy privileges such as high-status honor admired by audiences, economic benefit by selling the fame, and even legal privilege implicitly or explicitly experienced (Kurzman et al., 2007). In this vein, celebrities have the opportunity to become influencers or centers in social-cause-related information distribution.

Particularly, social media has taken a special role in constructing public persona. As social media emerge, Marwick and boyd (2011) conceptualize celebrity as “an organic and ever-changing performative practice” (p. 142), which rejects the inflexible identification of
characteristics and labels for celebrities. In a social media age, an ordinary person has the potential to attain celebrity status through processes of celebrification at the individual level and celebritization at the societal level (Driessens, 2014). Driessens (2013a, 2013b) utilize field migration as one characteristic of celebritization, indicating celebrities’ symbolic power can jump out of their original professional field and increased their societal impact.

Driessens (2013a, 2013b) further creates a new analytic concept, celebrity capital, or say repeated media appearance, to explain the celebrification process at an individual level. He considers the accumulation of celebrity capital is the most vital factor in celebrification. Driessens (2013b) also argues that the field migration of celebrities consists of exchanging celebrity capital for other kinds of capital, which determines the extent to which it is possible to translate the public personae of celebrities, from one field into another. I agree with Driessens (Driessens, 2013a, 2013b) on the significance of celebrity capital, as he has elaborated, in celebrification and celebritization. However, I argue that celebrity capital is not the only crucial capital form regarding celebrity status attainment and field migration. To understand the function of various capital forms, I first pose a model explaining how an ordinary individual accumulates various forms of capital and finally obtains celebrity status (Figure 2).

2.1.1 Modeling celebrity status attainment

Bourdieu (1984) views the contemporary society as the composition of divergent fields where social actors occupy various positions and accumulate several forms of capital. In his conceptualization, a field is composed of related institutions, norms, and rules, prioritizing certain activities and discourses. Bourdieu mainly analyzes four forms of capital: economic, cultural, social, and symbolic capital (Bourdieu, 1984, 1986; Bourdieu & Wacquant, 2013). Before Bourdieu, Karl Marx in 1867 has proposed the classical theory of economic capital in
relation to human labor (Heinrich, 2012); Schultz (1970) and Becker (2009) highlight the importance of human capital in economic development. Researchers on the conceptualization and application on capital extend the concept into physical capital (Shilling, 2004), emotional capital (Virkki, 2007), intellectual capital (Marr, 2005), media capital (Davis & Seymour, 2010), media meta-capital (Couldry, 2003), and celebrity capital (Driessens, 2013a, 2013b) at individual, organizational, or societal levels.

Figure 2. Modeling celebrity status attainment (in the case of the entertainment field) based on Bourdieu (1984, 1986, 1987), Couldry (2003), and Driessens (2013a, 2013b).

The conceptualization of these capital forms is diverse in different disciplines. Sociologist Lin Nan (1999a) defines social capital specifically from the lens of investment based on social resources theory. Following Lin’s (1999a) conceptualization, I have defined capital as
individuals’ investments in different domains, which includes economic, human, cultural, social, celebrity, and symbolic capital (Table 1).

Table 1 *Theories of Capital*

<table>
<thead>
<tr>
<th></th>
<th>The Classical Theory</th>
<th>The Neo-Capital Theories</th>
<th>Capital Level of analysis</th>
<th>Capital Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theorists</strong></td>
<td>Marx</td>
<td>Schultz, Becker</td>
<td>Bourdieu</td>
<td>Access to and use of resources embedded in social networks</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Social relations: Exploitation by the capitalists (bourgeois) of the proletariat</td>
<td>Accumulation of surplus value by laborer</td>
<td>Reproduction of dominant symbols and meanings (values)</td>
<td>Solidarity and reproduction of group</td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td>Economic Capital</td>
<td>Human Capital</td>
<td>Cultural Capital</td>
<td>Investment in technical skills and knowledge</td>
</tr>
<tr>
<td></td>
<td>A. Part of surplus value between the use value (in consumption market) and the exchange value (in production-labor market) of the commodity</td>
<td>Internalization or misrecognition of dominant values</td>
<td>Investment in social networks</td>
<td>Investment in mutual recognition and acknowledgement</td>
</tr>
<tr>
<td></td>
<td>B. Investment in the production and circulation of commodities</td>
<td>Investment in media appearance</td>
<td>Every form of capital obtains an explicit or practical recognition</td>
<td></td>
</tr>
<tr>
<td><strong>Level of analysis</strong></td>
<td>Structural (Classes)</td>
<td>Individual</td>
<td>Individual/Class</td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individual</td>
<td>Group/Individual</td>
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<td><strong>Theories of Capital</strong></td>
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<td>Individual</td>
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The model in Figure 2 addresses the accumulation of five capital forms. Economic capital refers to the investment in the production using social actors’ income, wealth, and monetary assets (Bourdieu, 1986; Lin, 1999a). Human capital is the investment in an individual's talents, skills, and knowledge through education (Aziz, 2015; G. S. Becker, 2009; Schultz, 1970), while some researchers also further defined it as intellectual capital (Marr, 2005). Human capital as well, in my conceptualization, includes the investment in the healthy body and physical attractiveness of social actors, which is also called physical capital (Shilling, 2004). Human
capital also contains emotional capital, meaning the ability to construct affective relationships and manage emotional presentations (Virkki, 2007). Cultural capital, as Bourdieu (Bourdieu, 1984, 1986) elucidates, includes the investment in dominant symbols and values through the socialization of family values and norms, the investment in the aesthetic disposition of artifacts, books and paintings, and the investment in academic qualifications, or the certificated cultural competency. Celebrity capital is defined as the investment in recurrent media visibility, which, as Driessens (2013a) illustrates, is working through the pervasive media capital (Davis & Seymour, 2010) and media meta-capital (Couldry, 2003). Social capital is defined as access to and use of resources embedded in social networks (Bourdieu, 1986; Lin, 1999a). The definitions of the main forms of capital this dissertation addresses are shown in Table 1. All these capital forms are exchangeable (Bourdieu, 1986; Couldry, 2003; Driessens, 2013a).

Figure 2 shows the process of celebriﬁcation, a public persona obtaining celebrity status (Driessens, 2013a, 2013b). Celebrity status attainment can be explained as the reward of the investment of the accumulated forms of capital as social resources (Kurzman et al., 2007; Lin, 1999a, 1999b). The model is constructed in the case of the entertainment field, but it is worth noting that any social field can apply to this model.

In this process, celebrities’ public persona consists of performance of several capital forms. Bourdieu defines symbolic capital as the recognition of any other kinds of capital (Bourdieu & Wacquant, 2013). In this sense, the celebrity status attainment, i.e. the process of celebriﬁcation from public persona to celebrity status, is the accumulation of economic, human, cultural, social, and celebrity capital with the key point of recognition – when other sorts of capital convert into symbolic capital (Figure 2). If the individual's forms of capital are recognized by the audience in a specific social field, then these types of capital are converted to a
form of symbolic capital, at the precise moment that the individual achieves celebrity status. Moreover, as long as celebrity status (symbolic capital) has been attained, this symbolic power, along with wealth and reputation, also influences celebrities’ accumulation of capital in such a way that facilitates maintenance of celebrity status (Kurzman et al., 2007).

In this sense, celebrity advocacy is a mobilization of symbolic capital achieved in certain social field. To understand how symbolic capital, or say celebrity status, is utilized to advocate social activism, I first explicate the definition and development of celebrity advocacy in relation to the mass media in the next section.

2.2 What Is Celebrity Advocacy?

Panis (2015) calls for a sharpened conceptualization of celebrities’ socio-political involvement. His suggestion is necessary because scholars have used various terminologies to describe this phenomenon based on their specific academic disciplines. These terms are abundant but have different focuses, such as celebrity activism (e.g., Ellcessor, 2018), celebrity advocacy (e.g., Thrall et al., 2008), celebrity politics (e.g., Ribke, 2015), celebrity humanitarianism (e.g., Mitchell, 2016), celebrity philanthropy (e.g., Bulck, 2018), and celebrity diplomacy (e.g., Wheeler, 2011, 2016, 2018). Scholarly articles using these various terminologies contain special focuses and methodologies. While these terms are all concentrating on celebrities’ social-political involvement, they are different in their scope (local, national, or international), reach (traditional media or social media), objects (entertainment celebrities’ migration or activists obtaining celebrity status), and focus (media representation, external causes, or impact). Among these terms, I choose celebrity advocacy in the current research project to describe celebrities’ involvement in social activism because this term is most appropriate to illustrate the associations regarding information flow between celebrities, the media, and the public attention.
Advocacy can refer to any action that argues in favor of, speaks for, or actively supports a certain social cause. In this sense, celebrity advocacy can be defined as a series of actions that celebrities take to actively support social causes, ideas, or policies (Brockington & Henson, 2015). Meyer and Gamson (1995) describe these actions as “a recognizable legitimate interest in the outcome of a political question or movement” (p. 190-191). These actions include raising funds, attending social movements, creating artifacts that are related to social issues, or tweeting or retweeting information concerning social activism. Furthermore, Brockington and Henson (2015) have observed that celebrity advocacy not only contains the above visible speaking-out actions but also includes less visible actions such as arranging meetings between policymakers and social activists.

Celebrity diplomacy has been encouraged from as early as 1953 when American film star Danny Kaye was invited to cooperate with the United Nations Children’s Fund (UNICEF) (Wheeler, 2018). Developed from then on, celebrity advocacy has been a crucial tool for transnational social activism because of celebrities’ global star image. Celebrities like Angelina Jolie, George Clooney, and Charlize Theron have been successful ambassadors for the United Nations (Wheeler, 2016, 2018). Other active celebrities in advocacy scholarship include Bono (e.g., Farrell, 2012), Lady Gaga (e.g., Bennett, 2014) and Princess Diana (e.g., Brown et al., 2003), to name just a few.

Celebrity advocacy has at least two layers: (a) celebrities’ media presences which contain information distributions regarding social causes and (b) celebrities’ symbolic power in mobilizing audiences’ engagement in social movements. Thrall et al. (2008) consider celebrity advocacy as a strategy with a focus on celebrities’ capacity in attracting attention from mass media and the public. Audiences’ civic engagement may start from their engagement with
celebrities, as such exposure and reception of civic-related information published by celebrities will be the first step for the audience to take a position in social movements. Jackson (2008) provides empirical evidence that celebrities may have the potential to strengthen their fans’ political beliefs depending on context. In this sense, it is crucial to understand how celebrity advocacy attracts public attention.

2.2.1 Attention acquisition of celebrity advocacy

Using celebrity to spread messages of social activism has been a conventional way for social activists since the inauguration of mass media. Both mass media and social activism need celebrities' attention-gathering ability to increase communicative power among mass audiences. Hence, celebrities have functioned as a bridge for conveying information from social activists to media producers and then to the public. However, the role of celebrity in social activism is changing because of the revolution of media technology during the past 30 years. In the age of mass media, celebrities' impact on the public needs the help of mass media to connect with audiences, whereas in the age of the internet and social media, celebrities have obtained a direct path to them.

Sociologists Gamson and Wolfsfeld (1993) propose that the dynamic interactions between social movements and mass media as asymmetric. Social movements rely more on mass media than the reverse in attracting public attention, validating social movements by taking them into public discourse and providing social and cultural contexts for understanding origins and consequences of social events. Using power dependency theory, the authors identify a communicative inequality in the process of message transition from social activists to mass media and then to a mass audience. Meanwhile, various characteristics of both sides can affect what kind of social movement messages that media gatekeepers select, prioritize, and frame.
These characteristics include journalists' professional and ideological values, routine reporting practices, and structural constraints of mass media (Shoemaker, 2014); these also include social activists' leadership, media strategies, and competence in meaning construction of social movements (W. A. Gamson & Modigliani, 1989; W. A. Gamson & Wolfsfeld, 1993).

Mass media's value to social activists and organizations lies in its role in the social construction of meanings in media discourses (W. A. Gamson & Modigliani, 1989). Social movements need mass media to influence public opinion since collective activism needs the support of the general public, "to mobilize potential adherents and constituents, to garner bystander support, and to demobilize antagonists" (Snow & Benford, 1988, p. 198). Other social activists also want to elicit an influence on formal policy-making by affecting media discourses (Barnard, 2018; Camaj, 2018). To fulfill this goal, social activists maintain effective interactions with mass media producers (W. A. Gamson & Wolfsfeld, 1993; Malinick et al., 2013).

Some communication scholars have used media system dependency theory to explain the asymmetric relations between mass media and other social actors (Ball-Rokeach, 1985; Ball-Rokeach & Loges, 2000; Brough & Li, 2013; Lowrey & Gade, 2012). Empirical examinations of media effects theories have provided quantitative evidence for mass media's power in influencing the public's interests in and attitudes towards specific social issues (Bryant & Oliver, 2009). Because media resources are scarce, the traditional media occupy the dominant symbolic power during the mass media age; therefore social movement scholars consider mass media as a critical mode of transmitting messages in mobilizing the public and organizing collective actions (Brough & Li, 2013; W. A. Gamson & Modigliani, 1989).

Because social movements' interests often conflict with mainstream ideology, it is especially important for social activists to broaden the scope of media coverage and so as to
increase the public's exposure to the context and significance of particular social movements (W. A. Gamson & Wolfsfeld, 1993). For example, a longitudinal analysis of news coverage of breast cancer finds the impact of high-profile women acknowledging their breast cancer on media coverage (Corbett & Mori, 1999). Therefore, the media have been acting as a consistent and fundamental component in discussing celebrity advocacy. For example, Gamson and Wolfsfeld (1993) point out the mass media's emphasis on entertainment, and visual value of their reported events highlight celebrities' role in speaking for social movements. They address that celebrities' participation was just an effect of the interactions between mass media and activists while Meyer and Gamson (1995) argue that celebrities could bring both resources and risks simultaneously into social movements via mass media coverage. In this sense, the public’s exposure to celebrity news has been an important measurement as scholars examine the influence of celebrity advocacy (Brockington & Henson, 2015; Couldry & Markham, 2007). In short, the media are not only an essential brick to build up celebrities’ public image, but also to providing a celebrity-political magnification effect (Totman & Marshall, 2015).

However, when social activists appraise the use of celebrities’ mediated personae to attract public attention, the disadvantages that celebrities bring into social causes and movements are also discussed. The skewing potential of celebrity advocacy means that members of the public who are attracted by celebrities will pay less attention to social causes, and more to celebrities’ personal attributes (Meyer & Gamson, 1995; Wheeler, 2018). Meyer and Gamson’s (1995) analysis on celebrity participation in social causes concludes that celebrities are more likely to involve in general causes, such as charity than specific social justice group entitlements. In the same vein, Wheeler (2018) reviews the critiques of international celebrity advocacy and pointed out celebrities’ involvement in international social movements may generate the
trivialization of authentic social causes, the disguise of the relationship between capitalist exploitation and global inequality, and the maintenance of global stereotypes.

At the same time, the effectiveness of media use for celebrity advocacy still needs empirical evidence. Research on celebrities’ social-political involvement is mostly studied by discursive analysis or single case studies (Panis, 2015). Yet, several articles have addressed celebrity appeal to the civic engagement of the public with empirical results (Brockington & Henson, 2015; Couldry & Markham, 2007; S. Park et al., 2015; Thrall et al., 2008). Couldry and Markham (2007) employs self-report diaries, in-depth interviews, and national survey data in the UK to evaluate the impact of the pervasive celebrity culture on the citizens’ political engagement. They find that although participants show preference to enjoy celebrity culture, this preference is not related to their concern on public issues. Twitter research of Park et al. (2015), although only focusing on South Korea context, also reveal that celebrity followers were those who showed least interest in politics, similar to the results of Couldry and Markham’s (2007) research in the UK. Still in the UK context, Brockington and Henson (2015) deployed surveys, in-depth interviews, and focus groups to investigate public opinion towards celebrity advocacy. They concluded that the reach of celebrity advocacy to the public was limited in the UK, but respondents firmly believed that celebrity advocacy was powerful in commanding media coverage. In the US context, Thrall et al. (2008) also point out the significance of celebrity appeal to mass media, but only as it applies to prominent stars. As they find, although 60% of celebrities are more or less involved in advocacy, only a few of them lead to news-making. As supplementary evidence, the Pew Research Center’s report on celebrity influence on YouTube news-making indicates that celebrity is not the major contributor to news coverage on this particular platform (Rosenstiel & Mitchell, 2011). Considering the effectiveness of information
diffusion for social activists using celebrity advocacy, it is crucial to understand how celebrity advocacy works in contemporary media environments.

2.2.2 Field migration

The above unresolved issues have encouraged researchers to reconsider celebrities’ special role in social advocacy. Celebrities’ uniqueness in the areas of social activism and advocacy information flow lies in their ability to migrate across social fields. This so-called field migration is “the mobility within and across social fields of people using their celebrity status” (Driessens, 2013b, p. 645). Field migration is identified as an indicator of celebritization, which refers to the way that being famous has become a social trend, penetrating contemporary societies (Driessens, 2013a). For example, in terms of entertainment celebrities, migration occurs both within the entertainment field and across social fields. In entertainment fields, singer Paul McCartney, for example, has sought to transform himself from a popular musician to a classical musician, via a route that is both fruitful and risky (Giles, 2015). Actor Arnold Schwarzenegger is an example of migrating across fields: in his case, from entertainment to political power. In the same vein, celebrity advocacy is also a type of field migration: celebrities deploy their celebrity status in the service of social causes and social activism. Actor Angelia Jolie and singer Bono exemplify the ways that entertainment celebrities convert their global fame into humanitarian issues (Wheeler, 2018).

Celebrity migration is a long-term practice of celebrities across cultural fields (Giles, 2015). Scholars have also used field migration to explain how entertainment celebrities transform into politicians (Arthurs & Shaw, 2016; Ribke, 2015). Whatever difference exists between those social fields, celebrity migration is fraught with advantages and risks. The widespread recognition of celebrities’ public personae reflects a great potential to attain profit or
public attention, even in the context of migrating into another field (Arthurs & Shaw, 2016). However, evaluations by critics and the public in different social fields may produce a negative response, which may ultimately elect to decrease the capacity of celebrities to attract an audience (Ribke, 2015). In this sense, celebrity advocacy comprises a specific process of celebrity migration, from their professional field toward a social activism field.

Following the conceptualization of field migration (Driessens, 2013b) and my celebrity status attainment model (Figure 2), I raise another conceptual capital model to describe a given celebrity’s unique role in social cause advocacy (Figure 3). To clarify the boundaries of different social fields, this model has limited its focus to the case of migration of entertainment celebrities (Field A) to social activism (Field B). It is worth noting that other social fields may also apply to Field A in terms of celebrity advocacy because celebrities are not confined to the entertainment domain.

![Diagram of celebrity advocacy networked model](image)

**Figure 3.** Modeling networked celebrity advocacy as capital performance in field migration based on Driessens (2013a, 2013b) in case of the entertainment field.
2.2.3 Modeling celebrity advocacy as capital performance

Field migration, as Driessense (2013b) suggested, refers to the capacity of celebrities to transfer symbolic power from one field to another and depends on reciprocal exchanges of their various forms of capital. The attainment of symbolic power has been illustrated in Figure 2. Celebrity status indicates various capital forms that a public persona has invested in on social field have been recognized by the public and simultaneously transferred to symbolic capital (Bourdieu, 1986; Bourdieu & Wacquant, 2013; Driessens, 2013a; Kurzman et al., 2007; Lin, 1999a). Hence, the symbolic power consists of the transfiguration of various capital forms.

Furthermore, Bourdieu’s “Forms of Capital” (1986) already addresses the possibility of converting one form of capital to another. Communication scholarship has examined the exchange of different capital forms. For instance, Törrönen and Simonen (2015) analyze the symbolic power of women’s magazines using field theory and differentiated various forms of capital, such as economic, social, cultural, symbolic, physical, emotional, and meta-capital. However, these exchanges occur in the same social field. The key question in celebrity advocacy concerns the extent to which capital can be transported from one field to another, while sustaining the celebrity’s attention-gathering capacity.

An underlying assumption of celebrity advocacy is that a given celebrity can attract public attention for their involvement with issues of social activism. In such an involvement, it is desirable for a given celebrity’s symbolic power (attention-gathering ability) to be transferable from their professional fields to the social activism field. This assumption also means that celebrities’ media appearances in social activism fields, as opposed their professional fields, can also be recognized and legitimated by the public.
However, the problem is that symbolic power is field-specific and does not allow for simple reallocation. As Driessens (2013b) notes, the possession of a fan base in the entertainment field is insufficient for celebrities to build up the same level of legitimacy of celebrity status in any other social field. In addition, it should be noted that field migration might also influence the symbolic power of celebrities in the previous field in the opposite manner because they update their recognized public personas with unprecedented advocacy activities. These updates require another round of public recognition, which is risky (Giles, 2015).

Therefore, Figure 3 shows a theoretical model of field migration to explain the underlying system of celebrity advocacy based on the theories of capital (Bourdieu, 1984, 1986; Bourdieu & Wacquant, 2013; Couldry, 2003; Driessens, 2013a, 2013b; Lin, 1999a). As Figure 3 displays, various forms of capital show unequal contributions to celebrity advocacy. Some capital forms, such as economic, human, and cultural capital, are field-specific, not applicable for field migration. On the other hand, celebrity capital and social capital can migrate. Celebrity capital and social capital have exchangeable relationships and ultimately influence the public’s recognition of this celebrity in each social field.

Celebrities might use their economic capital to show their support, such as by donating money to charities. However, although any kind of capital investment is in the shadow of economic capital, economic investment is still field-specific. The investment and profit of economic capital in any social field can only bring the field-specific recognition. This recognition will not directly engender fame in other social fields if this celebrity does not invest economic capital in a new social arena. For example, Bill Gates’ investment in information technology is different from their donation in charity. They lead to different kinds of symbolic power of Bill Gates in these two fields.
Moreover, when celebrities migrate to social activism fields to advocate certain social causes, they seldom show instant expertise in activism. In this sense, their human and cultural capital rarely reallocate. Human capital as the knowledge and skills of celebrities is specifically applied to certain social fields (Currid-Halkett & Ravid, 2012). For example, when celebrities migrate from the entertainment field to the social activism field, they need to show engagement in knowledge and skills in the new social activism field. Their expertise in entertainment performance will not naturally be transferred to the social activism field. Although some celebrities might perform as “real” activists, it is hard to require all celebrities who advocate for social issues to have sophisticated knowledge of social causes.

Furthermore, celebrities’ cultural capital as conforming to the mainstream values of society (Lin, 1999a) is also inappropriate to shift to celebrity advocacy. Social activism mostly calls for social change against existing social hierarchies which might not comply with the mainstream value (Wheeler, 2018). It has been argued that under the context of popular feminism and neoliberal contexts, influential public figures have used claiming to be supportive of feminism as a tool for accumulating cultural capital (De Benedictis et al., 2019).

It does not mean that no celebrities have successfully invested in cultural capital in the social activism field. For example, the eco-celebrity Ian Somehalder has combined his star image in performance with his advocacy in environmental issues. His recognized compassion in environmental advocacy inversely becomes part of his public persona in the entertainment field (Alexander, 2013). This kind of cultural capital actually is already field-specific in social activism, which is different from the invested cultural capital in the entertainment field.

Celebrity capital is crucial in field migration and indeed capable of migration. As noted above, celebrity advocacy consists of a complex relationship among celebrities, the media, and
social causes; moreover, public attention is a key element in this complicated relationship. In other words, the information flow associated with celebrity advocacy is unique because of the ability of celebrities to attract media and public attention. This ability can be traced to the pervasive influence of the media in contemporary societies. In the view of Couldry (2003), the media occupy the power of meta-capital. Couldry (2003) emphasized that state meta-capital introduced “the possibility that definitions of prestige within specific fields may be determined by influences outside the fields” (p. 667). In this sense, Driessens (2013b) regards celebrity capital as an impact derived from media meta-capital, which "can potentially materialize in celebrity capital and its value (on recognition) and exchange rate are influenced by media across social space" (p.554).

Hence, Driessens (2013a, 2013b) concludes that celebrity capital is a major component of converting celebrity status to other power resources across social spaces. Regarding celebrity capital’s convertibility, several articles have offered empirical evidence for its analytic power. Johnston, Rodney, and Chong (2014) have utilized the concepts of celebrity capital and cultural capital to analyze media personas, such as celebrity cooks. Arthurs and Shaw (2016) have applied the concept of celebrity capital and its convertibility to other forms of capital for the performance of Britain comedian Russel Brand in the political field. These empirical studies mainly analyze how celebrities accumulate and convert celebrity capital after they achieve celebrity status.

However, celebrity capital’s convertibility is insufficient for explaining the process of celebrities transferring into another social field. A celebrity’s visibility with an entertainment or with social activism issue lends different degrees of legitimacy of this celebrity in these two fields. An explanation of the difference needs to encompass public attention, which gives
legitimacy to celebrity visibility. This public attention is related to the scope of audience that the celebrity can mobilize to recognize the celebrity visibility. The social relations of celebrities in the migration are seen as their social capital (Bourdieu, 1986; Lin, 1999a). Therefore, social capital, which receives insufficient attention in previous arguments (Driessens, 2013a, 2013b, 2014), is another key element in my capital model, determining the degree of convertibility of celebrities’ symbolic power.

My theoretical model on celebrity advocacy (Figure 3) emphasizes the importance of social capital in field migration. As Lin (1999a) clarifies, “If it is assumed that social capital attempts to capture valued resources in social relations, network positions should facilitate, but not necessarily determine, access to better embedded resources” (p. 36). This means that embedded resources and network positions are functional for and connected to each other in constructing social capital. A celebrity’s positions embedded in various social networks can be seen as bridges which connect social activists, media outlets, and a mass audience. The personal communities of celebrities link distinct audience members who might not connect with each other. This kind of composition of celebrity communities implies special responsibility for conveying information. Attention to social capital that has been mobilized by celebrities leads to the construction of the concept networked celebrity advocacy.

In conclusion, I propose a capital model of field migration to theoretically explain how celebrity advocacy happens across different social fields. I aim to use this theoretical model to investigate certain problems of celebrity advocacy. As Thrall et al. (2008) suggest, social media might provide a positive path for celebrity advocacy to avoid the previous problematic issues, such as debates about authenticity, ambiguity, or topic skewing in mass media coverage. In the
following section, I explore what special features that the social media brings to the model and aim to explore how celebrities used social media to advocate social-cause-related information.

2.3 What Is Networked Celebrity Advocacy?

Articles from Couldry and Markham (2007) and Brockington and Henson (2015) focus on the UK context and do not consider the different affordances between mass media and social media on celebrity influence. As Thrall et al. (2008) suggest, social media could offer a new path for advocacy-involved celebrities to attract public attention without considering media attention. Park et al. (2015) also point out, South Korean celebrities on Twitter attracted those who were incapable of processing political information through a critical lens. In this sense, it is vital to understand how celebrity advocacy functions on social media.

Ellcessor (2018) classifies celebrity advocacy’s (although she uses the term celebrity activism) relation with social causes into two types: (a) personal standing and (b) official roles as spokespersons. The blurred lines of these two types lead to the various degree of perceived authenticity of celebrities among their audiences, especially in the current networked media environment. Online celebrity practice may bring more perceived authenticity than the star image constructed in mass media era because “personal disclosure and intimacy are normative” in the social networking sites (Marwick & boyd, 2011, p. 149). This dissertation defines the networked media following boyd and Ellison’s definition of social networking sites:

We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within a system. (boyd & Ellison, 2007, p. 211)
As the authors elucidate, the uniqueness of social networking sites lies in the possibility of making visible the social relations between social actors, which is demonstrated as internet connectivity (Haythornthwaite, 2005). The public exhibition of networks has been considered a fundamental feature of social networking sites compared with other internet media (Steinfield et al., 2012). The transformation from a mass media environment to a networked media environment means newly-emerging gatekeepers, which consist of legacy media outlets and crucial personal influencers in the social media conversations (Barzilai-Nahon, 2006; Landreville et al., 2015; Reese & Shoemaker, 2016). Through a social network analysis lens, a networked media environment indicates the reshaping of the audience from the ambiguous mass to fragmented personal communities. Therefore, to illustrate how celebrity-advocated information is conveyed in a networked media environment, I propose the concept of *networked celebrity advocacy* to highlight the importance of connectivity embedded in networked media influencing celebrity advocacy online.

Some scholars consider the emergence of the internet and social media as a crucial factor that is changing the characteristics of celebrity practice (Marwick & boyd, 2011), social movements (Krinsky & Crossley, 2014), and celebrity advocacy (Bennett, 2014; Duvall & Heckemeyer, 2018; Harlow & Benbrook, 2019; Thrall et al., 2008; Tufekci, 2013). For example, Marwick and boyd (2011) argue that the new, networked media has prompted the transformation of celebrity-related communication and developed a sense of intimacy between celebrities and their followers on Twitter. Thrall et al. (2008) have identified three transforming patterns emerging within celebrity advocacy: active arenas migrating from news to entertainment, communicative characteristics changing from mediated broadcasting (mass media focus) to unmediated broadcasting (internet focus), and communicative patterns transforming from
vertical (top-down in mass media industry) to horizontal (multi-modality) communication. These changes are tightly related to the societal transformation from the mass media era toward the networked media age. In this sense, this article highlights the internet media’s role in celebrity advocacy as a fundamental structural element causing strategic transformation.

In this sense, I conceptualize networked celebrity advocacy as celebrities using their symbolic power by the way of capital migration to advocate for social causes in the networked media environment. In other words, this concept is explaining how celebrities transfer their celebrity and social capital from their previous fields to social activism, and especially demonstrating how celebrities’ networked position on social networking media functions in advocating social-cause-related information. This concept not only examines celebrity advocacy through a lens treating celebrities as influential carriers of information and ideology, but also investigates the relationships between celebrities and other social actors during the communicative processes.

Networked celebrity advocacy describes that how social media forge the ongoing connections between celebrities and other social actors to help celebrities disseminate social-cause-related information and achieve potential mobilizations. Research on social movements organizations have used social network analysis as a metaphor or an analytical approach for a long time (Krinsky & Crossley, 2014).

My conceptualization is enlightened by the attention of other social activism researchers to the connectivity. Ellcessor’s (2018) defines connected celebrity activism as “a matter of ongoing, seemingly authentic, technologically-facilitated performances that forge connections between a celebrity’s persona, projects, interactions, causes, and activist organizations” (p. 256). While her concept is more focused on “the evolving practices and signs of activism in a digital
era” (Ellcessor, 2018, p. 267), my construct puts emphasis on the connections among persons of interest in a social movement. This emphasis is decided by the connectivity as a crucial determinant of social media (boyd & Ellison, 2007), which is a distinctive feature of networked celebrity advocacy. Tufekci (2013) also focuses on the internet connectivity and delineates her conceptualization of networked microcelebrity activism as “politically motivated noninstitutional actors who use affordance of social media to engage in presentation of their political and personal selves to garner public attention to their cause, usually through a combination of testimony, advocacy, and citizen journalism” (p. 850). The major difference between my concept and Tufekci’s is that her research objects are limited to microcelebrities (Marwick & boyd, 2011), whereas my concept of networked celebrity advocacy seeks to elucidate the field migration of celebrity advocacy on the social networking media. The dissertation includes not only those who have obtained celebrity status on social networking cites (microcelebrity), but also those who have enjoyed symbolic power of being a celebrity through various, hybrid media environment.

2.3.1 A new path for attention acquisition

The significance of networked celebrity advocacy lies in that it provides a new path of inquiry for attention and online social movements such as the #MeToo movement. As Tufekci emphasizes:

Attention is a key resource for social movements. Attention is the means through which a social movement can introduce and fight for its preferred framing, convince broader publics of its cause, access solidarity, and mobilize its own adherents. (Tufekci, 2013, p. 849).
Because social activism is usually deviant from mainstream mass media coverage, social movement scholars are cautious of those who can resolve the problem of attention scarcity (Andrews et al., 2010; Zhang et al., 2018). The ability to attract public attention is the major reason for social activists showing such an interest in celebrities’ role in advocacy (Meyer & Gamson, 1995; Tufekci, 2013). Celebrities’ capacity of attaining attention has been constructed by mass media’s dominance and the public’s para-social familiarity in the mass media age. For instance, Brown, Basil, and Bocarnea (2003) investigate Princess Diana's social influence and suggest that audience involvement with Princess Diana significantly mediates her social influence on public attitudes, beliefs, and behavior. In brief, the advantage of utilizing celebrities in social causes is just as Meyer and Gamson argue, “the chief asset that celebrities can offer social movements is the visibility that comes with their participation; celebrities carry a spotlight with them” (Meyer & Gamson, 1995, p. 185).

Furthermore, social media has provided another venue for celebrities to attract the audience. Tufekci (2013) has offered a thoughtful analysis of how the networked media environment has changed the strategies of obtaining public attention. Positively thinking, social activists now can use participatory media platforms to circumvent mass media’s monopoly of public attention. Tufekci demonstrates a special case - an activist-journalist - Zainab Al-Khawaja as a representative of what the author defined as networked micro-celebrity activism. Tufekci points out that it is new media’s power that integrates Zainab’s different identities into her public persona, which increasingly attracts public attention through Zainab’s social media accounts. Tufekci’s analysis has echoed my model on celebrity status attainment in the social activism field, although she has not touched on issues regarding Zainab’s symbolic power in the journalism field and how this power could be transferred into social activism.
In the meantime, social media also brings about an usher of information flow, which makes the goal of attracting public attention in a digital media age even harder than in a mass media age. As Webster (2018) demonstrates, the currency in the hybrid media system is the ability to attract attention from the mass fragmented audiences. Guo and Saxton (2018) point out social media offer an increasingly noisy world, and therefore nonprofit organizations "are struggling to effectively grab and hold the attention of their supporters and the general public" (p. 6). As Tufekci (2013) argues, message circling often happens in the same enclosed communities on social media, which makes advocacy information less likely to reach broad audiences through social media rather than mass media. In this sense, the communicative patterns on social media regarding advocacy information flow needs a complex and multiple-layer view in the current hybrid media environment. Therefore, the concept of networked celebrity advocacy needs an understanding of the attention acquisition through the new path of networked media.

The networked media environment provides a potential path for social activists to change communicative strategies. They now have a choice of circumventing mass media and directly engaging public attention through the internet, particularly social media. Mobilization, validation, and scope enlargement are three principal goals of social movement organizers wanted to achieve through mass media (W. A. Gamson & Wolfsfeld, 1993). Tufekci (2013) argues that strategies of attainment of these three goals have been changed while mass media no longer serve as a monopoly position in attracting public attention. For example, mobilization messages now can choose a path different from passing through mainstream mass media’s gatekeeping, but through Twitter, Facebook, YouTube, Instagram, and other civic or social media, where the activism organizers take the role of gatekeepers. Guo and Saxton’s (2018) empirical analysis of how 145 advocacy organizations effectively use Twitter to capture the
audience’s attention reveals that the audience paid more attention to those Twitter accounts which have a larger size of the network and greater volume of speech. Wang, Liu, and Gao’s (2016) social network analysis on the use of Twitter hashtags to distribute advocacy information finds various patterns in the strategies of social movement *Occupy Wall Street* organizers.

In the current hybrid media environment, Zhang, Wells, Wang, and Rohe (2018) argued that public attention is powerful because attention (1) offers accessibility to a communicative system; (2) provides a channel and potential for social actors to take actions; (3) displays transferability across social fields; and (4) expands the scope of the public attention. Their research analyzes President Donald Trump’s Twitter following composition and operationalize the public attention as “audience metrics” including follower numbers, retweets, and replies (p. 3165). These audience metrics represent social relations on Twitter among social actors through the lens of social network analysis perspective.

In this sense, the key question in *networked celebrity advocacy* is what constitutes the potential base of attention transference, which means, who pays attention to celebrity-advocated information on social media. Public attention, as part of celebrity status, is a kind of symbolic capital. As the celebritification model in Figure 2 demonstrates, this part of symbolic model is the recognized social capital when an ordinary person achieves a celebrity status. Thus, to understand how attention is transferred in the field migration of *networked celebrity advocacy*, it is necessary to understand the composition and features of social capital. One approach to investigating social capital on networked media is the framework of social network analysis. In the next section, I explain how the question of attention transference can be explored through the theories of social capital from a social networking lens, which look into the function of social relations and the possible network power in *networked celebrity advocacy*. 
2.3.2 Theories of social capital

Theories of social capital can help understand the following topics in social movements scholarship from a social network analysis perspective: information diffusion, social actors’ positions, the solidarity of social movement communities, and the leadership issue in social organizations (Krinsky & Crossley, 2014). For the current project, they can help to describe the characteristics of celebrities’ communities in certain topic conversations, which represent the public attention on social networking media. They can also help to identify what social factors might influence the characteristics of celebrities’ attentive publics.

Definitions

Lin (1999a) argues that social capital is rooted in social relations and needs to be conceptualized and defined based on social networks. Moody and Paxton (2009) suggest researchers on social capital and social network analysis to utilize the joint appeal of these two fields to studying social relations: the combination of investigating meaningful content through social capital theories and examining dynamic structure through social network analysis. On this track, this dissertation surveys the conceptualization of social capital through a social network analysis perspective.

Within this perspective, social capital is defined at both the collective and individual levels (Pena-López & Sánchez-Santos, 2017). Putnam (1995) defines social capital at a group level as an organizational feature containing networks and shared values and facilitating collaborations of group members. Putnam (2000) suggests the concept of social capital is useful in analyzing civic engagement and community building. He holds a positive view of social capital’s effect in community building and considers social capital as “features of social organization, such as trust, norms and networks, that can improve the efficiency of society by
facilitating coordinated actions” (Putnam, 1993, p. 167). Although Putnam (2001) claims that online social networking is not suitable for the construction of social capital, other scholars attest the existence of online social capital (Haythornthwaite, 2012; Sajuria et al., 2015).

Haythornwaite (2012) argues that social capital is an added value in the online community, where support and emotion are reciprocal at the network level. At the group level as well, Bourdieu (1986) defines social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p. 248). Bourdieu uses the term to describe the maintenance of the social inequality of class hierarchy in a society, which is inflexible and rejects social mobility.

Interestingly, although Bourdieu (1986) defines social capital as a collective asset, he also suggests social capital can be utilized at an individual level. Thus, a social actor can possess a volume of social capital determined by the volume of connections this actor has and can mobilize. In this way, some researchers understand social capital at an individual level. Lin (1999a) defines social capital as “resources embedded in a social structure which are accessed and mobilized in purposive actions” (p. 35). Following Lin’s definition, Pena-López & Sánchez-Santos (2017) have explicated individual social capital as a personal network where social actors can retrieve resources for individual achievements.

At a group level, Putnam (2000) conceptualizes bonding social capital and bridging social capital as two disparate forms of social relations accessed and mobilized by social actors. Based on his elucidation, bonding social capital refers to social relations related to exclusive identities and homogeneous groups whereas bridging social capital refers to social relations in groups of inclusive identities and heterogenous actors.
**Social capital as the investment**

The conceptualization of social capital is still filled with ambiguity although it has been widely adopted in communication research. Ports (1998) argues that the definitions of social capital refer to the social relations or alternatively to the outcome of the social relations. This might be the reason why Driessens (2013a) states that social capital is barely separated from symbolic capital. However, Bourdieu describes symbolic capital as the recognized forms of other capital (Bourdieu & Wacquant, 2013). In this sense, I study social capital as investment in social relations and treat the outcome or return of these invested social relations as recognized social capital, or say, part of symbolic capital (Figure 2).

Following the distinction between bonding social capital and bridging social capital, communication scholarship has researched the associations between use of social networking sites and perceived social capital using the survey method (Steinfeld et al., 2012). Such research more focuses on the outcome/return of social capital in its analysis and results (e.g., Ellison et al., 2011; Steinfeld et al., 2012; Williams, 2006). In particular, a two-year panel study have revealed the causal direction from use of social networking sites to the bridging social capital using self-report surveys (Steinfeld et al., 2008). This research offers invaluable insights to my conceptualization model on networked celebrity advocacy. However, different from treating social capital as the outcome, this dissertation focuses more on the social relations on their own and put emphasis on the invested social capital at the individual level.

Defining social capital from an investment viewpoint, Lin (1999a) treats it as “investment in social relations with expected returns in the marketplace” (p. 19). As he illustrates:

>[A]t this relational level, social capital can be seen as similar to human capital in that it is assumed that such investments can be made by individuals with expected return, some
benefit or profit, to the individual……the focal points for analysis in this perspective are (1) how individuals invest in social relations, and (2) how individuals capture the embedded resources in the relations to generate a return. (Lin, 1999a, p. 32)

Lin’s conceptualization of invested social capital is rooted in the understanding of social networks. Moody and Paxton (2009) suggest that social networks analysis can provide concrete measurements for social capital research. From a social network analysis perspective, social capital mainly touches on the resources accessed and mobilized in social networks (Lin, 1999a). In *networked celebrity advocacy*, transferring social capital means accessing and mobilizing social associations in celebrities’ social networks. This dissertation explores *networked celebrity advocacy* in the #MeToo social movement on Twitter. My focal research object is the function of personal networks around celebrities in the Twitter #MeToo movement. Therefore, I follow Lin’s (1999a) conceptualization and operationalization of social capital to this research.

To further understand the nuance of the capitalization process of the social capital investment, I adopt Figure 4, which is originated from Lin’s (1999a) article on modeling a theory of social capital. In the following section, I address this model, combine it with the analysis of social network measurement of social capital, and raise three social-capital-related research questions regarding the researched *networked celebrity advocacy*.

### 2.4 Research Questions and Hypotheses

Lin (1999a) illustrates the process of social capitalization in Figure 4, which identifies the unequal positions of social actors before capitalization, classifies the capitalization process as accessibility and mobilization, and identifies the outcome of the social capitalization as instrumental and expressive returns. This illustration (Figure 4) helps the dissertation to explore one part of the overarching research question regarding how networked celebrity advocacy
functions in the #MeToo movement: how invested social capital of celebrities in *networked media advocacy* can be recognized by the public and transferred into symbolic capital.

As Figure 4 demonstrates, *accessibility* and *mobilization* are main measurements of individual social capital. *Accessibility* includes embedded resources and networked locations. *Mobilization* consists of use of contacts and contact resources.

According to Lin’s (1999a, pp. 35–37) explanation, embedded resources can be seen as social actors’ characteristics and possession, including network resources (such as network composition or range of resources) and contact statuses (such as occupation or authority); network locations can be seen as social actors’ structural positions in their social networks,
including a bridge to access and strength of tie. The embedded resources and network positions are functional for and connected with each other in constructing social capital.

My major research object in the current project, networked celebrity advocacy, represents the overlapping networks between social media topic conversation networks around #MeToo and personal communities around celebrities (see Figure 1). In networked celebrity advocacy, the accessibility of a celebrity’s social capital can be represented as personal communities around celebrities, demonstrating how celebrities are followed by social media users (Zhang et al., 2018). Accessibility is only the starting point of social capital construct and maintenance. The following step of mobilization in networked celebrity advocacy means the social relations that celebrities have mobilized through their Twitter functions, such as mentioning, replying to, retweeting, and following.

In this sense, what I investigate in detail in the current project is the mobilization of celebrities’ social capital. The contact resources that networked celebrity advocacy has mobilized in #MeToo conversation represent the attention that celebrities attract for certain social causes. According to existing literature, such public attention on social media can be represented as social media users’ replies, retweets, and likes of the celebrity’s social-cause-related post, or audience metrics in social media (Karpf, 2016; Zhang et al., 2018). These activities are communicative relationships between celebrities and other social media users and thus construct networks indicating information flow.

2.4.1 Network compositions

Bourdieu (1986) and Lin (1999a) consider all social relations in the networks that a social actor can assess as the volume of social capital. Bourdieu (1986) points out that social capital
derives from strong membership relations. In this sense, scholars have confirmed that high
density networks indicate more collective social capital (Haythornthwaite, 2012; Putnam, 1995).

Another social network measurement of social capital might be tie strength (Moody &
Paxton, 2009; Steinfield et al., 2012). In social network analysis, a pair of social actors who have
one or more type of relations are called to have ties. Social network analysis researchers have
developed theories of ties including strong ties, weak ties, and latent ties (Granovetter, 1973;
Haythornthwaite, 2002, 2005). Granovetter (1973) proposes the conception of tie strength,
indicating time, energy, emotion, and other resources spent in the given ties. Although strong ties
might imply high density of the community, but the information or resources social actors enjoy
in the network might be redundant. On the contrary, weak ties might bring new information into
the community. In this sense, Burt (2000) argues that a large amount of weak ties in the network
indicates higher social capital.

Haythornthwaite (2005) clarifies the distinction of the strength of strong and weak ties:
the pair with strong ties might be highly motivated to share information and resources with each
other, such as family member or close friends; the pair with weak ties might bring different
information, experiences, and resources from other social fields to the pair. Haythornthwaite
specifically defines latent ties as technologically available, but not activated ties between pairs,
which are popular with usage of multiple media. The internet and other new networking media
help group members to “(1) create latent ties, (2) recast weak ties, … and (3) has minimal impact
on strong ties” (Haythornthwaite, 2005, p. 136). When the networked media publicly displays
the social relation list of social actors, it lays latent ties to networked media users (Marwick &
boyd, 2011). In this sense, especially for measuring social capital derived from networked media,
latent, weak, and strong ties should all be involved.
In conclusion, the size of social relations that a celebrity possesses in networks, the connectivity of communities in which celebrities are embedded, and the texture of tie strength in these networks are all measurements in terms of the composition of social networks. Therefore, the first research question concerning social capital I propose is:

RQ1: What are the compositions of celebrity networks in the #MeToo movement?

2.4.2 Networked positions

Social capital can also be measured as the network position of social actors. Still in the vein of individual social capital, Burt (2004) argues that a social actor in networks might hold a special position called a broker, which connects two separate sub-networks. In Burt’s (2004) view, the role broker fills the structural hole, which represents the possibility of removing the broker in terms of these two separate networks. In this sense, the broker occupies a special network position which makes the broker an advantage resource in a network, or say, having the social capital. As Burt (2004) illustrates, broker position occupies power advantage of connecting separate communities and acts as bridges across structural holes. In this sense, a social actor who sits in this position might gain strategic advantage and transfer information and resources from one community to another. As Krinsky & Crossley (2014) demonstrate, centrality is also a concept for understanding positional advantage in social networks: betweenness centrality is similar to the role of broker, bridging two weakly connected networks; degree centrality indicates how many connections the social actor has in the network. A higher degree centrality might indicate more opportunities to distribute information broadly. Centrality hence is representing individual social capital (Borgatti et al., 2018).

Hence, I pose the second research question regarding the invested social capital:
RQ2: What networked positions do celebrities hold in networked celebrity advocacy of the #MeToo movement?

2.4.3 External factors

In Figure 4, regarding individual social capital, collective assets and structural and positional variations are two predictors of the individual who starts to collect social relations to construct personal communities. This part of model represents the external factors that influence social capital mobilization. For example, the #MeToo social movement is a gender-specific advocacy, with the majority of celebrity advocates being women (Gill & Orgad, 2018). In addition, #MeToo has spread into more than 85 countries and various ethnicities and gender cultures will also influence celebrities’ involvement in this social movement. It has also been criticized for lacking the power of intersectionality and calls for the return to the original slogan created by social activist Tarana Burke to pay special attention to women of color (Earle, 2019).

The theory of homophily has suggested that people in the same group are more likely to make connections, which possibly leads to the inequality of social capital (Lin, 2000). A review on homophily effect has identified race, ethnicity, gender, occupation, behavior, and values as potential categories for similar individuals connect with each other (McPherson et al., 2001). Homophily effect in gender on social media has been examined through empirical analysis (Bamman et al., 2014). Homophily is also considered as a crucial factor influencing fans’ para-social relationship with celebrities (Brown, 2015; Kosenko et al., 2016). In this sense, I raise the following research question:

RQ3: What types of external influence factors can be identified in networked celebrity advocacy of the #MeToo movement?

2.4.4 Celebrity capital and social capital: from the invested to the recognized
The third part of the model in Figure 4 represents two kinds of return of individual social capital. Social resources theory views status attainment as an investment and mobilization of personal and social resources for returns in wealth, status, and power (Lin, 1999a), which is called *instrumental return*. Social capital mobilization also brings about *expressive return* including *physical health*, *mental health*, and *life satisfaction*. One example of the instrumental return can be found in the article of Tyler and Bennet (2010). The authors use social class as an analytical category to explain the acclaimed social mobilization of reality show celebrities, which means an individual changes social position from a lower social class to a higher one while obtaining celebrity status. Diani (2003) points out that positions in the social movement networks leads to different kinds of influence. A study on social movement media coverage finds that social activists’ centrality in the activism networks is a predictor of their citations on national media (Malinick et al., 2013).

Therefore, when a celebrity transfers from one social field to social activism field (Figure 3), what the celebrity invests in *networked celebrity advocacy* is the recognized social capital in the previous field; but by the way of migration, this symbolic capital (part of celebrity status) is employed as the invested social capital in the social activism field. This invested social capital will go through another round of status attainment and when it is recognized, the social actor gets new celebrity status in the social activism field. In this sense, I propose the following hypotheses as presented in Figure 5:
Figure 5. The hypothesized model on the associations between celebrity capital and social capital in networked celebrity advocacy. Arrows are based on time difference.

H1: The higher the invested celebrity capital in networked celebrity advocacy, the higher recognized celebrity capital in a social activism field.

H2: The higher the invested celebrity capital in networked celebrity advocacy, the higher the recognized social capital in a social activism field.

H3: The higher the invested social capital in networked celebrity advocacy, the higher recognized celebrity capital in a social activism field.

H4: The higher the invested social capital in networked celebrity advocacy, the higher recognized social capital in a social activism field.

H5: The higher the invested celebrity capital in networked celebrity advocacy, the higher the invested social capital in networked celebrity advocacy.

H6: The higher the recognized celebrity capital in social activism field, the higher the recognized social capital in a social activism field.
2.5 Summary

To summarize, the literature review chapter has demonstrated the concepts of celebrity, celebrity advocacy, and *networked celebrity advocacy* based on the social movement scholarship, celebrity studies, and social network analysis perspective. Further, I have constructed a theoretical model to illustrate celebrity advocacy as field migration, in which I argue that social capital and celebrity capital take up crucial roles. According to my theoretical model, I propose six hypotheses to explore associations between celebrity capital and social capital in different social fields, and three research questions to investigate individual social capital in networks representing *networked celebrity advocacy*. In the following section, I demonstrate my methodology in data collection and analysis.
Chapter III: Methods

The dissertation adopted social network analysis as the primary methodology to guide the research design, data collection, and data analysis. Social network analysis has been a valid approach to investigating community structure (Carrington & Scott, 2016; Gruzd & Haythornthwaite, 2013, 2016; Haythornthwaite, 2005) and social movements (Diani, 2003, 2016; Krinsky & Crossley, 2014; Malinick et al., 2013). Below I explain how I applied social network analysis to the current research project, demonstrate data collection and analysis procedures, and explicate the limitations and ethical considerations.

3.1 A Social Network Analysis Perspective

Based on the graph theory, social network analysis focuses on relations between social actors through visualization (Carrington & Scott, 2016). Different from other sociological paradigms, social network analysis emphasizes relationships between individuals and societies. Social relations between actors are more crucial than social groups or other institutions in social network analysis studies (Marin & Wellman, 2016). In the visualization of social network analysis, individual entities (individuals, groups, communities, organizations, or societies) are represented by nodes; the relationships between those entities are represented by edges. These relations can be explained as who does what to whom, including information transmission, emotional support, financial transaction, and other activities. Social actors form interpersonal ties from one or more social relations.

Social network analysis paradigm has developed a series of operational concepts and measurements to investigate the composition of the networks and roles of individual entities in the networks (Hanneman & Riddle, 2016). Social network analysis also provides a systematic vocabulary and technique for the investigation of relational patterns on social media (Gruzd &
Haythornthwaite, 2013, 2016). On the social media platform Twitter, the social network analysis approach provides the opportunity to explore the structure of loosely connected communities with the edges built by activities such as following, tweets, retweets, mentions, and hashtags (Kharroub & Bas, 2016; Martha et al., 2013; M. Smith et al., 2014). Table 2 lists the social network analysis terms used in this dissertation.

Social network analysis has been a well-founded approach to researching social movements (Diani, 2003, 2016; Krinsky & Crossley, 2014; Malinick et al., 2013). With the occurrence of the internet and especially social media, online social movements have been an important topic in communication scholarship. For example, it has been investigated that Facebook users’ network size and connections with public political actors have an impact on the users’ political engagement (Chan, 2016).

Celebrities and other public figures’ influence has also been examined in a few research articles applying a social network analysis perspective. Social organizations consistently use hashtags containing names of public figures to enhance the visibility of social activism information (Wang et al., 2016). Celebrities’ prestige and engagement are critical to their influence in protest movements according to the investigation of the pop singer Nicole Scherzinger, the actor Kelly Slater, and the actor Keahu Kahuanui around the topic #WeAreMaunaKea (Buente & Rathnayake, 2016). Only one conference paper investigates celebrity advocacy on the #MeToo movement from a social network analysis perspective (Sturgess & Burns, 2018). This paper focuses on the description of the Twitter #MeToo conversations content and personal networks. Therefore, the current dissertation project using social network analysis as the primary methodology is contributing to the celebrity advocacy scholarship in an innovative way.
Table 2 *Terms of social network analysis used in the dissertation, derived from Hanneman and Riddle (2016).*

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node</td>
<td>A social actor in a network</td>
</tr>
<tr>
<td>Edge</td>
<td>A relation between two social actors in a network</td>
</tr>
<tr>
<td>Tie</td>
<td>A pair in a social network who has one or more relations</td>
</tr>
<tr>
<td>Size</td>
<td>The number of all nodes and the number of all edges</td>
</tr>
<tr>
<td>Degree-</td>
<td>The percentage of the examined network to the most centralized network composition of the same size.</td>
</tr>
<tr>
<td>centralization</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>As the number of present edges divided by the number of all possible edges</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Dyads (the relation between two nodes) have ties in both directions in a network</td>
</tr>
<tr>
<td>Degree</td>
<td>How many nodes an ego is connected</td>
</tr>
<tr>
<td>Out-degree</td>
<td>In a directed network, how many nodes an ego is sending a connection</td>
</tr>
<tr>
<td>In-degree</td>
<td>In a directed network, how many nodes an ego is sent a connection</td>
</tr>
<tr>
<td>Betweenness</td>
<td>How many times a node is on the shortest path between any two other nodes in the network</td>
</tr>
<tr>
<td>Brokerage</td>
<td>Acting as a bridge in or between social groups</td>
</tr>
<tr>
<td>(broker)</td>
<td></td>
</tr>
<tr>
<td>Coordinator</td>
<td>A, b and c are all members of the same group</td>
</tr>
<tr>
<td>Consultant</td>
<td>B is not a member of the group that a and c within</td>
</tr>
<tr>
<td>Gatekeeper</td>
<td>When b and c are in the same group, but a is from outside the group</td>
</tr>
<tr>
<td>Representative</td>
<td>A and b are in the same group and b is acting as a contact point to the group that c is within</td>
</tr>
<tr>
<td>Liaison</td>
<td>A, b, and c are in three separate groups</td>
</tr>
</tbody>
</table>
3.2 The Case: #MeToo on Twitter

According to a report published by Pew Research Center, the #MeToo hashtag has been used more than 19 million times on Twitter from 10/15/2017 to 09/30/2018, and influential celebrities are part of key topics in those tweets (Anderson & Toor, 2018). In this sense, #MeToo on Twitter provides a substantial case to investigate the networked celebrity advocacy.

Recent social network analysis projects often use public posts on social media platforms as one important data collection strategy (e.g., Gruzd & Haythornthwaite, 2016; A. Smith & Anderson, 2018; Wang et al., 2016; Xiong et al., 2019; Zhang et al., 2018). Among several social media platforms, I selected Twitter to study communicative patterns among celebrities and other influencers in the #MeToo conversation. The selection of Twitter was due to the following reasons:

1. Twitter is the original social media platform for Allyssa Milano to post the “Me Too” message on Oct 15, 2017, which instigated a relaunch of #MeToo movement.

2. The Twitter conversations have been an increasingly important battlefield for people who are interested in social and political issues and aim to construct civic societies (e.g., Harlow & Benbrook, 2019; Xiong et al., 2019).

3. Although all social media are crucial for citizens to build an online public sphere, taking into practical and convenient consideration, Twitter data are more accessible to collect than other platforms like Facebook and Instagram because of various public policies of different social media.

I utilized the time frame from 10/15/2017 to 01/31/2018 to explore networked celebrity advocacy in the #MeToo conversation. It started from October 15, 2017 when American actor
and activist Allyssa Milano first posted her tweet regarding *Me Too* (Earle, 2019; Gill & Orgad, 2018; Xiong et al., 2019). There were several conversation peaks in the #MeToo conversation on Twitter after this date (Anderson & Toor, 2018). Among them, January 2018 was prominent because of two celebrity-related events advocating #MeToo: Oprah’s speech at the Golden Globe Awards and Kesha’s performance at Grammy Awards. Therefore, I set the ending date as January 31, 2018.

A substantial number of celebrities have joined the advocacy of #MeToo. Among them, I paid special attention to Alyssa Milano (@Alyssa_Milano) promoting #MeToo on Twitter. Allyssa Milano was chosen because of the following criteria:

1. Alyssa Milano is regarded as the first celebrity who publicly used the phrase of “Me Too” on Twitter to promote public awareness of sexual harassment. Her tweet went viral in October, 2017, which has been seen as a start of the popularity of the #MeToo movement online, although the term “me too” had been initiated by Tarana Burke since 2006 (Gill & Orgad, 2018).

2. Alyssa Milano is identified as both a social activist and a celebrity actor with the statement on her Twitter profile: “I get political/personal here.” She is consistently working on social activism using Twitter hashtags and her celebrity influence (see Twitter.com/Alyssa_Milano).

3. Alyssa Milano has been continuing to use #MeToo to raise public awareness on Twitter. For example, on April 27, 2019, she invited the creator of the “Me Too” phrase, Tarana Burke, to join her podcast to talk about how #MeToo became so powerful. However, on April 2020, she removed the #MeToo from her Twitter bio and incited a burst of criticism on social media.
These criteria echo other scholarship’s selection of research objects based on their engagement with online social movements (e.g., Duvall & Heckemeyer, 2018; Xiong et al., 2019). In addition, I also paid special attention to Tarana Burke (@TaranaBurke), the social activist who started the #MeToo movement as early as 2006. @TaranaBurke also achieved great presence on Twitter and is considered as the authentic spirit of #MeToo movement (Adetiba, 2017; Gill & Orgad, 2018; Rodino-Colocino, 2018).

3.3 Study Design

I have defined networked celebrity advocacy as the migration of celebrity capital and social capital from one social field to the social activism field. Therefore, the hypothesized theoretical model on the associations between celebrity capital and social capital (Figure 5) identifies two kinds of social capital actively working in advocating the #MeToo information on Twitter: the invested social capital in the networked celebrity advocacy and the recognized social capital in the social activism field.

According to Lin’s (1999a) model of social capital from a social network analysis perspective, I describe the invested social capital as the top influencers’ involvement in the #MeToo conversations, which include two measurements: the potential reach of their tweets, and the network determined by their active involvement: mentioning, replying to, and retweeting other Twitter handles with the #MeToo hashtag. On the other hand, I measure the recognized social capital as the frequency of becoming top influencers and the followed-following network among the top influencers based on Lin’s (1999a) model.

Therefore, the analysis of this dissertation has been separated into three phases: the first phase focuses on the #MeToo involvement network of the top influencers, the second phase focuses on the followed-following network of the top influencers, and the third phase
investigates external factors influencing the two networks and the associations between social capital and celebrity capital. The first two network analyses explore RQs 1&2: the composition of *networked celebrity advocacy* and the structural positions of celebrities in the #MeToo movement. The third analysis investigates RQ 3 to identify the external factors which might influence celebrities’ contribution in the Twitter #MeToo conversation. In addition, the third phase tests the relationships theoretically proposed by the field migration model (H1-6).

### 3.4 Data Collection

My research goal is to investigate celebrities’ role in #MeToo conversations on Twitter which evidences the impact of *networked celebrity advocacy*. To reach this goal, I compare advantages and disadvantages embedded in the structural positions of celebrities to those of other influencers in the #MeToo conversations. In this sense, the unit of analysis is a top influencer in #MeToo conversation on Twitter from Oct 2017 to Jan 2018.

#### 3.4.1 The unit of analysis

A top influencer in a Twitter conversation means this account has been replied to, mentioned, and retweeted more than other handles under this topic. I used AI-powered software provided by Crimson Hexagon (Pew Research Center, 2015) to collect the data of top influencers in the #MeToo conversation. Crimson Hexagon stores the complete coverage of all Tweets globally, dating back to 2008 (Crimson Hexagon, 2020). The exploratory searching on Crimson Hexagon using #MeToo as the key word showed that celebrities are a substantial part of top 50 influencers lists of each month from the beginning till the date when I retrieved the data on Feb 18th, 2020. Compared to the whole population on Twitter, the #MeToo community showed over 50 times more interest in celebrity during the time frame based on Crimson Hexagon’s data exploration.
3.4.2 Sampling: The top influencers list

I utilized purposive sampling strategy in this dissertation project. A list of top influencers in the #MeToo conversation on Twitter from October 2017 to January 2018 was collected. For each dataset constructed around a specified topic and specific time period, Crimson Hexagon creates a list of top 50 influencers based on the number of times that Twitter users were mentioned, retweeted, and replied to.

Table 3 Monthly and Total Twitter Conversations with the #MeToo Hashtag from October 2017 to January 2018

<table>
<thead>
<tr>
<th>Month</th>
<th>Conversation Total Volume</th>
<th>Crimson Hexagon Sample</th>
<th>Tweets mentioned/replied/retweeted Top 50 Influencers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Volume</td>
</tr>
<tr>
<td>October 2017</td>
<td>1,353,323</td>
<td>170,000</td>
<td>47,372</td>
</tr>
<tr>
<td>November 2017</td>
<td>661,619</td>
<td>297,378</td>
<td>106,793</td>
</tr>
<tr>
<td>December 2017</td>
<td>1,300,160</td>
<td>310,000</td>
<td>153,763</td>
</tr>
<tr>
<td>January 2018</td>
<td>1,410,640</td>
<td>310,000</td>
<td>114,697</td>
</tr>
<tr>
<td>Total</td>
<td>4,725,742</td>
<td>1,087,378</td>
<td>422,625</td>
</tr>
</tbody>
</table>

Note. Data collected by Crimson Hexagon using keyword “#MeToo” and limited to English. Crimson Hexagon samples were randomly selected from all historical data during the time frame.

I used "#MeToo" as the topic keyword to search Twitter data for each month from October 2017 to January 2018. My search resulted in a dataset with four lists of top 50 influencers. The list contained 200 Twitter handles who were most influential in the #MeToo conversation on Twitter during this time period. For example, the activities of and interactions between the top 50 influencers in the #MeToo conversations in the first four months consisted of
28%, 36%, 50%, and 37% of information flow of each month, respectively, according to
Crimson Hexagon's sampling data (Table 3).

I cleaned up the cases based on the following criteria:

1. I excluded the duplicate handles because the duplicates referred to the same
account and only needed to occur once in the network dataset. For example,
@Alyssa_Milano appeared four times in the dataset, which means she was the top
influencer every month. @Alyssa_Milano was counted as one independent case.
This procedure resulted in 151 cases.

2. I excluded the handles whose #MeToo-related posts were irrelevant to the
#MeToo conversation but only working for promoting their commercial services.
For example, one handle @bestfunny merely used #MeToo and other popular
hashtags to promote its follower-boosting service. The posts that @bestfunny
uploaded were irrelevant to the #MeToo movement. This handle @bestfunny was
deleted from the top influencer list. This procedure resulted in 149 cases.

3. I excluded the handles that had been suspended or deleted on Twitter. For
example, @bre_steward_30, a professional basketball player Breanna Stewart,
told her personal #MeToo story. She was one of the top influencers in October.
When I collected the network data between these influencers on March 2nd, 2020,
she had deleted her Twitter account. The following and follower lists of
@bre_steward_30 no longer existed. Therefore, I deleted the case from the
network data set. This procedure excluded 14 cases.

4. I excluded the handles who were not actively involved in the #MeToo
conversation. Those handles conducted neither of two activities: first, posting
content using the #MeToo hashtag; and secondly, being mentioned because of performing relevant activities advocating the #MeToo movement. For example, @realdonaldtrump or @potus, both referring to President Trump, were among the top influencer lists several times because Twitter users mentioned these handles. However, these two handles never posted anything containing #MeToo. Meanwhile, President Trump never advocated for the #MeToo movement during the time period. Therefore, these two handles were deleted from the network dataset aiming of investigating celebrity advocacy. On the other hand, @kesha, singer Kesha Rose, did not post anything using #MeToo hashtag, but performed a song supporting #MeToo during the Grammy Awards in January and instigated a substantial amount of tweeting advocating both #MeToo and her performance. The account @kesha was kept in the dataset. This procedure excluded 11 accounts.

After data cleansing, the list remaining included 124 handles as the most influential Twitter accounts in #MeToo conversations from October 2017 to January 2018. All the profile information of these 124 top influencers was downloaded.

3.5 Data Analysis

I used python to extract edges and nodes lists from the Crimson Hexagon data (Deen, 2013). UCINET was utilized to analyze the social network analysis data and test the associations between celebrity and social capital of these top influencers (Borgatti et al., 2018; Hanneman & Riddle, 2016). UCINET is a sophisticated tool designed for analyzing social networks (Gruzd & Haythornthwaite, 2013; Hanneman & Riddle, 2016). Gephi was used to visualize social networks, which is an open source software for dynamic network visualization (Bastian et al.,
SPSS 24 was used to conduct statistical analysis on nodes attributes of the top influencers if the UCINET could not provide corresponding algorithms.

### 3.6 Threats to Validity

It should be noted that there might be threats to internal and external validity in the process of statistical analysis (Creswell, 2014). The correlational analysis results between celebrities’ social media network characteristics and their attracted mass media attention might have alternative explanations other than my inferences. Threats to internal validity, which means other explanation of the associations, might include participants’ personal features such as gender, age, ethnicity, political orientation, educational background, and unprecedented personal events. For instance, Beck (2012) argues that gender influences celebrities’ popularity and hence possibly has an impact on celebrity advocacy. Most celebrities who publicly supported #MeToo were women, which might influence their community composition and mass media’s attention to them. Therefore, I also collected the demographic data (type, gender, and social field) based on celebrities’ profile information and media coverage, treated them as external variables, and explored their contribution to relationships between top influencers. In addition, threats to external validity might include the English-language based context within which these celebrities were and the specific #MeToo movement in different countries in which they were involved. In response, I make no claim that the results of this study can be applied to other language-based cultural contexts and movements without further investigation on cultural differences. In doing so, other additional studies are needed (Creswell, 2014).

### 3.7 Social Media Limitations

Although social media is an integral part of the daily lives of many in the US (Perrin, 2015; Perrin & Anderson, 2019; A. Smith & Anderson, 2018), it is worth noting that social
media do not represent all social groups equally (McCay-Peet & Quan-Haase, 2017). The dissertation focuses on the first three and a half months of the #MeToo movement from October 2017 to January 2018. The 2018 social media usage report from the Pew Research Center shows that only approximately 24% Americans use Twitter (A. Smith & Anderson, 2018). In addition, 45% of 18-to-24-year-olds were Twitter users and 53% of Twitter users were relatively inactive, visiting the platform less than once a day. According to the report, demographically, men’s usage of Twitter (23%) was similar to women (24%); a slightly higher proportion of African Americans (26%) used Twitter than Whites (24%) and Hispanic (20%); and 18% of Americans who held an education degree of high school or less, 25% of those who took some college, and 32% of those who took more than college are Twitter users. These data indicate that Twitter topic conversations happen in a narrow population of social media users who only use English as their posting language in the #MeToo conversation. Although these online conversations are critical for promoting public discussions and constructing civil society (McCay-Peet & Quan-Haase, 2017), they are still limited regarding the scope and representativeness of people who are actively involved in the Twitter communities.

### 3.8 Ethical Considerations

The data collection and analysis based on social media data leads to the primary ethical concern of the privacy of social media users. Twitter currently is a public social media platform. It is possible to review Twitter users’ profile information and their activities can be publicly retrieved. Twitter has become the most researched social media platform because of the openness of its API (e.g., Barnard, 2018; Harlow & Benbrook, 2019; Weller et al., 2014; Zhang et al., 2018). However, the ethics of social media data collections is always under debate (Zimmer, 2010; Zimmer & Kinder-Kurlanda, 2017). Scholars have argued that because information
collection on Twitter has no direct interaction with users, it can be seen ethical to collect public posts and the identifiable but not private information on Twitter (Moreno et al., 2013). The current research investigates the interacting activities and followed-following relationships of celebrities. Celebrities are public figures, so I could use their posts without invasion on their privacy.

3.9 Summary

This chapter has demonstrated that the primary method I used in the dissertation is social network analysis. The units of analysis in the dissertation are the top influencers who have occupied a considerable amount of information traffic in the Twitter #MeToo conversations. I collected historical Twitter data through Crimson Hexagon, extracted network data through python, visualized networks through Gephi, and analyzed data through UCINET and SPSS.

Using this approach to investigate the role of networked celebrity advocacy in the #MeToo movement, I designed three phases of study in this dissertation. Phase One was designed to interpret the connections created by the mentioning, replying to, and retweeting activities those top influencers initiated. Phase Two was designed to interpret the connections constructed by the followed-following activity between the top influencers. Phase Three was designed to understand the connections between these two networks, survey the external factors that influenced their composition, and testing the hypothesized theoretical model mapping the associations between celebrity capital and social capital in networked celebrity advocacy.

In the next three chapters, with the overarching research question of how networked celebrity advocacy functioned in the #MeToo movement, I examined three research questions and six hypotheses. To answer these research questions, I utilized social network analysis to (a) provide network visualizations; (b) conduct macro-level analysis; and (c) conduct micro-level
analysis to explore compositions and celebrities’ structural positions in Phase One and Phase Two. To explore external factors and test the hypotheses, I conduct descriptive, correlational, and regression analyses to examine the associations between celebrity capital and social capital.
Chapter IV: Phase One – The #MeToo Involvement Network

*Networked celebrity advocacy* focuses on the mobilization of celebrity capital and social capital in social movements. Phase One investigated how the top influencers mobilize social capital through their involvement in the #MeToo topic community on Twitter. Phase One addressed social capital regarding research questions 1&2: the network compositions of the top influencers and their structural positions in these networks. In Phase One, I studied a communication network built upon the top influencers' mentioning, replying to or retweeting activities in the Twitter #MeToo conversation.

4.1 Data Preparation

4.1.1 The #MeToo involvement network dataset

I already identified the 124 top influencers who took up a substantial part of Twitter #MeToo conversations (see 3.4.2). Using Crimson Hexagon, I then applied the Boolean operator (“#MeToo” AND “AUTHOR: (a top influencer’s handle)”), limiting the time frame as 10/15/2017 to 1/31/2018 and the language as English to collect Twitter data. This data collection procedure allowed me to collect all tweets with the #MeToo hashtag posted by the 124 top influencers during the time frame.

In this way, the collected dataset contained 5,844 posts, including 3,449 original tweets, 422 replies, and 1,973 retweets. The volume of the tweets, especially the original tweets and retweets, increased from October 2017 to December 2017. On average, each top influencer posted approximately 47 tweets with the #MeToo hashtag. Twenty-two influencers only posted one tweet. Two handles uploaded more than 500 posts, indicating a strong desire to influence the #MeToo conversation on Twitter.
I then used the Python code T2G developed by Freelon (2013) to extract the communicative relations within the 124 top influencers' tweets. A relation is constructed when a top influencer mentioned, replied to, or retweeted another Twitter handle. These associations are directed: the sources are top influencers, and the targets are the Twitter handles that their posts included. These associations are also valued: a source might mention, reply to, or retweet one Twitter handle several times. Each interaction of mentioning, replying to, or retweeting was counted as 1. Several top influencers also retweeted posts with their own names, which are called self-loop associations and excluded in the analysis. The resulting dataset was an edges list including 3,226 valued edges and 2,283 nodes. The whole dataset was also divided by month. All datasets were imported into Gephi 0.9.2 to produce visualization results and UCINET 6.695 to calculate size, degree, centralization, density, and centrality measures.

4.1.2 Variables in Phase One

Phase One analyzed the #MeToo involvement of the 124 top influencers through a social network analysis lens. The variables used in the Phase One included three items of demographic information and a series of network analysis measurements.

Compensated with information from Google search results and the top influencers’ website information (if possible), the following demographic variables were coded: type, gender, and social field.

Type. Based on whether a top influencer is an individual or organization account, the variable type has two values: 1=individual, 2=organization.

Gender. Based on Twitter profiles and other complementary sources, individual accounts are classified as 1=female and 2=male.
Social Field. This variable refers to the professional field of top influencers based on cross-validation on their Twitter profiles, their individual websites, and Google search results. This categorical variable has six values: 1=activism, 2=entertainment, 3=politics or law, 4=journalism, 5=non-journalism publishing or academia, and 6=not applicable. It is worth noting that several handles are self-identified as working for multiple social fields. In this sense, this dissertation coded their first identification as the value in the variable social field. In addition, because this dissertation focuses on the capital migration from the entertainment field to social activism field, I also coded two dummy variables activism (1=in the activism field, 0=not), and entertainment (1=in the entertainment field, 0=not).

The social network analysis variables I used in the Phase One were: the size, degree, degree centralization, density, reciprocity, and centrality, which are valid measurements to examine the composition of social networks and networked positions of celebrities (Hanneman & Riddle, 2016). The explanation of these terms can also be checked in Table 2.

Size. Size is counted as the number of all nodes and the number of all edges (Hanneman & Riddle, 2016). Nodes are the social actors in a network, and edges are the relations between any two nodes.

Degree centralization. Degree centralization reflects the percentage of the examined network to the most centralized network composition of the same size (Hanneman & Riddle, 2016).

Density. Density is calculated as the number of present edges divided by the number of all possible edges. Density is a critical measurement of social network analysis because it provides insights in how rapid information diffuses in one network (Hanneman & Riddle, 2016).
Meanwhile, high density also indicates high levels of social capital at a community level (Gruzd & Haythornthwaite, 2016; Hanneman & Riddle, 2016).

Reciprocity. Reciprocity reflects how many two-way ties between two actors exist in the network. Reciprocity is an indicator of network cohesion. Aligned with density, high reciprocity also suggests higher collective social capital inside the network (Hanneman & Riddle, 2016).

The above four measurements (size, degree centralization, density, and reciprocity) can be applied to network analysis at a macro level. The below series of the centrality measurement are specifically used to investigate node-level social capital (Hanneman & Riddle, 2016).

Centrality. Centrality is the primary measurement for researchers to understand an ego’s position in a social network (Chua et al., 2016). Among centrality measures, I used in-degree, out-degree, and betweenness to focus on a node’s centrality position, which indicates the influence and power of social actors in a social network (Hanneman & Riddle, 2016). All three centrality measurements are associated with the concept of social capital, while a higher degree indicates a higher advantage regarding the node’s position in social networks (Gruzd & Haythornthwaite, 2013, 2016; Hanneman & Riddle, 2016). Degree measures how many nodes an ego connected. Degree includes out-degree and in-degree, indicating two directions between any two nodes. In Phase One, out-degree is calculated as how many nodes an influencer was mentioning, replying to, or retweeting, whereas in-degree as how many nodes mentioned, replied to, or retweeted the ego. Betweenness represents how important a certain node is in the top influencers network. It is calculated as how many times a node is on the shortest path between any two other nodes in the network.

4.2 The Composition of the #MeToo Involvement Network

4.2.1 Network visualization
Underlying #MeToo conversations are flows of information and opinions among Twitter users. These flows are outcomes of interactions between any two Twitter handles. Investigating celebrity advocacy in the Twitter #MeToo movement from a network perspective allowed me to understand how #MeToo conversations were partly constructed or even controlled by those top influencers. Among individual influencers, 30 were entertainment celebrities who had achieved their popularity as a singer, actor, comedian, or television host (not including news program hosts; the detailed information is shown in Appendix A). These entertainment celebrities’ role in the #MeToo conversation can be explored through comparisons with top influencers from other social fields, such as politics, journalism, or non-journalism publication.

I first discovered how those 124 top influencers were connected to each other through their Twitter activities of mentioning, replying to, and retweeting. In this way, they had an impact on information flow under the topic #MeToo. Applying social network analysis to analyze the discovered #MeToo involvement network provided evidence to disclose if the influencers showed effective contribution to successfully advocating the #MeToo movement by reaching a broad population or catching the attention of legacy media.

The top influencers in this network are a source of any edge, while their targets can be other top influencers, or Twitter handles who were not among the 124 top influencers. Self-looping has been removed. Each edge is directed, indicating that \((A, B) = 1\) meant A mentioned, replied to, or retweeted B one time in the #MeToo conversation. The edge is also valued.

The visualization of the #MeToo involvement network was created by Gephi 0.9.2 (Bastian et al., 2009). I used the layout of Yifan Hu provided by Gephi (Optimal Distance=100, Relative Strength =0.2, Initial Step size=20), which tends to push nodes farther apart while the path between two nodes is long.
Figure 6. The #MeToo involvement network on Twitter produced by Gephi 0.9.2. Node size is based on value of betweenness centrality. Node color is based on social field.
Demonstrated in Figure 6, the #MeToo involvement network displayed how the 124 top influencers actively engaged in the conversation during the examined time period. Figure 6 (a) is a panoramic view of the network and (b) is a zoom-in view of the center of the network.

As Figure 6 illustrates, the composition of the network is represented as a network with the 124 top influencer egos (colored) and a great deal of alters (grey points). Because this network is constructed based on the top influencers’ posts containing #MeToo hashtag, this composition means that each ego node was mentioning, replying to, or retweeting several nodes in their posts. Using these Twitter functions, those ego nodes disseminated #MeToo information to different alters and aimed to mobilize these alters to retweet or reply to the information. In this way, the #MeToo-related information might reach a broad population by the personal communities of the top influencers and their alters.

The node colors in Figure 6 were assigned based on the top influencers’ social field. As the field migration model (Figure 3) suggests, the underlying mechanism of networked celebrity advocacy is mobilizing celebrities’ recognized celebrity capital and social capital in the previous social fields where they have achieved celebrity status. The node colors in Figure 6 demonstrated these top influencers’ previous social field. The edge colors were correspondent to their source nodes, those who conducted Twitter activities to create relationships. It was observed that the entertainment group (presented as rose red) and the social activism group (orange) wove a relatively tight texture at the center, suggesting the importance and collaboration between these two groups in the community of the #MeToo conversation during the first three and half months of the #MeToo movement. The dark grey color indicated that those nodes were not part of the top 124 active influencers, but they had contributed to the conversation passively.
The node size was automatically determined by the centrality measurement *betweenness* based on the Gephi algorithm created by Brandes (2001). *Betweenness* and other centrality measurements are important for identifying the power of social actors in the network at the micro level. The actor @Alyssa_Milano, the social activist @TaranaBurke, and the actor @PattyArquette occupied the three biggest size in terms of *betweenness* in this visualization as shown in Figure 6.

The edge size was assigned based on the weight of each association. The bigger size indicated more times that node A mentioned, replied to, and retweeted node B. The highest value came from a social organization @TheDemCoalition’s engagement with its creator Scott Dworkin (@funder), 118 times. The second largest edge is when the actor Ariane Bellamar mentioned the actor Jeremy Piven 88 times because she accused of his sexual misconduct. The third largest edge represented the association between @dashannestokes and @realdonaldtrump, 87 times while President Trump was accused of several sexual assaults.

### 4.2.2 The whole network

The whole #MeToo involvement network was created by the activities of the 124 top influencers. Their mentioning, retweeting, and replying to functions resulted in the *size* of 2,283 nodes and 3,226 valued edges (not counting self-loop connections). This network was incomplete because the associations between those nodes other than the 124 top influencers were not collected. Table 4 depicts the basic information of this whole network. The *averaged degree* was 1.413, suggesting that each node on average connected one or two nodes. The *average weighted degree* (2.658) was higher than the no-weighted one, indicating that each pair might be connected more than twice.
Table 4 The Tweets Volume, Network Size, Average Degree, Degree Centralization, Reciprocity and Density of the Whole #MeToo Involvement Network and the Monthly Sub-Networks

<table>
<thead>
<tr>
<th>#MeToo Involvement Networks</th>
<th>The Whole Network</th>
<th>October 2017</th>
<th>November 2017</th>
<th>December 2017</th>
<th>January 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Tweets</td>
<td>5,844</td>
<td>1,099</td>
<td>1,462</td>
<td>1,830</td>
<td>1,453</td>
</tr>
<tr>
<td>Original Tweets</td>
<td>3,449</td>
<td>615</td>
<td>930</td>
<td>1,032</td>
<td>872</td>
</tr>
<tr>
<td>Reply</td>
<td>422</td>
<td>57</td>
<td>160</td>
<td>131</td>
<td>74</td>
</tr>
<tr>
<td>Retweet</td>
<td>1,973</td>
<td>427</td>
<td>372</td>
<td>667</td>
<td>507</td>
</tr>
</tbody>
</table>

Network Measurements

<table>
<thead>
<tr>
<th></th>
<th>Nodes*</th>
<th>Edges*</th>
<th>Average Degree</th>
<th>Average Weighted Degree</th>
<th>Degree Centralization</th>
<th>Reciprocity</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,283</td>
<td>3,226</td>
<td>1.413</td>
<td>2.658</td>
<td>.303</td>
<td>.009</td>
<td>.001</td>
</tr>
<tr>
<td>October 2017</td>
<td>596</td>
<td>644</td>
<td>1.081</td>
<td>1.408</td>
<td>.217</td>
<td>.008</td>
<td>.002</td>
</tr>
<tr>
<td>November 2017</td>
<td>731</td>
<td>836</td>
<td>1.144</td>
<td>2.274</td>
<td>.336</td>
<td>.012</td>
<td>.002</td>
</tr>
<tr>
<td>December 2017</td>
<td>953</td>
<td>1,176</td>
<td>1.234</td>
<td>2.125</td>
<td>.237</td>
<td>.010</td>
<td>.001</td>
</tr>
<tr>
<td>January 2018</td>
<td>834</td>
<td>1,017</td>
<td>1.219</td>
<td>1.849</td>
<td>.240</td>
<td>.004</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695 and Gephi 0.9.2.
*Nodes included isolates. Edges included no self-loop activities.

The degree centralization was 0.303, suggesting that the degree of variance in the #MeToo involvement network as 30.3% of the perfectly centralized network of the same size. The value of degree centralization in this network only represented the 124 top influencers’ active initiation of #MeToo conversations because this dissertation did not collect the activities of nodes other than those 124 top influencers. This value was not quite high, but still reflected
some nodes were more central than others in the network, suggesting potential unequal advantages of the structural positions of the nodes (Hanneman & Riddle, 2016).

The whole network’s graph density was 0.001, indicating only 0.1% of all possible ties among nodes had been constructed. The reciprocity was 0.009, suggesting 0.9% of all existing ties were two-direction. These two measures of network cohesion were quite low. It is because this network had a relatively large size of 2,283 nodes, but this dissertation only paid attention to associations activated by the 124 nodes of them.

Among those top influencers, the majority used their tweets with the #MeToo hashtag to actively connect each other. However, there were some outliers. Fourteen top influencers, who posted with #MeToo but not mentioned other nodes’ handles, were mentioned, replied to, or retweeted several times by other top influencers in the network. For example, a comedian Nick Jack Pappas (@pappiness), only tweeted once about #MeToo and this tweet was virally retweeted. He posted on 10/15/2017: “Men, don’t say you have a mother, a sister, a daughter…Say you have a father, a brother, a son who can do better. We all can. #MeToo.” He hence became one of the top influencers, but he never posted anything else with #MeToo again during the time period. He had 43,345 followers when he posted the tweet. As Rodino-Colocino (2018) suggested, through the empathy embedded in his tweet, Pappas successfully mobilized his followers’ networks to virally spread this tweet and amplified the influence of the #MeToo movement.

Two celebrities, the host and actor @oprah, and the singer @kesharose, did not post any tweets using the hashtag but their #MeToo related offline activities had been recognized online. These two stars’ handles had been mentioned by several top influencers: 19 nodes mentioned @oprah while three mentioned @kesharose.
According to the observation of the network visualization in Figure 6, it is noted that several top influencers were isolated on the periphery of the network. These isolated top influencers made arguments in the #MeToo conversation but did not interact with other top influencers. As Figure 6 shows, most of the top influencers were tightly connected to each other based on their activities on Twitter, but those isolated nodes indicated one possible explanation of mobilizing social capital in the #MeToo conversation. Although these isolated nodes were not connected to the #MeToo involvement network in this dissertation, they were still among the top influencers list, which was calculated by Crimson Hexagon based on their mentions, retweets, and replies to in the monthly #MeToo conversation. The isolated nodes indicated the existence of sub-communities under the topic of #MeToo but showed different path of information flow from the main community identified among the top influencers.

4.2.3 The sub-networks

Table 4 also demonstrates the dynamic of the top influencers’ #MeToo involvement throughout four months. The visualization of this dynamic is depicted in Figure 7.

As Table 4 presents, the volume of nodes and edges increased across time, signifying the trend of the top 124 influencers’ deeper involvement with #MeToo. This result supports the report of Pew Research Center in terms of the growing trend of the #MeToo conversation (Anderson & Toor, 2018). Notably, the top influencers’ performance in December was exceptional. They showed extraordinary passion in December with the highest volume of nodes, edges, and average degree. This degree of engagement might be attributed to Time magazine naming “The Silence Breakers” for the #MeToo movement as the Person of Year 2017 (Zacharek et al., 2018).
In November, the top influencers showed highest \textit{average weighted degree} (2.274), \textit{degree centralization} (.336), and \textit{reciprocity} (.012). These results indicated that the #MeToo conversations initiated by these top influencers were more dominated by a few of them in November. For example, the \textit{degree centralization} of November showed that 33.6\% of information traffic was initiated by a small group of influencers. This group of influencers interacted with these other nodes more frequently than in other months with the highest weighted degree.

Figure 7 shows the transformation of the composition of the #MeToo conversation initiated by the top 124 influencers. As mentioned, @Alyssa_Milano, @TaranaBurke, and @PattyArquette were the top three of \textit{betweenness} centrality of the whole network, so I identified their names on the presentation of top influencers in each month in Figure 7. Aside from these consistently important nodes, I also identified node names of those top influencers who occupied the top three \textit{betweenness} centrality in each month. Based on the observation of the monthly networks in Figure 7, it is also worth noting that the composition of their involvement in the #MeToo conversations gets more and more central along the time, which echoed the trend indicated in Table 4.

Furthermore, two patterns can be observed through the comparison of the four network visualizations. First, entertainment celebrities (colored as rose red) and social activists (colored as orange) continuously occupied higher \textit{betweenness} centrality in each month, indicating that the #MeToo movement’s major advocators. Secondly, aside from November 2017, the actor @Alyssa_Milano showed the dominant power in the #MeToo conversation. These observations were also reflected in other news and academic articles (e.g., Anderson & Toor, 2018; Earle, 2019; Khomami, 2017).
Figure 7. The monthly #MeToo involvement networks on Twitter produced by Gephi 0.9.2. Node size is based on value of betweenness centrality in each month. Node color is based on social field.

4.3 Structural Positions in the #MeToo Involvement Network

Figure 6 and 7 visually present the power of the top influencers based on their betweenness centrality. According to Hanneman and Riddle (2016), the power of actors in a certain network is decided by their structural positions. In other words, the paradigm of “who is...
speaking to whom” determines the opportunities and constraints of the actor in the network. Lin (1999b) refers to these opportunities and constraints as representations of social capital based on social resources theory. In this sense, some structural positions have more advantages, more social capital, and more power than others. To measure those advantages or disadvantages, social network analysis scholars have used a series of centrality measurements: in-degree, out-degree, and betweenness centrality. These are popular measures which have been validated in different research designs (Buente & Rathnayake, 2016; Feng, 2016; Gruzd & Haythornthwaite, 2013; Malinick et al., 2013). Table 5 shows the top 20 accounts based on these three measurements. The ranking is based on the non-weighted degree value, but their weighted degree values are also displayed.

4.3.1 The out-degree centrality

The out-degree in this network represented how often a top influencer mentioned, replied to, and retweeted a node in their tweets with #MeToo hashtag. This value reflected the top influencers’ active engagement with the #MeToo conversation. The highest out-degree value is from advertising executive Cindy Gallop, who mentioned 693 handles 1,664 times in her 858 posts. She is also the one who tweet the most during the time with the #MeToo hashtag.

Among the top influencers with the highest 20 out-degree values were four organizations and sixteen individuals. All four organizational nodes are from the social activism field: @womensmarch, @UltraViolet, @NARAL, and @un_women, indicating social activists’ continuous effort in impacting the #MeToo conversations.
Table 5  The Top 20 Influencers List of In-degree, Out-degree, and Betweenness Centrality of the whole #MeToo Involvement Network

<table>
<thead>
<tr>
<th>In-Degree</th>
<th>Out-Degree</th>
<th>Betweenness e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alyssa_Milano</td>
<td>34^a 158^b</td>
<td>CindyGallop 693^c 1,664^d</td>
</tr>
<tr>
<td>TaranaBurke</td>
<td>27 126</td>
<td>ArianeBellamar 192 621</td>
</tr>
<tr>
<td>time</td>
<td>25 51</td>
<td>skyrider4538 183 405</td>
</tr>
<tr>
<td>realdonaldtrump</td>
<td>22 190</td>
<td>EdanClay 126 150</td>
</tr>
<tr>
<td>oprah</td>
<td>19 35</td>
<td>PattyArquette 121 176</td>
</tr>
<tr>
<td>CNN</td>
<td>15 30</td>
<td>Alyssa_Milano 115 165</td>
</tr>
<tr>
<td>foxnews</td>
<td>13 21</td>
<td>LVNancy 108 177</td>
</tr>
<tr>
<td>SenGillibrand</td>
<td>12 18</td>
<td>MaureenShaw 106 206</td>
</tr>
<tr>
<td>washingtonpost</td>
<td>11 19</td>
<td>womensmarch 94 134</td>
</tr>
<tr>
<td>AynRandPaulRyan</td>
<td>11 21</td>
<td>CHSommers 79 123</td>
</tr>
<tr>
<td>rosemcgowan</td>
<td>10 22</td>
<td>jcpenni7maga 78 91</td>
</tr>
<tr>
<td>womensmarch</td>
<td>9 11</td>
<td>Amy_Siskind 71 79</td>
</tr>
<tr>
<td>nytimes</td>
<td>9 68</td>
<td>GraceStarling4 66 112</td>
</tr>
<tr>
<td>MaureenShaw</td>
<td>9 18</td>
<td>AynRandPaulRyan 65 117</td>
</tr>
<tr>
<td>itsgabrielleu</td>
<td>8 12</td>
<td>Rosie 57 71</td>
</tr>
<tr>
<td>funder</td>
<td>8 133</td>
<td>GretchenCarlson 53 68</td>
</tr>
<tr>
<td>NARAL</td>
<td>8 9</td>
<td>DebraMessing 51 60</td>
</tr>
<tr>
<td>UNICEFUSA</td>
<td>8 21</td>
<td>UltraViolet 50 80</td>
</tr>
<tr>
<td>DebraMessing</td>
<td>7 18</td>
<td>NARAL 47 65</td>
</tr>
<tr>
<td>senfranken</td>
<td>7 18</td>
<td>un_women 43 62</td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695 and Gephi 0.9.2.

^a In-degree value without weight.
^b Weighted in-degree value.
^c Out-degree value without weight.
^d Weighted out-degree value.
^e Betweenness centrality has been normalized by all possible betweenness paths a node has.
Aside from these organizations, individual advocates among the top 20 influencers showed divisive conversation initiations: three of them supported the aim of #MeToo whereas three of them totally disagreed with the value of #MeToo. One of the opponents @skyrider4538, who tweeted 123 posts with #MeToo hashtag to express her anger on the movement by mentioning 183 handles 405 times. In a tweet posted on 11/18/2017, she called celebrities like Alyssa Milano, Ashley Judd, Lady Gaga, Debra Messing, and Patty Arquette as “hypocritical Hollywood elites.” Averagely, she had 29,122 followers on November, 34,548 followers on December, and 41,708 followers on January. The increasement of her followers was corresponding to her growing number of tweets with #MeToo hashtag from 10 to 46 to 67. Her tweets mentioned handles 433 times, including retweeting herself 28 times. These activities showed her desire to influence the #MeToo conversation. However, she had only been cited in others’ tweets twice, which means that her repeated social media appearance was not recognized by other influencers and not considered as a powerful presence. Still, it is precarious that @skyrider4538 opposed the advocacy of the #MeToo movement but acted as a top influencer with the relatively higher out-degree value in the Twitter conversation. This finding suggests that social activists needed to increase their impact on the #MeToo conversation by more tweeting, retweeting, and replying to other influencers and constructing a solid information flow network with the similar aim of advocacy.

Among the top influencers’ out-degree list was only one male, the freelance writer @EdanClay who mentioned 126 Twitter accounts 150 times in his posts. All other individual accounts were women, suggesting that women’s voices have been heard in the #MeToo movement. Six of them were female celebrities, indicating a special feature of the dominance of female celebrities in the composition of this network. Among them, actor Ariane Bellamar
mentioned 192 Twitter accounts 621 times in her 340 posts from October to January. She shared her personal story in #MeToo and accused actor Jeremy Piven of sexual misconduct (Vella, 2017). Therefore, she mentioned Piven’s Twitter account 88 times in the network. She also mentioned a few media outlets to enlarge the impact of her story and pushed the entertainment industry to make change, including @EW, 41 times; @HBO, 37 times; @CBS, 36 times; and @CBSNEWS, 24 times. Other involved celebrities, actors Patty Arquette, Alyssa Milano, Rosie O’Donnell, Debra Messing, and singer Holly O’Reilly, emphasized promoting #MeToo other than telling a personal story. Combining both personal-story-telling and advocating in posts was former Fox news anchor Gretchen Carlson, who filed a sexual harassment complaint against Fox news channel chairman Roger Ailes in 2016 (Vultaggio, 2019).

4.3.2 The in-degree centrality

The in-degree in the #MeToo involvement network was defined as how often a node was mentioned, replied to, and retweeted by the top 124 influencers. This value indicates that when the top influencers initiated #MeToo conversations, how frequently an account will be the one they wanted to interact with. It might imply this account’s importance in the #MeToo movement, such as the “me too” creator Tarana Burke or the Twitter #MeToo beginner Alyssa Milano. Alyssa Milano ranked first in this in-degree influencer list: she was interacted 158 times by 34 top influencers, followed by Tarana Burke, who was interacted 126 times by 27 influencers. Milano mentioned Burke 16 times while Burke mentioned Milano 5 times in the four months’ conversation. The cooperation between @TaranaBurke and @Alyssa_Milano demonstrated the possibility of successfully utilizing star power in social activists’ advocacy.

Not just Burke, social activists performed well regarding the in-degree measurement: two individuals, Tarana Burke and Maureen Shaw, and two organizations, @NARAL and
@UNICEFUSA, were on the top 20 in-degree list. Their presences of in-degree suggested the effort of social activists in the #MeToo movement had been recognized.

Except for Alyssa Milano, five entertainment celebrities were among the top in-degree list, including talk show host Oprah Winfrey, singer Holly O’Reilly, actor Rose McGowan, model Gabriel Union, and actor Debra Messing. Alyssa Milano’s mentioning frequency (158 times) was only less than President Trump (190 times), indicating that Milano had built up a reputation of #MeToo advocator in the Twitter conversation. The host Oprah did not post any tweets with #MeToo hashtag, but still was mentioned 35 times, mostly in January 2018. Her presence of in-degree showed her offline actions on the Golden Global Awards supporting #MeToo movement influenced online discussion on Twitter, signifying entertainment celebrities’ ability of transferring celebrity capital and mobilizing social capital across borders from the reality to the virtual world.

Four politicians were among the top 20 in-degree list. As Table 5 shows, President Trump (@realdonaldtrump) was mentioned 190 times by 22 top influencers. Senate Al Franken (@senfranken) was mentioned 18 times by 7 nodes. Their presence in the top 20 in-degree list might be because they were accused of several cases of sexual harassment in the #MeToo movement. It is noted that both Trump and Franken have two accounts on Twitter and both of their accounts were mentioned by others. Hence, their presence might rank higher in the in-degree list if combining two accounts. Another Senator Kirsten Gillibrand (@sengillibrand) was mentioned 18 times by 12 nodes. She fought for justice for sexual assault survivors in the military and considered #MeToo as a powerful revolution (Siddiqui, 2019). Democratic campaign consultant Scott Dworkin (@funder) was mentioned by 8 nodes 133 times, but mostly by the organization @TheDemCoalition that he co-founded (118 times).
It is worth noting that five legacy media outlets were on the top 20 in-degree list: *Time* magazine, *CNN*, *Fox News*, *The Washington Post*, and *New York Times*. *Time* magazine was mentioned 51 times by 25 nodes mainly because it recommended the #MeToo movement as *Person of Year* (Chappel, 2017). *CNN* was mentioned 30 times by 15 influencers, and it was the only media outlet who became a top influencer every month. *The New York Times* was mentioned 68 times by 9 nodes, which was the most frequently mentioned media outlets among the influencers. *The New York Times* has been a consistent observer on the Harvey Weinstein scandal and the #MeToo movement (see nytimes.com/series/metoo-moment and nytimes.com/topic/person/harvey-weinstein).

It is worth noting that media outlets did not show much engagement with the #MeToo conversation on Twitter as evidenced in the top 20 out-degree list. However, they were still powerful authorities demonstrated in the in-degree list when social actors wanted to advocate or oppose a social cause by reaching a broad scope of audience. The networked social media Twitter connected to the digital legacy media, whose audience are not just 22% of the US population, through the hyperlinks that Twitter users cited in the posts.

**4.3.3 The betweenness centrality**

*Betweenness* referred to how often a top influencer stayed on the shortest path on which one node aimed to transmit a message to another. In the #MeToo involvement network, for instance, node A was a social activist, node B was a media outlet. A’s tweets might not be seen by B. C was an entertainment celebrity and C’s tweets might be paid attention to by B. In this sense, if celebrity C could retweet social activist A’s post, then media outlet B had the chance of seeing node A’s tweets and received the advocacy information. In this sense, the role of C in this Twitter conversations was what Smith et al. (2014) identified as an ego of a broadcast network,
who is most likely to be a media outlet or a well-known public figure. The indirect information flow from A to C to B can also explain how the social activists utilize famous celebrities to amplify the effect of messages advocating social cause in any network on social media. Therefore, betweenness centrality revealed that which node was most likely to be treated as a bridge of information flow in the #MeToo involvement network.

Seven entertainment celebrities and seven social activists, including organizations, were in the top 20 betweenness list. In addition, two politicians, two journalists, and two scholars were also showed higher importance regarding the bridge role in the information traffic.

The top five influencers in the betweenness list were the actor Alyssa Milano, the activist Tarana Burke, the actor Patty Arquette, the activist and opinion journalist Maureen Shaw, and the actor Ariane Bellamar. The composition of two social activists and three entertainment celebrities of the top five betweenness indicated that entertainment celebrities as a social group showed the perceived authority in talking about #MeToo on Twitter. The “me too” phrase creator Tarana Burke was the most legitimate actor in this network: Burke did not show extreme weighty in out-degree but ranked higher in in-degree and betweenness. Her position showed that acting as a conversation starter was crucial to develop authority in the corresponding community. The actor Alyssa Milano ranked high across three lists, indicating that the effect of her re-initiating #MeToo on Twitter as a conversation starter was amplified by her celebrity status.

On the contrary, those media outlets that were impactful in in-degree but reluctant to actively advocating #MeToo through online networks were incapable of becoming a credible bridge of two nodes regarding betweenness. It was also observed from the comparison between the out-degree list and the betweenness list that, although being active in mentioning, replying to, or retweeting was crucial for disseminating #MeToo message, the tweeting activities of the top
influencers were not a sufficient reason for them to become opinion leaders in the network (Schäfer & Taddicken, 2015).

4.3.4 The comparison between Alyssa Milano and Tarana Burke

Table 6 displays the comparison of centrality measurements between Alyssa Milano and Tarana Burke. In the #MeToo involvement network, the in-degree values of Milano and Burke were both high, indicating their authority of advocating #MeToo on Twitter. Interestingly, the entertainment celebrity Milano showed far higher out-degree values than those of Burke, suggesting that Milano’s passionate engagement with the #MeToo conversation. In the similar vein to the out-degree, Milano continuously demonstrated higher values of betweenness than those of Burke across the four months. Table 5 discloses that out-degree was not a determining factor of betweenness; but it is observed from Table 6 that if two social actors shared the similar in-degree, their active involvement as out-degree would decide the extent of them being treated as bridges of information flow in a network.

Table 6 The Comparison of Alyssa Milano and Tarana Burke Regarding Weighted In-Degree, Weighted Out-Degree, and Betweenness Centrality in the #MeToo Involvement Network

<table>
<thead>
<tr>
<th>#MeToo Involvement Networks</th>
<th>Weighted In-degree</th>
<th>Weighted Out-degree</th>
<th>Betweenness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alyssa Milano</td>
<td>Tarana Burke</td>
<td>Alyssa Milano</td>
</tr>
<tr>
<td>The Whole Network</td>
<td>158</td>
<td>126</td>
<td>165</td>
</tr>
<tr>
<td>October 2017</td>
<td>33</td>
<td>44</td>
<td>52</td>
</tr>
<tr>
<td>November 2017</td>
<td>29</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>December 2017</td>
<td>60</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>January 2018</td>
<td>36</td>
<td>24</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note. Data calculated by UCINET 6.695 and Gephi 0.9.2.*
Figure 8. The comparison between Tarana Burke (TB) and Alyssa Milano (AM)’s network reach, produced by Gephi 0.9.2. Node size is based on the value of betweenness centrality. Node color is gradient due to the distance from the ego. The a, b, c and d represent the data collected in October, November, December, and January.
The importance of *betweenness* centrality in information dissemination is visualized in Figure 8. As Figure 8 demonstrates, the dynamic of the information reach of Tarana Burke and Alyssa Milano was shown for comparison. The size of nodes was determined by their *betweenness*. The color of nodes was gradient: the dark orange represented the initial starter of a conversation; the light yellow represented no reach to the nodes. Any mention, retweet and reply were represented as an orange line. The reach of these two central figures in the #MeToo conversation were the same from November 2017 to January 2018. On October, the relation between Burke and Milano was not developed through their tweets. But since November, they had cited each other in their tweets and created a solid cooperation through their posts. From then on, their networks were shared, and their information can reach more people through the bridge role of both Milano and Burke. This kind of cooperation is what Thrall et al. (2008) suggested a decade ago to utilize star power to strengthen the ability of attracting public attention through social media.

### 4.4 Summary

Phase One of the study analyzes the #MeToo involvement network created by the top 124 influencers’ Twitter performance. This incomprehensive network with 2,283 nodes and 3,226 edges around the top influencers elucidated the performance of these top influencers in the first three and half months. The network was discovered based on the influencers’ activities of tweeting, retweeting, and replying to. The visualization of the whole network and the sub-networks in each month demonstrated the composition of the relations embedded in the #MeToo conversation among the top influencers (RQ1). The cooperation between social actors from entertainment and social activism fields in the network denoted the importance of *networked celebrity advocacy* in the #MeToo movement at the initial stage. By means of analyzing *in-*
degree, out-degree, and betweenness centrality, the Phase One elucidated which social actors achieved great performance in the #MeToo conversation (RQ2). Social activist Tarana Burke and several influential entertainment celebrities demonstrated vital structural positions in this network, indicating their advantages and opportunities in the #MeToo involvement network.

However, it is worth noting that the #MeToo involvement network was built up on their Twitter activities. These activities were provisional and could not guarantee the information dissemination because the receiver of any activity can ignore the sender’s message. One example is that although President Trump (@realdonaldtrump) was ranked highest in weighted in-degree, he never responded to those messages. This kind of association is temporary and lack of consistent influence. Another disadvantage of this network building is that the message only reached persons who are mentioned in the tweets. Notwithstanding, those top influencers have another way to receive and send messages, which is their followed-following network. Since the #MeToo movement is long-lasting on Twitter, it is necessary to investigate a network with consistency among the top influencers. Thus, as discussed in the next chapter, Phase Two explores the function of networked celebrity advocacy in the #MeToo movement through the followed-following relations among the top influencers.
Chapter V: Phase Two – The Followed-Following Network

The research object of Phase Two was a network defined by the followed-following relationship on Twitter among the top influencers. Using the same approach as in Phase One, Phase Two explores the composition of the followed-following network through visualization and interpretation at the macro level through both the whole network and ego-networks (RQ1). The whole network consisted of all examined top influencer nodes. Each ego network was composed of one top influencer and all nodes connected to this ego through one step. Phase Two also investigates celebrities’ structural positions in the followed-following network by analyzing micro-level social network analysis measurements (RQ2). The macro level focuses on the community whereas the micro level focuses on nodes attributes.

5.1 Data Preparation

5.1.1 The followed-following network

The followed-following network data was collected based on the top 124 influencers list used in Phase One. I created a Twitter account for research purpose and followed all the 124 top influencers. Using the Twitter function "Followers you know," when I logged into my account and checked the profile of any top influencer I had followed, Twitter would show a list of those top influencers who were also following the specific profile. In this way, I identified "who follows whom" among the top influencers on March 2nd, 2020. One of the top influencers @GraceStarling4, who was actively involved in the conversation as evidenced in the #MeToo involvement network, had set her account as private. Therefore, I excluded her from the final list of the followed-following network. This network only contains 123 nodes whose Twitter profiles were public on March 2nd, 2020.
This followed-following network between these 123 top influencers was constructed to survey the information flow among them. In this sense, supposing that nodes A and B are both top influencers, I set A in the first column and B in the first row. B following A means information posted by A can be seen by B, whereas information posted by B might not be seen by A. Therefore, I defined \((A, B) = 1\) when A was followed by B, indicating the information sending; \((B, A) = 1\) when A is following B, indicating the information receiving. The result was a sparse matrix with values 0 and 1, 0 indicating no relationship and 1 indicating the followed/following relationship. The matrix is directed and asymmetric. Both first column and first row are 123 influencers’ handle names.

It is worth noting that Twitter accounts were continuously changing the list of their following and followers. In this sense, my followed-following dataset was only applicable for being collected on March 2nd, 2020. On April 4th, 2020, I repeated the same procedure to cross-validate the reliability of the network data set. It turned out that several Twitter handles had changed their following/follower lists, but by fewer than three handles. Therefore, the followed-following dataset showed consistency.

5.1.2 Variables in Phase Two

Phase Two explores the recognized social capital in the networked celebrity advocacy: the followed-following network of the top influencers in the #MeToo movement. It is still a social network analysis and uses the variables in the Phase One including size, density, reciprocity, degree centralization, and degree centrality. Different from Phase One, Phase Two specifically paid attention to the ego-networks around the top influencers. In this way, I added one more social network analysis indexes especially applicable to ego-networks: brokerage.
Brokerage. I adopted Gould and Fernandez’s (1989) notion of brokerage with Diani’s (2003) exploration on brokerage in social movement studies. The structural hole theory (Burt, 2004) suggests that how individuals are embedded in neighborhoods may result in important positional advantages and disadvantages. The position of brokerage indicates an ego is acting as a bridge in or between social groups. Brokerage analysis is one major measurement for structural hole analysis, which contributes to understanding an ego’s social capital (Burt, 2000; Lin, 1999a). Each path where the ego lies between two alters will be checked based on the group membership of the three (an ego and two alters) (Hanneman & Riddle, 2016). Egos can have many opportunities to act as a broker between two attributed groups. These opportunities can be classified as: coordinator, consultant, gatekeeper, representative, and liaison. When the information flows from node A (source) to B (broker) and then to C (destination), coordinator indicates A, B and C are all members of the same group; consultant means B is not a member of the group that A and C within; gatekeeper is when B and C are in the same group, but A is from outside the group; representative means A and B are in the same group and B is acting as a contact point to the group that C is within; and liaison suggests that A, B, and C are in three separate groups. Higher brokerage indicates higher individual social capital.

I also collected two pieces of related information regarding the #MeToo followed-following network, the numbers of followers and following of the top 123 influencers, to get a description of the top influencers followed-following situation in general. The descriptive analysis was calculated through SPSS 24.

Followers. This variable measured how many Twitter handles followed the influencer when the data were retrieved. Data was collected through Crimson Hexagon and was identified as the volume of followers when the account became the top influencer for the first time.
The top 123 influencers’ follower information was highly skewed (skewness = 4.29). Only four of the top influencers had fewer than 1,000 followers. There were 43 top influencers with the number of followers ranging from 1,001 to 100,000. Ranging from 100,001 to 1,000,000 were 42 influencers. Another 34 influencers had more than one million followers.

*Following.* This variable measured how many Twitter handles this influencer followed on the date the data were retrieved. The collection procedure was the same as for *Followers.*

The following information of the top 123 influencers was also highly skewed (skewness = 3.36). Only 7.3% of the influencers followed fewer than 100 Twitter handles. The majority of the influencers followed more than 100 and fewer than 10,000 handles. Eighteen top influencers followed more than 10,000 Twitter users.

### 5.2 The Composition of the #MeToo Followed-Following Network

#### 5.2.1 Network visualization

The #MeToo followed-following network is also a communication network indicating information flow among the top influencers. Two handles relate to each other if one is followed by another. Each connection is directed because the followed-following relationship is not reciprocal. The arrow in the network visualization means \((A, B) = 1\), suggesting A is followed by B. Figure 9 displays the followed-following relationships of the discovered top influencer network created by Gephi. The layout of the network in Figure 9 was based on the algorithm Force Atlas, which tends to push hubs at the periphery and put authorities more central (Bastian et al., 2009).
Figure 9. The #MeToo followed-following network among the top influencers on Twitter produced by Gephi 0.9.2. Node size is based on value of betweenness centrality. Node color is based on community-detection algorithm. Isolates are not shown.

The node colors in Figure 9 are automatically assigned using a community-detection algorithm (Blondel et al., 2008). Each color represents a subgroup of the dataset containing nodes which are more likely to connect with each other than the rest of the network. I used resolution parameter as 1.5: when this parameter is higher than 1, the algorithm produces a smaller number of communities in the network. As shown in Figure 9, aside from four isolated nodes who are not connected with anyone, the network was classified as three communities (orange: 77.24%; rose red: 17.89%; blue: 1.63%). Clustering like these communities might
mathematically suggest that those nodes with same color share similar interests or have similar contributions in the network (Gruzd & Haythornthwaite, 2013). According to the composition of this network, it is clear that most nodes were densely connected with each other as represented as orange. Due to the highly bipolarized opinions on Twitter, it is not surprising to find the nodes in rose red community shared the support of President Donald Trump. The rose red community included the active @skyrider4538, @LVNancy, and @jcpenni7maga, who showed the high out-degree in the #MeToo involvement network (Table 5) and publicly opposed the advocacy of the #MeToo movement. The proportion of these three communities indicates that at the early stage of the #MeToo movement, the majority of the #MeToo conversation attenders were supporting the value of #MeToo, but the dissent opinion was also strong (becoming top influencers) and hard to ignore in the composition of the followed-following network.

Parallel to the #MeToo involvement network, the node sizes in this followed-following network are also automatically assigned based on the measurement betweenness centrality. The actor Alyssa Milano (@Alyssa_Milano) occupied the biggest size based on the ranking of the betweenness measurement, visually presenting her authority in the network.

Figure 9 displays a possibility of community detection based on mathematical calculation of network strength. I also wanted to investigate if the node attributes as extra factors influenced their connections in the followed-following network (RQ3). In this sense, I assigned the node colors based on various social fields as Figure 10(a), types as Figure 10(b), and gender as Figure 10(c).
Figure 10. The #MeToo followed-following network among the top influencers on Twitter produced by Gephi 0.9.2. Node size is based on value of betweenness centrality. Node color is based on social field (a), type (b), and gender (c).
Figure 10(a) assigns pink to entertainment, green to journalism, and orange to social activism. Nodes in the entertainment field were mostly higher in betweenness centrality ranking and their sizes were obviously bigger than those from other fields. Entertainment celebrity nodes were also more likely to stay in the core of the layout, indicating their authority in the network. Comparing Figure 9 and 10(a), it is also interesting to see those nodes from journalism were sitting in between community orange and rose red, indicating this social field’s broad acceptance.

Figure 10(b) assigns red to individual nodes and green to organizations. It is obvious that organizational nodes were concentrated in the center of the graph and also stayed in between two communities of individual nodes. Among the individual nodes, Figure 10(c) attributes light blue for women, and yellow for men. Male nodes were scattered in the graph, while female nodes tended to connect with each other in both communities.

5.2.2 The whole network

Figures 9 and 10 show a whole network of all 123 sampled influencers in this followed-following network. The size of the whole network displayed 1,938 ties with 123 nodes. Four nodes were total isolates, which meant they were not connecting with any other top influencers in the network. The description of the whole followed-following network is shown in Table 7.

In addition, Phase One examined the #MeToo involvement network containing 124 top influencers and all Twitter accounts that those influencers mentioned, replied to, and retweeted. It provides a demonstration of the #MeToo conversation in the first three and a half months. In Phase Two, I used only the top 123 influencers’ associations in the #MeToo involvement network to make comparisons between their conversational interactions and followed-following relationships (see Table 7).
Table 7 The Comparison Between #MeToo Follow and #MeToo Involve Networks among the 123 Top Influencers

<table>
<thead>
<tr>
<th></th>
<th>#MeToo Follow</th>
<th></th>
<th></th>
<th>#MeToo Involve</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Whole</td>
<td>Alyssa Milano</td>
<td>Tarana Burke</td>
<td>The Whole</td>
<td>Alyssa Milano</td>
<td>Tarana Burke</td>
</tr>
<tr>
<td></td>
<td>Network</td>
<td></td>
<td></td>
<td>Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nodes</td>
<td>123</td>
<td>76</td>
<td>35</td>
<td>123</td>
<td>44</td>
<td>31</td>
</tr>
<tr>
<td>Edges</td>
<td>1,938</td>
<td>1,434</td>
<td>479</td>
<td>478</td>
<td>245</td>
<td>126</td>
</tr>
<tr>
<td>Average Degree</td>
<td>15.756</td>
<td>18.868</td>
<td>13.686</td>
<td>3.886</td>
<td>5.568</td>
<td>4.065</td>
</tr>
<tr>
<td>Degree Centralization</td>
<td>.423</td>
<td>.636</td>
<td>.458</td>
<td>.298</td>
<td>.807</td>
<td>.818</td>
</tr>
<tr>
<td>Out-Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centralization</td>
<td>.316</td>
<td>.475</td>
<td>.433</td>
<td>.183</td>
<td>.320</td>
<td>.273</td>
</tr>
<tr>
<td>In-Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centralization</td>
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<td>.583</td>
<td>.433</td>
<td>.249</td>
<td>.677</td>
<td>.824</td>
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<tr>
<td>Reciprocity</td>
<td>.299</td>
<td>.322</td>
<td>.417</td>
<td>.081</td>
<td>.129</td>
<td>.156</td>
</tr>
<tr>
<td>Density</td>
<td>.129</td>
<td>.252</td>
<td>.403</td>
<td>.032</td>
<td>.129</td>
<td>.135</td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695.

As Table 7 shows, the density of this followed-following network was 0.129, which meant 12.9% of all potential ties among those nodes really occurred. The density value suggested it was a highly connected network, which can also be seen in the visualization (Figure 9 & 10). The density also indicates that the community consisting of all these top influencers shared a higher degree of social capital at a group level.

The reciprocity value was 0.299, suggesting 29.9% of nodes are having two-way connections: both followed and following. The degree centralization of the whole network is
0.423, a middle value between 0 (not centralized) and 1 (extremely centralized). The degree centralization indicates that the #MeToo conversations on Twitter in the first three and a half months were dominated by a few influential participants, while leaving certain space for more people contributing to the information flow. It also suggests that nodes in different structural positions in this network had unequally distributed advantages. Those powerful nodes who have higher value of degree centrality have fewer constraints and more opportunities.

The top influencers’ followed-following network showed a high density, reciprocity, and degree centralization, suggesting that #MeToo information sharing might be strong inside the network, but new information flow into the network might be weak (Gruzd & Haythornthwaite, 2013). The majority of these top influencers held a large number of followers. The conversation related to the examined top influencers occupied approximately 39 percent of the all conversations using #MeToo during the four months (see Table 3). The high density, reciprocity, and degree centralization might suggest that a certain level of closure (homogeneous) in the top influencer network impacted the major information flow in the #MeToo conversation.

Meanwhile, this network consisted of social activists/organizations, media outlets/journalists, politicians, and celebrities. The closure for strong information sharing also suggests that a #MeToo-related information published by a social activist had a high potential to be received and shared by other nodes, reach a broad population, and obtain media and public attention.

Table 7 also shows that, with the same 123 nodes, the connections in the #MeToo involve network are far lesser than the #MeToo follow network. Accordingly, the density of the #MeToo follow network was five times that of the #MeToo involve network. This result might have two alternative explanations. First, the #MeToo follow network data was collected on March 2nd, 2020, but the #MeToo involve data referred to activities from October 2017 to January 2018. In
this sense, the connections and the density between the top influencers might have increased along with the development of the #MeToo movement. Hence, the group social capital might increase along with the continuous interactions on the shared topics (Sajuria et al., 2015). On the other hand, it might reflect the intention of social media users to receive information from others but not to initiate conversations with them, which means the group possesses a great deal of weak ties, but it is a long way to strengthen these weak ties and transfer them into strong ties. In this way, this group’s social capital accumulation is more focused on new resources (Burt, 2000) but not the solidarity (Putnam, 2000). Indeed, the scant associations in the #MeToo involvement network suggest that there are considerable latent ties (Haythornthwaite, 2002), technologically available but not activated, in the conversation. Social activists can make use of these latent ties to amplify their voices.

### 5.2.3 The ego-networks

Figures 9 and 10 provide visual evidence of the composition of the whole top influencers network. However, very little information of the individual nodes’ contribution is showed in the visualization. One way to examine node attributes is to analyze the ego-networks extracted from the whole network. Ego networks are special networks with a node as a central node (called ego) and a neighborhood with all other nodes (called alters) connecting with ego at one path length (all alters directly connected with ego) in this network.

Using Gephi’s filter function, I identified two ego-networks visually from the whole networks with egos as Tarana Burke and Alyssa Milano (Figure 11).
Figure 11. Visualization of ego-networks of @Alyssa_Milano (a) and @TaranaBurke(b) in the #MeToo followed-following network among the top influencers on Twitter produced by Gephi 0.9.2. Node size is based on value of betweenness centrality. Node color is based on social field (left) or community (right).

The ego-networks only considered one step network around the ego. Tarana Burke is the creator of the “Me too” phrase and the inaugurator of this social movement. Alyssa Milano has been an active celebrity who continuously supported #MeToo movement on Twitter during the time frame. It is necessary for the understanding of information flow in the #MeToo conversation to examine and compare these two ego-networks.
The visualization of these two ego-networks in Figure 11 shows that both two central actors in the #MeToo movement mostly connected with the central community identified in Figure 9. Especially @TaranaBurke showed no connections with the purple community. @Alyssa_Milano’s alters had far more nodes from journalism (as green) than @TaranaBurke. Both ego-networks showed a substantial portion of celebrities (as pink). The observation of these two ego-networks supported the impact of *networked celebrity advocacy* in the #MeToo conversation on Twitter. Celebrities demonstrate strong collaborations with activists and possibilities of transferring messages from the social activism field to the journalism field.

The comparison of main macro-level measurements of these two ego-networks in the #MeToo follow network is also shown in Table 7: Both sub-groups maintained higher density than the whole network. Especially the ego-network around @TaranaBurke, with the highest density 0.403, indicated 40.3% of possible connections really happened. Meanwhile, this ego-network also had relatively smaller size of nodes than the personal community of @Alyssa_Milano. Both measurements indicated a high closure around the social activist @TaranaBurke. Nodes in this subgroup may be easily mobilized to support the advocacy for #MeToo. However, the information flow in this group may be hard to reach a broad population with new nodes.

@Alyssa_Milano possessed the density of 0.252, higher than the whole network and less than @TaranaBurke’s ego network. However, @Alyssa_Milano’s ego-network showed two times higher average degree than @TaranaBurke, indicating the former’s network was better at information sending and receiving since the Milano’s community had a higher volume of connections. This advantage of the Milano’s network was also evidenced by its edges volume at three times that of @TaranaBurke. With one-step connection, Alyssa Milano with 1,434 edges
made visible 61% of connections in the whole network which had 1,938 edges, indicating her undoubted central position in the whole network.

5.3 Structural Positions of Celebrities in the #MeToo Followed-Following Network

In the followed-following network, since I defined \((A, B) = 1\) when \(A\) is followed by \(B\), the out-degree indicates the most followed Twitter accounts, who have opportunities of sending information to reach a broad population. The in-degree suggests how many accounts an actor was following, indicating the variety of information sources, whom an actor gets information from. Betweenness centrality displays how often Twitter accounts stay between the shortest information paths between other actors and who are most likely to connect different groups, clusters or communities. Table 8 shows the top 20 accounts based on the comparison of these three measurements and the volume of following and followers.

5.3.1 The in-degree centrality

In-degree was important to evaluate the recognized social capital represented by the followed-following network. The value indicated the degree of richness of information that an actor might receive. A celebrity with low in-degree was less likely to bridge two different kinds of social fields. If a celebrity was not receiving any social-cause-related information, it would be hard for the information to travel through the node of celebrity and ultimately reached a broad population.

Among the top 20 actors with highest in-degree values in this network, there were four social activism organizations, and eight entertainment celebrities. In terms of the #MeToo conversations, these accounts are willing to be exposed to a broad information scope. No legacy media outlets are found in the top 20, but three journalists/writers are on the list. The absence of legacy media organization in the list was reasonable since the official Twitter accounts of legacy
media outlets might not collect information from other Twitter sources, but their employees (journalists/writers) might.

Table 8 *The Top 20 Influencer Lists of Following Volume, Followers Volume, In-Degree, Out-Degree, and Betweenness Centrality of the #MeToo Followed-Following Network*

<table>
<thead>
<tr>
<th>Following</th>
<th>In-Degree</th>
<th>Followers</th>
<th>Out-Degree</th>
<th>Betweenness</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPR</td>
<td>funder</td>
<td>youtube</td>
<td>Alyssa_Milano</td>
<td>Alyssa_Milano</td>
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<td>TheDemCoalition</td>
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<td>laurenduca</td>
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</tr>
</tbody>
</table>

*Note.* Data calculated by Crimson Hexagon and UCINET 6.695.
5.3.2 The out-degree centrality

Out-degree in the followed-following network was more important than in-degree because the preeminent function of networked celebrity advocacy is utilizing celebrities' star power to distribute information to the widest audience. Not to mention a considerable number of fan-followers, just in the current project's network, seven celebrities were in the top 20 actors of highest out-degree values.

Different from the in-degree top 20 list, legacy and social media outlets accounts occupied eight positions in this out-degree list. The second to the fifth highest positions were all legacy media outlets. Media outlets' significant performance in out-degree was reasonable because they were traditionally information provider for mass population.

However, celebrities' high-ranking positions on this list indicated their importance specifically in the #MeToo conversations. Especially, @Alyssa_Milano was the number one influencer in the top out-degree list, where the actors @Rosie, @PattyArquette and film director @ava were all in the top 10 with those legacy media outlets. The celebrities' power in the out-degree list also suggested that celebrities on social media were self-presentation media outlets publishing information to their personal community with enormous followers (Marshall et al., 2015).

The result also resembled the role of celebrity communities as broadcasting networks in the Twitter conversations in general that were identified by Pew Research Center (M. Smith et al., 2014). Social media has been an alternative route for those well-known public figures to accumulate celebrity capital. No social activist is on the out-degree list. Social activists' weak position in the top 20 out-degree list suggests the necessity for social movement organizers to adopt celebrities' star power to enlarge the impact of social activism.
5.3.3 The *betweenness* centrality

*Betweenness* centrality implies who is the most important actor in the middle to connect various individuals, clusters, or communities. It is the most crucial measurement to indicate an actor's bridging power in this social network. The top 20 *betweenness* list showed top five of them were celebrities. The total of nine out of top 20 were entertainment celebrities; four were media outlets; three were journalists; and two were social activism individuals/organizations. The composition of these actors was justifiable because celebrities had achieved good performance on both *in-degree* and *out-degree* measures. Social activists ranked high on the list of *in-degree* but not *out-degree* while legacy media outlets were high on *out-degree* but not *in-degree*. Celebrities in this network were expert in both receiving various information and publishing information to a broad population. In this sense, the *betweenness* centrality indicates that celebrities in the Twitter #MeToo movement achieved and mobilized a great deal of social capital due to their special structural positions as bridges between social activism and media outlets.

Table 8 also exhibits the top 20 influencers with the largest volume of followers and following. Most top 20 followers were media outlets, including both legacy and social media. They also took a large proportion of top 20 *out-degree* influencers, indicating these two items might be correlated. The top 20 following list showed some overlapping with top 20 *in-degree* (four accounts), but most of the accounts in the following list seldom showed in top 20 *out-degree* and *betweenness* lists.

5.3.4 The *brokerage*

My research purpose is to investigate how individual nodes, such as celebrities with numerous followers, took up various structural positions in the #MeToo conversations on
Twitter. Hence, it is important to examine the opportunities and constraints of those top influencers as individual actors have in the network.

To be noted, the top influencers in the sample also have another layer of personal communities with averaging 3,621,436 followers. This aspect of ego-networks around celebrities was not displayed in the top influencers network. However, celebrities’ information can be seen by this sizeable amount of mass audience. In this sense, the volume of followers was another indicator of individual social capital. With these large communities in mind, I used UCINET to examine the top influencers on brokerage interpretation (Table 9) and treated @Alyssa_Milano and @TaranaBurke as two special cases (Table 10).

Egos were separated into six groups based on their social field (activism, entertainment, politics or law, journalism, non-Journalism publishing or academia, and not applicable). Table 9 suggests that top influencers who occupied top 20 frequencies of becoming those broker roles: coordinator, consultant, gatekeeper, representative, and liaison. Those roles suggest the opportunities of influencers because of their structural positions. Each role displayed seven to ten entertainment celebrities on the top 20 lists, suggesting entertainment celebrities’ passionate involvement in the #MeToo conversations. Six entertainment celebrities, actors @Alyssa_Milano, @Rosie, @PattyArquette, @rosemcgowan, @TomArnold and filmmaker @ava, occupied higher positions of each role. Alyssa Milano ranked first or second across all roles, indicating her dominance in bridging the information flow in this special #MeToo topic community.
Table 9 Brokerage Measurements of Top 20 Influencers in the #MeToo Followed-Following Network

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Gatekeeper</th>
<th>Representative</th>
<th>Consultant</th>
<th>Liaison</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosie</td>
<td>Alyssa_Milano</td>
<td>Alyssa_Milano</td>
<td>funder</td>
<td>Alyssa_Milano</td>
<td>Alyssa_Milano</td>
</tr>
<tr>
<td>Alyssa_Milano</td>
<td>Rosie</td>
<td>Rosie</td>
<td>Alyssa_Milano</td>
<td>funder</td>
<td>Rosie</td>
</tr>
<tr>
<td>PattyArquette</td>
<td>ava</td>
<td>PattyArquette</td>
<td>TheDemCoalition</td>
<td>TheDemCoalition</td>
<td>funder</td>
</tr>
<tr>
<td>ava</td>
<td>PattyArquette</td>
<td>feministabulous</td>
<td>Rosie</td>
<td>Rosie</td>
<td>PattyArquette</td>
</tr>
<tr>
<td>feministabulous</td>
<td>feministabulous</td>
<td>ava</td>
<td>ProudResister</td>
<td>NARAL</td>
<td>ava</td>
</tr>
<tr>
<td>washingtonpost</td>
<td>rosemcgowan</td>
<td>laurreduca</td>
<td>NARAL</td>
<td>ProudResister</td>
<td>TheDemCoalition</td>
</tr>
<tr>
<td>rosemcgowan</td>
<td>TomArnold</td>
<td>RVAwonk</td>
<td>ava</td>
<td>PattyArquette</td>
<td>feministabulous</td>
</tr>
<tr>
<td>laurreduca</td>
<td>NARAL</td>
<td>rosemcgowan</td>
<td>PattyArquette</td>
<td>rosemcgowan</td>
<td>rosemcgowan</td>
</tr>
<tr>
<td>TomArnold</td>
<td>laurreduca</td>
<td>washingtonpost</td>
<td>ew</td>
<td>ava</td>
<td>NARAL</td>
</tr>
<tr>
<td>GretchenCarlson</td>
<td>ew</td>
<td>funder</td>
<td>rosemcgowan</td>
<td>feministabulous</td>
<td>laurreduca</td>
</tr>
<tr>
<td>ingrahamangle</td>
<td>MaureenShaw</td>
<td>TheDemCoalition</td>
<td>laurreduca</td>
<td>RVAwonk</td>
<td>ProudResister</td>
</tr>
<tr>
<td>MaureenShaw</td>
<td>UltraViolet</td>
<td>MarleeMatlin</td>
<td>RVAwonk</td>
<td>TomArnold</td>
<td>TomArnold</td>
</tr>
<tr>
<td>MarleeMatlin</td>
<td>funder</td>
<td>democracynow</td>
<td>TomArnold</td>
<td>laurreduca</td>
<td>RVAwonk</td>
</tr>
<tr>
<td>msnbc</td>
<td>quinncy</td>
<td>TheRoot</td>
<td>feministabulous</td>
<td>DemWrite</td>
<td>MaureenShaw</td>
</tr>
<tr>
<td>AynrandPaulRyan</td>
<td>TheDemCoalition</td>
<td>prouderesister</td>
<td>kellyanepolls</td>
<td>DemWrite</td>
<td>DebraMessing</td>
</tr>
<tr>
<td>quinncy</td>
<td>AynrandPaulRyan</td>
<td>MaureenShaw</td>
<td>MaureenShaw</td>
<td>SenGillibrand</td>
<td>MarleeMatlin</td>
</tr>
<tr>
<td>time</td>
<td>DebraMessing</td>
<td>kylegriffin1</td>
<td>DemWrite</td>
<td>MaureenShaw</td>
<td>DebraMessing</td>
</tr>
<tr>
<td>kylegriffin1</td>
<td>MarleeMatlin</td>
<td>TomArnold</td>
<td>DebraMessing</td>
<td>UltraViolet</td>
<td>UltraViolet</td>
</tr>
<tr>
<td>TheRoot</td>
<td>UN_Women</td>
<td>time</td>
<td>UltraViolet</td>
<td>kamalaharris</td>
<td>ew</td>
</tr>
<tr>
<td>RVAwonk</td>
<td>RVAwonk</td>
<td>AynrandPaulRyan</td>
<td>wikileaks</td>
<td>MarleeMatlin</td>
<td>DemWrite</td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695.

Social activists’ performance shows their effort: two to five positions across all roles list.

Three organizations, Pro-Choice America (@NARAL), UltraViolet Action (@UltraViolet) and The Democratic Coalition (@TheDemCoalition), appeared in the most role lists, indicating this social organization’s ability of mobilizing social capital on Twitter regarding the #MeToo conversation or other social-cause information disseminating.
One social activist and opinion journalist Maureen Shaw appeared in each brokerage role, suggesting a possibility for social activists using their structural power to influence information exchange. However, the most well-known activist in the #MeToo movement, @TaranaBurke, was only listed in the broker role of representative, which means Tarana Burke occupied a broker role in the information flow from social activism group to those of other social fields. This absence is a precarious alert for social activists when part of their social media strategy is attracting more public attention beyond legacy media’s control.

Table 10 Brokerage Measurements of @Alyssa_Milano and @TaranaBurke in the #MeToo Followed-Following Network

<table>
<thead>
<tr>
<th>Social Field</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alyssa Milano</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 a</td>
<td>32</td>
<td>128</td>
<td>24</td>
<td>92</td>
<td>75</td>
<td>16</td>
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<tr>
<td>2</td>
<td>64</td>
<td>162</td>
<td>35</td>
<td>129</td>
<td>113</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>84</td>
<td>7</td>
<td>60</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>70</td>
<td>202</td>
<td>33</td>
<td>123</td>
<td>143</td>
<td>23</td>
</tr>
<tr>
<td>5</td>
<td>52</td>
<td>125</td>
<td>23</td>
<td>84</td>
<td>74</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tarana Burke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>22</td>
<td>1</td>
<td>11</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>30</td>
<td>0</td>
<td>14</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>23</td>
<td>1</td>
<td>7</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695.

a1=Activism, 2=Entertainment, 3=Politics & Law, 4=Journalism, 5=Non-Journalism Publication & Academia, 6=Not Applicable.
Looking deeply into @Alyssa_Milao’s roles between those six groups in Table 10, I found that the highest value (202) was the gatekeeper role of @Alyssa_Milano from the journalism field to the entertainment field. From the activism group to the journalism group, @Alyssa_Milano showed as liaison 92 times, which was much higher compared to 11 times for @TaranaBurke as role of representative from the activism group to the journalism group. From the journalism group to the activism group, @Alyssa_Milano showed as liaison 70 times, also higher than 8 times for @TaranaBurke as gatekeeper role from the journalism field to the activism field. This comparison indicated that entertainment celebrity @Alyssa_Milano’s structural position had more advantages than social activist @TaranaBurke in the information flow between social activists and media outlets.

5.4 The Comparison Between Phase One and Phase Two

Both the #MeToo involvement network and the followed-following network were utilized for investigating information flow initiated by the top influencers in the #MeToo conversation. In the #MeToo involvement network, the in-degree suggested passive information receiving and out-degree indicated active information sending. In the followed-following network, as I defined, the in-degree demonstrated passive information receiving and out-degree revealed potentially active information sending. The similarity exists in the top 20 in-degree list of the #MeToo involvement (Table 5) and the top 20 out-degree of the followed-following network (Table 8). In other words, the ranking of those nodes that were mentioned, replied to, and retweeted by the influencers was similar to that of the nodes who had the highest possibility of reaching broad populations, mainly including entertainment celebrities and media outlets.

It is also important to note that the actor @Alyssa_Milano was ranked high in each top 20 list of the two networks. No social activists, even the creator of #MeToo, @TaranaBurke,
achieved the similar performance. Alyssa Milano publicly endorsed Joe Biden in her tweets, showing her democratic party affiliation. The political indication, beyond the activism orientation, has also been found in Earle’s (2019) research on the politicization and polarization of mainstream media coverage of #MeToo. Earle (2019) argues that the event of Brett Kavanaugh was a turning point for the #MeToo movement to be deeply stuck in polarization. However, according to what my dissertation has found, the polarization has existed from the beginning, as evidenced in @realdonaldtrump’s highest weighted in-degree and the Trump supporters (@skyrider4538, @LVNancy, and @jcpenni7maga)’s higher out-degree in the #MeToo involvement, as well as in the Trump opponents (senior political consultant @funder and singer @AynRandPaulRyan)’s high ranking in most lists of both networks.

It is also observed from the comparison between these two #MeToo-related networks that Tarana Burke showed higher authority in the involvement network than in the followed-following network. In contrast, Alyssa Milano’s authority in the #MeToo conversation is verified by both networks. The reason for their difference in the dominance of the conversation might come from two aspects based on my theoretical model on networked celebrity advocacy in Figure 3. First, it might result from the recognized celebrity capital of Alyssa Milano in the previous social field that was transferred to the social activism field and this celebrity capital might have influenced the accessibility of social capital that Milano and Burke have in the #MeToo advocacy. Secondly, it might also be partly influenced by the active engagement of Milano and Burke with the #MeToo conversation represented by their out-degree in the involvement network, which represented the mobilization of social capital that these two public figures have. Milano showed higher transferred celebrity capital, accessed social capital, and mobilized social capital than Burke, which might be the reason for their difference in authority.
The comparison of Tarana Burke and Alyssa Milano demonstrates their distinct social capital. Based on the results in Table 6, the personal community of Tarana Burke has fewer nodes, edges, and average degree, but higher density, than that of Alyssa Milano in the followed-following network. Therefore, Alyssa Milano accumulated more individual social capital in terms of the range of resources. However, Tarana Burke’s community displayed higher group social capital than Alyssa Milano’s regarding density (Haythornthwaite, 2012; Putnam, 2000). It is observed from the results that Alyssa Milano’s community was better at information flow with low density and more weak ties and Tarana Burke’s community demonstrates higher solidarity with high density and possibly more strong ties. Both types of community strength contribute to promoting social movements in different ways, suggesting the necessity of collaboration between social activists and celebrities in order to utilize two kinds of advantages.

5.5 Summary

Phase Two investigates the #MeToo information flow based on the followed-following network among the top 124 influencers. Different from the #MeToo involvement network examined in the Phase One, the followed-following network shows high density because all the network ties only exist between two of the top 123 influencers.

The composition of the followed-following network has been explored through the network visualization and the macro-measurements of the whole network and two ego-networks (RQ1). The structural positions of the top influencers, especially entertainment celebrities, have been investigated via the interpretation of in-degree, out-degree, and betweenness centrality (RQ2). Moreover, the examination of all top influencers’ brokerage in the network demonstrates the network advantages of Alyssa Milano and other entertainment celebrities and social activists involved in the #MeToo conversation based on their followed-following ties (RQ2).
The comparison at the micro level between two central figures, @Alyssa_Milano and @TaranaBurke in the Twitter #MeToo movement, shows that the networked celebrity advocacy has the great potential to bridge the associations between various social groups, more effective than the activists’ isolated campaigns. In this sense, the cooperation between social activists and celebrities are necessary and crucial in the networked media environment.

The comparison at the macro level between two networks is convincing in relation to the structural importance of entertainment celebrities, such as @Alyssa_Milano. Furthermore, the findings disclose the precarious situation of #MeToo in the bi-polarized political environment: it might be hijacked by political provocateurs whose goal was out of the scope of the #MeToo movement and hence distorted the legacy and social media representation of the #MeToo conversations.

The comparison also shows that the same influencer might rank differently regarding their social capital measurements in the two #MeToo-related information flow networks. It is of question what external factors lead to their in-degree, out-degree, betweenness centrality variance and the difference between the two networks (RQ3). After the examination of the composition of the two networks in the networked celebrity advocacy and the interpretation of the structural positions of entertainment celebrities compared with other social actors, it is crucial to understand if these characteristics will lead to good performance in legacy media coverage of the #MeToo movement.

Meanwhile, the comparison between the two networks and between two crucial public figures in the #MeToo movement indicates that it is necessary to understand the relationship between celebrity capital and social capital to disclose the causes of the difference between two networks and between different top influencers. In this sense, I conducted the third phase of the
study to explore the possible external factors and test the hypotheses between celebrity capital and social capital in the *networked celebrity advocacy* (Figure 5).
Chapter VI: Phase Three – External Factors Exploration & Hypotheses Testing

Due to my theoretical model of field migration in the networked celebrity advocacy on Figure 3 and compensated by Lin’s (1999a) social capital model in Figure 4, personal attributes of the top influencers might also influence their accessibility and mobilization of social capital. These personal attributes consist of the structural and positional variations of the top influencers in the society. In this sense, Phase Three first explores the possible associations of three nodes attributes: type, gender, and social field. Furthermore, the third phase investigates the effect of a sharing attribute to relationships building between any two nodes in the network. Lastly, I proposed six hypotheses regarding the associations between celebrity and social capital in the networked celebrity advocacy in Figure 5. Phase Three probes into these hypotheses from two perspectives: the matrices among the top influencers, and the vectors of their attributes. I used UCINET to process the matrices data and SPSS to handle statistical analysis based on the vectors.

6.1 Data Preparation

6.1.1 Network data

Phase Three used the network datasets from both previous phrases. To ensure sample size consistency throughout various datasets, I used the list of 123 top influencers identified in Phase Two as my sample for the Phase Three.

The adjacency matrix of the top 123 influencers’ #MeToo involvement (#MeToo Involve) was collected according to the Phase One using UCINET. Only the associations between the 123 top influencers were remained. The result was a 123*123 adjacency matrix with valued, directed ties.
The dataset of the top 123 influencers’ followed-following network (#MeToo Follow) was still the dataset used in Phase Two, a 123*123 adjacency matrix with binary and directed ties.

6.1.2 Media coverage data

To analyze the celebrity capital of top influencers, the media coverage dataset was collected through three combined ProQuest databases: US News, Canadian News, and International News. Twitter is a global social media platform and the #MeToo movement has been identified as a global social movement influencing over eighty countries (Anderson & Toor, 2018; Gill & Orgad, 2018). Hence, I used these three databases to collect English media coverage globally.

For each top influencer, I searched their Twitter handles (e.g., @Alyssa_Milano) or their real names (e.g., Alyssa Milano) in these three databases, with the limitation of only using English, of the type as News, and of excluding the publication source of University Wire. The time frame used for the top influencers’ media coverage before the #MeToo movement (PreMC) is 10/15/2015 to 10/14/2017 in order to get a broad range of their celebrity capital before #MeToo. The time frame used for the top influencers’ media coverage during the #MeToo movement (MTMC) is 10/15/2017 to 01/31/2018, the same as of Phase One and Phase Two.

6.2 Variables in Phase Three

The demographic information of type, gender, and social field had been coded at the stage of Phase One.

Celebrity capital was measured by two variables: media coverage before the #MeToo movement (PreMC) as the invested celebrity capital from the previous social field, and the
media coverage with #MeToo Topic (MTMC), the recognized celebrity capital in the social activism field.

*Media coverage before the #MeToo movement (PreMC)* was collected as the frequency of a top influencer's Twitter handle or real name mentioned in any news article from 10/15/2015 to 10/14/2017.

*Media coverage with the #MeToo Topic (MTMC)* was a top influencer's media coverage with the key word "#MeToo" from 10/15/2017 to 01/31/2018.

Social capital was measured by four variables: the tweet impression of posts with the #MeToo hashtag (*Tweet Reach*) and *betweenness centrality* in the #MeToo involvement network (*BeInvolve*) as the invested social capital in the networked celebrity advocacy; and the frequency of being a top influencer in the #MeToo movement (*TopIF*) and *betweenness centrality* in the #MeToo followed-following network (*BeFollow*) as representing the recognized social capital in the social activism field.

*Twitter Reach*. This variable represents how extensively a top influencer can reach through their posts using the following formula:

\[
\text{Twitter Reach} = \text{SUM} (\text{Post Impression}_1 + \text{Post Impression}_2 + \ldots + \text{Post Impression}_{i}).
\]

In this formula, \(i\) represents the number of posts with #MeToo hashtag of a top influencer; Post Impression equals to a top influencer’s followers plus followers of all users who haveretweeted the post according the Crimson Hexagon’s algorithm (Crimson Hexagon, 2019). In this sense, the variable *Twitter Reach* is a composite variable containing both followers and tweet frequency of the top influencers.

*BeInvolve*. The value of *betweenness centrality* of each top influencer in this 123*123 #MeToo involvement network (*BeInvolve*) was collected through UCINET. The value was
normalized as the percentage of the maximum possible betweenness relationships that an actor could have in this network by UCINET.

TopIF. This item was collected as the frequency of being a top influencer in the #MeToo movement from October 2017 to January 2018. I collected the data of the top 50 influencers of each month, therefore, the range of TopIF was 1 to 4.

BeFollow. I used UCINET to collect the value of betweenness centrality of each top influencer in this 123*123 #MeToo followed-following network (BeFollow). The value had been normalized following the same procedure as BeInvolve.

6.3 Descriptive Information

There were 89 individual accounts and 34 organizations in my sample. Of the former, 70% individuals were females and 30% were males. The majority of the influencers were in entertainment (25.2%) and journalism (29.3%). Those who worked in social activism (11.4%), politics or law (13.0%), and non-journalism publishing or academia (16.3%) took up almost the same percentage of the sample. Six Twitter handles were not applicable to classify their profession.

Table 11 shows the basic descriptive information of six variables: PreMC, TopIF, Tweet Reach, BeInvolve, BeFollow, and MTMC.

The media coverage of the top influencers before the #MeToo movement (PreMC) was highly skewed (skewness = 10.491). There were 20.2% of top influencers with no media coverage before the #MeToo movement starting date, including the “MeToo” phrase creator Tarana Burke. Media organizations themselves showed the highest media presence in the dataset, including the appearance of the organization names mentioned in the news articles on their own media outlets and citations from other media outlets’ news. Aside from media outlets, eight top
influencers’ names showed up in more than 10,000 news articles. Twenty-five of them were depicted in more than 1,000 but less than 10,000 articles. The majority of the top influencers (48.4%) were cited in less than 1,000 news articles from 10/15/2015 to 10/14/2017 before the #MeToo movement.

Table 11 *Descriptive Information of PreMC, TopIF, Tweet Reach (millions), Betweenness in the #MeToo Involvement Network, Betweenness in the #MeToo Followed-Following Network, and MTMC (N=123)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std</th>
<th>Skewness</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreMC</td>
<td>28,292</td>
<td>211,091.726</td>
<td>10.491</td>
<td>0</td>
<td>2,305,638</td>
</tr>
<tr>
<td>Tweet Reach</td>
<td>74.334</td>
<td>334.967</td>
<td>6.739</td>
<td>0.001</td>
<td>2,594.551</td>
</tr>
<tr>
<td>BeInvolve</td>
<td>.896</td>
<td>2.020</td>
<td>4.080</td>
<td>0</td>
<td>13.871</td>
</tr>
<tr>
<td>TopIF</td>
<td>1.290</td>
<td>.707</td>
<td>2.600</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>BeFollow</td>
<td>.819</td>
<td>1.486</td>
<td>2.207</td>
<td>0</td>
<td>10.337</td>
</tr>
<tr>
<td>MTMC</td>
<td>124</td>
<td>392.673</td>
<td>6.024</td>
<td>0</td>
<td>3474</td>
</tr>
</tbody>
</table>

*Note.* Data calculated by SPSS 24.

Four Twitter handles had been top influencers (*TopIF*) in each month; six of them had been top influencer for three times; 12 of them were top influencer twice; and 101 of them were top influencer only once.

The top influencers’ *Twitter reach* was highly skewed (skewness = 6.739). The maximum value was from the media outlet *New York Times* (@nytimes) of approximately 2.6 billion potential impressions on Twitter.

The *betweenness centrality* value of the #MeToo involvement network (*BeInvolve*, skewness = 4.080) and that of #MeToo followed-following network (*BeFollow*, skewness =
2.207) were also skewed. The minimum value of both betweenness centrality measurement was zero, and both the highest values were from the actor @Alyssa_Milano.

The media coverage of the top influencers during the #MeToo movement (MTMC) was also highly skewed (skewness = 6.024) with a considerable number of zeros and several outliers. On average, each top influencer was depicted in 124 news articles. However, almost 47.3% of the top influencers had not been covered by mass media regarding the topic #MeToo. The highest co-occurrence of a top influencer and the #MeToo movement in news articles came from the handle @Twitter, showing the substantial power of social media in disseminating #MeToo information.

6.4 External Factors Exploration

6.4.1 Chi-square analysis

To explore the effect of the three external factors, two Chi-square analyses were conducted through SPSS 24 to investigate if social field displayed associations with type or gender. Since all organizations were coded as un-classified in gender and these two variables had a considerable proportion of overlapping, I did not conduct Chi-square analysis on the relation of type and gender.

The Pearson Chi-square analysis for independence indicated significant associations between social field and type, $X^2 (1, 123) = 23.627, p < .001$, Cramer’s $V = .437$, indicating large effect size. As shown in Figure 12(a), activism and journalism fields showed more percentage of organizations than that of other fields. In this sense, social organizations in these two fields demonstrates impact on #MeToo information dissemination. Meanwhile, other social fields had way more individuals than organizations, particularly in the entertainment field.
Figure 12. The bar charts of the cross-tabulation results of type and social field (a) and gender and social field (b) among the top influencers of #MeToo, produced by SPSS 24. Social field: 1=Activism, 2=Entertainment, 3=Politics & Law, 4=Journalism, 5=Non-Journalism Publication & Academia, 6=Not Applicable.
No significant relation is found between social field and gender, $X^2 (1, 89) = 8.618, p = .125$. However, Figure 12(b) demonstrates that the extremely higher proportion of female celebrities acting as top influencers in the #MeToo conversation during the first three and a half months, particularly in the social activism and entertainment fields.

**6.4.2 Relational contingency table analysis**

I further delved into the external factors with an impact on relations between those 123 top influencers in the two networks (RQ3) based on randomization and permutation tests suggested by Borgatti, Everett and Johnson (2018). Relational contingency table analysis with 10,000 iteration was conducted using UCINET to explore the contribution of type, gender, and social field to the relation building of the top influencers in the #MeToo movement. Gender did not result in any significant outcome. Hence, Table 12 only presents the results of type and social field, including the chi-square value of the relational contingency table analysis and the ratio of observed/expected value of each cell.

As shown in Table 12, the category type was not significant regarding the impact on the #MeToo involvement network building ($X^2 = 25.59, p = .145$). Organizations received more activities in the #MeToo involvement network (both observed/expected ratio are greater than 1), meaning that the top influencers showed preferences to organizations when mentioning, replying to, or retweeting other handles, but this preference is not statistically significant. In addition, type was a significant contributor to followed-following connections ($X^2 = 99.25, p < .05$). The ratio of observed value by expected value of each cell showed that organizational handles’ in-group and out-group connections were both higher than the expected (ratio >1) while individual handles not. Exceptionally, organizational handles were more likely to be followed by other organizations (observed/expected ratio = 1.52).
Table 12 Observed/Expected Ratio of Relational Contingency Table Analysis of Type and Field in the #MeToo Involvement and Followed-Following Networks (N=123)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>X²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#MeToo Involve</td>
<td>A</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>.66</td>
</tr>
<tr>
<td>#MeToo Follow</td>
<td>A</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td><strong>1.16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Field</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>#MeToo Involve</td>
<td>1</td>
<td><strong>2.76</strong></td>
<td><strong>2.31</strong></td>
<td>.45</td>
<td><strong>2.00</strong></td>
<td>.67</td>
</tr>
<tr>
<td>2</td>
<td><strong>2.24</strong></td>
<td><strong>1.59</strong></td>
<td>.46</td>
<td><strong>1.09</strong></td>
<td>.76</td>
<td>.00</td>
</tr>
<tr>
<td>3</td>
<td>1.05</td>
<td><strong>1.35</strong></td>
<td><strong>2.69</strong></td>
<td>.91</td>
<td>.52</td>
<td><strong>.00</strong></td>
</tr>
<tr>
<td>4</td>
<td>.67</td>
<td>.47</td>
<td>.57</td>
<td>.49</td>
<td>.30</td>
<td><strong>.00</strong></td>
</tr>
<tr>
<td>5</td>
<td><strong>2.24</strong></td>
<td>1.72</td>
<td>.31</td>
<td><strong>1.61</strong></td>
<td>.41</td>
<td>.14</td>
</tr>
<tr>
<td>6</td>
<td>.75</td>
<td><strong>1.01</strong></td>
<td>.00</td>
<td>.57</td>
<td>.78</td>
<td><strong>.00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#MeToo Follow</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.00</td>
<td>1.41</td>
<td>.85</td>
<td>.69</td>
<td>.86</td>
<td>.65</td>
</tr>
<tr>
<td>2</td>
<td>1.78</td>
<td>1.71</td>
<td>.62</td>
<td>.94</td>
<td><strong>1.02</strong></td>
<td>.54</td>
</tr>
<tr>
<td>3</td>
<td>1.11</td>
<td>.83</td>
<td><strong>1.44</strong></td>
<td>.63</td>
<td>.62</td>
<td>.52</td>
</tr>
<tr>
<td>4</td>
<td><strong>1.81</strong></td>
<td><strong>1.32</strong></td>
<td><strong>1.34</strong></td>
<td><strong>1.18</strong></td>
<td>.64</td>
<td>.66</td>
</tr>
<tr>
<td>5</td>
<td>1.00</td>
<td>.86</td>
<td>.80</td>
<td>.72</td>
<td>.55</td>
<td>.32</td>
</tr>
<tr>
<td>6</td>
<td>.09</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td><strong>.00</strong></td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695.
* p < .05.
** p < .01.
*** p < .001.
Cell value is bold-highlighted if the ratio of observed/expected > 1.
A= Individual, B=Organizational.
a= Activism, 2=Entertainment, 3=Politics & Law, 4=Journalism, 5=Non-Journalism Publication & Academia, 6=Not Applicable.
Social field was presented as a contributor for both the followed-following network ($X^2 = 383.56, p < .001$) and the involvement network ($X^2 = 227.39, p < .05$). In the #MeToo follow network, four groups (activism, entertainment, politics, and journalism) showed a tendency to build up more in-group connections than the randomized expected value, indicating that the influencers of the same group were more likely to follow each other.

In the #MeToo involvement network, activism, entertainment, and politics groups showed higher tendency to mention, reply to, and retweet each other in the same group. Journalism did not show its tendency to develop in-group activities, which suggests journalists’ function of speaking out to the whole society, not just to the journalism group. Meanwhile, in the #MeToo involve network, the journalism group received more activities from the activism, entertainment, and non-journalism publication groups; in the #MeToo follow network, the journalism group was more likely to be followed by nodes from the activism, entertainment, and politics groups. Both results indicate that Twitter users still treat journalists and media outlets as an important channel for information distribution.

The activism group displayed their effort in building relationship in both two networks. In the #MeToo involve network, the activism group interacted more than expected with entertainment (2.31) and journalism (2.00) groups. In the #MeToo follow network, the activism group followed more nodes than expected of the entertainment (1.78), politics (1.11), and journalism (1.81) groups. Considering the examined network was created based on the discussions around a social activism topic #MeToo, it is reasonable to obtain the above results.

In addition, the ratio of observed/expected value of in-group relation building of social activism group was high in both networks (#MeToo Involve: 2.76; #MeToo Follow: 2.00). The entertainment group demonstrated the same pattern as the social activism group (#MeToo
These results indicate that nodes in the social activism and entertainment groups formed more connections than its expected and randomized value. In addition, the entertainment group influencers were followed more than expected only by two groups (activism and non-journalism publication) but were interacted more than expected across almost all groups except for the journalism group. This result suggests that although entertainment influencers were not considered as consistent information resource, social actors on Twitter had noticed and utilized entertainment influencers’ names to increase the information diffusion regarding the #MeToo topic. Moreover, the social activism group and the entertainment group showed higher observed value in the out-group relation with each other, indicating their strong collaborations in the #MeToo movement (#MeToo Involve: 2.24, 2.31; #MeToo Follow: 1.78, 1.41). These results illustrate the solidarity in and between the social activism group and the entertainment group.

6.5 Hypotheses Testing

*Networked celebrity advocacy* has been illustrated as an overlapping area of celebrity communities and the #MeToo topic conversation community in this project (see Figure 1). Based on my theoretical model on celebrity advocacy (Figure 3), I have raised six hypotheses regarding associations between celebrity capital and social capital in networked celebrity advocacy (Figure 5). In this dissertation, I tested the six hypotheses from a relational perspective between matrices (Figure 13) and a node attribute perspective between vectors (Figure 14).
Figure 13. An operationalized model on the associations between networks of celebrity capital and social capital in networked celebrity advocacy. Arrows are based on time difference.

Figure 13 shows an operationalized model of networked celebrity advocacy with variables as matrices between the top influencers, indicating that this operationalized model hypothesized the associations between various ties of the top influencers. The relation in the #MeToo involvement matrix was the activity of mentioning, replying to, and retweeting. The tie in the #MeToo followed-following network was the relation of being followed.

I used UCINET to create two media coverage networks regarding the difference between any two nodes based on two celebrity capital variables (PreMC and MTMC). I transformed the top influencers’ media coverage data into two 123*123 adjacency matrices with the cell value as the row node’s PreMC or MTMC value minus that of the column node. This approach is suggested by Borgatti et al. (2018) and the resulting matrixes showed the difference between any two nodes regarding their media coverage before the #MeToo movement and their #MeToo movement media coverage from 10/15/2017 to 01/31/2018. Following the same procedure, I transformed the variable Twitter Reach into a 123*123 matrix, representing the difference of potential impressions between two nodes, and the variable TopIF into the matrix representing the
difference of the frequency of becoming a top influencer. Therefore, these matrices were all focused on the difference between nodes.

In this way, I prepared four networks of the top 123 influencers to investigate the hypotheses operationalized in Figure 13. The invested celebrity capital in networked celebrity advocacy was measured as the network of difference in the media coverage before the #MeToo movement (PreMC Difference). The recognized celebrity capital in the social activism field was evaluated as the network of difference in the media coverage during the first three and a half months in the #MeToo movement (MTMC Difference). The invested social capital in the networked celebrity advocacy was measured as two networks: the network of difference of tweet reach of each influencer during the time frame (Tweet Reach Difference), and the #MeToo involvement network defined by the activities of mentioning, replying to, and retweeting (#MeToo Involve). The recognized social capital was investigated as the network of difference in the frequency of becoming a top influencer (TopIF Difference), and the network of the followed-following associations among the top influencers (#MeToo Follow). All variables were 123*123 adjacency matrixes representing one kind of ties between two nodes respectively. The #MeToo Follow network was binary and directed. All other networks were valued and directed.

6.5.1 Correlation and regression analysis between networks

To test the proposed model regarding the relationships between celebrity and social capital, I began with QAP-MP correlations among six variables with 5,000 permutations. The result is showed in Table 13.
Table 13 QAP-MAP Correlation Analysis Among the Networks of the Top Influencers in the #MeToo conversations (N=123)

<table>
<thead>
<tr>
<th>Networks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 PreMC Difference</td>
<td>.188*</td>
<td>-.009</td>
<td>.019</td>
<td>.070*</td>
<td>.840***</td>
<td></td>
</tr>
<tr>
<td>2 Twitter Reach Difference</td>
<td>-.068**</td>
<td>.457***</td>
<td>.124***</td>
<td>.486*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 #MeToo Involve</td>
<td>.063***</td>
<td>.124***</td>
<td>-.064**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 TopIF Difference</td>
<td>.036</td>
<td>.276*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 #MeToo Follow</td>
<td>.121***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 MTMC Difference</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Data calculated by UCINET 6.695.
*, p < .05.
**, p < .01.
***, p < .001.

H1 tested the association between the investment in celebrity capital (PreMC difference) and the recognized celebrity capital (MTMC difference). As Table 13 demonstrates, the invested celebrity capital PreMC Difference was strongly correlated with the recognized celebrity capital MTMC Difference (r = .840, p < .001). The higher value of difference of media coverage before the #MeToo movement, the higher value of the difference of media coverage during the first three and a half months in the #MeToo movement. H1 was supported in relation to the difference of celebrity capital among the top influencers.

H2 tested if there is a relation between the investment of celebrity capital and the recognized social capital. PreMC Difference was associated with the #MeToo followed-following network (#MeToo Follow), but extremely weak (r = .07, p < .05). The correlation indicates that the larger difference of the media coverage before the #MeToo movement (A minus B) might indicate that two nodes were more likely to construct a followed relation (A was
followed by B). However, the r coefficient size was too weak to ensure the existence of the association. Furthermore, PreMC Difference was not significantly associated with TopIF difference. Therefore, H2 was not supported.

H3 investigated if the investment in social capital is correlated with the recognized celebrity capital. MTMC Difference showed a positive correlation with Tweet Reach Difference (r = .486, p < .05). This result indicated that two nodes’ difference in their twitter potential impression was positively correlated with their difference in the media coverage during the first three and a half months of the #MeToo movement. MTMC Difference was negatively related to #MeToo Involve (r = -.064, p < .05). If A mentioned, replied to, and retweeted B more frequently, then the difference in #MeToo media coverage of A and B would shrink. However, the r coefficient was too small to confirm this association. Therefore, H3 was partly supported.

H4 tested the relations between the investment of social capital and its social capital returns. One recognized social capital, #MeToo Follow, was correlated with two forms of invested social capital, Tweet Reach Difference (r = .124, p < .001) and #MeToo Involve (r = .124, p < .001). The difference of two nodes’ potential impressions on Twitter (A minus B) was higher, then the possibility of that A was followed by B was higher. The more occurrence of A mentioning, replying to, or retweeting B, the higher the chance of that A was followed by B. Both coefficients were quite small. Another recognized social capital, TopIF Difference was moderately correlated with Tweet Reach Difference (r = .457, p < .001), indicating that the bigger difference in Tweet Reach between A and B, the bigger difference in their frequency of becoming a top influencer. TopIF difference was weakly and negatively correlated with #MeToo Involve (r = -.063, p < .001). In this sense, the more occurrence of A mentioning, replying to, or retweeting B, the bigger difference in their frequency difference of becoming a top influencer.
Still, this correlation coefficient was too small to ensure the relation. Therefore, H4 was partly supported.

H5 tested the association between investments of celebrity and social capital. PreMC Difference was positively associated with the mobilized social capital Tweet Reach Difference (r=.188, p < .05), but not significantly associated with #MeToo Involve. These results indicated that the more difference in the media coverage before the #MeToo movement between two nodes, the more difference in the potential impressions that these two nodes could get during the time frame. However, the PreMC difference did not suggest the tie strength between two nodes. In this sense, H5 was partly supported.

Finally, H6 tested the association between the recognized social capital and the recognized celebrity capital. MTMC Difference was positively correlated with #MeToo Follow (r = .121, p < .001) and TopIF Difference (r = .276, p < .05). Both strength of associations was small. The probability that A was followed by B and the frequency difference of becoming a top influencer (A minus B) was correlated with the difference of their media coverage (A minus B) in the #MeToo movement during the time frame. Therefore, H6 was supported.

**6.5.2 Regression analysis between networks**

The QAP-MP correlation analysis explored the connections between celebrity and social capital in an undirected way. Furthermore, due to the chronological order, the operationalized model in Figure 13 also suggested that the invested celebrity capital was a predictor of the recognized celebrity capital (H1), and of the recognized social capital (H2). As hypothesized, the invested social capital was a predictor of the recognized celebrity capital (H3), and of the recognized social capital (H4). Thus, I conducted QAP multiple regression with Double Dekker
Semi-Partialling method from a viewpoint of network analysis. The results are demonstrated in Table 14.

Table 14 Multiple Regression QAP via Double Dekker Semi-Partialling on the TopIF Difference, the #MeToo Followed-Following Network, and #MeToo Media Coverage According to the Chronological Order (N=123)

<table>
<thead>
<tr>
<th>Networks</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TopIF Difference</td>
<td>#MeToo Follow</td>
<td>MTMC Difference</td>
</tr>
<tr>
<td>PreMC Difference</td>
<td>Beta  .069</td>
<td>Beta  .047</td>
<td>Beta  .775</td>
</tr>
<tr>
<td></td>
<td>Sig.  .022</td>
<td>Sig.  .024</td>
<td>Sig.  .000</td>
</tr>
<tr>
<td>Tweet Reach Difference</td>
<td>Beta  .468</td>
<td>Beta  .124</td>
<td>Beta  .338</td>
</tr>
<tr>
<td></td>
<td>Sig.  .001</td>
<td>Sig.  .005</td>
<td>Sig.  .000</td>
</tr>
<tr>
<td>#MeToo Involve</td>
<td>Beta  -.032</td>
<td>Beta  .137</td>
<td>Beta  -.035</td>
</tr>
<tr>
<td></td>
<td>Sig.  .016</td>
<td>Sig.  .005</td>
<td>Sig.  .001</td>
</tr>
<tr>
<td>Intercept</td>
<td>Beta  .000</td>
<td>Beta  .127</td>
<td>Beta  .000</td>
</tr>
<tr>
<td></td>
<td>Sig.  .000</td>
<td>Sig.  .000</td>
<td>Sig.  .000</td>
</tr>
<tr>
<td>R-Square</td>
<td>Beta  .215</td>
<td>Beta  .036</td>
<td>Beta  .818</td>
</tr>
<tr>
<td></td>
<td>Sig.  .001</td>
<td>Sig.  .001</td>
<td>Sig.  .001</td>
</tr>
</tbody>
</table>


*, p < .05.
**, p < .01.
***, p < .001.

I first tested the predicating effect of the invested celebrity capital and social capital on the recognized social capital. Model 1 of TopIF Difference achieved a good model fit ($r^2 = .215$, p < .01). PreMC Difference, Tweet Reach Difference and #MeToo Involve network explained the 21.5% variance of TopIF Difference. Among these predicting variables, the higher Tweet Reach Difference was, the higher TopIF Difference was (beta = .468, p < .001). If A was more active
than B in the #MeToo Involve network, the gap of the frequency of becoming a top influencer between A and B was decreasing (beta = -.032, p < .01).

Model 2 in Table 14 showed a significant model fit (r² = .036, p < .01). This model provided evidence for the contribution of the invested celebrity capital to the composition of the #MeToo followed-following network (beta = .047, p<.05). The coefficient indicated that if the difference of two top influencers’ media coverage before #MeToo increased one unit, the possibility of a visible connection between two nodes would increase by 4.7%. According to the contribution of the invested celebrity capital in Models 1&2, H2 was partly supported.

Model 2 also suggested that two forms of the invested social capital showed significant associations with the #MeToo followed-following network. The #MeToo involvement network predicted the connections in the followed-following network (beta = .137, p < .01), indicating that the one unit increase of the tie strength between two nodes in the #MeToo involvement network (A sent information to B) predicted 13.7% increase of the possibility that A was followed by B. The accruing difference of tweets potential impressions across the two nodes (A minus B) predicted the chances of a connection as A was followed by B (beta = .124, p<.01). Therefore, H4 was supported. However, similar to the correlation analysis results, all the regression coefficients were small.

Model 3 of the recognized celebrity capital (MTMC Difference) also showed a good fit (r² = .818, p < .01). The invested celebrity capital and social capital explained the 81.7% variance of the recognized celebrity capital. The invested celebrity capital in the networked celebrity advocacy (PreMC Difference) showed the strongest predating power on the recognized celebrity capital in the social activism field (beta = .775, p < .001). H1 was supported. The result evidenced the importance of celebrity capital in the field migration (Driessens, 2013a).
The variables of social capital in *networked celebrity advocacy* also showed significant associations with the recognized celebrity capital through #MeToo Involve (beta = -.035, p < .01) and Tweet Reach Difference (beta = .338, p < .001). More activities happened between A and B in the #MeToo involvement network or smaller difference of tweets reach of A and B, then less gap of media coverage difference of A and B regarding #MeToo related media coverage. Thus, H3 was supported.

In this sense, these results supported my theoretical model of the *networked celebrity advocacy* focusing on the field migration of both social capital and celebrity capital from a relational perspective.

### 6.5.3 Correlation analysis between node attributes

The above analysis tested the hypotheses from a relational viewpoint, which means how the connections of two top influencers in one situation would influence those in another. In the following section, I conducted statistical analyses from a node-attribute perspective to investigate my operationalized model in Figure 14.

![Figure 14](image)

*Figure 14.* An operationalized model on the associations between celebrity capital and social capital in *networked celebrity advocacy* from a vector perspective. Arrows are based on time difference.
From a node-attribute perspective, nodes were the 123 top influencers, and nodes attributes were four capital forms. The invested celebrity capital in *networked celebrity advocacy* was represented as the media coverage of each top influencer before the #MeToo movement (*PreMC*). The invested social capital in *networked celebrity advocacy* included two parts: the accessed social capital represented as the potential impressions accumulated through top influencers’ posts regarding #MeToo (*Tweet Reach*), and the *betweenness centrality* in the #MeToo involvement network (*BeInvolve*). The recognized celebrity capital in the social activism field was presented as the media coverage of each top influencer during the #MeToo movement in the first three and a half months (*MTMC*). The recognized social capital in the social activism field was presented as two variables, the frequency of becoming a top influencer in the Twitter #MeToo conversations (*TopIF*) and the *betweenness centrality* of each node in the #MeToo followed-following network (*BeFollow*).

To test my hypotheses regarding the associations between celebrity capital and social capital, I conducted correlational analysis for all major variables using Spearman's rho through SPSS. I chose Spearman's rho because most variables are non-symmetric with high skewness.

As displayed in Table 15, the invested celebrity capital (*PreMC*) in *networked celebrity advocacy*, which was accumulated in the previous social field, was positively correlated with recognized celebrity capital in the social activism field (*MTMC*) (rho = .743, p < .01). Therefore, H1 was supported.

The invested celebrity capital (*PreMC*) was also correlated with the recognized social capital in social activism field (*BeFollow*) (rho = .469, p < .01). The result indicates that the more news articles that a top influencer was mentioned by mass media before the #MeToo movement, the more central and important the top influencer’s position was in the followed-
following network among the #MeToo top influencers. However, PreMC was not correlated with another recognized social capital (TopIF), indicating the top influencers’ previous media coverage showed no relation to the frequency of becoming a top influencer and controlling a substantial amount of information traffic. H2 was partly supported.

Table 15 Spearman’s Rho Analysis of PreMC, MTMC, TweetF, TopIF, and Betweenness among the Top Influencers of #MeToo (N=123)

<table>
<thead>
<tr>
<th>Variables</th>
<th>PreMC</th>
<th>Tweet Reach</th>
<th>BeInvolve</th>
<th>TopIF</th>
<th>BeFollow</th>
<th>MTMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreMC</td>
<td>1</td>
<td>.610**</td>
<td>.217*</td>
<td>.167</td>
<td>.469**</td>
<td>.743**</td>
</tr>
<tr>
<td>Tweet Reach</td>
<td>1</td>
<td>.360**</td>
<td>.392**</td>
<td>.437**</td>
<td>.401**</td>
<td></td>
</tr>
<tr>
<td>BeInvolve</td>
<td>1</td>
<td>.317**</td>
<td>.423**</td>
<td>.260**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TopIF</td>
<td>1</td>
<td>.102</td>
<td></td>
<td>.272**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BeFollow</td>
<td></td>
<td></td>
<td></td>
<td>.336**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTMC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Note. Data calculated by SPSS 24.

* p < .05.
** p < .01.
*** p < .001.

The recognized celebrity capital in the social activism field (MTMC) were positively correlated with two invested social capital in the networked celebrity advocacy, including Tweet Reach (rho = .401, p < .01) and BeInvolve (rho = .260, p < .01). The results suggest that the higher potential impression of a top influencer’s #MeToo posts indicated the more times that a Twitter handle was mentioned by mass media regarding the #MeToo coverage. In addition, the centrality of a top influencer in the #MeToo involvement network was also an indicator of this top influencer’ media coverage during the #MeToo movement. H3 was supported.
In terms of the relationship between the invested and recognized social capital, *Tweet Reach* was positively related to *BeFollow* (rho = .437, p<.01) and *TopIF* (rho = .392, p<.01); *BeInvolve* was also positively correlated with *BeFollow* (rho = .423, p<.01) and *TopIF* (rho = .317, p<.01). The results indicate that the more potential impressions of a Twitter handle produced in #MeToo conversations or the more central a top influencer was in the #MeToo involvement network demonstrated the more central and important position of this node occupied in the followed-following network and a higher frequency of becoming a top influencer. H4 was supported.

*PreMC* was positively associated with *Tweet Reach* (rho = .610, p<.01) and *BeInvolve* (rho = .217, p < .05). In networked celebrity advocacy, the invested celebrity capital was significantly related to the accessibility of the top influencers’ posts and to the mobilized social capital in the #MeToo conversation during the time frame. In this way, H5 was supported.

The results showed that one dependent variable, a top influencer’s media coverage associated with the #MeToo movement (*MTMC*), was correlated with all independent variables. A top influencer’s structural importance in the followed-following network (*BeFollow*) showed a positive correlation with their media coverage regarding #MeToo (*MTMC*) (rho = .336, p < .001). Another recognized social capital (*TopIF*) was also significantly associated with *MTMC* (rho = .272, p< .01). In this sense, H6 was supported.

### 6.5.4 Regression analysis between nodes attributes

To further understand the distinct contribution of the celebrity capital and social capital to the possible media coverage in terms of the #MeToo movement, I built a hierarchical regression model to test the association of celebrity capital and social capital as Figure 14 hypothesized. The dependent variable *MTMC* has almost the half zeros. Therefore, I chose to recode *MTMC* as
a dichotomous variable $DyadMTMC$ ($0 =$ not covered by mass media, $1 =$ covered by mass media) based on Fletcher, MacKenzie, and Villouta (2005)’s suggestion. In this way, it is observed that 68 top influencers were mentioned in the news articles under the topic of the #MeToo movement. A hierarchical logistic regression was performed to assess four blocks of independent variables to predict the dichotomy outcome variable according to the time difference. The result is shown in Table 16.

Block 1 assessed the impact of the social field of the top influencers. Results showed that the model achieved a good fit ($X^2 = 8.865, \text{df} = 2, p <.05$). In the final model with seven predictors, the odds ratio of top influencers in the entertainment field (odds ratio = 3.877, $p <.05$) was significant, meaning that the top influencers in the entertainment field were almost four times more likely to be covered by mass media regarding the topic #MeToo than those who were not entertainment celebrities. Whether or not the influencer identified as an activist was not contributing to the model. The first block explained between 7% (Cox and Snell R square) and 9.3% (Nagelkerke R square) of the variance in the dependent variable.

The second block examined the effect of the invested social capital on the chances of being covered by mass media for top influencers. The results showed that the model has a good fit ($X^2 = 27.769, \text{df} = 4, p < .001$). However, neither tweet reach nor betweenness centrality of the #MeToo involve network were significantly contributing to the final model. The second block explained between 20.2% (Cox and Snell R square) and 27% (Nagelkerke R square) of the variance in the dependent variable.
Table 16 *Hierarchical Logistic Regression Predicting Likelihood of Being Covered in Mass Media (N=123).*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig.</th>
<th>Odds Ratio</th>
<th>Lower</th>
<th>Upper</th>
<th>X2</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Block 1</strong></td>
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<tr>
<td>Activism</td>
<td>.148</td>
<td>.568</td>
<td>.068</td>
<td>.795</td>
<td>1.159</td>
<td>.381</td>
<td>3.529</td>
<td></td>
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<td><strong>Block 2</strong></td>
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<tr>
<td>Twitter Reach</td>
<td>.000</td>
<td>.000</td>
<td>.805</td>
<td>.369</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>BeInvolve</td>
<td>.103</td>
<td>.155</td>
<td>.440</td>
<td>.507</td>
<td>1.108</td>
<td>.818</td>
<td>1.502</td>
<td>27.769</td>
<td>4</td>
<td>.000</td>
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<tr>
<td><strong>Block 3</strong></td>
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<td></td>
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<tr>
<td>TopIF</td>
<td>-.245</td>
<td>.545</td>
<td>.202</td>
<td>.653</td>
<td>.783</td>
<td>.269</td>
<td>2.276</td>
<td></td>
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<tr>
<td>BeFollow</td>
<td>.832</td>
<td>.393</td>
<td>4.481</td>
<td>.034</td>
<td>2.299</td>
<td>1.064</td>
<td>4.968</td>
<td>42.914</td>
<td>6</td>
<td>.000</td>
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<tr>
<td><strong>Block 4</strong></td>
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<tr>
<td>PreMC</td>
<td>.001</td>
<td>.001</td>
<td>5.565</td>
<td>.018</td>
<td>1.001</td>
<td>1.000</td>
<td>1.003</td>
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<tr>
<td>Constant</td>
<td>-1.401</td>
<td>.700</td>
<td>4.011</td>
<td>.045</td>
<td>.246</td>
<td></td>
<td></td>
<td>71.994</td>
<td>7</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Note.* Block 1: Social field; Activism is a binary variable: 1=in the social activism, 0=not in the social activism field; Entertainment is a binary variable: 1=in the entertainment field, 0=not in the entertainment field.
Block 2: Invested social capital;
Block 3: Recognized social capital;
Block 4: Invested celebrity capital.

The third block investigated the effect of recognized social capital and displayed a good fit ($X^2 = 42.914$, df = 6, $p < .001$). In the final model, only the *betweenness centrality* of the #MeToo followed-following network significantly predicted the odds of being covered by mass
media (Odds ratio = 2.299, p < .05). The result indicates that with one unit increase of the betweenness centrality, the likelihood of being covered by mass media in the #MeToo news increases 2.299 times. The second block explained between 29.5% (Cox and Snell R square) and 39.4% (Nagelkerke R square) of the variance in the dependent variable.

The final block added the invested celebrity capital as a predictor and the model also achieves a good fit ($X^2 = 71.994$, df = 7, p < .001). In the final model, the previous media coverage of the top influencers significantly predicated their media coverage in the #MeToo movement. The odds ratio is 1.001, meaning that one unit of increase in the previous media coverage resulted in 0.1% percent increase in likelihood of being covered by mass media in terms of the #MeToo movement. The final model correctly classified 79.7% cases. The model explained between 44.3% (Cox and Snell R square) and 59.3% (Nagelkerke R square) of the variance in the binary possibility of top influencers being covered by mass media regarding the #MeToo movement.

6.6 Summary

Phase Three utilizes statistical techniques to examine if the matrices or the vectors of the sampling 123 influencers represented the population of top influencers in the whole #MeToo movement and networked celebrity advocacy in general.

I first investigated the external factors that influenced the networked celebrity advocacy, and then tested the associations between celebrity capital and social capital hypothesized in my field migration model. Among the three external factors, the variable social field shows a significant association with type. The results of the relational contingency table analysis suggest social field was a strong external factor that influenced the in-group and between-group
associations among the top influencers in the #MeToo networks during the first three and a half months.

In addition, I conducted correlation and regression analysis from the relational perspective to examine the influence of one kind of connections had an impact on another between two top influencers. I also applied correlation and regression analysis to examine the associations between the nodes’ attributes. In this way, Phase Three has offered empirical evidence to support the proposed theoretical model. For each entertainment celebrity involved in the #MeToo advocacy, their recognized celebrity capital in the entertainment field has transferred to *networked celebrity advocacy* of #MeToo and ultimately influenced the recognized celebrity capital in the social activism field. Through the investment in social capital, the top influencers have also transferred their social capital in *networked celebrity advocacy* and ultimately influenced their social capital in the social activism field.
Chapter VII: Discussion and Conclusion

Celebrity advocacy scholars have questioned whether the networked social media provides a new path for social activists to employ celebrity advocacy (e.g., Bennett, 2014; Ellcessor, 2018; Thrall et al., 2008; Tufekci, 2013). This dissertation has introduced the concept of networked celebrity advocacy to highlight what the connectedness of networked social media brings to the practice of celebrity advocacy. This connectivity has renewed the process of celebrity status attainment and thus transformed celebrity advocacy. The conventional path of celebrity advocacy is extended to a new route of networked social media. On this new route, influencers, who are not limited to top stars, can transfer their symbolic power into the social activism field. The concept of networked celebrity advocacy demonstrates how this symbolic power can be employed through the connectedness of networked social media both theoretically and methodologically.

Theoretically, this dissertation has introduced a model of capital performance to explain the underlying mechanism of networked celebrity advocacy, highlighting the capability of celebrity capital and social capital transferring from one field to another. Although celebrity capital has been articulated in several case studies of celebrity politics (e.g., Arthurs & Shaw, 2016; Farrell, 2012), social capital has been a critical element in social movements research (Krinsky & Crossley, 2014) and online celebrity activism scholarship (e.g., Tufekci, 2013), no research has been done on celebrity advocacy through the combined power of celebrity capital and social capital. This dissertation suggests that the attention acquisition of social activism participants is determined not just by their previously recognized symbolic power, but also by the active engagement with the access and mobilization of their social relations.
Methodologically, although social network analysis has been popular in social movement studies (Diani, 2003; Krinsky & Crossley, 2014), very little research has used this approach to study celebrity advocacy. Employing social network analysis, this dissertation suggests that the connectedness of networked celebrity advocacy demonstrates a pivotal role in gatekeeping information flow and attracting media and public attention. In other words, this dissertation highlights the significance of social capital in the field migration of networked celebrity advocacy through this methodological perspective.

In this chapter, I begin with the evaluation of the study’s limitations. Next, I review the theoretical model of networked celebrity advocacy and the applied social network analysis approach. Then I summarize the key findings. Afterwards, I evaluate my results based on the previous research of celebrity advocacy and the insights that my theoretical model brings. The future possibilities of applying the theoretical model are then addressed, followed by a concluding note.

7.1 Limitations

This dissertation has limitations in relation to research design, data collection, and data analysis. The data collection was firstly restricted regarding the time and scope of the #MeToo movement, and only focused on data from the first three and a half months of this movement. Scholars have suggested that the advancement of social movements such as #MeToo illustrate crest and trough because of the interventions from various social groups of interest (Anderson & Toor, 2018; Earle, 2019). Pew Research Center’s report shows that the Twitter #MeToo conversations showed three peaks from 10/15/2017 to 01/31/2018: Oct. 16-21, 2017 because Alyssa Milano posted her “Me Too” tweet and Harvey Weinstein resigned from the board of this entertainment company; Dec. 6-13, 2017 because Time magazine named #MeToo activists as
persons of the year; and Jan. 8-13, 2018 because celebrities like Oprah Winfrey advocated for #MeToo in the 75th Golden Globes Awards (Anderson & Toor, 2018). There were other similar peaks in the first year of the #MeToo movement but with less volume of tweets than these time periods (Anderson & Toor, 2018). In this sense, the first three and a half months might represent the most important period of the #MeToo movement. Meanwhile, it should be taken into consideration that the dissertation’s time and scope were restricted when analyzing results and making inferences based on the sampling data I collected through Crimson Hexagon.

In addition, this project was restricted to the English-language. However, the #MeToo movement has been a global phenomenon. More than 85 countries had joined the movement with their own language and their distinct characteristics of fights against sexual harassment and assault. The networked social media have global users and online social movements have the chance of going beyond national borders. With this restriction in mind, it is also worth noting that when Anderson and Toor (2018) examined the five high-volume peaks in the #MeToo conversations, they found that over 70% of #MeToo tweets were written in English. In this sense, the English-language dataset in this dissertation can represent a majority part of tweets, but it is clearly limited.

Thirdly, the dissertation used Twitter as the only social media platform to investigate the function of networked celebrity advocacy. However, many online social movements consist of cross-platform conversations. For example, entertainment celebrities might select Instagram, Facebook, Snapchat, or Twitter together as their advocating platform to advocate #MeToo. Twitter conversations are not representative of the public in the US since only 22% of the American population were using Twitter in 2017 (Pew Research Center, 2020). Still, the U.S. adults’ social media use has been increasing from 2005 to 2019 and reached 72% of the whole
population (Pew Research Center, 2020). Consequently, when analyzing the Twitter #MeToo conversations in this dissertation, it should be taken into account that celebrity advocacy also occurred on other social media platforms.

Moreover, this dissertation concentrates on networked celebrity advocacy, which limits to the influence of celebrity status online. The celebrities’ involvement in social movements has not been confined to online environments. Social capital’s online and offline applications regarding the social networking sites might complement each other (Steinfield et al., 2012). Celebrity capital, the repeated media occurrence, can be accumulated through both offline and online versions. Therefore, this dissertation takes into consideration that celebrity appeal in offline events can instigate online response even without the celebrity’s direct voice. Hence, the dissertation includes celebrity accounts @oprah and @kesharose into analysis because these two entertainment celebrities’ offline performance has influenced the online conversations and they became top influencers of January #MeToo conversations.

7.2 The Model of Networked Celebrity Advocacy

With the acknowledgement of these limitations, this dissertation investigates the function of networked celebrity advocacy through a special case: the #MeToo movement, which can be used to demonstrate the concept’s analytical power in other online social movements. Different from previous research on celebrity advocacy from a networked perspective, this dissertation provides a theoretical model of capital performance in field migration to understand the underlying systemic mechanism of networked celebrity advocacy. This dissertation applies the model to understand celebrity appeal in the Twitter #MeToo movement. Indeed, it is theoretically possible to employ this model for other projects on celebrity advocacy in the networked media and help understand the pervasive celebrity culture in contemporary societies.
Through this analytical model, the project identifies the importance of celebrity capital and social capital in field migration, and in this way, provides a description of the alternative path of information flow from social movements organizers to celebrities, then to media outlets and the public on social media. The analysis of capital performance also offers suggestions for social movement organizations about the legitimacy of utilizing celebrities in social causes advocacy. The prominent role of celebrity capital and social capital in networked celebrity advocacy calls attention for social movement organizers to the questions of how to select appropriate star images and how to strengthen the relationship building on social media.

This dissertation utilizes social network analysis as the primary method to investigate relations inside the networked celebrity advocacy of the #MeToo movement on Twitter. The selection of the methodology seeks to fill in the gap of scant detailed social network analysis in previous research on celebrity advocacy. As delineated in the literature review in Chapter II, although social network analysis has been widely accepted in research on social movements as both a metaphor or an analytical tool (Krinsky & Crossley, 2014), this method has not been comprehensively explored in celebrity advocacy.

Under my theoretical framework of considering networked celebrity advocacy as the mobilization of celebrity capital and social capital, social network analysis is suitable for this project to investigate the migration of social capital through two #MeToo related networks: the #MeToo involvement network and the #MeToo followed-following network. It also provides an insightful lens to examine the relationships between celebrity capital and social capital and to research the associations from both a vector and a matrices analysis.

Concerning celebrity capital, this dissertation follows the calculation of star power as mass media citations (Thrall et al., 2008). Moreover, this dissertation relates star power to
networked positions on social media and tested the relations under the framework of field migration. In this way, this dissertation provides new insights on star power in a social media path as suggested by Thrall et al. (2008).

In the following sections, I first summarize the findings of this dissertation and then discuss these findings in two foci that networked social media bring into celebrity advocacy: 1) attention acquisition and 2) connectivity and relationship-building.

7.3 Summary of Findings

This dissertation’s overarching research question is to explore how the networked celebrity advocacy function in the social movements like #MeToo. Three sub-research questions have been examined and six hypotheses have been tested. In a summary, the data in the three phases of this study demonstrate the following patterns.

Regarding network composition of the two researched networks (RQ1), the data suggest: among the top influencers in the Twitter #MeToo conversations, 1) entertainment celebrities and social activists tightly collaborated with each other and 2) the social activist Tarana Burke’s personal community is more likely to be cohesive, but the entertainment celebrity Alyssa Milano’s personal community is more suitable for information diffusion.

In terms of networked positions of the top influencers (RQ2), the data indicate: among the top influencers in the Twitter #MeToo conversations, 1) Tarana Burke and several entertainment celebrities took a dominant role in the Twitter conversations; however, Tarana Burke did not transfer this power to the long-term followed-following relationships; 2) compared with Tarana Burke, Alyssa Milano occupied a more powerful broker role between the top influencers from various social fields; and 3) a top influencer, who is more likely to be mentioned in other influencers’ posts, is more likely to be followed by other influencers.
In terms of the external factors (RQ3), the data suggest: among the top influencers in the Twitter #MeToo conversations, 1) organizational influencers are more likely to mention, retweet, and reply to other organizations; 2) social activists showed higher authority in the conversations but this authority does not lead to a higher possibility of being followed by other top influencers; and 3) influencers from the journalism field are more likely to be interacted with and followed by influencers from other social fields.

Regarding the associations between celebrity and social capital (Hypotheses 1-6), from a relational perspective, the data indicate: between any two influencers A and B in topic communities of certain social movements on networked social media, 1) A becomes a top influencer more frequently than B, if A’s posts reach a broader social media audience than B’s; 2) A is more likely to be followed by B, if A’s posts reach a broader social media audience than B’s, or if A is more interactive than B in the topic community; and 3) A has more media citations regarding certain social movement topics, if A has more media citations before than B, or if A’s posts reach broader social media audience than B’s.

In addition, from a vector perspective, the data demonstrate: among the influencers in topic communities of certain social movements on networked social media, 1) entertainment influencers are more likely to be cited in the news coverage of social movements than other influencers; 2) if a top influencer has more previous media citations, they are more likely to be cited in the news coverage of these social movements; and 3) if top influencers are more important in their structural position regarding the followed-following relationship in topic communities, they are more likely to be cited in the news coverage of the social movements.

The following sections discuss two dimensions of analyzing networked celebrity advocacy: statistical analysis offers empirical evidence for applying the field migration of
celebrity and social capital to other social movements whereas the social network analysis approach provides interpretive evidence for connectivity embedded in the #MeToo movement.

7.4 Attention Acquisition

Social activists have employed celebrity advocacy as a conventional strategy to amplify the influence of social movements (Brockington & Henson, 2015; Duvall & Heckemeyer, 2018; Meyer & Gamson, 1995; Thrall et al., 2008). Although activists have more expertise in advocating and explicating social causes than celebrities, celebrities can attract more media and public attention than social activists in the mass media era (Meyer & Gamson, 1995). The asymmetric relations between social activists and mass media have justified the legitimacy to employ celebrities, especially pop stars, to promote their social activism campaign (W. A. Gamson & Modigliani, 1989; W. A. Gamson & Wolfsfeld, 1993; Meyer & Gamson, 1995). Attention in contemporary societies is a rare resource for competing (Webster, 2018). In this sense, social activists need celebrities to score a success.

The networked social media provide both challenges and benefits for social activists to obtain the attention from a mass fragmented audience (Webster, 2018; Zhang et al., 2018). The advantage of the networked social media is to provide a new path for social activists to circumvent mass media gatekeepers and get public attention. Its disadvantage lies in the increasing rareness of public attention because of the information overload in the internet age.

This dissertation has introduced the concept of networked celebrity advocacy to examine celebrities’ symbolic power and networked social media’s connectivity on networked social media to enlarge the impact of social causes. Based on theories of social capital and celebrity capital (Bourdieu, 1984, 1986; Bourdieu & Wacquant, 2013; Driessens, 2013a, 2013b; Lin, 1999a), the results of this dissertation find that famous people’s symbolic power in one social
field can transfer into the social activism field through investment in their celebrity capital and social capital. The dissertation has focused on the connectivity in networked celebrity advocacy by the way of studying celebrities’ social capital transformation.

The results affirm the existence of a new path of celebrity advocacy on networked social media. The results also suggest that not just entertainment or political celebrities can practice their symbolic power, but those who obtain celebrity status online (not from legacy media), such as journalists, writers, scholars, or activists can also become influencers in social media conversations and attract media and public attention. Hence, the concept of networked celebrity advocacy is not only capable of being applied to the #MeToo movement as in this dissertation, but also to other online social activism campaigns, such as #TimesUp or #BlackLivesMatter.

7.4.1 Star power through a conventional path

A conventional model of celebrity advocacy assumes that celebrity status can successfully attract media and public attention to social causes (Duvall & Heckemeyer, 2018; Meyer & Gamson, 1995). This assumption is mostly taken for granted and only very few projects are devoted to providing statistical evidence (Brockington & Henson, 2015; Couldry & Markham, 2007). This assumption is supported by this dissertation’s results. First, a hierarchal logistic regression analysis indicates that entertainment celebrities, compared with social activists, displayed higher possibility of being mentioned in mass media coverage in the #MeToo movement. However, this result might be due to a specific feature of this activism. The early development of the #MeToo movement has been focused on sexual harassment and assault on workplace settings (Earle, 2019). In this sense, influencers' professional fields are important in their effect on influencers' networked positions and further media coverage. The top influencers, whose voice were retweeted, mentioned, and replied the most in the #MeToo conversation,
worked on social activism, entertainment, politics, journalism, or publication fields. This finding regarding the composition of top influencers resembles other research on the #MeToo movement. For example, a description of the first week tweets in this topic also finds that the influencers are mostly famous public figures or media organizations (Sturgess & Burns, 2018). However, it is questionable if the professional field of the top influencers is an important factor in the selection of mass media gatekeepers to report #MeToo. The results of this dissertation show that the social field of influencers is slightly in effect if mass media selected them as sources in news articles but highlight that the effect was only applicable for entertainment influencers.

The significance of the effect of entertainment celebrities also indicates a problematic pattern in the media coverage of social movements. For instance, the #MeToo coverage in UK has showed strong evidence of positive, but de-politicized framing (De Benedictis et al., 2019). Media framing of social movements typically displays concentrations and distractions. For example, news media coverage of feminism shows a longitudinal trend of de-politicization, along with the intensifying of neoliberalism in various national contexts (Mendes, 2011, 2012). Mass media tend to frame sexual violence and related social movements as personal stories based on a commercial drive to obtain the public attention since these stories satisfy the sensational desire of the mass audience (Mendes, 2011, 2012). The #MeToo movement shows a similar pattern (Mendes et al., 2018). It even adds another sensational factor: entertainment celebrities, to attract attention from both mass media and the public (Earle, 2019), which intensifies the distortion of the already biased media coverage of social movements.

The question of who is speaking and heard is crucial in social movements. Scholars have examined if social activists’ personal attributes influence their chance of being covered by legacy
media (Diani, 2016; Malinick et al., 2013). Legacy news media are more likely to select entertainment or political celebrities, rather than social activists, as reporting subjects because of the profitable inquiry of attracting public attention (De Benedictis et al., 2019; Earle, 2019). News media coverage of #MeToo movement has tended to give preference to celebrity scandal rather than advocating social justice (De Benedictis et al., 2019; Earle, 2019). Zarkov and Davis identified "the most visible #MeToo women are powerful: rich and famous celebrities, well-known TV personalities, journalists, and members of political elites" (Zarkov & Davis, 2018, p. 5). Although this choice is a representation of the symbolic power of celebrity status, other women of disadvantage are left silent and at the centralized point were those privileged and influential women such as Hollywood stars (Gill & Orgad, 2018; Hsu, 2019; Zarkov & Davis, 2018). This kind of observation is evidenced in the current project by the analysis of social fields of those top influencers.

The good news is, the field migration model of celebrity advocacy is not confined to entertainment celebrities. It also supports the conventional path of celebrity advocacy through evidence of the predictive power of celebrity capital. Celebrity capital of the top influencers in the previous social field has been verified as strongly correlated with the media coverage of related social movements as the hierarchical logistic regression model suggests in this dissertation. Furthermore, the regression models on the relationships of top influencers indicate that the invested celebrity capital difference is the strongest predictor of the recognized celebrity capital difference, suggesting the consistency of mass media’s gatekeeping practice. It also implies that this gatekeeping consistency is hard to change even with the advancement of networked social media. The results justify the long-term strategy of social activists to employ star power to amplify the influence of social causes advocacy (Meyer & Gamson, 1995; Thrall et
al., 2008). The results also raise a possibility for activists, not just of reinforcing their cultural capital, but also of accumulating celebrity capital to attract media attention. Just as in the case of the #MeToo movement, Tarana Burke had zero media citations before the movement, but accumulated a substantial celebrity capital from 10/15/2017 to 01/31/2018, which can be used as an investment in other social activism to get repeated media appearances regarding the new social movement.

7.4.2 Star power through a new path

Thrall et al. (2008) have suggested the new digital media age might provide a new path for celebrity advocacy practice. My theoretical model of networked celebrity advocacy and the results of the examination of the #MeToo movement provide an analysis of the communicative patterns of this new path. Diani (2003) raised the question whether a leader or broker role of social activists influenced their performance in mass media. Malinick, Tindall, and Dianis (2013) have found positive relations between social activists’ network centrality and their media citations. The networked celebrity advocacy model steps over the boundary of social activists and extends its scope to all top influencers in the topic communities on networked social media. In this way, through analyzing social capital and its association with celebrity capital, this dissertation identifies various communicative patterns on the new path of star power in attracting media and public attention to social causes.

First, the new path does exist by evidence of social capital’s predicting power of media coverage from both relational and vector perspectives. The presence of following-followed ties and interaction ties both predicted the difference of #MeToo movement coverage, suggesting that the networked social media path is a positive way for social activists to utilize star power and attract media attention. From a vector perspective, the importance of celebrities' networked
position in the #MeToo followed-following network on Twitter is also a predictor of whether these celebrities would be covered by legacy media outlets. In other words, influencers who are not in the entertainment field and not having the celebrity capital privilege, also have the possibility of being covered if they occupied an advantaged structural position in the topic communities on the networked social media. In this sense, celebrities' sensational personal stories are not the only reason for mass media to report on them. Their involvement in the #MeToo movement can also be impactful.

On the other hand, the social capital’s contribution to the new recognized symbolic power should be carefully evaluated without over- or under-estimation. Buente and Rathnayake's (2016) analysis of celebrity influence in the #WeAreMaunaKea movement showed that celebrities’ follower size does not influence how they perform in a specific and temporary conversation. However, the follower size is still a valuable measurement when the social activism organizers select celebrities to cooperate to amplify the social causes. Therefore, this dissertation has used a composite variable tweet reach, combining the effect of both followers sizes and their tweeting frequency, to analyze the mobilized social capital of the top influencers. The results display that the variable tweet reach was significantly correlated with the importance of the top influencers in both #MeToo networks. In this sense, it is concluded that the performance of top influencers in #MeToo depends on the composite power of their access of huge volume of followers plus their engaging activities mobilizing their social relations. Unfortunately, further regression analysis finds that, controlling the predicting power of the previous media coverage of the top influencers, the volume of tweet reach shows no predicting power of the possibility of the top influencers covered by legacy media. In this sense, further
exploration is needed on how social capital impacts on celebrity capital and what factors affect top influencers’ posts on the networked social media.

Also considering the mobilization of social capital, it is worth noting that the structural advantage in the #MeToo involve network was not correlated with both media coverage variables, indicating that the structural position of the top influencers in the #MeToo involvement network created by interacting activities was not influenced by or influenced a top influencer’s celebrity capital. On the contrary, the structural advantage in the #MeToo follow network was correlated with media coverage variables, indicating that the structural position of the top influencers in the followed-following network was significantly related to the top influencer’s celebrity capital.

The difference between these two networks is that, the #MeToo involvement network is an event-based, temporary connections map, while the followed-following network demonstrates consistency in the long term. For the social activism practice, this result suggests the importance of maintaining consistent connections with well-known public figures such as entertainment celebrities. The transitory connections built on emergency requirements might borrow celebrities’ fame for a short time, but this action could not lead to substantial attention from mass media and the public. In this sense, to fulfil the inquiry of attracting media and public attention in networked celebrity advocacy, social activists should consider the utilization of followed-following relation building not the accidental mentioning, replying to, or retweeting. Moreover, this relation building should be a long-term strategy especially working on social media or other social networking sites. Not treating an entertainment celebrity as a hired spokesperson for a social movement, but more like a friend with solidarity in advocating social causes, might be an
7.4.3 *Celebrity status and self-presentation media*

The new path of star power in *networked celebrity advocacy* has another layer. In the sections above, the discussion is more around celebrities’ unique ability in field migration. Furthermore, the advancement of networked social media also brings another chance for ordinary people to achieve celebrity status through the celebritification process (Driessens, 2013a) using self-presentation media, their networked social media accounts (Marshall et al., 2015).

Even with many pitfalls, the ability of celebrity advocacy to attract media attention is undoubted, based on this dissertation’s results. Thrall et al.’s (2008) analysis of star power highlighted the role of prominent celebrities in the mass media age. In a networked media environment, an ordinary person may achieve celebrity status through the accumulation of capital. Moreover, the accumulated celebrity capital is highly correlated and predicted the chance of being covered in the #MeToo movement news, lending support to the theoretical framework of field migration. In this sense, the media attention-getting capacity is not just dependent on the category of top stars, but also on all top influencers’ accumulation of various forms of capital.

This result also responds to Tufekci’s concept of connected microcelebrity activism (Tufekci, 2013) and buttresses her analysis of the function of activists becoming microcelebrities to amplify their influence in advocacy. Indeed, the field migration of celebrity advocacy occurs from various social fields to social activism. According to the theoretical model and empirical evidence in this dissertation, it is suggested that the strategic utilization of celebrity advocacy in promoting social activism can expand its selection pool from entertainment celebrities to those of other social fields. For example, in the case of #MeToo involvement, the opinion journalist and
feminist Maureen Shaw showed a high rank in *out-degree, in-degree, and betweenness centrality*, indicating that she had been in an important position in the conversation. She is not an entertainment celebrity, but with her accumulated media appearances as a subject matter expert, and her active mobilization in social relations, she might be an alternative choice when considering the practice of celebrity advocacy.

The Pew Research Center’s report on topic communities on Twitter (M. Smith et al., 2014) demonstrated a broadcast network for famous public figures and media outlets, indicating that celebrities, social activists, and other individual agents in the top influencers network, have employed their Twitter accounts as self-production media outlets (Marshall et al., 2015). The result of this dissertation shows that the most followed Twitter accounts are media outlets and secondly, entertainment celebrities and political elites, which echoed the demonstration of a broadcast network. In this sense, the top influencers’ accounts on networked social media can be understood as self-presentation media, which publish messages to their followers.

Entertainment celebrity women, such as actors Alyssa Milano, Patricia Arquette, Rosie, Rose McGowan, and Debra Messing, have taken up the top positions of the networked advantage across the two networks. However, the “Me Too” creator Tarana Burke achieved superior advantage in the #MeToo involvement network but did not transfigure this advantage into the #MeToo followed-following network. These results indicate a potential for social activists to develop their social media strategy, converting the power constructed in the temporary conversations to the long-term self-presentation media effect.

As self-presentation media, each tweet of a top influencer can be seen by a relatively large size of personal community. Those followers might only have unidimensional relation with the celebrity ego. With the celebrity ego and their related top influencers network, the followers
received various degree of exposure to #MeToo information flow, depending on the ego's structural position in the network. In this sense, aside from the communicative strategies suggested as reinforcing authenticity and increasing the affective emotion (Alexander, 2013; Marwick & boyd, 2011; Van Zoonen, 2004), celebrity activists might consider how to maintain and strengthen their advantageous structural positions to enlarge their mobilizing effect. Celebrity activists might employ the strategy of mobilizing media outlets and other celebrities to enlarge the influence of their message reach.

In summary, the conventional model of celebrity advocacy has been tested and verified, whereas a new path of star power is identified and analyzed. This new path of star power stresses the importance of social capital and suggests for social activist to utilize the celebrification and self-presentation media to amplify the influence of social causes. It is worth noting that the new path is built up on the development of the networked social media and its mechanism needs further examination.

7.5 Connectivity and Relationship-Building

The concept of networked celebrity advocacy highlights the importance of connectivity. The visibility of connectivity among social actors is one fundamental feature of the networked social media (Marwick & boyd, 2011). Audience matrices, for example, are a function of networked social media representing connectivity and have been applied to attract public attention in political issues (Zhang et al., 2018). Connectivity has applied to social movements through hashtag activism (Duvall & Heckemeyer, 2018; Kaufman et al., 2019; Wang et al., 2016; Xiong et al., 2019), and to celebrity advocacy through connected celebrity activism (Ellcessor, 2018) and microcelebrity networked activism (Tufekci, 2013). The results of this dissertation suggest social activists to utilize the connectivity of networked social media when
they practice a celebrity advocacy strategy. Upon this strategy, three themes need attention: the feature of affective solidarity, the composition of polarization, and those easily neglected isolates/suspended accounts.

7.5.1 Affective Solidarity

Activists suggest that relationship building on social media is crucial for raising the awareness of social problems (Crompton, 2008). This relationship building has a special meaning regarding celebrity advocacy because celebrities can create affective relations with their fans and hence occupy a distinguishing mobilizing effect. This effect has been explored in celebrity appeal to other social movements. For example, Alexander (2013) analyzed actor Ian Somerholder as a twist of two activism approaches: a marketing approach and a relationship-building approach. Lady Gaga has promoted a series of social causes campaigns in her tightly connected fan community (Bennett, 2014). Recent scholarship on #BlackLivesMatter also suggest hip-hop celebrities’ mobilization of their fanbases (Duvall & Heckemeyer, 2018).

To describe the relationship building in the #MeToo movement, Rodino-Colocino (2018) introduced the concept of affective solidarity, which means solidarity actions organized through emotional ties. The MeToo movement launched by Tarana Burke in 2006 is considered as a social movement with "transformative empathy" (Rodino-Colocino, 2018, p. 97). Transformative empathy encourages affective solidarity among victim-survivors from sexual harassment and assault. Burke defined the empathy as "not just that you are not alone, but that you are normal" (Adetiba, 2017). When actor Alyssa Milano asked survivors of harassment and assault to tweet "MeToo," her action had the power to encourage people to evaluate the "magnitude of the problem" that Alyssa addressed on Oct 15, 2017. In terms of empathy, these entertainment stars are part of a mass audience who might experience the same sexual violence (Zacharek et al.,
In this sense, celebrities as silence breakers encouraged other women to speak out (Hsu, 2019). Both Tarana Burke and Alyssa Milano shared the goal of empowerment through empathy (Rodino-Colocino, 2018). Their actions have created affective solidarities among victim-survivors.

This relationship-building strategy is more accessible in the networked social media than in the legacy media age. The connectivity makes visible all relationships of social actors (boyd & Ellison, 2007). Technologically, this media platform offers a substantial number of latent ties (Haythornthwaite, 2002; Steinfeld et al., 2012). For the mobilization of social capital, these latent ties are better to be transferred into weak ties or strong ties. The visualization of the #MeToo follow network displayed strong connectivity inside the top influencers, which indicates a tendency of strong ties building. In this sense, the results of this dissertation suggest intensive relationship-building between social activists and top influencers from other social fields.

The analysis of the composition of the #MeToo involvement network finds that by way of the connection with Alyssa Milano and other celebrities, Tarana Burke’s information diffusion increased its scope reach. In this sense, it is applicable for social movement organizers to increase collaborations with celebrities. This strategy is quite traditional, but still useful in the backdrop of the pervasive contemporary celebrity culture (Meyer & Gamson, 1995; Thrall et al., 2008). These collaborations might not only utilize celebrity status to promote social activism to a mass audience, but also incorporate celebrities' images and activities into the main themes of social activism to avoid skewing communication among mass media. On the other hand, the collaborations might be a positive route to influence social media conversation in a way that leads to accurately reflect social activism's manifesto. This social media path might have influence on the framing of social movements on sexual violence of both social media users and
news coverage. Consequently, it is insightful for other social activists to analyze the composition of social networks and the networked positions of top influencers for their adoption of networked celebrity advocacy strategy.

The affective solidarity also shows a specific relationship-building in the case of this dissertation: the empowerment through empathy is related to characteristics of celebrities, especially entertainment celebrities. As the Pew Research Center reported (Anderson & Toor, 2018), a great deal of highly-trending tweets in the #MeToo conversations were personal stories of victims. Marwick and boyd (2011) have demonstrated, entertainment celebrities have disclosed their personal stories online and obtained closeness and intimacy with their followers. In other words, compared with other social fields, entertainment celebrities are more likely to construct affective solidarity with the survivors and other audience; this might indicate that some social movements working on mobilizing emotional ties are more suitable for networked celebrity advocacy.

Compared with male entertainment celebrities, female entertainment celebrities showed more active involvement with the #MeToo conversations, such as @Alyssa_Milano, @PattyArquette, or @oprah. Regarding betweenness centrality, thirteen women and two men were in the top 20 high-ranking list in the #MeToo involvement network whereas eleven women and one man were in the list of the #MeToo follow network. These results indicate that women occupied more crucial structural positions in the #MeToo conversation networks. The female celebrities demonstrated their prestige in the information flow of #MeToo movement. In this sense, it was not just celebrities in general, but exactly those female celebrities who demonstrated their star power in the #MeToo information flow.
Aside from female celebrities, women from other social fields rarely occupied a structural position of advantages in the #MeToo follow network. As Zarkov and Davis (2018) observed, most of social activists are considered as agents. This implies a possibility that women did not realize the importance of building structural advantages and still intended to remain silence other than relaying their own stories. However, for the good of advocating for feminism movements like #MeToo, it is helpful to encourage women to make their voices louder than before.

Moreover, this affective solidarity inside female entertainment celebrities might be only applicable to the researched #MeToo movement. The statistical results of this dissertation show that gender similarity was not a contributing external factor to the possibility of a pair having a tie in the #MeToo movement. Gender is also not a significant variable influencing the chances of being covered by legacy media. Hence, the prominent performance of female entertainment celebrities is due to this movement’s specific context. The beginning of the #MeToo movement is to help victims of sexual assault and harassment against the backdrop of the events like the scandal of the filmmaker Harvey Weinstein. However, other contexts might bring different compositions regarding the gender of top influencers in the topic communities on the networked social media. In this sense, it is unsupported to apply this gender appeal to other social movements.

7.5.2 Polarization

The relationship-building in networked celebrity advocacy also needs to attend to special features of the social media platforms. Polarization as a trending feature of Twitter topic communities also occurred in the #MeToo conversations (M. Smith et al., 2014). Park et al.’s (2015) research on South Korean celebrity politics on Twitter found that liberals were more
likely to follow celebrities, and the political celebrities were more likely to attract those Twitter users who lacked political knowledge. Especially situated in networked celebrity advocacy, more social responsibility might be put on celebrities’ social media account to channel followers without critical analysis of political environments. In this dissertation, this feature of polarization is represented by the visualization of the #MeToo followed-following network: a separation of two communities.

This feature is also presented in the #MeToo coverage on mass media (Earle, 2019). The initiators of the #MeToo movement contextualized #MeToo in a political discourse of "counter-white-supremacist-patriarchal" movement (Rodino-Colocino, 2018). The #MeToo movement showed a collectivity of victim-survivors and intersectionality of sex and power (Gill & Orgad, 2018). The legacy news media framed #MeToo movement as de-politicized and showed a strong individualism tendency (De Benedictis et al., 2019; Mendes et al., 2018). However, Earle (2019) pointed out, after the case of Brett Kavanaugh, the US news media changed their focus to frame the #MeToo movement as the polarization between two major political parties. Because of the possibility of the complementary effects of online and offline social movements, it is worth noting that the news media trend of polarization might also increase the cleavages and dissentions within #MeToo on the networked social media.

The evidence in this dissertation shows that the polarization was not effective at the beginning of the #MeToo conversation in the involvement network but became obvious in the long-term followed-following network. Indeed, the polarization effort of Twitter users has been observed from the early stage of the #MeToo movement. The analysis of the top influencers’ #MeToo involvement conversations has found that, the Trump supporters @skyrider0538, @LVnancy, and @jcpenni7maga’s active engagement with highly frequent posts reflects that
partisan attitudes also spread their influence into the #MeToo conversations on Twitter. They were not advocating but combating the #MeToo movement but still became top influencers who took up a substantial traffic of the conversation, indicating that a considerable proportion of Twitter users followed the message of certain political preference and more likely influenced by a famous status of a top influencer. Social activists need to pay attention to the possible junction of polarization of both legacy media coverage and networked social media conversations, since it indicates the probability of destructing the affective solidarity identified in networked celebrity advocacy.

7.5.3 Outliers

Lastly and importantly, it is worth noting that the online relationship-building also has outliers such as isolated and suspended social accounts. Earle (2019) pointed out that, compared with #TimesUp movement, the #MeToo movement was more concentrated on the individual level. Hence, the collaboration of the personal relation-building between activists and celebrities is especially important for the #MeToo development. In fact, as Pew Research Center’s report suggested, the #MeToo conversation was filled with personal stories (Anderson & Toor, 2018), evidenced by the isolates in the #MeToo involvement network. These stories might get popularity in a short period, but they lack the long-term networked power as the message publication function in the followed-following network. The importance of isolates for social activists is that they provide the potential of delving into different routes of networked celebrity advocacy. Their departure from the major community also indicates their mobilization potential in latent ties.

However, it is important to pay attention to the isolates and other marginalized accounts in the #MeToo conversations. Another form of outliers is the suspended accounts. Mendes,
Ringrose and Keller (2018) argued that individuals felt safe and comfortable to use digital platforms rather than offline conversations to engage in the movements like #MeToo. However, except for visibility, digital communication might also bring stressful experiences through exposing personal stories in public. Through the data analysis of this dissertation project, it is evident that several Twitter handles who posted their #MeToo stories currently suspended their public accounts. Several of them are celebrities in different social fields. Without evidence, it was hard to definitively attribute these suspensions as a response to stress after exposure, but it at least implies that these disappeared social actors might have experienced pressure after they made their voices heard in the #MeToo movement.

7.6 Areas of Future Studies

As Wheeler (2016) suggested, the criticism of celebrity advocacy should move beyond the polarization of bad or good to the nuanced analysis of why and how celebrities work with specific social institutions. Although celebrity advocacy might trivialize the importance of severe social injustice and reinforce the existing capitalist ideology, it still occupies an unavoidable power to publicize useful information in the networked social media age.

This dissertation has posed the concept of networked celebrity advocacy and explained its underlying mechanism with theories of capital, especially celebrity and social capital. Its theoretical contribution to the debate of the effectiveness of celebrity advocacy lies in the analytical concept of networked celebrity advocacy and its capital performance model. Future research using this analytical concept and the capital model of networked celebrity advocacy is expected.

7.6.1 The new path
This dissertation has provided empirical evidence for the unique attention-gaining capability of celebrities through both conventional means and the new networked social media path. The results have justified the route for networked celebrity advocacy to attract media attention. More comprehensive interpretation is expected regarding the association between the investment in the forms of capital and various media frames. For example, social activists’ personal features are positively correlated with different media frames based on Malinick, Tindall, and Diani’s (2013) analysis of environmentalists in British Columbia, Canada. One criticism of celebrity advocacy is the possibility of distorting the focus of media coverage of serious social causes (Meyer & Gamson, 1995; Wheeler, 2018). It would be insightful to further understand how the conventional and new paths of star power affect media framing of various topics using the theoretical model of networked celebrity advocacy. For example, many entertainment celebrities have joined the advocacy for #BlackLivesMatter, but several of them were praised (Ali, 2020) while others were criticized (Coley, 2020) in legacy media coverage. The networked celebrity advocacy model can help with identifying the reasons for the valence of legacy media coverage of social movements employing networked media functions.

Theoretically, this dissertation only focuses on the connectivity of the networked social media. Other features of this new path are also worth noticing. For example, different social media customize pages in distinct ways, provide various functions for users to interact, and offer disparate privacy agreements with users (boyd & Ellison, 2007; Steinfield et al., 2012). Taking into account different social media affordances will lend new insights of analyzing celebrity advocacy on the networked social media.

7.6.2 Capital performance
Furthermore, the networked celebrity advocacy model identifies five forms of capital contributing to the field migration: some of them are not transferrable, but still are influencing factors. For example, some entertainment celebrities have woven activism into their star image and made it part of cultural capital (Alexander, 2013). One kind of disapproval of celebrity advocacy is to criticize the authenticity of the involved celebrities. Some celebrities’ engagement with social movements has been considered as the accumulation of cultural capital as profit driven (Coley, 2020; De Benedictis et al., 2019). Although this dissertation has no sufficient space for such discussion, it will be crucial for social activists to fully analyze all forms of capital in networked celebrity advocacy of specific social movements in order to make right decisions.

Indeed, Driessens (2013a) identified celebrity capital as a representation of pervasive media meta-capital that Couldry (2003) raised based on the development of contemporary mass media. In the networked social media, it is questionable if celebrity capital is still limited to legacy media appearances and how the meta-capital concept is renewed with the advancement of networked social media. If the meta-capital might transform its content and form, then how will the five forms of capital identified in my theoretical model be transformed? Further theoretical advancement is needed regarding my theoretical model.

7.6.3 Social capital

Aside from providing evidence for two paths of star power in celebrity advocacy, the networked celebrity advocacy model puts emphasis on analyzing social capital through a social network analysis perspective. The relationship-building of influencers in the topic communities of social movements on networked social media has been examined according to their accessibility and mobilization of social relations based on Lin’s (1999a) model. Interpretations of
other social movements such as #BlackLivesMatter regarding social activists’ relationships with privileged celebrities and media outlets is anticipated in future research.

In addition, the dissertation has focused on the form of social capital, but the content of social relations is also crucial. Although this dissertation somewhat touched upon the importance of tie strength between the top influencers, this topic needs deep examination into various ties and their applicable contexts (Haythornthwaite, 2002; Steinfield et al., 2012). Future research might investigate the tie strength from a perspective of the public, using tools like survey or in-depth interview to understand how audience members perceive their relations with celebrities regarding bonding and bridging social capital (Putnam, 2000; Steinfield et al., 2012).

Specific to celebrity advocacy, parasocial relationships between celebrity and their fans have been widely researched in communication scholarship (Bond, 2016; Brown, 2015; Claessens & Van Den Bulck, 2015; Kim & Song, 2016; Stever & Lawson, 2013). This dissertation has analyzed celebrities’ personal communities created by the top influencers of a topic community. But it has not emphasized the influence of parasocial relationships in a celebrity community. Studies on celebrity advocacy have touched on the impact of parasocial relationships in affecting political engagement (Atkinson & DeWitt, 2019; Chan, 2016). Marwick and boyd (2011) have pointed out the associations between celebrity and fans on networked social media display particular patterns in authenticity, intimacy, and parasocial relationships. Future research to delve into how social capital is related to parasocial relationships will extend the understanding of the theoretical model of networked celebrity advocacy.

Moreover, celebrity advocacy scholars in the UK have examined the public recognition of celebrity news talking about political issues and concluded that the strength of celebrity appeal
in the public is exaggerated (Brockington & Henson, 2015; Couldry & Markham, 2007). The UK scholars also pointed out that different cultural contexts influence the impact of celebrity advocacy. Now because of the global reach of social media, it is valuable to investigate the distinct communicative patterns of networked celebrity advocacy and their impact on attracting public attention in different national and cultural contexts through comparative analyses.

7.7 Final Thoughts

In 1995, Meyer and Gamson observed that “the celebrity without a cause has become anomalous” (p. 181). Twenty-five years later, what they had observed is still ubiquitous in contemporary media environments. Now, celebrities have more autonomy to advocate for what they believe because of the transforming media technologies. On June 6, 2020, Lady Gaga announced on Instagram:

Starting tomorrow, I’m giving over my Instagram account to each of the organizations I’ve recently donated to, in an effort to amplify their important voices.

And after I vow to regularly, in perpetuity, across all of my social media platforms, post stories, content, and otherwise lift up the voices of the countless inspiring members and groups in the Black community. (Lady Gaga, Instagram post, 2020/06/05)

Her statement has offered an inspiring annotation for networked celebrity advocacy in social movements. What Lady Gaga gave over, was not her public persona, but the function of her Instagram account as a media outlet with a large volume of fans and audience. Through this path, celebrities, although still deeply embedded in capitalism and consumerism, use their symbolic power on public good.
### Appendix A

The researched individual influencers working in the entertainment field who were involved in the #MeToo conversations

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<thead>
<tr>
<th>Twitter Handle</th>
<th>Name</th>
<th>Occupation</th>
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<tbody>
<tr>
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<td>Alice Glass</td>
<td>actor</td>
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<tr>
<td>@Alyssa_Milano</td>
<td>Alyssa Milano</td>
<td>actor</td>
</tr>
<tr>
<td>@aparnapkin</td>
<td>Aparna Nancherla</td>
<td>comedian</td>
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<tr>
<td>@ArevaMartin</td>
<td>Areva Martin, Esq.</td>
<td>show host</td>
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<tr>
<td>@ArianeBellamar</td>
<td>Ariane Bellamar</td>
<td>actor</td>
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<tr>
<td>@ava</td>
<td>Ava DuVernay</td>
<td>filmmaker</td>
</tr>
<tr>
<td>@AynRandPaulRyan</td>
<td>Holly Figueroa O'Reilly</td>
<td>singer</td>
</tr>
<tr>
<td>@bettemidler</td>
<td>Bette Midler</td>
<td>show host</td>
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<td>comedian</td>
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<td>Debra Messing</td>
<td>actor</td>
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Communication Theories and Applications: communication and society, research methods, audience analytics, media and diversity, feminist media studies, popular culture and communication, critical perspectives in film & television
PUBLICATIONS


CONFERENCE PAPERS & PRESENTATIONS


**RESEARCH EXPERIENCE**

**Research Assistant, Communication Department, Syracuse University, NY, USA**

Professor Seth Gitner

Summer 2019

- Collecting and summarizing literature about virtual reality usage in journalism;
- Designing a research project investigating the effect of video length on audience perception.

Dr. Keren Henderson

Summer 2018

- Preparing an academic article submission;
- Collecting literature review on the local TV news’ influence;
- Coding a content analysis project on the local TV news.

Dr. Carol M. Liebler

Spring 2018

- Revising the papers on D.C. missing girls and self-sexualization.
Fall 2017
• Collecting news data on Nexus-Lexis for the project of reporting D.C. missing girls;
• Collecting Twitter data with #MissingDCgirls using R;
• Using text-mining technique to analyze data;
• Writing up results and contributing to discussions.

Summer 2017
• Revising the paper on celebrity culture and selfie-posting;
• Revising the paper on Asian women’s body image in promotional events.

Summer 2016
• Revising the manuscript of celebrity culture and self-sexualization.

Summer 2015
• Presenting the project of celebrity culture, self-objectification, and self-dissatisfaction at two conferences.

Spring 2015
• Writing up the manuscripts of celebrity culture, self-objectification, and self-dissatisfaction project.
• Analyzing data using SPSS and Amos;
• Writing up the results.

Fall 2014
• Designing the research for the project of celebrity culture, self-objectification, and self-dissatisfaction;
• Collecting data based on a Qualtrics survey;
• Analyzing data using SPSS.

Summer 2014
• Writing part of literature review for a content analysis of Chinese films’ gender portrayal.

Spring 2014
• Collecting news and online comments data for the project of body image.

Professor Mel White
Summer 2017
• Developing the project of women creatives in the advertising industry.

Professor Beth Egan
Summer 2014
• Collecting and summarizing literature for the project of the effect of native advertisements.
Visiting Fellow, University of Sussex, School of Media, Film, and Music, Brighton, UK
Dr. Sue Thornham

Spring 2010
• Attending the courses of cultural studies and feminist film theory;
• Working on the dissertation using feminist film theory.

Fall 2009
• Attending the courses of queer studies and convergence media;
• Discussing and proceeding on the dissertation using feminist film theory.

RESEARCH TRAINING
2018-19 Certificate of Journalism and Mass Communication Quarterly Reviewer Trainee Program

TEACHING EXPERIENCE
Communication Department, Syracuse University, Syracuse, NY, USA
Instructor of Record
Spring 2017 Communications and Society
• Co-designing the syllabus;
• Giving lectures on the introduction to mass communication studies;
• Designing and grading assignments and current events quizzes;
• Grading student essays;
• Helping international students to adapt to culturally-different academia;
• Meeting with students regularly;
• Helping students with their learning difficulties.

Teaching Assistant
Spring 2020 TV/Internet Age, 2001-Present (combined undergraduate and graduate)
Fall 2019 Television in the Cable Era (1980-2001) (combined undergraduate and graduate)
Spring 2019 Television in the Network Age (1947-1981) (combined undergraduate and graduate)
Summer 2019  *Critical and Historical Perspectives on Television, Radio, and Film* (graduate)

Fall 2018  *TV/Internet Age, 2001-Present* (combined undergraduate and graduate)

Summer 2018  *Critical and Historical Perspectives on Television, Radio, and Film* (graduate)

- Grading exams;
- Holding review sessions;
- Meeting with students regularly;
- Helping students with their exams preparation.

Fall 2016  *Sight, Sound, & Motion* (undergraduate)

- Grading assignments;
- Meeting with students regularly;
- Helping students with the usage of Adobe Premiere and cameras;
- Helping students with completing their story-telling projects.

Fall 2016  *Industry of Forces* (graduate)

- Grading assignments;
- Meeting with students regularly;
- Helping international students to adapt to culturally-different academia;
- Helping students with exams/papers preparation.

**Teaching Project Assistant**

Spring 2020  *Analytics in Entertainment Media* (combined undergraduate and graduate)

Fall 2019  *Quantitative Research Methods* (graduate)

Fall 2018  *Quantitative Research Methods* (graduate)

- Designing a SPSS workshop syllabus;
- Designing and grading assignments;
- Giving lectures and individual guidance on SPSS;
- Meeting with students regularly;
- Helping international students to adapt to culturally-different academia;
- Helping students with resolving difficulties in their research projects.

**Guest Lecturer**

Fall 2019  *Big Data Analytics*, in the course of *Quantitative Research Methods* (graduate)
Spring 2019  *Everything Goes Social*, in the course of *Social Media Practicum* (undergraduate)

Spring 2019  *#MeToo in China*, in the course of *Media and Diversity* (undergraduate)

Spring 2019  *Survey Research Software*, in the course of *Public Relations Research Methods* (graduate)

Summer 2018  *In-Depth Interviewing*, in the course of *Introduction to Research Methods* (undergraduate)

Spring 2018  *Gender and Media*, in the course of *Communication and Society* (undergraduate)

Spring 2014  *Introduction to Chinese Media*, in the course of *Communication and Society* (undergraduate)

**Earlham College, Richmond, IN, USA**

**Guest Lecturer**

Spring 2017  *Chinese Women in Communication*

**Hai-Bing Film and Television Professional Training School, Hebei, China**

**Instructor**

Winter 2011  *Introduction to Film and Television*

**School of Journalism & Communications, Nanjing University, Nanjing, China**

**Instructor/Teaching Assistant**

Fall 2000  *Interview Methods in Journalism*

**TEACHING TRAINING**

**Communication Department, Syracuse University, Syracuse, NY, USA**

2016-18  Future Professoriate Program

**ADDITIONAL SKILLS**

Research  Statistical Analysis  *SPSS, AMOS, Mplus, R, UCINET*

Qualitative Analysis  *Nvivo*
**Data/Text Mining**  
*Weka, Mallet, R*

**Survey Research**  
*Qualtrics*

**Information Visualization**  
*Gephi, Adobe Illustrator*

**Professional Video Editing**  
*Adobe Premiere Pro*

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**ACADEMIC AWARDS**

**S. I. Newhouse of Public Communications, Syracuse University, Syracuse, NY**

- **2017-18** Graduate Assistantship
- **2017** Feinberg/Newhouse Dissertation Support Award
- **2016-17** Graduate Assistantship
- **2015-16** Graduate Fellowship
- **2013-14** Liu Foundation Multicultural Scholarship

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**Critical and Cultural Studies Division, AEJMC**

- **2018** Best Poster Display (First Place)
- **2016** Top Paper Award (First Place)

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**School of Arts & Communication, Beijing Normal University, Beijing, China**

- **2009-10** Visiting Aboard Scholarship

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**COMMUNITY SERVICE**

**S. I. Newhouse of Public Communications, Syracuse University, Syracuse, NY**

- **2016-17** Doctoral student representative serving on Teaching Standards Committee
- **2016-17** President of Newhouse Doctoral Students Organization

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**LANGUAGES**

Fluent in Chinese and English

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**PROFESSIONAL EXPERIENCE**
Over Seven Years’ Profession Experience in the Chinese Media Industry

2011-13  Freelance Documentary Filmmaker, Writer, & Translator, China
2006-07  Associate Producer, China Central Television - Film Channel, China
2004-06  Media Manager & Co-Founder, RRAX Ads, China
2003-04  Broadcasting Journalist, China Central Television - News Channel, China
2002-03  Broadcasting Journalist, Jiangsu Television, China