

To Tweet or not to Tweet? Variations in Scientist Social Media Use

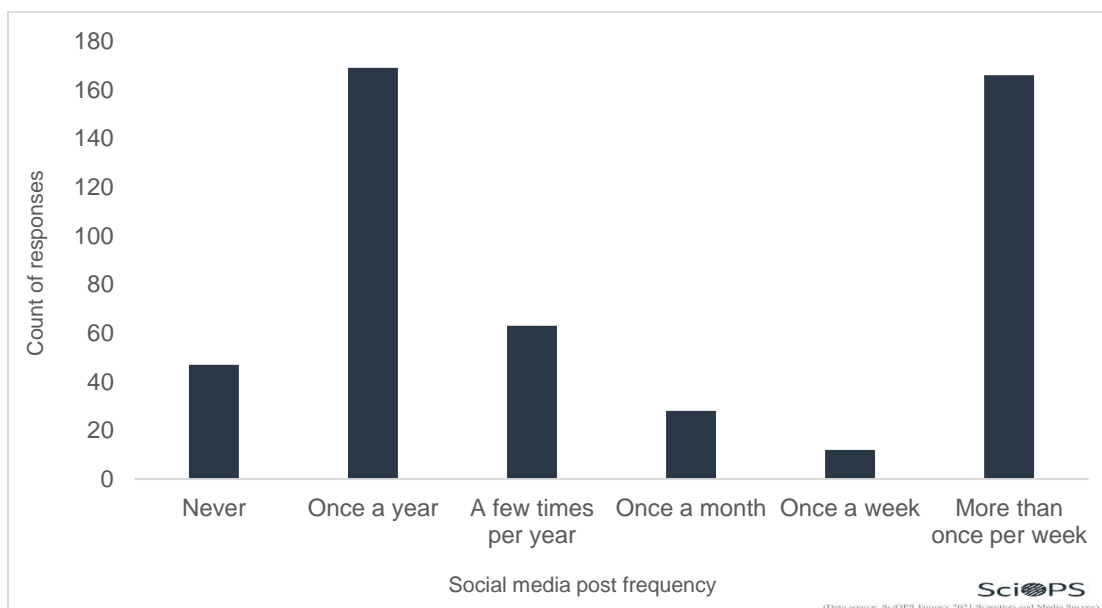
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Social media has helped scientists become more prominent in the cultural zeitgeist. The popular astrophysicist Neil deGrasse Tyson, for example, has over 14 million followers on Twitter. Social media has made it easier for scientists to share their research findings, engage in scientific debate, and network with other scientists¹.

While most scientists will never have a digital footprint as big as Tyson's, social media platforms can make scientists' discoveries more widely known. [SciOPS](#) (working with [SciLine](#)) recently asked scientists about their activity on social media. Our results show that scientists with more job security engage more on social media—and that scientist social media use varies by field of study.

We surveyed a random sample of 508 scientists from biology, civil engineering, geography, and public health and found that scientists are either very active or very inactive on social media. Figure 1 shows that most scientists report posting on social media once a year (35%) or multiple times a week (34%). These findings indicate that scientists have very different social media habits. It is possible that junior scientists are more likely to use social media than older scientists. On the other hand, senior scientists with stronger research profiles may be more active on social media.

Figure 1: How often scientists post about their research on social media (N=485)



We examined whether social media activity varies by scientist job tenure. Figure 2 shows the percentage of assistant professors, associate professors, and full professors who indicated they

post messages on social media at least once a month. Associate professors and full professors are more actively involved on social media than assistant professors. Senior faculty generally have more job experience than assistant professors. It is possible that associate and full professors can spend more time promoting their work on social media because they are tenured and have more job security than assistant professors. It is also possible they are simply more secure or successful in their research and thus, more actively using social media.

Figure 2: Active social media users, by job title (N=414)

Rank	Percent Active on Social Media
Assistant Professor	36%
Associate Professor	44%
Full Professor	44%

We also investigated whether social media engagement varied by field of study. Figure 3 shows the percent of biologists, civil engineers, geographers, and public health scholars who post on social media at least once a month.

Figure 3: Active social media use, by field of study (N=485)

Field of Study	Percent Active on Social Media
Biology	40%
Civil Engineering	40%
Geography	37%
Public Health	46%

Public health scientists are more active on social media than the other scientists in our sample. This could be explained by public health scientists being more focused on public outreach and applied social problems. The recent global health crisis presented by COVID-19 may also have motivated public health scientists to engage on social media at a higher rate than other types of scientists.

Social media has made it much easier for scientists to share their scientific knowledge with the public. We found that scientists who are more senior in their positions are more engaged in social media—as are scientists in the field of public health. While social media can be a useful tool for scientists, our data show that the majority of scientists do not actively use social media to share their work. Scientists eager to share their scientific findings with the public should post more on social media. To assist in this effort, universities may need to adjust their faculty evaluation criteria to incentivize scientists to be more active on social media. As the Neil deGrasse Tysons of the world have shown, social media is a powerful tool to disseminate information and inspire others to develop an interest in science. Scientists and universities can both do more to harness this tool to advance scientific knowledge in society.

¹ Social media for scientists. *Nat Cell Biol* 20, 1329 (2018). <https://doi.org/10.1038/s41556-018-0253-6>