
SOCIAL NETWORK ANALYSIS: SOCIAL ACTION OF K-POP FANS AS DIGITAL SOLIDARITY VIA TWITTER

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ABSTRACT

This study aims to explore the social actions of K-Pop fans as a form of digital solidarity through Twitter. In contrast to the research by Marinescu & Balica (2013), Pramadya & Oktaviani (2016), Yoon (2018) this study attempts to map and explore social networks by analyzing actors who play a role in social action as digital solidarity for K-Pop BTS fans namely ARMY through Twitter and see related relations between actors. The research method used is Social Network Analysis using Netlytic and Gephi software with data sourced from tweets on Twitter accounts. The results of this study explain the social network of actors involved in the social action of BTS fans, namely ARMY, with donation activities as a form of digital solidarity through four aspects, namely commons, assemblies, swarms and weak networks.

KEYWORDS social network analysis; social action; K-pop; BTS; digital solidarity



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INTRODUCTION

Several studies on K-Pop so far have only described it as a hybrid culture and also explained its influence and uniqueness as a product (Marinescu & Balica, 2013; Pramadya & Oktaviani, 2016; Yoon, 2018). K-Pop or Korean Pop is a form of culture originating from South Korea or commonly called the Hallyu Wave. The spread of the Hallyu Wave with various forms of products such as K-Drama and K-Pop which are growing rapidly in distribution throughout the world. If you look at its history, of course it is very long and is often explained by several parties, but the reasons why the Hallyu Wave culture can develop and spread very quickly, one of which is globalization and cultural hybridity (Marinescu & Balica, 2013; Pramadya & Oktaviani, 2016; Yoon, 2018).

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Globalization as an aspect that triggers a big impact with digital transformation is certainly a major factor in accelerating the development of K-Pop culture (Parc & Kim, 2020). The spread of K-Pop culture with globalization which then resulted in a cultural hybridity. Cultural hybridity is a negotiation process between local culture and outside culture which then accept each other as a result of technological developments or digitalization (Marinescu & Balica, 2013; Pramadya & Oktaviani, 2016; Yoon, 2018). Yoon (2018) mentioned that cultural hybridity in K-Pop can be formed through how fans take action, one of which is learning a foreign language, participation creates a space for communication between fans through social media and consumption behavior. These various actions then seem to obscure the commodification side of the main goal of spreading K-Pop culture.

Instead of looking at the strong side of commodification, this research tries to see how the actions of K-Pop fans are related to the participation of communication spaces between fans through social media. K-Pop fans or so-called K-Pop fandom (KPopers) are transcultural fandoms Han (2017). Transcultural fandom according to Han (2017) means how K-Pop fandom mobilizes across national borders geographically through communication and interaction using social media. Social media and K-Pop are indeed two things that are very closely related at this time. Through social media they build interactions and social networks as a means of communication and virtual world activities. The interaction that is built forms a community practice resulting in a behavioral term, namely fangirling. Fangirling is the language of K-pop fans which refers to the way they express their liking or love for their idol group which builds strong group solidarity online (Malik & Haidar, 2023).

Fangirling activities on social media as a representation of a sense of support, love and liking for K-Pop idol groups are mostly carried out with humanitarian-based social actions. One of the many K-Pop fans who often carries out humanitarian-based social actions, namely fans of the K-Pop BTS group. BTS fans are called ARMY (Adorable Representative M.C for Youth) apart from carrying out active support activities on social media, breaking YouTube's most famous record is an act of charity (Kanozia & Ganghariya, 2021). The massive use of social media, one of which is Twitter, is carried out to carry out humanitarian-based social actions, one of which is the campaign #LoveYourself, #SpeakYourself, #BlackLiveMatters and also fundraising for humanitarian assistance (Kim & Hutt, 2021; Lee & Kao, 2021). The hastagh is a form of digital solidarity.

Digital solidarity is a structural transformation regarding individual and group social relations that occur in the digital world Stalder (2013). This is done by K-Pop fans in various countries with community platforms that are owned in an organized way, one of which is in Indonesia. Indonesia is a country that also actively participates in social actions on Twitter social media. Reported by allkpop.com Indonesian BTS fans or Indonesian ARMYs carry out social actions to raise funds for online motorcycle taxis. Through tempo.com, from the survey data results, Twitter Indonesia ranks first as the country with the most K-Pop fans on Twitter.

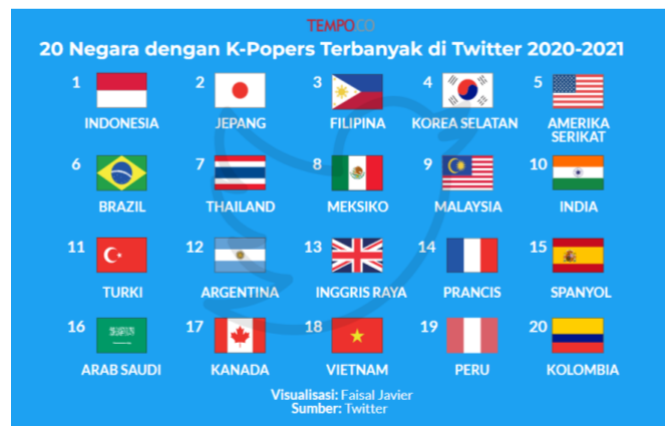


Figure 1. Most K-Pop data on Twitter 2020-2021

Based on this data, fangirling activities are also rife by Indonesian ARMY, which is part of K-Popers with the idol group BTS. The worldwide popularity of BTS in fact not only shows cultural hybridity but also places its fans as "digital gatekeepers" who use social media as gatekeepers to follow up on news or issues which are then carried out social actions both in bullying prevention and humanitarian assistance (Lynch, 2022).

Through social actions carried out by ARMY as a representation of BTS fans, especially Indonesia, ARMY presents the view that the presence of K-Pop culture has succeeded in influencing various social aspects. The use of social media, especially Twitter as a result of the presence of BTS, has the power to influence its fans, namely ARMY in Indonesia, to carry out activities that go beyond just supporting idols but benefit many people through digital community networks. This research presents two questions: 1) Who are the actors involved in the social action of K-Pop fans as digital solidarity through Twitter? 2) What are the social relations between actors in the social action of K-Pop fans as digital solidarity via Twitter?.

RESEARCH METHOD

This research method uses Social Network Analysis (Dawson, 2020) with Netlytic and Gephi software tools to process data. Data collection was sourced from Twitter tweets from April 27 2023 to May 4 2023 or limited collection was taken for 7 days using the keywords "ARMY" and "DONATION" which were crawled and then processed using Netlytic software which would later be analyzed and visualized using Gephi software. Data analysis was performed using Social Network Analysis (SNA) to explain the position of the most important dominant actor for information dissemination (Rios et al., 2019). The determination of these actors can be seen from a point called nodes while to see the relationships between actors can be seen from a line known as edges (Sitorus, 2022). Dominant actor mapping is done by measuring centrality (Mincer & Niewiadomska-Szynkiewicz, 2012). The measurement of centrality used in data processing is eigenvector centrality, namely the determination of actors who play

the most important role through the network based on the connection they have (Hansen et al., 2011; Segev, 2020). Meanwhile, the SNA visualization forms nodes that represent visual entities (objects, items, actors, or words), and edges that represent relationships or relations between nodes (Danowski et al., 2021; Segev, 2020)

RESULT AND DISCUSSION

Social actor in ARMY-BTS social action

Based on the results of crawling data which is then visualized in terms of nodes and edges. The social actions of K-Pop fans carried out by ARMY BTS fans through the keywords "ARMY" and "Donate" were analyzed through eigenvector centrality via Gephi. This measurement shows the actors who are most influential and play an important role in the BTS social action network. In figure 2. the actor who plays an important role is @fundsforbts_id. This account is a BTS fanbase account that aims to manage social action resources and information in the form of receiving donations and making donations. This twitter account has a strong influence in coordinating donation actions carried out by ARMY. This account is also the only account that has an interaction center in disseminating information related to donations.



Figure 2. Graph of Actor Network in BTS-ARMY Fans Social Action
Source: Processed by researchers in 2023

Figure 2. shows the network pattern between actors with the most retweeted tweets by Twitter users. Network visualization in the form of dots is referred to as nodes which represent Twitter users. While the visualization is in the form of lines called edges which represent the relationships in the network. Based on the results of data processing, it obtained nodes 239 and edges 227 in the keywords "ARMY" and "BTS". Based on *betweenness centrality*, the measurement of the closeness of

the relationship between one actor and the actor on the Twitter account @fundsforbts_id has the most significant relationship. This is shown by the many interactions where the account often receives donations for BTS members and also has activity of 374 retweets, 20.9 thousand views and 832 likes which is quite a lot.



Figure 3. Account posting @fundsforsBTS_ID in carrying out social actions
Source: Twitter

The results of further data analysis also show that the @fundsforbts_id account has a large number of followers, namely 11.4 thousand followers and has activities to make donations in the form of a donation project per BTS member. As an example in figure 3. The account carries out social actions for BTS fans, namely in the form of donations to BTS member solo activities, namely Suga BTS. Actually a twitter account that coordinates social actions carried out by ARMY are so many but until now the one who is still actively making donations is the account @fundsforbts_id. This activity is carried out by ARMY as a form of their love by providing benefits to the community and also usually donating to the ARMY fan community itself. Donation activities carried out based on individual BTS member projects are not limited to only fans who have a liking for BTS members or are called individual BTS member fans but all ARMY can participate.

Relationship Between Actors Relation to Digital Solidarity ARMY Social Action

Based on the results of data processing, the visualization of Figure 4 is generated. Which is visualized with the names of the actors, the dominant actor @fundsforbts_id as an actor who has significant influence and has relationships

between other actors. Figure 4. shows significant color differences between one actor and another.

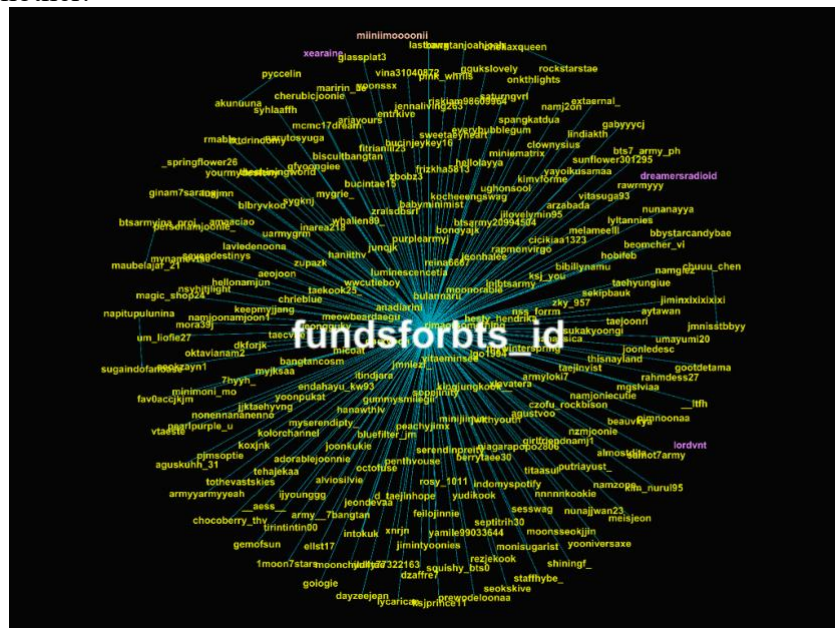


Figure 4. Actor Relations Social Network Graph

The visualization in Figure 4 shows the actor from `@fundsforbts_id` having interactions with other actors which are shown in color. The actor in yellow is the dominant actor in interacting with `@fundsforbts_id` from the closest account, namely the `@vitaminsee`, `@rimaBentuk`, `@rimaorsomething`, `@jiminiezt` from the edge position proximity. The relationship between the actors `@vitaminsee`, `@rimaBentuk`, `@rimaorsomething`, `@jiminiezt` and others was formed from interactions because they are both ARMYs.

The social network formed from figure 4. And social action in the form of project donations for each BTS member actually forms digital solidarity. This is because they have a sense of togetherness to carry out social actions based on their emotional ties. As Stalder (2013) shows digital solidarity from four aspects namely commons, assemblies, swarms and weak network.

Commons in the context of this research, it can be seen from the aspect of the `@fundsforbts_id` account that manages ARMY's social action information through their account. This account has 11.4 thousand followers where there is interaction between the `@fundsforbts_id` account and its followers and between followers in spreading information if ARMY wants to hold a donation action. The distribution of this information then refers to follow-up donations from receiving donations, procedures and also distribution of donations so that those who take part in this donation action know the information in a transparent manner. This activity then shows digital solidarity through the fanbase account that coordinates ARMY's donation actions.

Assemblies in the results of this study which refer to hierarchical associations and physical meetings have not been seen because the bonds they build are only virtual. Meanwhile, social interaction between members is also

limited because it is done indirectly. However, hierarchical associations in the aspect of assemblies see that the membership they build is not hierarchical, both in terms of age and gender. All members have the same position and the same opportunity to take part in the ARMY donation social action.

Meanwhile, for *swarms* that are related to groups of individuals and groups that have their own rules, the results of this study look more at the process of forming swarms through the @fundsforbts_id fanbase. The presence of this account contains a collection of individuals who have the same interests as BTS fans, namely ARMY. The members follow the account because they want to find information about their idol's fangirling activities, namely BTS. The @fundsforbts_id account actually doesn't have any special rules because anyone can follow the account, it's just that people who follow the account certainly have an interest in activities related to BTS. Meanwhile, for ARMY's donation action, they do not have standard rules to get real participation.

The results of this study also show *weakness networks* because this interaction network is only carried out by members who really have a passion for idol BTS or who claim to be ARMY. Meanwhile, for the requirements to become ARMY itself, there are no standard rules because these individuals claim to be part of ARMY from the basis of their emotional feelings. This weak network in the interaction of the donation action carried out by ARMY was formed because of the nature of this collection of groups that can enter and leave easily, without having to have a strong identity or register as a member.

CONCLUSION

Digital solidarity is a form of shifting perspective that social relations that are bound to each other are not only visible physically but can also occur through indirect interactions in cyberspace. In the social action of BTS fans, namely ARMY, digital solidarity is seen significantly, which is analyzed from social networks. The social network map shows that digital solidarity is built with the emergence of influential actors to coordinate ARMY's donations structurally. Then the digital solidarity of BTS fans' social action can also be seen from four aspects, namely *commons*, *assemblies*, *swarms* and *weak networks*. The results of this study still have limitations because they are sourced from Twitter data, but the results of this research can be a basis for developing studies on the presence of digital solidarity in the world of social media.

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