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Issue Communication Network Dynamics in Connective Action: The Role of Non-Political Influencers and Regular Users

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Abstract

Social media influencers (SMIs) have prevailed in online communication networks and can play key roles in connective action. However, how influencers connectively drive activism communication network is less clear. This study conceptualizes *issue influencers* as users who emerge as influential nodes in shaping the communication network in a contentious political issue niche. A new typology of influencers is proposed based on both issue and platform influence. Drawing on connective action theory and SMI studies, this study employed a Stochastic Actor-Oriented Model to examine how structural (endogenous) processes and influencer-level (exogenous) characteristics explain the communication network dynamics among issue influencers based on 200,000 Weibo posts from approximately 150,000 unique users about a gender policy discussion in China. The results show reciprocity, closure triplets, and influencer-level attributes including issue stance and influencer status significantly drive the longitudinal activism communication network. This study suggests that, when political influencers are absent, non-political influencers and regular users can effectively lead a contentious communication network on a platform with increasing censorship and suppression.

Keywords

issue influencer, digital activism, connective action, social network, gender politics, China

On 27 August 2021, *Guangming Daily*, a newspaper affiliated with the Chinese Communist Party (CCP), published a commentary blasting the prevalence of "sissy pants" pop culture (X. Chen, 2021). Six days later, the National Radio and Television Administration (NRTA) released a guideline to "stop the abnormal aesthetics of effeminate men," signaling a policy shift that regulates media representations of masculinity (McDonald, 2021). Unsurprisingly, this official announcement sparked a heated debate. Not only did fans of "sissy idols" push back, but a broader public also questioned the legitimacy of the ban on gender expression, citing concerns that it could exacerbate everyday violence targeting femininity. On 1 December, the photographer known as *Ludaosen* on Weibo was found dead after posting a suicide note detailing his experience of being bullied at school as a "sissy" boy (Samson, 2021).

The tragic death of *Ludaosen* quickly escalated the discussion on gender expression and the controversial ban on effeminate men in media. The government's use of the insulting word *niangpao* (equivalent to "sissy") in a policy document added fuel to the fire. Despite the political and technological risks associated with Chinese social media (Ma & Zhang, 2022; Tang, 2023), thousands of Weibo users

criticized and satirized the policy and the outdated stereotypical gender image it promoted, which also appeared in an education policy in 2020 aiming to prevent feminization of male teenagers (Yu & Sui, 2022). Over a 4-month period, various entertainment bloggers, movie recommenders, cartoonists, and regular users engaged in digital connective action, sharing dissenting views and successfully transforming the term *yanggang* (masculine) into a negative description of simplistic and traditional masculinity.[1] This communication network is just one example of the many policy debates and social advocacy efforts that take place on Chinese social media (Shao & Wang, 2017).

This study introduces the concept of *issue influencer*, who plays a crucial role in shaping the communication network in a contentious political issue niche. Unlike the traditional definition of a social media influencer (SMI), which is based on engagement metrics such as the number of reposts

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or followers, an issue influencer is defined by their active communication and influence within issue communication networks. These individuals are effective at shaping the communication dynamics in a certain issue niche and are expected to have a larger influence on that issue.

Furthermore, this study builds upon the literature on connective action theory and SMIs (Bennett & Segerberg, 2013; Cha et al., 2010; Harrigan et al., 2012) to investigate how issue influencers mobilize connective action in opposition to the ban on "sissy idols." The goal is to examine the ways in which endogenous structural processes and exogenous influencer-level characteristics contribute to the dynamics of an activism communication network within a censored digital public sphere.

This study advances the understanding of how non-political influencers and regular users coordinate connective action and shape networked public debate on social media platforms. In contrast to political influencers such as members of Congress or elected government officials, *non-political influencers* encompass a wide range of SMIs whose primary domain of influence lies outside of political issues and agendas (Casero-Ripollés, 2020). The theorization of issue influencers elucidates the contingencies and fluidity of social status, social influence, and communication practices among influencers. The empirical findings from the network modeling provide important implications for current activists and advocates in the digital sphere in China.

The Role of SMIs in Connective Action

Information and communication technologies have the potential to replace some of the functions of traditional organizations in social movements and enable connective action. Digital activism allows participants to articulate their opinions, emotions, and beliefs on issues and to interact with other actors at varying levels of involvement, which is more flexible than the traditional form of activism (Bennett & Segerberg, 2013). According to the logic of connective action, individual collaboration in the communication process has become a key mechanism for mobilizing digital social activism. Therefore, influencers hold critical positions in the communication network by producing and disseminating information, promoting activist goals, and organizing alliances (Ma & Zhang, 2022).

SMIs emerge as independent and famous individuals who build "a digital audience through sharing editorialized content" with their perspectives and opinions woven in (McCorquodale, 2020, p. 11). They adopt a variety of strategies such as routinized interaction with followers and create a consistent public persona (Suuronen et al., 2022). SMIs often create a sense of intimacy with their followers, and this sense of connection can lead to higher engagement and loyalty among followers (Cha et al., 2010), and can even lead to social influence beyond the realm of brand marketing and

product, as seen in the case of issue influencers discussed in this study (Bakshy et al., 2011; Iyengar et al., 2011).

Numerous studies (Alexandre et al., 2022; Dash et al., 2022; Wang et al., 2020) have suggested that SMIs tend to have a domain of focus. For instance, they may be content creators in user-generated content sites or gym gurus on Instagram who monetize opinion leadership through collaboration with marketers. Alternatively, they may exert influence on public opinion and political agendas through online personal influence, known as political influencers. Political influencers may include political actors such as government officials, Congressmen and Congresswomen, and political commentators (Casero-Ripollés, 2020). Political influencers are particularly powerful when combined with polarized opinions and populist sentiments and they tend to be rewarded with more attention, retweets, and followers (Dash et al., 2022). In contrast, SMIs whose audience building and content sharing primarily focus on non-political domains (e.g., arts, fitness, and wellbeing) will be referred to as *non-political influencers* in the following sections.

In digital connective action, SMIs are indispensable actors. For instance, in the #MeToo movement, celebrities, media organizations, and journalists were identified as connective action starters while regular users and activists prolonged the communication as movement maintainers (Mirbabaie et al., 2021). However, there is no consensus on how to define influence on digital platforms, especially in the context of connective action. This article argues that neither domain-based nor metrics-based definitions offer adequate insights into the contingencies and dynamics of SMIs' role in connective action.

First, while political influencers are often active participants in connective action, SMIs of other domains might have varying degrees of motivation and resources to participate across different issues (Ma & Zhang, 2022). Suuronen et al. (2022) demonstrated that it was very common for traveling, fashion, and health influencers to engage in political issues online. For SMIs, the decision-making process of participation in connective action is not limited by the "influencer category." Rather, SMIs might voice out on issues that are deemed important and relevant from political interest, personal experience, and social network.

Second, previous literature has suggested that influencers are not always dominant. Harrigan et al. (2012) found that influencers were less effective than expected in the social influence process due to limited attention and information overload. Users who have been influential via a large follower base did not always produce the largest cascade in word-of-mouth diffusion as regular users (Bakshy et al., 2011). These mixed findings might be explained by how researchers measure influence. For instance, Cha and colleagues (2010) found that influencers based on the number of followers have inconsistent degrees of influence over engagement. A simple dichotomy of influencer-regular user

might conceal the contingencies and mutation in social status and social influence of actors during the information diffusion process (Liang & Lee, 2021).

In summary, the categorization of influencers into fixed domains (e.g., political, fitness, or fashion) or the measurement of influence based on counts of followers or engagement metrics (e.g., Cha et al., 2010; Dash et al., 2022) conceals an influencer's role and effect in connective action, which is a fluid and iterative digital network in nature (Liang & Lee, 2021; Ma & Zhang, 2022). To address this issue, this article proposes a new typology of influencers based on their issue network influence and explains why it is more productive than both domain-based and metrics-based measures to gauge SMIs' roles in online digital activism.

A Network-Based Typology of Influencers

The concept of *issue influencer* refers to individuals who play critical roles in shaping online public discourse in contentious political issue niches. I define an issue influencer as someone who can exert considerable impact on the issue communication network and effectively build connections with other influential users to ally in connective action and amplify social influence. The concept goes beyond measuring a user's single-layer influence, as indicated by the number of retweets or mentions (Cha et al., 2010; Dash et al., 2022). Instead, it aims to evaluate an individual's influence on generating long-lasting conversation and network position in relation to other influential communicators, which is critical to maintaining and escalating a connective action network.

The typology comprises two key dimensions: general influence on the platform and specific influence on the issue communication network (refer to Figure 1 for the conceptual diagram). Based on whether a platform influencer successfully drives an issue communication network, I further categorize issue influencers into two distinct groups.

The first group, referred to as *leading issue influencers* (LIIs), includes those who have established high general influence on the social media platform as platform influencers (Cha et al., 2010). Examples include politicians, journalists, and celebrities. When platform influencers engage in an issue niche and drive the formation of issue communication network, they become issue influencers with leading roles such as initiating conversations and attracting attention during the early stage of the issue development.

The second group is *contingent issue influencers* (CIIs), who are typically regular users with negligible platform influence. However, if a regular user triggers significant information sharing or a large-size cascade through eye-catching comments or communication ties with LIIs (Bakshy et al., 2011; Harrigan et al., 2012), they can become part of the issue influencer network, albeit in a contingent fashion. Compared with platform influencers, regular users are less likely to become issue influencers. Nevertheless, during the
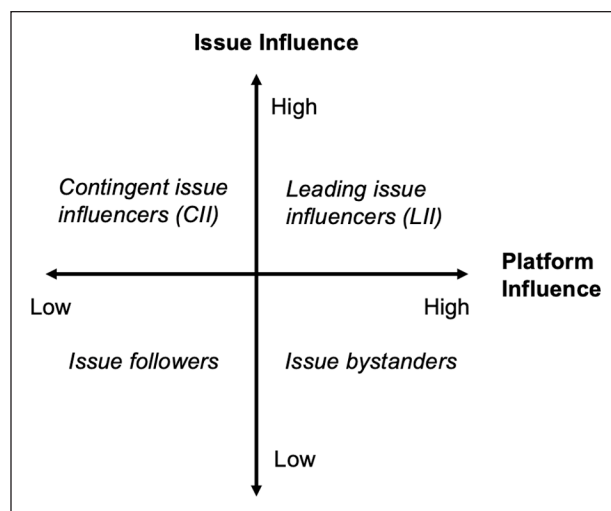

Figure 1. A typology of social media influencer in an issue niche.

formation and evolution of the issue network, a CII can accumulate reputation, attention, and connections, thereby increasing their chances of acquiring a larger follower base and eventually becoming a platform influencer (Cha et al., 2010).

Regular users who engage in the issue communication but fail to exert significant influence are considered *issue followers*. In contrast, *issue bystanders* are platform influencers who possess the ability to mobilize resources but choose not to engage in the issue communication. Together, issue followers and issue bystanders form the counterparts of issue influencers.

The new typology of influencers is particularly useful in conceptually and practically separating platform influence from issue influence, accumulative influence from improvisational influence, and individual-level influence from network-level influence. As the digital public sphere tends to be fragmented, SMIs have built their expertise, status and influence in heterogeneous issue niches (McCorquodale, 2020; Suuronen et al., 2022). Therefore, when connective action targets a specific policy or organization, both platform influencers and regular users have the potential to become leaders in the developing process of an issue communication network. By focusing on the temporality of social influence, the concept of issue influencer allows for an interchangeable understanding of influencers and regular users without presumptions of their previous online social status. Besides digital activism, the concept of issue influencer can be applied in marketing and information diffusion.

Communication Network Dynamics Among Issue Influencers

From the perspective of connective action theory (Bennett & Segerberg, 2013; Mirbabaie et al., 2021), the connections and coordination among influential activists are crucial for

sustaining activism and mobilizing more participants. Therefore, social network analysis is an appropriate method for understanding the dynamics of digital activism. The social network approach emphasizes the interrelationships among actors and how the structural processes of their relations as well as the characteristics of the actors co-shape the network dynamics (Diani & McAdam, 2003; Monge & Contractor, 2003).

While many studies have adopted network analysis to examine connective action such as using network-based measures (Kuo, 2018) and holistically delineating the network structure of activists and participants (Jackson et al., 2018; Ma & Zhang, 2022), less is known about how structural mechanisms, such as closure-based transitivity, influence the activism network through rigorous empirical network modeling. Although some studies explored basic structural processes such as reciprocity (Y. Yang & Stoddart, 2021), more research is needed to understand the underlying structural mechanisms that influence the activist network.

Furthermore, previous literature on networked activism has often included all participants (Ma & Zhang, 2022; Y. Yang & Stoddart, 2021), lacking a nuanced understanding of the coordination among influential nodes only. The SMI marketing literature suggests that partnering with multiple influencers can generate synergy and stronger effects in shaping customers' choices (Vrontis et al., 2021). Therefore, it is essential to investigate whether similar effects exist among issue influencers in connective action and what underlying structural processes could explain the network dynamics.

Digital Connective Action and Social Media Platforms in China

Among the many social media platforms in the Chinese fragmented online public sphere (Shao & Wang, 2017), Weibo is a microblogging site launched in 2009, often referred to as "the Chinese Twitter." It is now one of the most popular platforms in China with nearly 600 million monthly active users as of Q3 2022 (Thomala, 2022). The open architecture and large user base, though with a certain level of censorship, have rendered the platform a critical digital public space where the Chinese public engages in concerning controversial social issues (Shao & Wang, 2017; Tang, 2023). In its early stage, there was a famous slogan "attention changes China"[2] meaning that public engagement on social media could meaningfully impact the government's decision-making process and even the political system in China (G. Yang, 2009).

However, digital public deliberation in China has been largely suppressed by a series of regulatory and organizational reconfigurations (Y. Yang & Stoddart, 2021). A large number of celebrity commentators who had been vocal on controversial issues, often holding a dissenting view, were

banned in 2013 (Buckley, 2013). The propaganda machine on social media further moderates the power of influencers in shaping public opinion (Huang et al., 2018). Besides, the commercialization logic of Weibo as a publicly listed company since 2014 complicates what was once one of the very few public spaces for political discussion such that it is now an amalgam of advertising, entertainment, and public deliberation site (Jia & Han, 2020; Tang, 2023). Is digital connective action still possible in China? If yes, who are the current influential actors, and how do they coordinate in the absence of previous dissenting political influencers? Answering these important questions can shed light on Chinese digital activism research.

Research Context

The goal of this study is to decipher the communication network dynamics among issue influencers in China. I choose a recent controversial media policy on gender representation as the research context. In September 2021, the NRTA released an official guideline asking the media industry not to present images of effeminate men, or *niangpao* (McDonald, 2021). On 18 September, Beijing RTA also announced that it demanded the "sissy aesthetics" must be eliminated. However, just 3 years ago the CCP-run mouthpiece *People's Daily* condemned the remarks of *niangpao* as disparaging (Gui, 2018). The policy turn reflects a broader social and cultural control campaign and unavoidably led to a heated discussion on social media platforms.

Those who raised concerns worried that this policy might further threaten gender expression freedom and act as an official endorsement for gender-based school bullying, causing more *Ludaosen*-like tragedies (Samson, 2021). The discursive movement, primarily opposing the ban, approximately lasted 5 months from August to December 2021, transforming the supposedly positive words used in the guideline such as *yanggang* (masculine) into negative connotations criticizing the singular and macho masculinity. The discussion about the controversial policy has not been systematically censored. Given that the primary participants in digital activism were opposing the official ban, it is a suitable case to understand how the issue influencer communication network evolves as connective action.

As informed by previous research in communication network dynamics, several structural processes (or endogenous effects) should be especially essential in shaping the issue influencer network dynamics of interest. First, as one of the most fundamental network structural processes, reciprocity suggests that nodes in a network would send a tie to those who have sent a tie to them. Communication ties are found to be driven by reciprocity in various contexts (Esteve Del Valle & Borge, 2018; Harrigan et al., 2012; Young et al., 2023; Zhen et al., 2023). Second, transitive means that a node tends to form closed triplets for a stable and cohesive

relationship (Monge & Contractor, 2003). Previous literature has suggested a closure-based structural process as one of the driving forces for communication tie formation (Harrigan et al., 2012; Peng et al., 2016; Zhen et al., 2023).

While the structural processes have been extensively tested in various networks, in the specific context of Chinese digital connective action as discussed above, it is beneficial not to assume that the effects of structural processes would underlie the communication network dynamics in the same way as those in Western societies:

> *Research Question 1a (RQ1a)*. How does reciprocity influence the tie changes in the issue influencer communication network?

> *Research Question 1b (RQ1b)*. How does transitivity influence the tie changes in the issue influencer communication network?

For influencer-level features (or exogenous effects), policy or issue stance is a significant predictor of tie formation and clustering in policy communication networks (Dash et al., 2022; Esteve Del Valle & Borge, 2018). Next, based on the new typology proposed in the earlier section, I test if LIIs (previously platform influencers) would tend to send and receive more ties than CII (previously regular users). Then, the homophily effects for all influencer-level features are examined as suggested by previous research (Wu et al., 2011; Young et al., 2023; Zhen et al., 2023). Finally, network size, likeability on social media, and gender are controlled following Park and Kaye (2017) and Xu and colleagues (2021):

> *Research Question 2 (RQ2)*. How does issue stance explain the network dynamics among issue influencers?

> *Research Question 3 (RQ3)*. Will LIIs receive or send more ties than CIIs in the issue influencer network?

> *Research Question 4 (RQ4)*. Will issue influencers with the same issue stance and same influencer categorization tend to have a tie?

Methods

Data

I used an open-source Python program, *weibo-search* (L. Chen, 2020/2022) to collect public Weibo posts, which can retrieve up to 10 million posts each day. Given the dates of critical events in the policy discussion, I collected posts published from 25 July 2021 to 12 December 2021, which contain a series of keywords that are related to insulting words describing effeminate men (e.g., 娘炮, *niangpao*), masculinity (e.g., 阳刚, *yanggang*), cross-dressing (e.g., 女装大佬, *nvzhuang dalao*), and victims from school bullying due to

gender expression (e.g., 鹿道森, *Ludaosen*). The data collection started on 23 September 2021 to collect the newly added posts daily until 12 December 2021. A total of 23 keywords were included to capture the discussion on the ban and gender expression as exhaustive as possible (see the full list in Table S1).

A preliminary analysis of the most frequently used hashtags suggested that some of the keywords were used in a context with less relevance to the sissy ban discussion. Therefore, I removed the posts that contain irrelevant hashtags. This procedure yielded a dataset of 199,683 posts from more than 150,000 unique users. Figure 2 shows the volume of posts containing the different keyword(s) across time. The official ban on sissy idols and effeminate men and state media commentaries provoked discussion peaks on Weibo. Specifically, the word *yanggang* (masculine) was frequently satirized by users to make ironic comments about men who committed domestic violence or have sexist attitudes. The death of *Ludaosen* brought another peak of discussion over the gender expression of men in early December and the volume of the posts gradually declined afterward.

The top 20 most popular hashtags in the dataset are listed in Table S2. Some of the hashtags might not contain the keywords (e.g., Hashtags 1, 2, and 19) but the content containing the hashtags is highly relevant. For example, fans of SANTA, a Japanese idol in a Chinese boy band, intentionally used "masculine" to appraise him after realizing celebrating an ambiguous gender expression can be risky after the ban. While Yinghao Sun, another male idol, was humiliated as a sissy man at the airport by haters.

Constructing an Issue Influencer Communication Network

I first identified issue influencers among the 152,193 Weibo users in the discussion about the ban on sissy idols. To do so, I constructed the full discussion network among all users where a tie representing if there existed a communication link (either mentioning or reposting) originated from the user being reposted or mentioned to the user who reposted or mentioned. The reposting and mentioning ties tend to better signal meaningful communication among actors than follower-followee ties (Peng et al., 2016). The full directed one-mode binary network consists of 120,002 nodes and 139,178 ties.

Next, I identified issue influencers from the full network based on the eigenvector centrality of the nodes. While multiple centrality measurements such as degree centrality and betweenness centrality have been used to assess the influence of a node (Valente, 2010), eigenvector centrality captures the conceptualization of issue influencers in the communication network. Eigenvector centrality describes the relative importance of a node and assigns larger weights to nodes whose neighbors are also tightly connected in the network (Alexandre et al., 2022). Thus, eigenvector
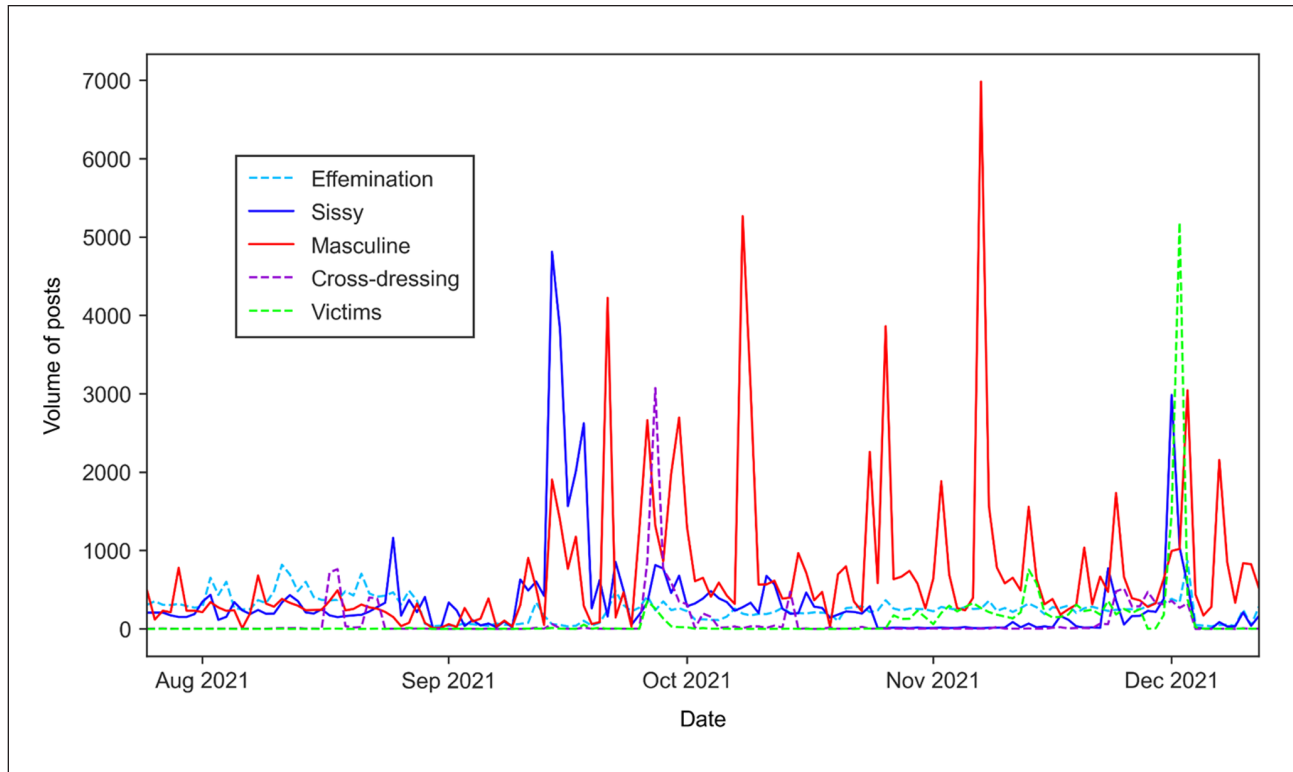
Figure 2. The volume of posts by different keyword(s) across time.

centrality could identify issue influencers that are both essential to the overall communication network and are connectively clustered, which focus on the mutual relationships among nodes in a contingent network.

The distribution of eigenvector centrality of the nodes in the full network is highly skewed and 0.015 was chosen as the threshold to generate 388 issue influencers. The threshold allows me to select highly influential nodes (see Figure S1) while ensuring the size of the network is feasible for network modeling in RSiena and manual coding. Based on the typology introduced earlier in this article, the rest of the nodes are *issue followers* ($N=119,614$). I compared the issue influencers and issue followers on additional three network metrics on cumulative distribution plots (see Figure 3) and found that issue influencers generally had a higher level of indegree, outdegree, and local clustering coefficient (a measure of the degree to which a node is embedded in a clique) than issue followers, suggesting that eigenvector centrality is a reliable measurement to identify influential users. I also performed a text analysis on the content created by issue influencers and found that most of the posts were relevant to the discussion over the ban, masculinity, and gender expression. The top 10 most frequently used words among issue influencers can be found in Table S3.

I took the subnetwork composed of the 388 issue influencers from the full network and the issue influencer communication network consists of 1,756 ties. To investigate the

longitudinal dynamics of the network, I broke down the network into two periods, the first period is from 25 July 2021 to 14 October 2021, and the second period is from 15 October 2021 to 12 December 2021. The cutting-off point (15 October) was selected based on the distribution of the volume of posts, peaks, and critical events (see Figure 3) so that the first period includes the initial reactions and opposition from the public after the guideline from Beijing RTA. In the second period, the discussion was about how users turned the word *yanggang* into a negative one to criticize macho masculinity and the following relevant consequences such as the suicide of *Ludaosen*. Figure 4 illustrates the networks in two periods.

Manual Coding

I conducted content analysis on the issue influencers to categorize issue influencers, analyze their issue stance, and assess the current account status. Through an iterative process, I developed and revised the coding scheme (see Table S4). The author and another trained coder manually coded the same 25.7% ($N=100$) of the influencers and calculated the intercoder reliability. Krippendorff's α (Krippendorff, 2018) reached a satisfactory level across three variables: .92 on the influencer categorization, .90 on the issue stance, and 1.00 on account status. Next, each coder independently coded half of the remaining influencers.
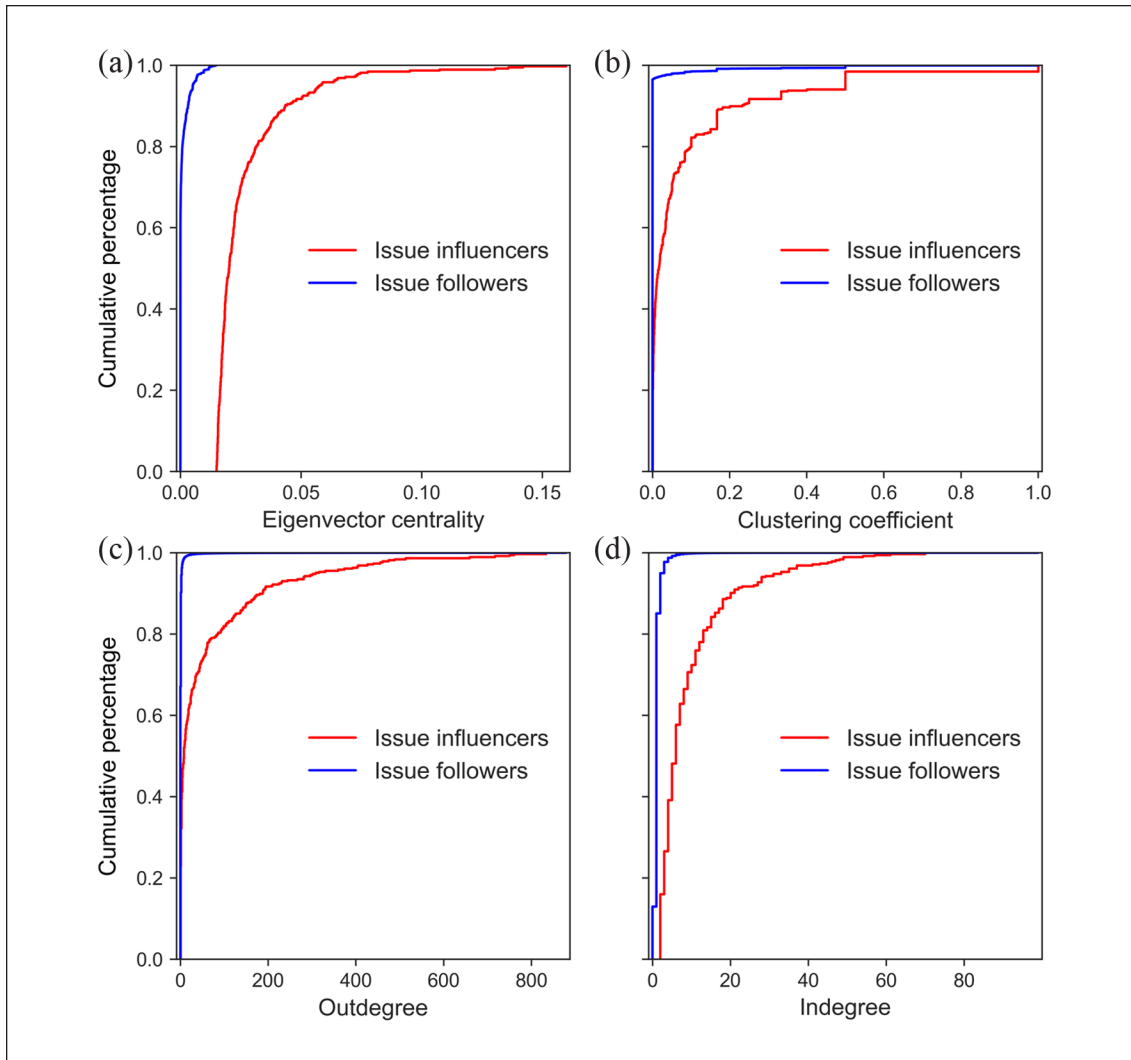
Figure 3. Cumulative distribution of eigenvector centrality (a), clustering coefficient (b), outdegree (c), and indegree (d) for issue influencers (*N* = 388) and issue followers (*N* = 119,614).

Measures

Endogenous Variables. Reciprocity suggests that a node is more likely to send a tie back to others that send a tie to it. In the network of issue influencers, a reciprocal relationship refers to an influencer being mentioned or reposted by another influencer would also establish a communication tie with them.

Transitive triplets measure the tendency of transitivity. Specifically, when influencer *i* sends a tie to *j*, and *j* sends a tie to *h*, *i* tends to also form a tie with *h* to complete a closed triplet (Ripley et al., 2020).

Number of three-cycles captures all types of closed triplets without any assumption about the order and direction among the nodes. It is a general indicator of the local triadic dynamics effect (Ripley et al., 2020).

Exogenous Variables

Issue Stance. Both original and reposts of the issue influencers were manually examined to determine their issue stance on the ban on sissy idols. Three hundred twenty-eight (84.5%) issue influencers showed an opposite stance against the official ban, which includes directly criticizing the policy, reflecting on toxic masculinity, and concerning the potential effect on school bullying. Sixty (15.5%) issue influencers were either producing irrelevant posts or had an ambiguous stance toward the policy. No issue influencer supported the policy. A dummy variable on issue stance was created: 1 = *Opposition*, 0 = *Unknown*.

Leading Issue Influencer (LII). The LIIs were coded based on their role on social media. Although the adapted coding scheme (Wang et al., 2020) includes seven different
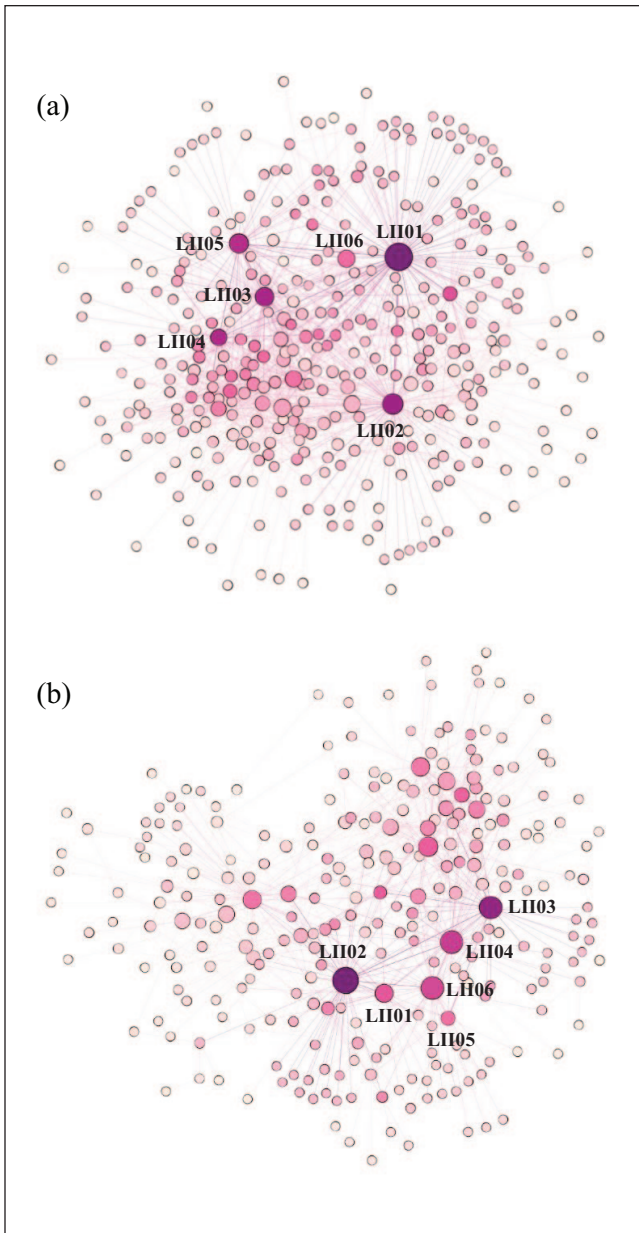
Figure 4. Issue influencer communication network in Period 1 (a) and Period 2 (b).
Node size is based on degree centrality, and node color is based on eigenvector centrality. Layout algorithm is Yifan Hu Proportional (optimal distance = 125.0, relative strength = 0.75, initial step size = 20.0, step ratio = 0.95). LII01–LII06 are the top six leading issue influencers (LII) with the highest eigenvector centrality at Period 1.

categories such as celebrity and media, only three types of categories emerged from the coding process, namely, regular users (with less than 10,000 followers and unverified, *N* = 190, 49.0%), non-political influencers (with more than 10,000 followers or verified as a non-political domain blogger, *N* = 192, 49.5%), and others (deactivated accounts that we are unable to determine its category, *N* = 6, 1.5%). Given the small sample size of the "others" category, I decided to

combine the six accounts into the regular user group to make a binary variable with the regular user as the reference group.

Control Variables. Several exogenous and endogenous variables are controlled. *Rate of change* captures the overall speed at which the network evolves. *Outdegree* indicates the overall tendency of a node to send a tie to another node in the network. The two fundamental variables are by default in the network evolution model (Ripley et al., 2020). *Out isolate* was added in the model to capture the tendency for a node to be an isolate in the network. Due to the low density of the network, the addition of out isolate effect could enhance model convergence (Ripley et al., 2020; Xu et al., 2021). Two variables quantifying social media platform influence were controlled: *Follower-following ratio* is calculated by dividing the number of followers by the number of following of an issue influencer. The number of following is the number an issue influencer follows on Weibo. This ratio can be used as an indicator of likeability on social media (De Veirman et al., 2017). As the original ratio is highly skewed, I performed a log transformation on the variable (*M* = 2.65, *SD* = 3.99). Following Xu et al. (2021), I created another variable indicating the *network size* by averaging the log-transformed numbers of followers and following (*M* = 7.72, *SD* = 2.03). Finally, *gender* was also included based on the self-identification of issue influencers in the profile (Male = 0, *N* = 102, 26.3%; Female = 1, *N* = 281, 72.4%).

Analytical Procedures. To analyze the longitudinal dynamics of the issue influencer network, I employed Stochastic Actor-Oriented Models (SAOM) in the simulation investigation for empirical network analysis (SIENA) (Ripley et al., 2020). SIENA models assume that the network evolution is due to the actors, or the nodes, who create, maintain, or terminate ties to other actors. Broadly speaking, these decisions are influenced by the network structure and the actor-specific characteristics, of either ego (the focal actor who makes decisions) or alters (other actors in the network). Therefore, the tie change among issue influencers could be investigated as a function of both exogenous structural effects and endogenous nodal effects. The analysis was conducted through the RSiena package (version 1.3.0) in R (version 4.1.1).

Results

Network Descriptives

The two networks each contain the same 388 issue influencers. The network density through the two periods decreased (Period 1 = 0.008; Period 2 = 0.004). The average degree shows a similar pattern (Period 1 = 3.165; Period 2 = 1.727), and so does the number of ties (Period 1 = 1.228; Period 2 = 670). From Period 1 to Period 2, 528 new ties were created, 1,086 ties were dissolved, and 142 ties were maintained. The Jaccard index was 0.081.[3] The descriptive results suggest that the communication over the sissy idol ban

among issue influencers gradually declined over time and the network data are suitable for parameter estimation in SIENA.

Network Modeling

To answer each research question, I modeled the variables of interest and the control variables to determine if the variable is significantly influencing the network change. According to Ripley et al. (2020), the *t*-test statistics with an absolute value larger than 1.96 indicate significance at the .05 significance level. To demonstrate a higher level of accuracy of the statistical significance, I calculated the *p*-values based on the *t*-scores and the degrees of freedom in the model. The results of goodness-of-fit diagnostics (see Figure S2) suggested that additional structural effects might improve the goodness-of-fit. However, I decided not to incorporate more structural effects given the importance of the nodal attributes in influencing the evolution of a very large network (*N* = 388). I reported the estimates, standard errors, and *p*-values for rate effects, endogenous network effects, and exogenous actor-specific effects in Table 1. The overall maximum convergence ratio was 0.19 and the *t*-ratios for all reported estimates were smaller than 0.04 in absolute values, suggesting excellent convergence for the model (Ripley et al., 2020).

The rate parameter suggested on average, there were more changes in how issue influencers interacted with each other during Period 2 than in Period 1. Combining the tie change information reported above, the change was mainly the dissolution of ties. It is reasonable because the official ban on sissy idols and effeminate men as well as news coverage from state-affiliated media all came out in the first period, which provoked more discussion. The negative and significant outdegree density parameter demonstrated that, on average, issue influencers did not tend to repost or mention each other.

RQ1a asked how reciprocity influences network evolution. Results showed that reciprocal relationships among issue influencers significantly contributed to tie formation (*Estimate* = 0.586, *SE* = 0.161, *p* = .002). Influencers were more likely to establish communication ties with other influencers who have already directed a link to them.

RQ1b asked how the network dynamics would be driven by transitive closure in the local structure. Results showed that both transitive triplets (*Estimate* = 0.193, *SE* = 0.043, *p* = .000) and the number of three-cycles (*Estimate* = 0.288, *SE* = 0.081, *p* = .002) significantly explained tie change. Influencers tended to form a closed triplet when communicating over the contentious gender policy. The more triad-cycles at an influencer's local structure would further lead to more tie formation.

RQ2 tested if the issue stance would explain the influencer network dynamics. The results demonstrate that issue stance was not a significant predictor of network change for both sending (*Estimate* = −0.003, *SE* = 0.057, *p* = .954) and receiving a tie (*Estimate* = −0.036, *SE* = 0.078, *p* = .649). *RQ3* asked if LIIs, compared with CIIs, would tend to initiate

Table 1. Estimated Stochastic Actor-Oriented Model for Influencer Communication Network (*N* = 388, Periods = 2).

Effects	Estimate	SE	*p*-value
Rate of change			
Period 1	51.396***	2.970	.000
Endogenous effects			
Outdegree	−3.685***	0.248	.000
RQ1a. Reciprocity	0.586**	0.161	.002
RQ1b. Transitive triplets	0.193***	0.043	.000
RQ1b. 3-cycles	0.288**	0.081	.002
Out-isolate	3.073***	0.294	.000
Exogenous effects			
RQ2. Issue stance ego	−0.003	0.057	.954
RQ2. Issue stance alt	−0.036	0.078	.649
RQ4. Issue stance same	0.173*	0.071	.024
RQ3. LII ego	2.442***	0.432	.000
RQ3. LII alt	1.076**	0.305	.002
RQ4. LII same	−0.710*	0.297	.027
Follower-following ratio ego	−0.006	0.015	.673
Follower-following ratio alt	−0.056**	0.019	.007
Follower-following ratio similarity	2.014***	0.285	.000
Network size ego	0.099***	0.027	.001
Network size alt	0.028	0.035	.432
Network size similarity	−0.310	0.262	.250
Female ego	0.013	0.043	.760
Female alter	−0.013	0.058	.820
Female same	0.033	0.057	.562

SE: standard error; LII: leading issue influencer.
*p < .05. ***p* < .01. ****p* < .001.

communication relationships and be favored as communication partners among the issue influencers. The results suggested that LIIs were more likely to both send a tie to others (*Estimate* = 2.442, *SE* = 0.432, *p* = .000) and to receive a communication link (*Estimate* = 1.076, *SE* = 0.305, *p* = .002) than CIIs.

RQ4 is about the role of homophily in tie change. The results suggested a tie was more likely to occur between two issue influencers who both opposed the ban (*Estimate* = 0.173, *SE* = 0.071, *p* = .024). Interestingly, a tie was less likely to form between two LIIs (*Estimate* = −0.710, *SE* = 0.297, *p* = .027), suggesting that the LII–CII pairs drive the network evolution.

For control variables, results suggested that issue influencers with a higher level of likeability were less likely to receive a tie, that is, to mention or to repost other issue influencers (*Estimate* = −0.056, *SE* = 0.019, *p* = .007). However, those with larger network sizes would tend to be mentioned and reposted (*Estimate* = 0.099, *SE* = 0.027, *p* = .001).

Discussion

This study makes several contributions to the literature on SMI, connective action, and Chinese digital activism. First, it presents a theoretical framework positions issue influencers

as essential actors propelling issue communication networks in connective action, using a novel influencer typology. Second, it empirically examines a series of endogenous and exogenous factors that shape network dynamics. Finally, it offers insights into how digital activism against an official policy is facilitated by non-political influencers and ordinary users in a heavily regulated online environment.

Previous research on connective action has showed the effectiveness of influential actors in mobilizing and motivating other participants. However, most influencers have been identified based on their large number of followers or social status as social movement organizations and political influencers (Alexandre et al., 2022; Dash et al., 2022; Mirbabaie et al., 2021). Given that the influence of opinion leaders is unstable (Cha et al., 2010; Liang & Lee, 2021) and that influencers can participate in political issues from other domains such as fashion and sports (Suuronen et al., 2022), the current study complicates the definition of influencers in connective action by proposing a new typology of influencers. This allows for an interchangeable understanding of influencers and regular users, without any presumptions about who they are or how many followers they may have. Both platform influencers and regular users can serve as potential leaders in developing an issue communication network.

Moreover, issue influencers consider their impact on the network level, where not only the number of reposts matters, but also the number of reposts generated by their reposts is significant. By sustaining the conversation and connecting with other influential actors, issue influencers become critical players in a connective action network. The concept of issue influencer is not only applicable to digital activism, but also to marketing and information diffusion (Bakshy et al., 2011; Iyengar et al., 2011).

This study presents empirical evidence of how complex network structural processes underlie connective action. Joining the proliferating research in networked connective action (Bennett & Segerberg, 2013; Jackson et al., 2018; Mirbabaie et al., 2021), the findings demonstrate that network mechanisms such as reciprocity, transitivity, and homophily significantly influence the evolution of an issue communication network. This study advances previous research efforts that focused on the network structure of an activism network (Ma & Zhang, 2022; Y. Yang & Stoddart, 2021) by formally modeling complex structural effects that shape activism networks. Finally, the study provides a computational modeling approach that lays the empirical foundations for further exploration of network mechanisms that drive digital connective action.

The study's findings align with previous research (Dash et al., 2022; Esteve Del Valle & Borge, 2018), which suggests that influencers coordinate with partners who share similar issue stances to amplify issue salience and promote their perspectives through social networks. Notably, no issue influencers in the study supported the sissy ban policy, although some platform influencers such as the scriptwriter

Wang Hailin endorsed it. However, Wang failed to gain wider influence through engaging in conversations with other influential users, resulting in a low eigenvector centrality score of 0.00019 and losing the momentum to shape the issue communication network. In addition, the gender representation policy was not prioritized in the propaganda agenda. Thus, no official media or other government-affiliated accounts joined the debate to moderate the influence of opinion leaders (Huang et al., 2018). Future studies on more salient and sensitive political issues, such as discussions over the "dynamic zero-COVID" strategy, may observe a network of well-connected issue influencers who align with the official stance.

The fact that LIIs (those issue influencers who were platform influencers before) tended to send and receive more ties than CIIs (those issue influencers who were regular users before) indicates that their existing status as influential users signals legitimacy and authority, encouraging the formation of ties. Interestingly, ties are more likely to form between an LII and a CII in the issue influencer network, suggesting that the discussion about the ban on sissy idols was not limited to a small cluster of platform influencers. Opinions successfully diffused from elite users to regular users who then became issue influencers in the network. Issue influencers with large network sizes and higher levels of likeability tended to be mentioned or reposted. It is not surprising that influential users tend to initiate the conversation by creating original content that triggers information sharing by others in connective action (Mirbabaie et al., 2021). However, LIIs were less willing to mention or repost other users potentially due to information overload, limited attention (Harrigan et al., 2012), and even conflicts of interest.

Contrary to previous studies (Dash et al., 2022; Wang et al., 2020; Wu et al., 2011), I did not identify any political influencers or media outlets in the issue communication network. One plausible explanation is that the sissy ban is directly made by the government which hardly receives open and large-scale critiques from political commentators and media in China. In fact, a great many state-affiliated media such as *People's Daily* received plentiful mentions, however, these users with high outdegree centrality scores seldom responded to the opponents and were unable to shape the issue communication network effectively. The absence of political influencers in the activism network suggests that political influencers might be more effective in political issues that are aligned with the government's stance in authoritarian states, which merits further empirical investigation. To study the role of political influencers in connective action and deliberate democracy, future research should consider influencer-public interaction within a specific system of political information and platform governance.

Although whether the connective opposition in the current study produced any policy change on gender representation is unknown from the data, the discussion over *niangpao* clearly coalesced into the stream of broader gender and

sexuality activism such as #MeToo in China. One obvious outcome of the current activism is that the word *yanggang* (masculine) has been widely satirized and mocked, offering a powerful discursive resistance in everyday discussion on gender against the official ideology. Even if the previous political influencers were mostly banned (Buckley, 2013) and Weibo seems to afford less publicness for connective action (Jia & Han, 2020), SMIs from various domains such as entertainment news bloggers and movie recommenders, together with regular users can still sustain a long-lasting communication network through the synergy of their cooperation that shape public opinion on an official policy (Vrontis et al., 2021). As Weibo evolves into a marketing platform (Jia & Han, 2020), profit-driven SMIs with high-profile influence (Bakshy et al., 2011; Iyengar et al., 2011) might form the backbone of future digital activism in China. Therefore, activists and advocates of social issues should leverage the networked nature of digitally connected users and engage both SMIs and regular users as much as possible in contentious political and social issues.

Limitations and Future Research

The current study focuses only on one political issue and most of the issue influencers hold a disapproval position. I speculate that issue stance would play a bigger role and the issue network would be more clustered once there is a strong presence of an opposing counterpart. Future research on connective action and issue influencers can replicate the current study to issues that are more heterogeneous in terms of issue stance to provide additional insights regarding how issue stance shapes the issue communication network.

Given the large size of the network ($N=388$), the study only included the most important structural processes. Future research should continue to explore how structural mechanisms such as outdegree activity and indegree popularity sustain the influencer communication network with a smaller sample or with a denser structure.

Finally, I am not able to gauge the motivations and concerns of the issue influencers, especially the LIIs. Platform influencers might select certain issues that are only related to their accumulated audience. In addition, platform influencers' stances and communication on a contentious political issue might be affected by the preference of their followers as the latter constitutes the opinion leadership and monetary base for the influencers. Future research should use interviews and surveys to understand the motivations of influencers in engaging in digital activism.

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. I translated the Chinese word *yanggang* as masculine/masculinity to reflect its normative connotations as intended by the government. However, in the discursive space that I am focusing on, it was perceived similarly to the concept of hegemonic masculinity (Connell, 2005).
2. Directly translated from Chinese: 围观改变中国
3. According to Ripley et al. (2020, p. 20), if the network change is primarily driven by termination of ties, a low Jaccard index will be fine for model estimation in SIENA.

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