

Partisan Responses to Fact-checking in Online News Platforms

Evidence from a Political Rumor about the North Korean Leader

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US monitoring intelligence that North Korean leader is in grave danger after surgery

By [Jim Sciutto](#), [Joshua Berlinger](#), [Yoonjung Seo](#), [Kylie Atwood](#) and [Zachary Cohen](#), CNN

Updated 1644 GMT (0044 HKT) April 21, 2020





US monitoring intelligence that Kim Jong Un's in grave danger after surgery

CNN reports from Israeli artillery positions near Israeli-Gaza border

Tho cros enc

Kim Jong-un's Absence and North Korea's Silence Keep Rumor Mill Churning

Rumors about the North Korean leader's health — and speculation over his possible death — have only increased over the past two weeks.



Rumors are swirling about Kim Jong-un's location and health. [These North Korea experts showed us](#)

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As Kim Jong Un Disappears, North Korea Watchers Advise Caution

The guessing game began when the leader missed his country's most important holiday April 15, then ratcheted higher after a South Korean publication reported he had heart surgery





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Kim Jong-un: No signs of heart surgery, says South Korea

6 May 2020





State media reported that Kim Jong-un opened a fertiliser plant on Friday



[National](#) [North Korea](#)

NK defector claims he is '99%' sure that N. Korean leader died

By Yonhap Published : May 1, 2020 - 16:35
Updated : May 3, 2020 - 11:57

[A-](#) [A+](#)



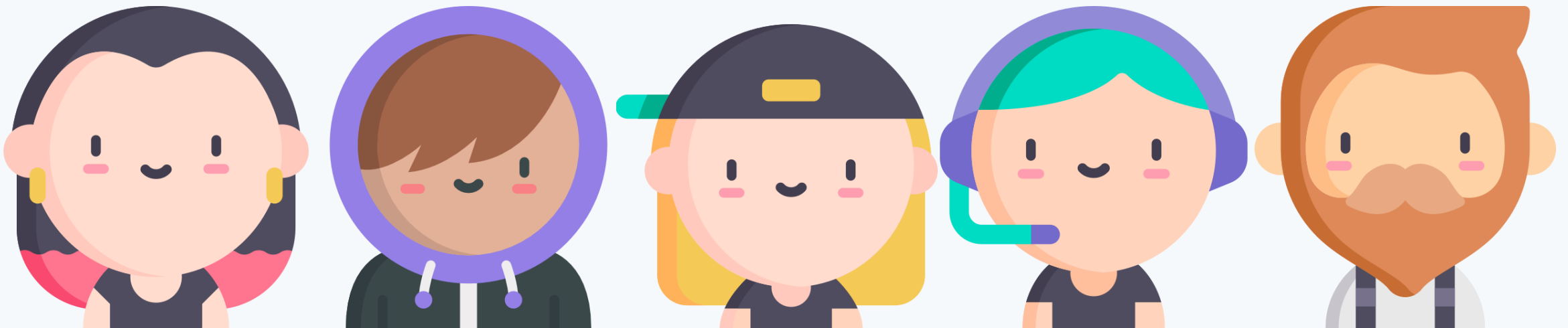


- 1) How and Why Partisans Respond to Media's Fact-checking
- 2) The Interactive Effects of Fact-checking and Political Slants of News Outlets
- 3) Large Scale Political Event to Test the Impact of Fact-checking

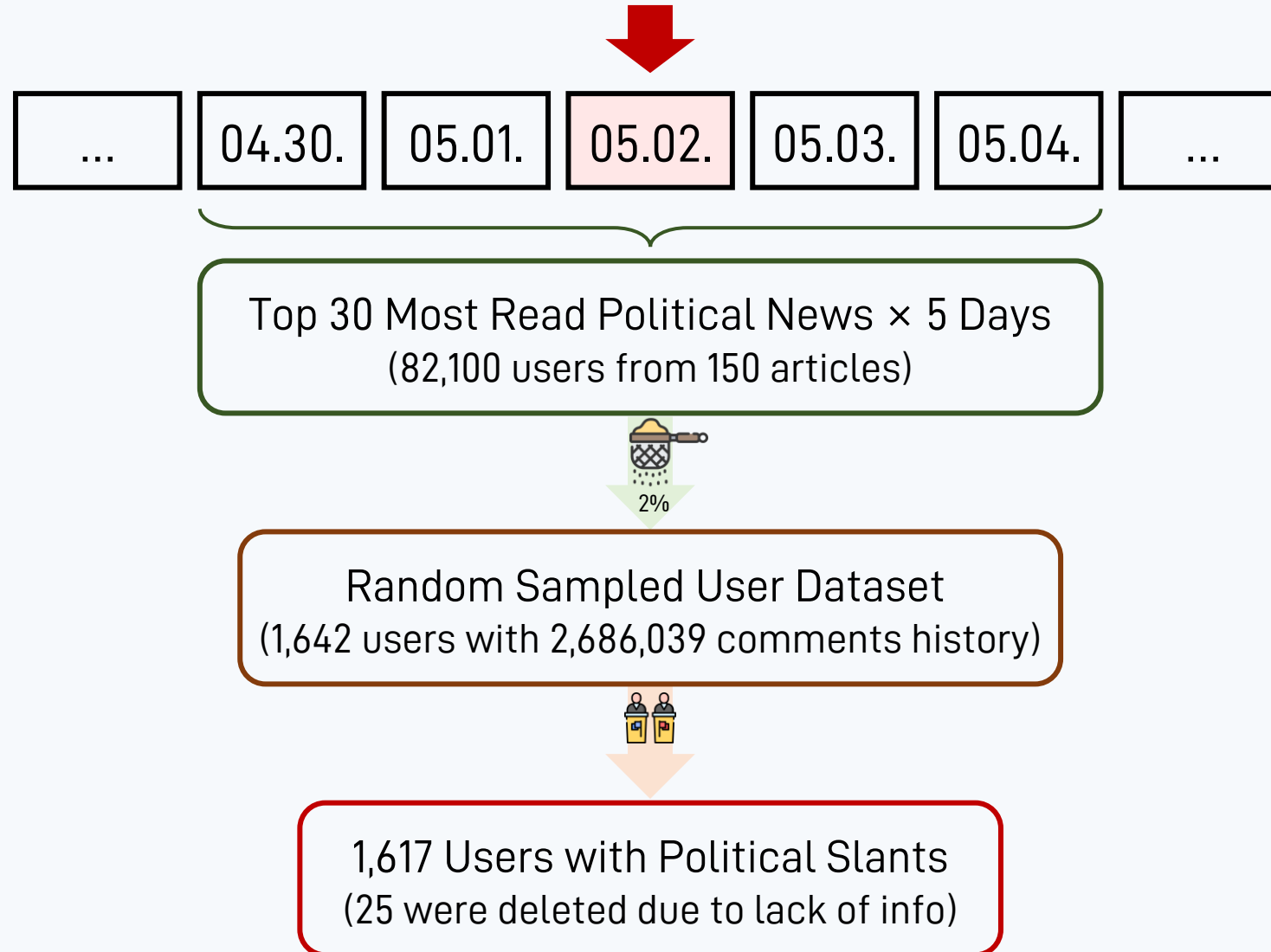
Large Scale Political Event to Test the Impact of Fact-checking

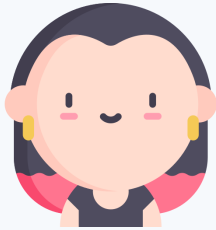
- 1) Quasi-experimental Research Setting
- 2) Sudden and Unexpected Event
- 3) Rumor Immediately and Widely Covered by Media
- 4) Directed Rebutted by the Leader's Own Appearance
- 5) Fact-Checking Covered by Most News Providers

NAVER



Initial Coverage on Kim Jong-un's Appearance





rkdxo**** 8 hours ago

rkdxo**** 9 hours ago

rkdxo**** 2 days ago

:

rkdxo**** 4 days ago

rkdxo**** 1 week ago



tlawo**** 3 hours ago

tlawo**** 5 hours ago

tlawo**** 21 days ago

:

tlawo**** 23 days ago

tlawo**** 24 week ago



wheor**** 23 minutes ago

wheor**** 1 day ago

wheor**** 1 day ago

:

wheor**** 19 days ago

wheor**** 2 months ago

Data and Model Preparation for Political Slant Classification

- 1) 3,000 manually labeled comments with three annotators,
randomly sampled from 2.7M entire comments data
(Krippendorff's alpha coefficient 0.93)
- 2) + 35,000 political slant data from previous research (Han et al, 2019)
- 3) 15.4GB Korean Comments based Pretrained *KcBERT* model
- 4) Binary Political Slant Classifier with F1 Score 0.89

Data and Model Preparation for Profanity Classification



(a) chosung

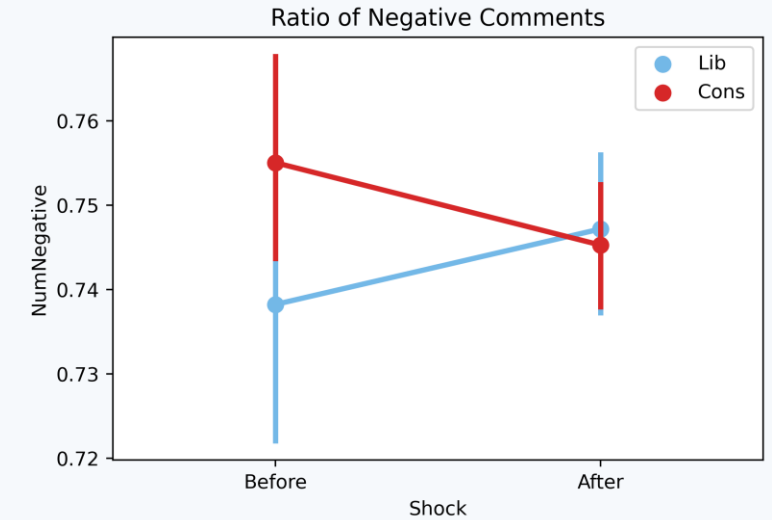
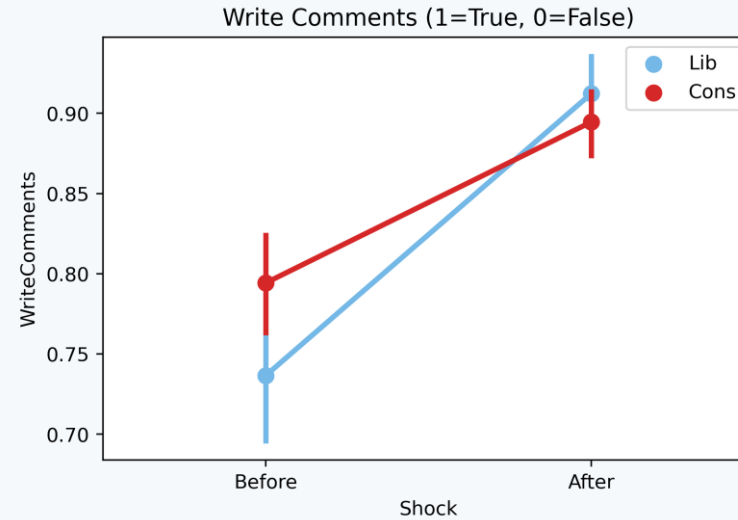
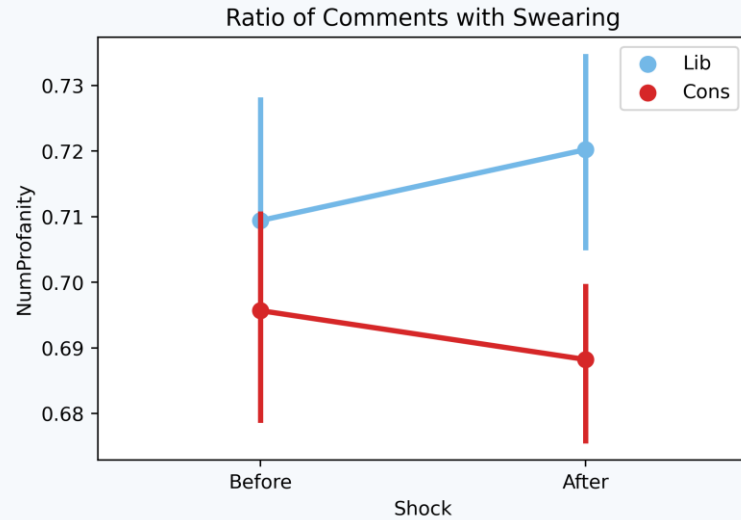


(b) joongsung



(c) jongsung

- 1) 9,300 political profanity data + 2.3 profanity data (Moon et al, 2020)
- 2) subcharacterBPE + 1D-CNN language model
- 3) Binary Profanity Classifier with F1 Score 0.91



- 1) DID(Difference-in-Differences) model for causal inference
- 2) Time invariant differences among users are captured by the fixed effects
- 3) Liberals wrote more comments and become more aggressive

$$y_{ijt} = \alpha_{ij} + \beta_1 \cdot After_t + \beta_2 \cdot After_t \cdot Conservative_i + \beta_3 \cdot After_t \cdot Conservative_j + \gamma \cdot After_t \cdot Conservative_i \cdot Conservative_j + \varepsilon_{ijt}, \quad (2)$$

where j indexes news outlets; α_{ij} is a set of interactions between user fixed effects and political slant of news outlets; $Conservative_j$ indicates 1 if outlet j is politically conservative, and 0 otherwise; other variables are identically defined as in Equation (1). Our interest is the three-way interaction term γ which picks up the difference in user responses to the fact-checking depending on the political slant of news outlets.

DDD Estimates of Eq. (2) Dependent Variables	Coeff. (γ)	Robust Std. Err.
Write a Comment	-0.112***	0.0346
Write a Rumor-Supporting Comm. No. of Comments	-0.0379***	0.0133
All Comments	-0.0985***	0.0334
Rumor-Supporting Comments	-0.0309***	0.00999
Non-Supporting Comments	-0.0793**	0.0329

DDD Estimates of Eq. (2) Dependent Variables	Coeff. (γ)	Robust Std. Err.
No. of Comments		
With Swearing	-0.0853***	0.0284
Without Swearing	-0.00966	0.0206
Non-Positive Sentiment	-0.0829***	0.0301
Positive Sentiment	-0.0213	0.0186

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- 1) Partisans get more vocal and hostile when their beliefs are supported
- 2) The increase in voice is asymmetric across political slants of news outlets
- 3) The pattern is observed in the platform where social functions don't exist

Thank You

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