SciOPS

Scientist Opinion Panel Survey

# Women in science interactions with the media

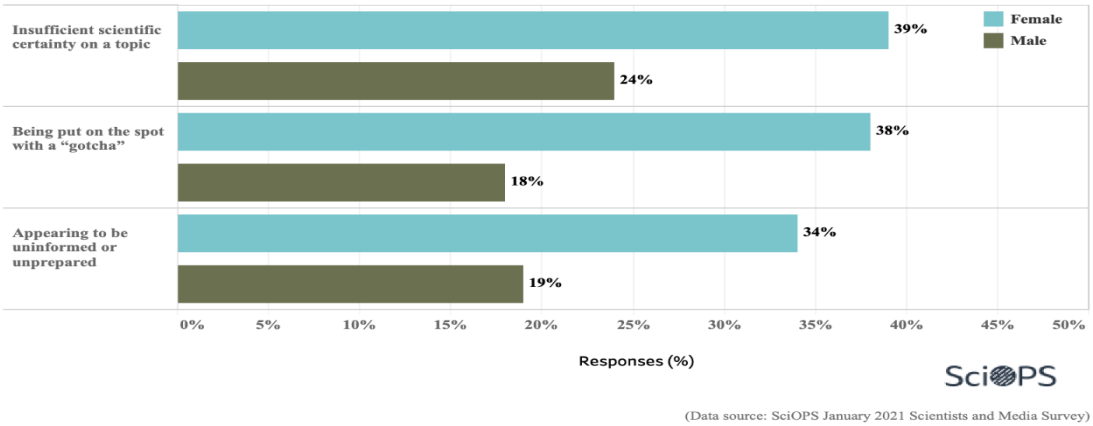
Ashlee Frandell

While more women are graduating with degrees in STEM fields, they continue to be underrepresented in the media[1]. The preponderance of male scientists in media coverage negatively influences perceptions and societal attitudes about women in science. Widespread internet use and multiple media channels that amplify men in science further perpetuate gender inequality in STEM fields[2]. The lack of female role models and the public not viewing of women as "real" scientists can negatively influence women entering STEM careers, the diversity of the scientific community[3], the promotion and impact of women's science and women's overall confidence. SciOPS partnered with SciLine surveyed a random sample of 508 biologists, civil engineers, geographers and public health professors at U.S. universities about scientists' views of their interactions with the media. The results can be found both on the SciOPS platform and the Chronicle article "*What Ph.Ds. can learn about talking with reporters*" by Rick Weiss. We find women are less confident and feel less prepared when interacting with the media and are less likely to believe media coverage represents the diversity of the scientific community.

## Women report lower confidence in media interactions

Scientists were asked about their **level of confidence** in their ability to give a successful media interview. A significantly higher proportion of men (72%) reported being highly confident (being a seven or higher on a confidence scale ranging from x to X) as compared to women (54%). **Figure 1** shows statistically significant differences between men and women's responses to specific challenges when interacting with media. A higher proportion of women report having ever been caught off guard (38% women vs. 18% men) or unprepared (73% women vs. 43% men) for their interactions with media. Women reporting challenges to media interactions meant to put them on the spot can lessen their confidence and future opportunities, further cementing the image of science as exclusively male[4].

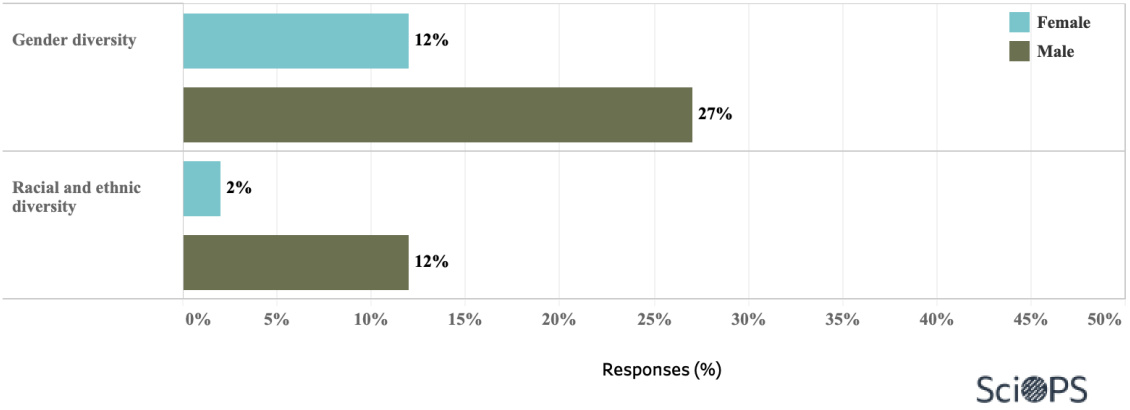
**Figure 1. Potential challenges from interacting with the media, by gender (n=496)[5]**




[1] Loverock and Hart, 2018
[2] Moreau and Mendick, 2012; Loverock and Hart, 2018
[3] Hart, *LSE Impact Blog*, 2018; Gewin, *Nature Career News*, 2018
[4] Hart, *LSE Impact Blog*, 2018
[5] Statistically significant differences at the *p<.01* level

**Figure 2** compares beliefs about how effectively media coverage of science represents the **diversity of the scientific community**, by gender. More men (27%) believe that gender diversity topics are extremely or very effectively covered by media, compared to only 12% of women scientists. In addition, men (12%) report that racial diversity is effectively covered by media at a higher rate than do women (2%). Overall, women scientists are significantly less likely than men to report that media's coverage of science effectively represents the diversity of the scientific community.

**Figure 2. Perception of how effectively media coverage of science represents the diversity of the scientific community by gender (n=480)[6]**




(Data source: SciOPS January 2021 Scientists and Media Survey)

Negative views of the accuracy of media's representation of diversity in science indicate perceived biases of media, and the challenges women face during media interviews indicate differential treatment and interactions with the media by gender. Poor experiences with the media can negatively impact how women are viewed as scientists. Although there are more women are graduating with STEM degrees[7], there remain important cultural and social changes that can improve perceptions of women as science experts, including associations and universities providing more media training for women in STEM, and recognizing and featuring women scientists in media and promotional reports.

Learn more about SciOPS and our survey method here.

References:

Gewin, Virginia. "Film and Television Tell Children Who Can Be Scientists Roles on the Screen Largely Reinforce the Message That Scientists Are White Men." *Nature Career News*, 2018.

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[6] Statistically significant differences at the *p<.01* level
[7] Loverock and Hart, 2018