## Supplementary Material

# INSTRUCTIONS OF "POLITICIZED SCIENTISTS: CREDIBILITY COST OF POLITICAL EXPRESSION ON TWITTER"

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## 1. INSTRUCTIONS: STUDY OF GENERAL POPULATION

Thank you for participating in this survey. Completing it will take about 5 minutes.

This study is part of a scientific research project. More detailed instructions will be provided. This study has received ethical approval, therefore the information you will find in the survey is truthful.

By clicking NEXT you explicitly give us your consent that:

We can collect your anonymous, non-sensitive personal data (like age, income, etc).

We can use this personal data for scientific purposes.

We can store your personal data on our safe-guarded university servers for up to 10 years.

We can make anonymized data available to other researchers online.

You are an American citizen.

You are at least 18 years old.

We promise to protect your data according to the new General Data Protection Regulation (GDPR) laws.

In case	you have c	doubts (	on the	experiment,	do not	hesitate to	contact us.
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Paste your Prolific ID:

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In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show that you read our questions carefully, please choose both "Extremely interested" and "Not at all interested" below: [Extremely interested, Very Interested, A little bit interested, Slightly interested, Not interested at all]

1.1. Demographics

What is your age? [Dropdown list from 18 to 99]

What is the gender you identify yourself with? [Male, Female, Other]

What is your household's gross income in 2020 in US dollars? [Less than \$15,000, \$15,000 - \$24,999, \$25,000 - \$49,999, \$50,000 - \$74,999, \$75,000 - \$99,999, \$100,000 - \$149,999, \$150,000 - \$200,000, More than \$200,000 ]

Which of the following best describes your ethnic identity? [African American/Black, Asian American/Asian, Caucasian/White, Native American, Hawaiian/Pacific Islander, Other, Prefer not to say]

What is your highest level of completed education? [Eight grade or less, Some high school, High school degree/GED, Some college, 2-year college degree, 4-year college degree, Master's degree, Doctoral degree, Professional degree (JD, MD, MBA)]

What is your employment status? [Employed full-time, Employed part-time, Unemployed looking for work, Unemployed not looking for work, Retired, Student, Disabled]

If employed, what best describes your work? [Management/Executive, Professional (e.g., doctor, lawyer, engineer), Clerical/Office/Administrative, Skilled trades (e.g., electrician, plumber), Service industry (e.g., hospitality, retail), Healthcare practitioner/Technical, Education/Training]

Please indicate to what extent you consider yourself religious [Not at all religious, Slightly religious, Moderately religious, Strongly religious, Very Strongly religious]

In which region do you currently reside? [Northeast (CT, ME, MA, NH, RI, VT, NK, NY, PA), Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD), South (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX), West (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)]

In politics, as of today, how do you consider yourself? [Republican, Democrat, Independent]

# 1.2. Vignettes

You are going to see the profiles of 5 different scientists. These scientists are active in different fields, they have different demographic characteristics and academic affiliations.

You are going to rate how credible you find each of these scientists and how willing you are to read their opinions.

These profiles are hypothetical but it is in your best interest to rate them based on what you really think. In fact, we are going to send to you via message the opinions of a scientist whose characteristics are closest to your highest-rated profile.

[The same structure of the questions will apply for all the 5 vignettes]

The profile you are seeing is a [Gender] scientist. This scientist works in the field of [Research Field]

Currently, this scientist is a [Seniority] at the [University Affiliation].

The scientist is active on X (formerly known as Twitter). The Twitter bio is the following: "[Twitter Bio]". An example of the scientist's post on X is available here: "[Twitter Post]".

How credible do you think this scientist is? [Slider 0-10]

How credible do you think this scientist's own research is? [Slider 0-10]

How willing you are to read an opinion piece from this scientist? [Slider 0-10]

## 1.3. Intermezzo

You are going to start a new task where you are going to see the profile of an economist. At the end of the task, you will be able to choose to receive a link to access a newsletter via Prolific message. The newsletter discusses several political and social issues in the U.S., based on research of economists similar to the one you will see on the next page.

## 1.4. Scientist's Profile

# 1.4.1. Passive Control Bio

The profile you are seeing is a [Gender] economist.

Currently, this economist is [Seniority] at the [Affiliation].

The economist is active on X (formerly known as Twitter). The twitter bio of the economist is: "Passionate about Research"

This is an example of a tweet: "In our research paper, we show that Nash equilibrium uniquely satisfies key axioms across different games, challenging refinement theories. Our findings have implications for zero-sum, potential and graphical games."

## 1.4.2. Active Control Bio

The profile you are seeing is a [Gender] economist.

Currently, this economist is [Seniority] at the [Affiliation].

The economist is active on X (formerly known as Twitter). The twitter bio of the economist is: "Passionate about Research"

This is an example of a tweet: "Our latest study in Lancet Global Health provides evidence on the health impacts of hostile environment policies toward migrants: restrictive entry and integration policies are linked to poorer mental and general health, and a higher risk of death."

## 1.4.3. Democrat Bio

The profile you are seeing is a [Gender] economist.

Currently, this economist is [Seniority] at the [Affiliation].

The economist is active on X (formerly known as Twitter). The twitter bio of the economist is: "Passionate about Research and Advocate for Equality (World Globe emoji)"

This is an example of a tweet: "Our latest study in Lancet Global Health provides evidence on the health impacts of hostile environment policies toward migrants: restrictive entry and integration policies are linked to poorer mental and general health, and a higher risk of death."

# 1.4.4. Republican Bio

The profile you are seeing is a [Gender] economist.

Currently, this economist is [Seniority] at the [Affiliation].

The economist is active on X (formerly known as Twitter). The twitter bio of the economist is: **Passionate about Research and Proud Patriot [Eagle emoji]** 

This is an example of a tweet: "Our latest study in Lancet Global Health provides evidence on the health impacts of hostile environment policies toward migrants: restrictive entry and integration policies are linked to poorer mental and general health, and a higher risk of death."

# 1.5. Outcomes

How credible do you think this economist is? [Slider 0-10]

How credible do you think this economist's own research is? [Slider 0-10]

How willing you are to read an opinion piece from this economist? [Slider 0-10]

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You have the opportunity to receive a real newsletter that combines opinion pieces on economic and social issues from economists who are similar to the profile you have seen just now.

This newsletter will be released to you via Prolific message. We will send you the link to access the newsletter. You can express your interest by clicking YES.

There are no costs involved in the newsletter and no subscription is needed.

Would you like to receive the link to the newsletter?[Yes/No]

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In general, how much do you trust scientists to find out accurate information about the world? [Extremely, Very, Moderately, Slightly, Not at all]

In general, how much do you trust scientists to do their work with the intention of benefiting the public? [Extremely, Very, Moderately, Slightly, Not at all]

In general, how much do you think that scientists should be involved in the policy-making process? [Extremely, Very, Moderately, Slightly, Not at all]

#### FIGURE 1.—Screenshot of the newsletter

#### **Project**

We are a team of economists and we share opinion pieces and blog posts with people who have expressed interest in receiving a newsletter covering topics related to U.S. economy. At the end of the month, we will post the top three articles and opinion pieces from economists that cover topics related to U.S. economy. These articles and blog posts are based on real academic articles.

To access the articles, please click on the title and you will re-directed to article's page.

July 2024

Article 1: US election risks and the impact of Trump's re-election odds on financial markets

Article 2: Investments in hospital infrastructure reduced mortality in the US South

Article 3: Import competition and US sentiment toward China

#### 2. INSTRUCTIONS: SURVEY OF JOURNALISTS

Thank you for participating in this survey. Completing it will take about 5 minutes.

This study is part of a scientific research project. More detailed instructions will be provided. This study has received ethical approval, therefore the information you will find in the survey is truthful.

By clicking NEXT you explicitly give us your consent that:

We can collect your anonymous, non-sensitive personal data (like age, income, etc).

We can use this personal data for scientific purposes.

We can store your personal data on our safe-guarded university servers for up to 10 years.

We can make anonymized data available to other researchers online.

You are at least 18 years old.

We promise to protect your data according to the new General Data Protection Regulation (GDPR) laws.

In case you have doubts on the experiment, do not hesitate to contact us.

Paste your Prolific ID:

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In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show

that you read our questions carefully, please choose both "Extremely interested" and "Not at all interested" below: [Extremely interested, Very Interested, A little bit interested, Slightly interested, Not interested at all]

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Which best describes your gender?[Male, Female, Non-Binary]

Which of the following best describes your current employment status? [Working full time now, Working part time now, Temporarily laid off, Unemployed, Retired, Receiving benefits or insurance, Taking care of home or family, Student, Other]

In which country do you live?

How many years have you spent in the field? [Less than 1 year, Between 1 year and 3 years, Between 3 years and 5 years, More than 5 years]

For what type of journal/news source do you work?[Daily newspaper/Weekly newspaper/Freelance/Online newspaper/Blog/TV]

What type of role do you have (or you had in your last employment)?[Reporter/Editor/Opinion writer/Columnist]

What is the political leaning of your employer?[Conservative/Liberal/Progressive/Not political]

Where do you place yourself on this scale? [Strongly conservative...Strongly Liberal]

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You will see the profiles of 3 different economists. These economists are active in research and have diverse demographic characteristics and academic affiliations.

You will rate how credible you find each of these scientists and their research, as well as how willing you are to read their opinions.

These profiles are hypothetical, but it is in your best interest to rate them based on your genuine preferences. In fact, we will include the opinions of the scientist whose characteristics most closely match your highest-rated profile in a newsletter about socio-economic issues in the U.S. that will be shared with 100 randomly selected U.S. respondents. If they rate the post you suggest as the highest, you will be entitled to receive a monetary bonus.

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The profile you are seeing is a [Gender] economist.

Currently, this economist is [Seniority] at the [Affiliation].

The economist is active on X (formerly known as Twitter). The twitter bio of the economist is: "Strongly Dem/Strongly Rep/Neutral"

How credible do you think this economist is? [0 to 10]

How credible do you think the economist's own research is? [0 to 10]

How willing you are to include an opinion piece from this economist to a newsletter? [0 to 10]

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Please state how much do you agree with the following statements.

A scientist's political stance should be disclosed when their research is reported [Strongly disagree...Strongly agree]

Featuring politically active scientists might affect their newspaper's credibility with its audience. [Strongly disagree...Strongly agree]

You anticipate backlash or increased engagement from their readership if a scientist's political views were prominently featured. [Slider from 0 (mostly backlash) to 100 (mostly engagement)]

Would you be more or less likely to reach out to a scientist for an interview or expert opinion based on the scientist's known political stance? [Extremely unlikely...Extremely likely]

Does an active or political social media presence make you more or less likely to feature that scientist? [Extremely unlikely...Extremely likely]

#### 3. INSTRUCTIONS: SURVEY OF SCIENTISTS 1

Thank you for participating in this survey. Completing it will take about 5 minutes.

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We can make anonymized data available to other researchers online.

You are at least 18 years old.

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In case you have doubts on the experiment, do not hesitate to contact us.

Paste your Prolific ID:

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In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show

that you read our questions carefully, please choose both "Extremely interested" and "Not at all interested" below: [Extremely interested, Very Interested, A little bit interested, Slightly interested, Not interested at all]

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Which best describes your gender?[Male, Female, Non-Binary]

Which of the following best describes your current employment status? [Working full time now, Working part time now, Temporarily laid off, Unemployed, Retired, Receiving benefits or insurance, Taking care of home or family, Student, Other]

In which field do you work?[Arts & Humanities, Life Sciences & Biomedicine, Physical Sciences, Social Sciences, Technology]

How many years have you spent in the field (after your postgraduate studies)?[Less than 1 year, Between 1 year and 3 years, Between 3 years and 5 years, More than 5 years]

What is your current position?[Postdoctoral researcher, University faculty, Industry professional]

For which institute do you work?[University, Research Institute (including public agencies), Private institute, Non profit, Hospital/clinic/facility]

To what extent do you consider yourself religious? [Very religious, Somewhat religious, Moderately religious, Slightly religious, Not at all religious]

Do you consider yourself a Republican, Democrat, Independent, or Other?[Republican, Democrat, Independent, Other, Not sure]

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We conducted a survey with a sample representing the U.S. population, matching broad census characteristics. We measured their trust in scientists, particularly focusing on whether this trust changes when these scientists express political opinions on social media.

The trust level was measured on a scale from 0 (no trust) to 10 (full trust). The sample reported a trust level of 7.2 out of 10 for scientists who do not express political opinions on social media.

What do you think is the reported level of trust for scientists who do express political opinions on social media?

If you guess correctly, you will receive a 0.5 GBP bonus (Use the scale from 0 to 10).

Slider from 0 to 10.

How much do you agree with the following statement?

"Scientists and researchers should avoid expressing their political opinions outside their area of expertise on social media."[Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

"Scientists and researchers should avoid expressing their political opinions about their area of expertise on social media."[Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

Out of 100 scientists and researchers, how many do you think would agree with the statement: "Scientists and researchers should avoid expressing their political opinions outside their area of expertise on social media."? Slider 0-100

Out of 100 scientists and researchers, how many do you think would agree with the statement: "Scientists and researchers should avoid expressing their political opinions about their area of expertise on social media."? Slider 0-100

To what extent do you agree with the statement?

"Expressing political opinions outside own area of expertise on social media can affect public trust in scientists." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

"Expressing political opinions about own area of expertise on social media can affect public trust in scientists." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

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Have you ever expressed your political opinions outside your area of expertise on social media?[Always, Most of the time, About half the time, Sometimes, Never]

Have you ever expressed your political opinions about your area of expertise on social media?[Always, Most of the time, About half the time, Sometimes, Never]

Do you believe that expressing political opinions on social media outside your area of expertise can impact your professional reputation?[No Impact, Moderate impact, Moderate to Severe impact, Severe Impact, Strong impact]

Do you believe that expressing political opinions on social media about your area of expertise can impact your professional reputation? [No Impact, Moderate impact, Moderate to Severe impact, Severe Impact, Strong impact]

Have you ever hesitated to express your political opinions on social media outside your area of expertise due to concerns about professional repercussions? [Always, Most of the time, About half the time, Sometimes, Never]

Have you ever hesitated to express your political opinions on social media about your area of expertise due to concerns about professional repercussions? [Always, Most of the time, About

half the time, Sometimes, Neverl

Have you observed other scientists expressing their political opinions outside their area of expertise on social media? [Always, Most of the time, About half the time, Sometimes, Never]

Have you observed other scientists expressing their political opinions about their area of expertise on social media? [Always, Most of the time, About half the time, Sometimes, Never]

Out of 100 colleagues, how many of them do you believe have faced negative consequences for expressing their political opinions outside their area of expertise on social media? Slider 0-100

Out of 100 colleagues, how many of them do you believe have faced negative consequences for expressing their political opinions about their area of expertise on social media? Slider 0-100

Out of 100 colleagues, how many of them do you believe have benefited from expressing their political opinions outside their area of expertise on social media? Slider 0-100

Out of 100 colleagues, how many of them do you believe have benefited from expressing their political opinions about their area of expertise on social media? Slider 0-100

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How much do you agree with the following statement?

"It is ethical for scientists to express their political opinions on social media about their field of expertise." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

"It is ethical for scientists to express their political opinions on social media outside their field of expertise." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

"There should be guidelines or policies regarding political expression of scientists on social media." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

"Scientists have a responsibility to remain neutral and unbiased in their public communications." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

"Expressing political opinions on social media can affect the public's trust in scientific research." [Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

#### 4. INSTRUCTIONS: SURVEY OF SCIENTISTS 2

Thank you for participating in this survey. Completing it will take about 5 minutes.

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Which best describes your gender?[Male, Female, Non-Binary]

Which of the following best describes your current employment status? [Working full time now, Working part time now, Temporarily laid off, Unemployed, Retired, Receiving benefits or insurance, Taking care of home or family, Student, Other]

In which field do you work?[Arts & Humanities, Life Sciences & Biomedicine, Physical Sciences, Social Sciences, Technology]

How many years have you spent in the field (after your postgraduate studies)?[Less than 1 year, Between 1 year and 3 years, Between 3 years and 5 years, More than 5 years]

What is your current position?[Postdoctoral researcher, University faculty, Industry professional]

For which institute do you work?[University, Research Institute (including public agencies), Private institute, Non profit, Hospital/clinic/facility]

To what extent do you consider yourself religious? [Very religious, Somewhat religious, Moderately religious, Slightly religious, Not at all religious]

Do you consider yourself a Republican, Democrat, Independent, or Other?[Republican, Democrat, Independent, Other, Not sure]

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You will be reporting your opinions on different topics. Please read each question carefully and provide your response.

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Imagine two scientists who work at U.S. universities. Both have identical characteristics: they are the same age, gender, and level of seniority, have comparable academic recognition, and work in the same field at universities of similar standing. Additionally, both are equally active on social media, using their personal accounts to engage on various topics. Let's call them 'Scientist X' and 'Scientist Y.'

The one key difference between them is this:

Scientist X starts sharing opinions on politically charged topics (e.g., immigration, climate change) that are related to the academic literature they contribute to as a researcher, sometimes referencing that literature explicitly and sometimes not.

Scientist Y, on the other hand, contributes equally to the same literature but does not share opinions on these politically charged topics.

Which scientist is more likely to be cited more often by their colleagues? [Scientist X much more cited, Scientist X slightly more cited, They get equally cited, Scientist Y slightly more cited, Scientist Y much more cited]

Which scientist is more likely to build a broader network of collaborators? [Scientist X much more likely, Scientist X slightly more likely, They are equally likely, Scientist Y slightly more likely, Scientist Y much more likely]

Which scientist is more likely to receive more academic job offers? [Scientist X much more offers, Scientist X slightly more offers, They get the same offers, Scientist Y slightly more offers, Scientist Y much more offers]

Which scientist is more likely to publish in top academic journals? [Scientist X much more likely, Scientist X slightly more likely, They are equally likely, Scientist Y slightly more likely, Scientist Y much more likely]

Which scientist is more likely to be featured in the media? [Scientist X much more likely, Scientist X slightly more likely, They are equally likely, Scientist Y slightly more likely, Scientist Y much more likely]

Which scientist is more likely to become involved in policymaking or take on a political role? [Scientist X much more likely, Scientist X slightly more likely, They are equally likely,

Scientist Y slightly more likely, Scientist Y much more likely]

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Imagine two scientists who work at U.S. universities. Both have identical characteristics: they are the same age, gender, and level of seniority, have comparable academic recognition, and work in the same field at universities of similar standing. Additionally, both are equally active on social media, using their personal accounts to engage on various topics. Let's call them 'Scientist Z' and 'Scientist Y.'

The one key difference between them is this:

Scientist Z starts sharing opinions on politically charged topics (e.g., immigration, climate change) that are unrelated to the academic literature they contribute to as a researcher.

Scientist Y, on the other hand, contributes equally to the same academic literature as Scientist Z but does not share opinions on these politically charged topics.

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[Same questions as before]
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In your own words, what qualifies a scientist as 'politicized' when they actively engage in political discourse? Where do you draw the line between sharing an opinion and promoting an ideology?

In a previous survey, scientists found it broadly acceptable to share political views related to their expertise. In your own words, what are the boundaries of that expertise (e.g., own literature, sub-field, discipline)?

Would you like to share any personal experiences regarding the costs or benefits of sharing political views online or in public?