

**Supplementary material**  
**Academic explanatory journalism and emerging COVID-19 science**

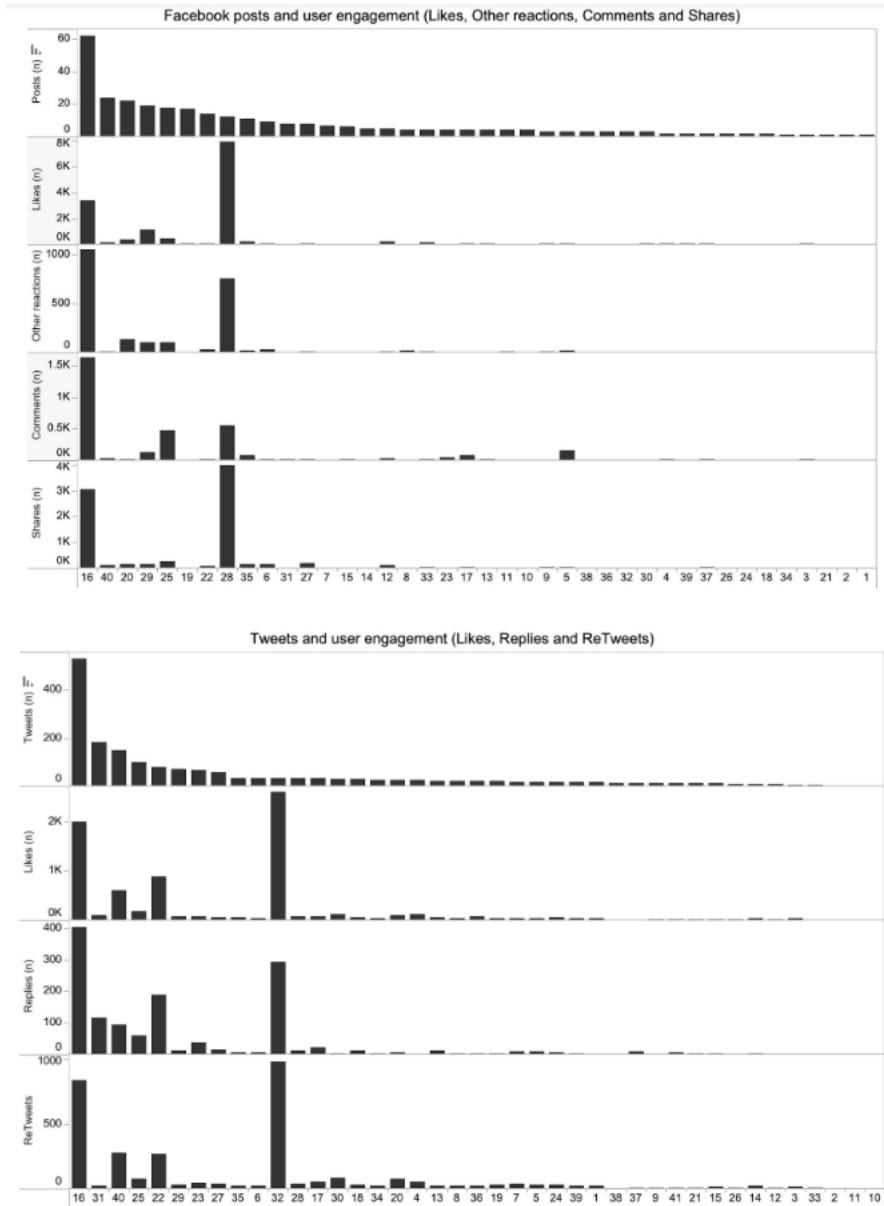


Figure 1. Twitter and Facebook engagement with *The Conversation* media stories mentioning COVID-19 preprints

TC article no	FB posts (n)	Comments (n)	Likes (n)	Shares (n)	Other reactions (n)
16	61	1627	3369	3068	1049
40	24	30	148	115	13
20	20	22	413	137	133
25	18	478	470	263	106
29	18	130	1168	152	101
19	15	3	47	19	5
22	14	11	94	60	30
28	12	555	7912	3985	752
35	11	84	255	144	16
6	9	12	85	146	26
27	8	21	101	181	15
31	8	9	19	6	0
14	5	0	4	9	1
8	4	3	28	18	16
10	4	1	20	10	4
11	4	4	38	8	7
12	4	25	214	123	12
13	4	14	47	12	5
17	4	80	69	33	2
23	4	44	36	11	2
33	4	20	116	57	6
5	3	162	55	27	20
7	3	3	20	13	1
9	3	1	54	40	6
15	3	10	5	3	1
30	3	3	43	12	0
32	3	2	9	9	4
36	3	0	14	5	1
38	3	5	25	19	2
4	2	14	46	9	3
18	2	0	1	0	0
24	2	0	12	5	0
26	2	0	10	6	0
37	2	11	42	39	4
39	2	4	42	7	4
1	1	0	10	1	0
2	1	0	1	2	0
3	1	15	62	7	1
21	1	0	8	1	1
34	1	6	11	9	2

TC article no	Tweets (n)	Likes (n)	Retweets (n)	Replies (n)
16	530	1,988	839	404
31	183	93	24	117
40	147	596	279	95
25	98	174	73	59
22	80	884	266	188
29	70	81	34	14
23	66	88	45	38
27	57	70	40	15
35	35	70	25	5
6	32	43	22	5
32	32	2,594	986	292
28	31	73	36	12
17	31	72	50	21
30	28	114	84	3
18	28	59	31	12
34	26	45	26	3
20	26	91	79	7
4	23	118	55	1
13	21	52	23	12
8	20	46	20	2
36	19	87	26	2
19	19	44	30	3
7	18	31	35	8
5	18	45	31	10
24	18	51	33	7
39	17	37	22	4
1	15	37	20	1
38	14	10	2	1
37	14	7	8	9
9	12	24	10	1
41	12	19	4	5
21	12	12	9	2
15	11	16	12	3
26	10	22	10	1
14	10	42	24	4
12	7	14	7	0
3	6	34	17	0
33	4	10	8	1
2	0	0	0	0
11	0	0	0	0
10	0	0	0	0

Table 1. Twitter and Facebook engagement with The Conversation media stories mentioning COVID-19 preprints

Story number	Story title	Publication date	Story URL
1	How social media is changing research and reactions to coronavirus outbreak	30/1/20	<a href="https://theconversation.com/how-social-media-is-changing-research-and-reactions-to-coronavirus-outbreak-130748">https://theconversation.com/how-social-media-is-changing-research-and-reactions-to-coronavirus-outbreak-130748</a>
2	R0: How scientists quantify the intensity of an outbreak like coronavirus and predict the pandemic's spread	5/2/20	<a href="https://theconversation.com/r0-how-scientists-quantify-the-intensity-of-an-outbreak-like-coronavirus-and-predict-the-pandemics-spread-130777">https://theconversation.com/r0-how-scientists-quantify-the-intensity-of-an-outbreak-like-coronavirus-and-predict-the-pandemics-spread-130777</a>
3	Yes, Australians on board the Diamond Princess need to go into quarantine again. It's time to reset the clock	20/2/20	<a href="https://theconversation.com/yes-australians-on-board-the-diamond-princess-need-to-go-into-quarantine-again-its-time-to-reset-the-clock-131906">https://theconversation.com/yes-australians-on-board-the-diamond-princess-need-to-go-into-quarantine-again-its-time-to-reset-the-clock-131906</a>
4	The hunt for a coronavirus cure is showing how science can change for the better	24/2/20	<a href="https://theconversation.com/the-hunt-for-a-coronavirus-cure-is-showing-how-science-can-change-for-the-better-132130">https://theconversation.com/the-hunt-for-a-coronavirus-cure-is-showing-how-science-can-change-for-the-better-132130</a>
5	COVID-19 death toll estimated to reach 3,900 by next Friday, according to AI modelling	6/3/20	<a href="https://theconversation.com/covid-19-death-toll-estimated-to-reach-3-900-by-next-friday-according-to-ai-modelling-133052">https://theconversation.com/covid-19-death-toll-estimated-to-reach-3-900-by-next-friday-according-to-ai-modelling-133052</a>
6	How big will the coronavirus epidemic be? An epidemiologist updates his concerns	9/3/20	<a href="https://theconversation.com/how-big-will-the-coronavirus-epidemic-be-an-epidemiologist-updates-his-concerns-133133">https://theconversation.com/how-big-will-the-coronavirus-epidemic-be-an-epidemiologist-updates-his-concerns-133133</a>
7	Scientists are still searching for the source of COVID-19: why it matters	12/3/20	<a href="https://theconversation.com/scientists-are-still-searching-for-the-source-of-covid-19-why-it-matters-133467">https://theconversation.com/scientists-are-still-searching-for-the-source-of-covid-19-why-it-matters-133467</a>
8	Coronavirus: Three lessons from the AIDS crisis	16/3/20	<a href="https://theconversation.com/coronavirus-three-lessons-from-the-aids-crisis-133575">https://theconversation.com/coronavirus-three-lessons-from-the-aids-crisis-133575</a>
9	Viruses live on doorknobs and phones and can get you sick—smart cleaning and good habits can help protect you	17/3/20	<a href="https://theconversation.com/viruses-live-on-doorknobs-and-phones-and-can-get-you-sick-smart-cleaning-and-good-habits-can-help-protect-you-133054">https://theconversation.com/viruses-live-on-doorknobs-and-phones-and-can-get-you-sick-smart-cleaning-and-good-habits-can-help-protect-you-133054</a>
10	Fleeing from the coronavirus is dangerous for you, the people you encounter along the way and wherever you end up	23/3/20	<a href="https://theconversation.com/fleeing-from-the-coronavirus-is-dangerous-for-you-the-people-you-encounter-along-the-way-and-wherever-you-end-up-133995">https://theconversation.com/fleeing-from-the-coronavirus-is-dangerous-for-you-the-people-you-encounter-along-the-way-and-wherever-you-end-up-133995</a>

11	Coronavirus: are people with blood group A really at higher risk of catching COVID-19?	23/3/20	<a href="http://theconversation.com/coronavirus-are-people-with-blood-group-a-really-at-higher-risk-of-catching-covid-19-134181">http://theconversation.com/coronavirus-are-people-with-blood-group-a-really-at-higher-risk-of-catching-covid-19-134181</a>
12	How can I treat myself if I've got—or think I've got—coronavirus?	27/3/20	<a href="https://theconversation.com/how-can-i-treat-myself-if-ive-got-or-think-ive-got-coronavirus-134654">https://theconversation.com/how-can-i-treat-myself-if-ive-got-or-think-ive-got-coronavirus-134654</a>
13	Coronavirus: loss of smell and taste reported as early symptoms of COVID-19	27/3/20	<a href="https://theconversation.com/coronavirus-loss-of-smell-and-taste-reported-as-early-symptoms-of-covid-19-134564">https://theconversation.com/coronavirus-loss-of-smell-and-taste-reported-as-early-symptoms-of-covid-19-134564</a>
14	Coronavirus FAQs: Can people without symptoms spread COVID-19? How long does it live on surfaces? What cleaning products kill the virus?	29/3/20	<a href="https://theconversation.com/coronavirus-faqs-can-people-without-symptoms-spread-covid-19-how-long-does-it-live-on-surfaces-what-cleaning-products-kill-the-virus-134945">https://theconversation.com/coronavirus-faqs-can-people-without-symptoms-spread-covid-19-how-long-does-it-live-on-surfaces-what-cleaning-products-kill-the-virus-134945</a>
15	Predicting COVID-19: what applying a model in Kenya would look like	30/3/20	<a href="https://theconversation.com/predicting-covid-19-what-applying-a-model-in-kenya-would-look-like-134675">https://theconversation.com/predicting-covid-19-what-applying-a-model-in-kenya-would-look-like-134675</a>
16	A small trial finds that hydroxychloroquine is not effective for treating coronavirus	3/4/20	<a href="https://theconversation.com/a-small-trial-finds-that-hydroxychloroquine-is-not-effective-for-treating-coronavirus-135484">https://theconversation.com/a-small-trial-finds-that-hydroxychloroquine-is-not-effective-for-treating-coronavirus-135484</a>
17	Should everyone be wearing face masks? It's complicated	8/4/20	<a href="https://theconversation.com/should-everyone-be-wearing-face-masks-its-complicated-135548">https://theconversation.com/should-everyone-be-wearing-face-masks-its-complicated-135548</a>
18	Coronavirus: what causes a 'second wave' of disease outbreak, and could we see this in Australia?	9/4/20	<a href="https://theconversation.com/coronavirus-what-causes-a-second-wave-of-disease-outbreak-and-could-we-see-this-in-australia-134125">https://theconversation.com/coronavirus-what-causes-a-second-wave-of-disease-outbreak-and-could-we-see-this-in-australia-134125</a>
19	Coronavirus: where do new viruses come from?	14/4/20	<a href="https://theconversation.com/coronavirus-where-do-new-viruses-come-from-136105">https://theconversation.com/coronavirus-where-do-new-viruses-come-from-136105</a>
20	Wildfire smoke worsens coronavirus risk, putting firefighters in extra danger	15/4/20	<a href="https://theconversation.com/wildfire-smoke-worsens-coronavirus-risk-putting-firefighters-in-extra-danger-136016">https://theconversation.com/wildfire-smoke-worsens-coronavirus-risk-putting-firefighters-in-extra-danger-136016</a>
21	Coronavirus: could the pandemic be controlled using existing vaccines like MMR or BCG?	21/4/20	<a href="https://theconversation.com/coronavirus-could-the-pandemic-be-controlled-using-existing-vaccines-like-mmr-or-bcg-136429">https://theconversation.com/coronavirus-could-the-pandemic-be-controlled-using-existing-vaccines-like-mmr-or-bcg-136429</a>
22	Blood sugar levels may influence vulnerability to coronavirus, and controlling them through conventional means might be protective	22/4/20	<a href="https://theconversation.com/blood-sugar-levels-may-influence-vulnerability-to-coronavirus-and-controlling-them-through-conventional-means-might-be-protective-136592">https://theconversation.com/blood-sugar-levels-may-influence-vulnerability-to-coronavirus-and-controlling-them-through-conventional-means-might-be-protective-136592</a>

23	Coronavirus: are we underestimating how many people have had it? Sweden thinks so	23/4/20	<a href="https://theconversation.com/coronavirus-are-we-underestimating-how-many-people-have-had-it-sweden-thinks-so-136893">https://theconversation.com/coronavirus-are-we-underestimating-how-many-people-have-had-it-sweden-thinks-so-136893</a>
24	Flushing is our next weapon against COVID-19, if you're happy to have your sewage scrutinised	24/4/20	<a href="https://theconversation.com/flushing-is-our-next-weapon-against-covid-19-if-youre-happy-to-have-your-sewage-scrutinised-136844">https://theconversation.com/flushing-is-our-next-weapon-against-covid-19-if-youre-happy-to-have-your-sewage-scrutinised-136844</a>
25	5 reasons it's safe for kids to go back to school	26/4/20	<a href="https://theconversation.com/5-reasons-its-safe-for-kids-to-go-back-to-school-137064">https://theconversation.com/5-reasons-its-safe-for-kids-to-go-back-to-school-137064</a>
26	In search of coronavirus treatments—the opportunities and challenges of using existing drugs	27/4/20	<a href="https://theconversation.com/in-search-of-coronavirus-treatments-the-opportunities-and-challenges-of-using-existing-drugs-136899">https://theconversation.com/in-search-of-coronavirus-treatments-the-opportunities-and-challenges-of-using-existing-drugs-136899</a>
27	The coronavirus genome is like a shipping label that lets epidemiologists track where it's been	27/4/20	<a href="https://theconversation.com/the-coronavirus-genome-is-like-a-shipping-label-that-lets-epidemiologists-track-where-its-been-136826">https://theconversation.com/the-coronavirus-genome-is-like-a-shipping-label-that-lets-epidemiologists-track-where-its-been-136826</a>
28	Evidence obesity is a risk factor for serious illness with coronavirus is mounting, even if you're young	28/4/20	<a href="https://theconversation.com/evidence-obesity-is-a-risk-factor-for-serious-illness-with-coronavirus-is-mounting-even-if-youre-young-137081">https://theconversation.com/evidence-obesity-is-a-risk-factor-for-serious-illness-with-coronavirus-is-mounting-even-if-youre-young-137081</a>
29	Infected with the coronavirus but not showing symptoms? A physician answers 5 questions about asymptomatic COVID-19	30/4/20	<a href="https://theconversation.com/infected-with-the-coronavirus-but-not-showing-symptoms-a-physician-answers-5-questions-about-asymptomatic-covid-19-137029">https://theconversation.com/infected-with-the-coronavirus-but-not-showing-symptoms-a-physician-answers-5-questions-about-asymptomatic-covid-19-137029</a>
30	What you need to know about how coronavirus is changing science	5/5/20	<a href="https://theconversation.com/what-you-need-to-know-about-how-coronavirus-is-changing-science-137641">https://theconversation.com/what-you-need-to-know-about-how-coronavirus-is-changing-science-137641</a>
31	Coronavirus tests are pretty accurate, but far from perfect	6/5/20	<a href="https://theconversation.com/coronavirus-tests-are-pretty-accurate-but-far-from-perfect-136671">https://theconversation.com/coronavirus-tests-are-pretty-accurate-but-far-from-perfect-136671</a>
32	Maybe coronavirus's aggressiveness could be changed by adding or subtracting sugar molecules from its spike protein	7/5/20	<a href="https://theconversation.com/maybe-coronaviruss-aggressiveness-could-be-changed-by-adding-or-subtracting-sugar-molecules-from-its-spike-protein-137388">https://theconversation.com/maybe-coronaviruss-aggressiveness-could-be-changed-by-adding-or-subtracting-sugar-molecules-from-its-spike-protein-137388</a>
33	As restrictions ease, here are 5 crucial ways for Australia to stay safely on top of COVID-19	12/5/20	<a href="https://theconversation.com/as-restrictions-ease-here-are-5-crucial-ways-for-australia-to-stay-safely-on-top-of-covid-19-138000">https://theconversation.com/as-restrictions-ease-here-are-5-crucial-ways-for-australia-to-stay-safely-on-top-of-covid-19-138000</a>

34	We designed an experimental AI tool to predict which COVID-19 patients are going to get the sickest	14/5/20	<a href="https://theconversation.com/we-designed-an-experimental-ai-tool-to-predict-which-covid-19-patients-are-going-to-get-the-sickest-136125">https://theconversation.com/we-designed-an-experimental-ai-tool-to-predict-which-covid-19-patients-are-going-to-get-the-sickest-136125</a>
35	How do you stay safe now that states are reopening? An expert explains how to assess risk when reconnecting with friends and family	18/5/20	<a href="https://theconversation.com/how-do-you-stay-safe-now-that-states-are-reopening-an-expert-explains-how-to-assess-risk-when-reconnecting-with-friends-and-family-138518">https://theconversation.com/how-do-you-stay-safe-now-that-states-are-reopening-an-expert-explains-how-to-assess-risk-when-reconnecting-with-friends-and-family-138518</a>
36	Rapid home-based coronavirus tests are coming together in research labs, we're working on analyzing spit using advanced CRISPR gene editing techniques	20/5/20	<a href="https://theconversation.com/rapid-home-based-coronavirus-tests-are-coming-together-in-research-labs-were-working-on-analyzing-spit-using-advanced-crispr-gene-editing-techniques-138064">https://theconversation.com/rapid-home-based-coronavirus-tests-are-coming-together-in-research-labs-were-working-on-analyzing-spit-using-advanced-crispr-gene-editing-techniques-138064</a>
37	How to lower your coronavirus risk while eating out: Restaurant advice from an infectious disease expert	21/5/20	<a href="https://theconversation.com/how-to-lower-your-coronavirus-risk-while-eating-out-restaurant-advice-from-an-infectious-disease-expert-138925">https://theconversation.com/how-to-lower-your-coronavirus-risk-while-eating-out-restaurant-advice-from-an-infectious-disease-expert-138925</a>
38	How leadership in various countries has affected COVID-19 response effectiveness	27/5/20	<a href="https://theconversation.com/how-leadership-in-various-countries-has-affected-covid-19-response-effectiveness-138692">https://theconversation.com/how-leadership-in-various-countries-has-affected-covid-19-response-effectiveness-138692</a>
39	Coronavirus may wane this summer, but don't count on any seasonal variation to end the pandemic	15/4/20	<a href="https://theconversation.com/coronavirus-may-wane-this-summer-but-dont-count-on-any-seasonal-variation-to-end-the-pandemic-136218">https://theconversation.com/coronavirus-may-wane-this-summer-but-dont-count-on-any-seasonal-variation-to-end-the-pandemic-136218</a>
40	Coronavirus drifts through the air in microscopic droplets—here's the science of infectious aerosols	24/4/20	<a href="https://theconversation.com/coronavirus-drifts-through-the-air-in-microscopic-droplets-heres-the-science-of-infectious-aerosols-136663?">https://theconversation.com/coronavirus-drifts-through-the-air-in-microscopic-droplets-heres-the-science-of-infectious-aerosols-136663?</a>
41	Coronavirus: there's no one perfect model of the disease	3/4/20	<a href="https://theconversation.com/coronavirus-weve-had-imperial-oxford-and-many-more-models-but-none-can-have-all-the-answers-135137">https://theconversation.com/coronavirus-weve-had-imperial-oxford-and-many-more-models-but-none-can-have-all-the-answers-135137</a>

Table 2. The full list of *The Conversation* titles and hyperlinks

Facebook Codes	Krippendorff's alpha
Facebook Space Type	0.948
Twitter Account Type	0.867
Facebook Space Actor Group	0.907
Twitter Account Actor Group	0.816

Table 3. Intercoder Reliability for Facebook and Twitter coding

Space Type	<u>Likes</u>			<u>Reactions</u>			<u>Shares</u>			<u>Comments</u>		
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Group	5.74	2	22.69	9.25	1	28.88	2.32	0	9.63	5.84	0	18.78
Page	98.58	6	692.35	89.06	4	509.62	57.15	3	369.49	17	0	68.98
Public Profile	32.83	7	79.44	35.72	8.5	89.65	20.83	4.5	52.31	8.83	1	26.75
Unknown	16.75	2.5	33.59	27.83	2	56.36	19.5	2	38.04	4.83	0	9.56

Table 4. Engagement by Facebook Space Type

Account Type	<u>Likes</u>			<u>Retweets</u>			<u>Replies</u>		
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Group	3.82	1.5	6.02	2.38	1	3.43	0.24	0	0.65
Individual	7.11	0	83.53	2.83	0	31.19	1.1	0	10.73
Unknown	0.87	0	3.09	0.37	0	1.99	0.45	0	0.82

Table 5. Engagement by Twitter Account Type

Actor Group	<u>Likes</u>			<u>Reactions</u>			<u>Shares</u>			<u>Comments</u>		
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Academia	19.44	11	23.34	15.15	6	18.71	9.37	3	14.15	3.52	0	7.67
Business	1.33	0	2.31	0	0	0	0	0	0	0	0	0
Citizen	61.55	2	603.47	44.38	1	401.73	27.95	0	301.7	9.61	0	46.42
Civil Society Organisation	6.73	3	10.1	3.73	1	5.96	2	1	3.42	1	0	2.48
Healthcare	9	2.5	12.68	8.88	1	14.12	4.25	0	7.42	2.75	0	4.86
Media and Communication	26.59	8	48.04	45.66	6	106	22.18	4	43.83	18.67	0	60.96
Political Actor	126.33	5	432.59	208.93	4	705.27	132.13	2	445.88	27.2	0	88.95
Unknown	18.25	4	33.17	30.83	6.5	55.69	22.17	2	37.67	5	0	9.49

Table 6. Facebook engagement by actor group



Actor Group	Likes			Retweets			Replies		
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Academia	9.68	1	31.82	4.62	0	16.03	0.8	0	2.42
Business	2.38	0	6.17	1.01	0	3.1	0.39	0	0.84
Citizen	1.11	0	4.04	0.34	0	1.45	0.4	0	0.75
Civil Society Organisation	2.15	1	3.75	1.52	1	2.78	0.19	0	0.48
Healthcare	1.93	0	3.09	0.69	0	1.03	0.4	0	0.83
Media and Communication	12.95	1	125.8	5.51	0	46.52	1.89	0	16.27
Political Actor	2.91	1	4.28	1.45	0	2.38	0.73	0	1.01
Unknown	0.77	0	2.71	0.28	0	1.42	0.4	0	0.78

*Table 7. Twitter engagement across actor groups*