Title: Supplementary methods appendix for "How different incentives reduce scientific misinformation online" Authors: Piero Ronzani (1), Folco Panizza (2), Tiffany Morisseau (3), Simone Mattavelli (4), Carlo Martini (5) Date: January 25<sup>th</sup>, 2024 Note: The material contained herein is supplementary to the article named in the title and published in the Harvard

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## **Appendix A: Supplementary methods**

## Participant selection

We recruited 4,003 U.K. residents through the online platform prolific.co on the 25th of April, 2022. The sample size (N = 1,000 per experimental condition) was determined based on related findings in previous experiments (Guess et al., 2020; Panizza et al., 2022). Assuming an a level of 5% and power 1 - b = 95%, we expected to capture even small differences between conditions (minimum detectable effect size f = 0.07). Four participants were excluded due to pre-registered criteria (using a mobile phone while desktop devices were mandatory, in concordance with previous studies). Hence, analyses were conducted on 3,999 participants. Participants were paid £0.70 for their time. The median completion time of the experiment was four minutes (minimum 31 seconds, maximum 99 minutes), and the median hourly pay was around £11.20/hour.

## Additional measures

In addition to the social validity of the post and the search behavior, participants were asked a number of control questions. These consisted of self-report measures of confidence in the validity rating ("How confident are you in your response?;" 6-point Likert scale from 1 [don't know] to 6 [absolutely certain]), intention to share the post ("Would you consider sharing this story online [e.g., through social networks or messaging apps?;" Yes/No]), plausibility of the post content ("How plausible do you find the content of the post?;" 6-point Likert scale from 1 [totally implausible] to 6 [totally plausible]), subjective knowledge about the post's content ("How much do you know about [topic]?;" 6-point Likert scale from 1 [nothing at all] to 6 [a great deal]), personal relevance of the post's content ("We are considering compiling a comprehensive summary of the scientific discussion behind the content of the post. If so, would you be interested in receiving it by private message on your prolific account?;" Yes/No), familiarity with the source ("Did you know [name of source] before the experiment?;" Yes/No), perceived trustworthiness of the source ("How much do you trust [name of source]?;" 5-point Likert scale from 1 [not at all] to 5 [entirely]), sharing frequency of social media ("Approximately how many news articles, memes, opinion pieces, etc. have you shared in the last week?"), trust in scientists ("In general, how much do you trust scientists to do what is right?;" 6-point Likert scale from 1 [not at all] to 6 [A lot]), conspiratorial beliefs on 5-point Likert scales combined into a mean index taken from Bode & Vraga (2018), altruism (adapted from Rushton et al., 1981), and social comparison (adapted from Gibbons & Buunk, 1999). In addition to responses in the questionnaire, we obtained information about participants from the recruiting platform, such as their level of education, socio-economic status, social media use, and belief in climate change.