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This study is part of our research on understanding social media users' motivations in sharing news articles, with a focus on spreading misinformation. In this work, we focus on analyzing how the tweet narratives are conceived. We developed a coding scheme to qualitatively characterize the narrative patterns that are used to indicate how Twitter actively constructs the narratives to deliver what they would like to speak in messages. We uncovered that such agency is associated with the credibility of the news sources. Twitter authors citing low credible sources engaged the most in incorporating the news articles word by word, simply letting the title speak for them and promoting the original highlights in the article titles. In contrast, tweets citing the more reliable source engage diverse narrative tactics including quotations, paraphrases, together with personal expressions and comments beyond the topics and views of the cited articles. Our findings suggest Twitter users who cited low credible sources with high chance of publication misinformation may f]Bri wa a a

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A total of four hundred tweets were selected from a larger dataset that we constructed using a publicly available list containing IDs of CO se

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To answer Q2, we examined the distributions of the narrative patterns observed in tweets that cited news articles from different levels of credibility. Table 2 shows the statistics. We highlight two observations:

- 1) **Hk YYrg`Vhjb[`h YUfhWYg`Zca `h Y`YUghfY]UV`YbYk g`Xca U]bg`fF!%LhYbX`lc** leverage the exact article title while adding short additional personal comments (e.g., “great read!”, emojis) or tactics (e.g., @mention, #hashtags) to promote its spreading. 50% of analyzed R1-tweets quote the title with promotion messages, while only 11.8%, 14.9%, and 10.3% in R2-, R3-, R4. These Twitter users mostly **`YhH YUfhWY`HhYg`h Ya gYj Yg`gdYU_`Zf`h Ya U`cf` a YggU] Yg`lc`VYXY]j YfYX`j]b`h Yf`hk YYrg`**Or, they mostly relied on the article titles to construct their tweets.
- 2) **Hk YYrg`Vhjb[`h Ya cfYfY]UV`YXca U]b`gci fWg`fF!`UbX`F!(** are more likely to include information from the article content that is beyond the article title. 11.3%, 12.0%, 3.6%, and 4.4% in R4, R3, R2, and R1, respectfully, when combined with the results from codes 6 and 7.

The results suggest that the transmitters may **Yb[U] Y`j]b`XYYdYf`W`bgi a dh`cb`UbX`g] U]b[`cZ`h Y`j]b`Zfa U]cb`gci fW`** since they must have read the articles and further highlighted and incorporated their own choice of selected content from the articles in their constructed tweets.

Table 2. Percentages of tweets across News Domains with Distinct Credibility Levels.

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F%	0.0%	11.1%	50.0%	4.4%	18.9%	2.2%	2.2%	11.1%
F&	0.0%	38.8%	11.8%	2.4%	8.2%	2.4%	1.2%	35.3%
F'	3.0%	16.4%	14.9%	4.5%	13.4%	6.0%	6.0%	35.8%
F(6.2%	22.7%	10.3%	3.1%	15.5%	3.1%	8.2%	30.9%

(Codes refer to the codes in Table 1)

To answer Q3, We further identify the level of agencies from the eight narrative patterns, and regrouped them into five levels. Table 3 shows the details and the distributions of tweets across news domains falling into these agency levels. These five levels range from the lowest agency (A1: the tweets simply quote the article titles word by word or copying the hyperlink of the articles) to middle agency (A3: paraphrase the article title or content), and to highest agency (A5: the tweet message goes beyond spreading the article information but comment or reflect on it).

We observed that **Hk YYrg`Vhjb[`a cghfY]UV`Ygci fWg`Yb[U] Y`a cfYX]j YfgY`k Ung`cZ` a YggU] YW`bghi W]cb`h UhfUb[Yg`Zca ` \] [`lc`ck`U] YbWn`Yj Yg`Yj Yb`m** In contrast, **Hk YYrg`Vhjb[`h Y`YUghfY]UV`Ygci fWg`]bX]WUHX`h Y`ck YghU] YbWn`Yj Yg`**. Specifically, for R4, from low to medium, and to high agency levels, there are about one-third of tweets at each

level. Rather, for R1, half of tweets focus on quoting the article title with brief promotion, and it has the least tweets in the highest agency level (11.1%).

Table 3. Five Agency Level and Percentages of Tweets across News Domains with Distinct Credibility Levels

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We present a novel finding on Twitter users' agency in online information sharing and reveal how the sharing of misinformation has a distinct characteristic

Discourse About the COVID-19 Pandemic: Development of a Public Coronavirus Twitter Data Set. *JMIR Public Health and Surveillance* 6 (2020).

[3] Nir Grinberg, Kenneth Joseph, Lisa Friedland, Briony Swire-Thompson, and David Lazer. 2019. Fake news on Twitter during the 2016 US presidential election. *Science* 363, 6425 (2019), 374–378.