



**Selected Papers of #AoIR2022:  
The 23rd Annual Conference of the  
Association of Internet Researchers**  
Dublin, Ireland / 2-5 Nov 2022

## **CURATING VIRALITY: EXPLORING CURATED LOGICS WITHIN #BLACKLIVESMATTER ON TWITTER**

Yiran Duan  
Syracuse University

Jeff Hemsley  
Syracuse University

Alexander Owen Smith  
Syracuse University

Dhwani Ghandi  
Syracuse University

LaVerne Gray  
Syracuse University

### **Introduction**

Researchers have been studying the diffusion of information on the internet more than a decade, and some of the theoretical understandings of virality could be updated with newer concepts. For example, Nahon and Hemsley (2013) used the concept of gatekeeping to explain how some actors have more influence over the flow of information than others. However, gatekeeping implies a focus on restricting information flows, while newer notions could better capture the nuance of modern actors' influence over diffusion of information online. To address this, we leverage the concept of social media influencers (Freberg et al., 2011), people who have some influence over other social media users, along with the theory of *curation logics*, which posits that actors' decision to share, or curate content is driven by the incentives they face and the social norms within which they are embedded.

Using both qualitative and quantitative methods, we show that different levels of influencers tend to spread different kinds of messages. From this we argue that influencers face different curation logics, which impacts what they share. We also argue

Suggested Citation (APA): Duan, Y., Hemsley, J., Smith, A., Ghandi, D., & Gray, I. (2022, November). *Curating Virality: Exploring Curated Logics within #BlackLivesMatter on Twitter*. Paper presented at AoIR 2022: The 23rd Annual Conference of the Association of Internet Researchers. Dublin, Ireland: AoIR. Retrieved from <http://spir.aoir.org>.

that Nahon and Hemsley's (2013) theory of how content goes viral could have more explanatory power with these updated concepts. This research contributes to the study of viral events on social media, the theory of curation logics and the literature around social movements.

## **Background**

To understand the logics around sharing viral content in such a social movement we turn to (Thorson & Wells, 2015, 2016)'s theory of *curated flows*, which describes how people select information to share into their own networks. Curation decisions are based on the incentives and social norms that actors face. As such, we might expect that actors in #BlackLivesMatter and #BlueLivesMatter networks might face different incentives and norms. However, some people tend to have more influence over the flow of information than others (Bakshy et al., 2011). Research has shown a positive relationship between number of followers someone has and how often they are retweeted (Hemsley, 2019; Kwak et al., 2010). As such, more followers tend to equate to more influence over information diffusion. Therefore, instead of Nahon and Hemsley's (2013) "typical", "medium" and "high" level gatekeepers, we think curation behaviors may differ at more granular levels, pointing to a more nuanced view of the curation logics faced by influencers at different levels. Similar to some other studies (Hemsley, 2019; Jackson, 2020), we break down the levels of influencers in our study based on their follower numbers. Table 1 summarizes the different levels of influencers. Specifically, our research questions are:

*RQ1: Do different levels of influencers curate different types of information about #BlackLivesMatter on Twitter?*

*RQ2: Are there differences in message type and influencer curation for #BlackLivesMatter, #BlueLivesMatter, and #AllLivesMatter?*

## **Methods**

We used supervised machine learning to analyze tweets during the week before and after Derek Chauvin's trial: April 13, 2021, to April 27, 2021. During this time Twitter had 2,634,951 tweets matching the terms BlackLivesMatter, BlueLivesMatter, and AllLivesMatter. Of these, 1,586,376 are retweets (60.21%). Using qualitative coding techniques (Elliott, 2018), we first coded 200 tweets together and developed 6 categories: Support, Opposition, Disruption, Informative, Reframing, and Not Relevant. We then coded another 1100 tweets separately and the intercoder reliability was higher than 75%. We used the 1300 tweets as a "gold label" data set to train machine learning models (Géron, 2019). An initial run using the Gradient Boosting Classifier with default parameters achieved the highest accuracy at 63%, but we plan to further improve the models using hyperparameter tuning and adding significantly more data to the gold labeled dataset. We then ran the models on all the retweets.

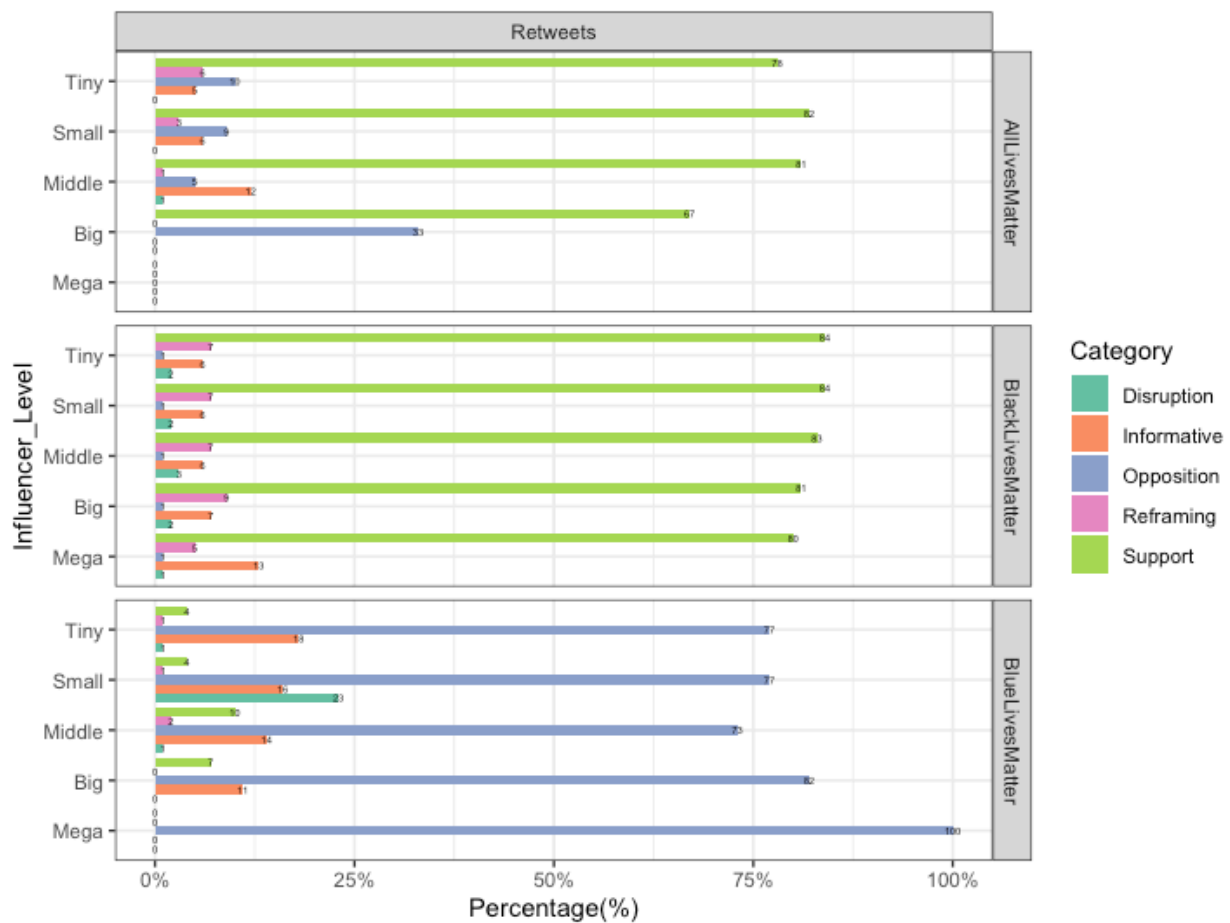
Influencer levels	Follower number
Mega	$X > 1$ million
Big	$100,000 \leq X < 1$ million
Middle	$10,000 \leq X < 100,000$
Small	$1000 \leq X < 10,000$
Tiny	$X \leq 1000$

**Table 1.** The Influencer Levels defined in This Study

## Results

We used Fisher's exact test to answer RQ1, and we find that different levels of influencers do tend to curate, or retweet, different message categories (p-value < 0.0005). As can be seen in figure 1, within #BlackLivesMatter data, Mega-level influencers tended to post relatively more Informative and fewer Disruption tweets, whereas those in the Middle-level tended to post relatively more disruption tweets. In general, except for Mega-level influencers, reframing messages were curated more frequently than informative. Tiny and Small-level influencers tended to be more similar and tended to current the highest rates of Support messages. These small and tiny level influencers are the largest groups and so probably face the widest range of norms and incentives, therefore it makes sense that they cover a wide range of content.

With respect to RQ2, we do see differences in message types and influencer curations. For example, support was the most frequently curated within #BlackLivesMatter and #AllLivesMatter, while for #BlueLivesMatter it is Opposition. #BlueLivesMatter has a much even distribution of message types that influencers curated, while #AllLivesMatter is more similar, but not as uneven, as #BlackLivesMatter.



**Fig 1.** Different Percentages of Tweets and Retweets that Influencers Posted across #All/Black/BlueLivesMatter.

## Conclusion

In this study we work to update Nahon and Hemsley's (2013) conception of virality by applying the framework of curated flows (Thorson & Wells, 2015, 2016) to discuss the information behaviors related to the #BlackLivesMatter social movement. Using both qualitative and quantitative methods, we find differences in different levels of influencers curation behavior within and between #All/Black/BlueLivesMatter. We offer some observations about the differences in *logics* (incentives and norms) that they might face. In future work we intend to expand our qualitatively coded gold label dataset, which we believe will improve the performance of our models. And while space requirements limited our ability to delve more deeply into how the concept of influencers and curation logics can update the concept of virality, we intend to follow up this theoretical work.

## References

Bakshy, E., Hofman, J. M., Mason, W. A., & Watts, D. J. (2011). Everyone's an influencer: Quantifying influence on twitter. *Proceedings of the Fourth ACM International Conference on Web Search and Data Mining - WSDM '11*, 65. <https://doi.org/10/fmzn5j>

Elliott, V. (2018). Thinking about the Coding Process in Qualitative Data Analysis. *The Qualitative Report*, 23(11), 2850–2861.

Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, 37(1), 90–92. <https://doi.org/10.1016/j.pubrev.2010.11.001>

Géron, A. (2019). *Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems*. O'Reilly Media, Inc.

Hemsley, J. (2019). Followers Retweet! The Influence of Middle-Level Gatekeepers on the Spread of Political Information on Twitter. *Policy & Internet*, 11(3), 280–304. <https://doi.org/10.1002/poi3.202>

Jackson, S. (2020). *Differentiated Information Flows: Social Media Curation Practices in the 2016 U.S. Presidential Elections*. 22.

Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media? *Proceedings of the 19th International Conference on World Wide Web*, 591–600. <https://doi.org/10.1145/1772690.1772751>

Nahon, K., & Hemsley, J. (2013). *Going Viral*. Polity Press Cambridge.

Thorson, K., & Wells, C. (2015). *How Gatekeeping Still Matters: Understanding Media Effects in an Era of Curated Flows* (pp. 25–44).

Thorson, K., & Wells, C. (2016). Curated Flows: A Framework for Mapping Media Exposure in the Digital Age: Curated Flows. *Communication Theory*, 26(3), 309–328. <https://doi.org/10/f878cg>