

Supplementary Material

The Influence of Toxic Trolling Comments on Anti-vaccine YouTube Videos

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Topic	Count	Topic words
virus	130	virus cell disease body patient system blood infection brain problem
government	288	trump president state country government money company right case party
others	244	world life movie right game point one god part let
route	382	friend child family house home life room school girl week
child	313	child disease measles vaccination health case doctor autism parent study
school	185	school person life point student child part parent work anything

Table 1 Top six topics video transcripts. Count is the number of videos belonging to each topic. Topic words are the representative words of each topic.

	Model1	Model2	Model3	Mean	Std
const	0.419***	0.198***	0.149*	-	-
View count	-0.073*	0.026	-0.068	0.6	0.15
Like ratio	-0.202***	-0.079	-0.052	0.91	0.13
Pseudoscience	0.033**	0.011	0.008	0.19	0.39
Publish date	0.029	0.046	0.017	0.8	0.18
Subscriber count	0.021	-0.022	-0.009	0.67	0.18
Fear (title)	-	0.141***	0.138***	0.11	0.21
description_fear	-	0.058**	0.065***	0.2	0.3
Fear (subtitle)	-	0.079***	0.082***	0.21	0.3
Toxicity (title)	-	0.037	0.011	0.07	0.15
description_toxicity	-	0.005	-0.008	0.06	0.13
Toxicity (subtitle)	-	-0.024	-0.068*	0.18	0.19
Topic_virus	-	0.084***	0.099***	0.08	0.27
Topic_government	-	-0.009	-0.011	0.18	0.38
Topic_route	-	0.017	0.011	0.27	0.44
Topic_child	-	0.096***	0.098***	0.19	0.4
Topic_school	-	0.031	0.037	0.12	0.32
Toxicity (comment)	-	-	0.177***	0.42	0.15
Comment counts	-	-	0.049	0.6	0.3
R-squ.	0.059	0.231	0.258	-	-
N	1,072	707	707	-	-

Table 2 Regression results of mean fear of comments at the video level. Model 1, 2, and 3 indicates the ablation study on independent values. Model 1 corresponds to the video's base features. In addition to them, Model 2 covers the video's emotion-related features. Model 3 corresponds to all the features including the comment features. Columns indicate the three models with different sets of variables and the mean and standard deviation (Std) for each variable. The rows indicate each variable, the coefficient of determination (R-square), and the number of samples (N). The cells are the coefficients in each model and the stars indicate the p values of the t-test: *** for $p < 0.001$, ** for $p < 0.01$, and * for $p < 0.05$.