The role of gender in peer-group perceptions of climate scientists’ media statements

Supplemental materials

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1.0 List of Universities Consulted

| Aberystwyth University | University of Edinburgh |
|------------------------|-------------------------|
| Bangor University      | University of Essex     |
| Birkbeck University, London | University of Exeter |
| Bournemouth University | University of Glasgow   |
| Cardiff University     | University of Gloucestershire |
| Durham University      | University of Hertfordshire |
| Edge Hill University   | University of Hull      |
| Liverpool Hope University | University of Leeds  |
| Keele University       | University of Leicester |
| Kingston University London | University of Lincoln |
| London School of Economics (LSE) | University of Liverpool |
| Loughborough University | University of Manchester |
| Newcastle University   | University of Northampton |
| Nottingham Trent University | University of Nottingham |
| Open University        | University of Oxford    |
| Queen's University Belfast | University of Plymouth |
| Royal Holloway University | University of Portsmouth |
| Swansea University     | University of Reading   |
| University of Aberdeen | University of Sheffield |
| University of Bath     | University of St Andrews |
| University of Birmingham | University of Sussex   |
| University of Brighton | University of Stirling  |
| University of Bristol  | University College London (UCL) |
| University of Cambridge | University of East Anglia |
| University of Chester  | Ulster University       |
| University of Cumbria  | University of Worcester |
| University of Dundee   |                         |
2.0 Online Survey Questions

The following sections are included, presented to participants chronologically:

2.1 Survey Introduction
2.2 Demographic Information
2.3 Media Statement (text written by the authors, with scientific information taken from Hansen (2007), Rahmstorf et al. (2007), Lenton (2011), Duarte et al. (2012), Spalding and Brown (2015), Westerling (2016)).

2.3.1 Male Scientist One (M1) – Daniel Thompson
2.3.2 Male Scientist Two (M2) – Matthew Thompson
2.3.3 Female Scientist One (F1) – Rebecca Thompson
2.3.4 Female Scientist Two (F2) – Helen Thompson

2.4 The Roles of a Scientist
2.5 Debrief

2.1 Survey Introduction

Investigating peer-group perceptions of climate change advocacy amongst environmental scientists

Thank you for taking part in my research. Responses will be used in my postgraduate thesis project for MSc Climate Change: Environment, Science and Policy at King’s College London. The project is investigating perceptions of environmental scientists by their peer group when they publicly advocate for climate action and policy.

For this research, ‘advocacy’ refers to any public communication that supports a policy, cause or action.

The survey should take no longer than 15 minutes to complete.

Identifying details such as your location or IP address are not collected. However, information required includes gender, ethnicity and education level. The survey responses are completely anonymised so no personal data can be associated with responses. Additionally, data will be aggregated in the final report to further ensure participants cannot be identified. More information about how your data is used can be found on the information sheet attached to the email you received.

It is up to you whether you participate, but your responses would be highly valued. The selected study population is environmental scientists with a PhD or above, which is why you have been chosen.

If you would like more information or have any questions or concerns please contact [email protected]

This survey is anonymous.

The record of your survey responses does not contain any identifying information about you, unless a specific survey question explicitly asked for it.

If you used an identifying token to access this survey, please rest assured that this token will not be stored together with your responses. It is managed in a separate database and will only be used to indicate whether you did or did not complete this survey. There is no way of matching identification tokens with survey responses.

Next
2.2 Demographic Information

General Information

Please select your gender, or select 'No answer' if you would prefer not to say:

- Female
- Male
- No answer

Please select your academic level:
- Professor
- Lecturer
- Postdoc
- PhD
- Master's Degree
- Undergraduate Degree
- Other: [Text Box]

Please select your ethnicity. If you consider yourself as 'other', please detail:
- Choose one of the following answers

[Dropdown List]
2.3 Media Statement

2.3.1 Male Scientist One (M1) – Daniel Thompson

On the course of the Washington DC Climate Action Conference in 2016, the media covering the event interviewed a number of attendees who came from a wide range of backgrounds. Below is an extract from one of these interviews with a British scientist who was in attendance and had worked on climate change research. This interview was published online in one report of the conference from a UK media outlet. This extract was chosen due to it being a comprehensive example of advocacy, and you will be asked to rate your initial impressions of the scientist who is being interviewed.

On Daniel Thompson, a UK-based climate change researcher, he stated his view on the topic the conference had been covering. “This topic touched on too many tipping points. This refers to a list of measures that will need to take place to stop climate change. The four main points are: drought, increasing extreme weather, increased risk of flooding, and increased risk of sea-level rise. These points are the ones that must be addressed by scientists and policymakers alike. One of the main points is that the Earth’s temperature is rising, which is a clear indication of climate change. We need to act now, and we need to act fast.”

On his presentation, he added, “I presented my findings to the conference, and I hope the ideas put forth will be taken seriously.”

In a scale of 1-10, with 1 being “not at all” and 10 being “extremely,” rate your initial impressions of the scientist based on the attributes below:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Extremely |
|---|---|---|---|---|---|---|---|---|-------------|
| Objective | | | | | | | | | |
| Respected | | | | | | | | | |
| Intense | | | | | | | | | |
| Dramatic | | | | | | | | | |
| Compassionate | | | | | | | | | |
| Competitive | | | | | | | | | |
| Original | | | | | | | | | |
| Sincere | | | | | | | | | |
| National | | | | | | | | | |
| Impressive | | | | | | | | | |
| Self-controlled | | | | | | | | | |
| Leader | | | | | | | | | |
| Impassible | | | | | | | | | |
| Critical | | | | | | | | | |
| Caring | | | | | | | | | |
| Loyal | | | | | | | | | |
| Expressive | | | | | | | | | |
| Sincere | | | | | | | | | |
| Trustworthy | | | | | | | | | |
| Approachable | | | | | | | | | |
| Logical | | | | | | | | | |
| Important | | | | | | | | | |
| Humble | | | | | | | | | |

How accurately do you think this place it?
2.3.2 Male Scientist Two (M2) – Matthew Thompson

Matthew Thompson, a UK based climate change researcher was asked his view on the topics the conference had been covering: “Our topic touched on has been tipping points. This refers to levels of emissions that will lead to catastrophic effects in the climate system, and we have reached this in several important processes. The parts of our return to often dynamic processes take over and it is out of our control as we are trying to be adaptive. Sadly, soon there will be too late in the summer season, and this has knock-on effects on regions and global scale in terms of temperature and animals we rely on the sea over the summer. This year was the 2°C target annual sea ice trebling event. We need to accept that this is now and it’s affecting us now.

We are setting unwanted climate change aside of scientific projections. Increased intensity and duration of extreme weather, unprecedented heatwave and wildfires, and other environmental changes are increasing at a massive scale. The average global temperature of the Earth is rising, and it’s just a fact. There is an inevitable lack of preparation for these occurrences, which has also been touched upon in the conference, and I hope the ideas put forth will be achieved.

We must get back to C2L levels of 2.05 ppm or lower, or try and limit the increasing and surpassing these tipping points and temperatures that will lead to immense consequences. This will need strong policies and strong action from our Governments.

I am disappointed by the lack of action for climate change mitigation, but I’m hoping conferences like this will turn it around. Interest are still lying with big business such as the fossil fuel industry instead of the best interests of Earth – our home. We are dooming future generations and non-human species to live in a world they have not created. Everyone can help by pushing for good government policies and changing to more sustainable behavior before it’s too late. We are entering a stage where mitigation may eventually range in unpredictability. When we will have to fight to adapt to the grim future we have created.

But if we significantly cut right now, we have a chance to make history – otherwise, we will be left with it."

On a scale of 1 – 10, with 1 being “not at all” and 10 being “extremely”, rate your initial perception of the scientist based on the attributes below:

|                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely |
|----------------|---|---|---|---|---|---|---|---|---|----|-----------|
| Objective      |   |   |   |   |   |   |   |   |   |    |           |
| Personalised   |   |   |   |   |   |   |   |   |   |    |           |
| Emotive        |   |   |   |   |   |   |   |   |   |    |           |
| Dramatic       |   |   |   |   |   |   |   |   |   |    |           |
| Competent      |   |   |   |   |   |   |   |   |   |    |           |
| Convincing     |   |   |   |   |   |   |   |   |   |    |           |
| Decisive       |   |   |   |   |   |   |   |   |   |    |           |
| Sincere        |   |   |   |   |   |   |   |   |   |    |           |
| Rational       |   |   |   |   |   |   |   |   |   |    |           |
| Dependable     |   |   |   |   |   |   |   |   |   |    |           |
| Self-controlled|   |   |   |   |   |   |   |   |   |    |           |
| Honest         |   |   |   |   |   |   |   |   |   |    |           |
| Impersonal     |   |   |   |   |   |   |   |   |   |    |           |
| Cold          |   |   |   |   |   |   |   |   |   |    |           |
| Caring         |   |   |   |   |   |   |   |   |   |    |           |
| Cynical        |   |   |   |   |   |   |   |   |   |    |           |
| Expressive     |   |   |   |   |   |   |   |   |   |    |           |
| Warm          |   |   |   |   |   |   |   |   |   |    |           |
| Trustworthy    |   |   |   |   |   |   |   |   |   |    |           |
| Approachable   |   |   |   |   |   |   |   |   |   |    |           |
| Logical        |   |   |   |   |   |   |   |   |   |    |           |
| Impactful      |   |   |   |   |   |   |   |   |   |    |           |
| Bias           |   |   |   |   |   |   |   |   |   |    |           |

How accurate do you think this....
2.3.3 Female Scientist One (F1) – Rebecca Thompson

In Rebecca Thompson, a UK-based climate change researcher, was asked her view on the topic the conference had been covering: "One topic touched on has been tipping points. This refers to levels of emissions that will lead to catastrophic effects in the climate system, and we have reached this in several important processes. The point at which an ocean's temperature or a glacier starts to melt is a tipping point. We need to act now and it is too late to solve it. One of the things that makes it so difficult is that it is happening all over the world and is affecting us now.

We are seeing increased climate change in areas that were previously untouched. Increased temperature and duration of extreme weather events are causing changes in ecosystems and human activities. We have observed increasing temperatures leading to more severe droughts and increasing risks of forest fires. The overall global temperature of the Earth is rising, it's not just a bit. There is an increasing need for action around the world, and we need to start now.

We must act now to reduce CO2 levels. We have limited time, so we need to act now. We have to think about how we can reduce our carbon footprint and take responsibility for our actions.

If you significantly reduce your carbon footprint, you can help to slow down the rate of climate change. But if you significantly increase your carbon footprint, you will accelerate the rate of climate change. As we have to act now, it is important to take action to reduce our carbon footprint.

On a scale of 1 to 10, with 1 being 'not at all' and 10 being 'extremely', rate your initial impression of the scientist based on the attributes below.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| Objective | | | | | | | | | |
| Bona fide | | | | | | | | | |
| Competent | | | | | | | | | |
| Competitive | | | | | | | | | |
| Decisive | | | | | | | | | |
| Credible | | | | | | | | | |
| Caring | | | | | | | | | |
| Proactive | | | | | | | | | |
| Expressive | | | | | | | | | |
| Warm | | | | | | | | | |
| Approachable | | | | | | | | | |
| Insightful | | | | | | | | | |
| Impactful | | | | | | | | | |
| Risk | | | | | | | | | |

How accurate do you think this page 5?
2.3.4 Female Scientist Two (F2) – Helen Thompson

Dr Helen Thompson, a UK based climate change researcher, was asked her view on the topics the conference had been focusing on. The topic discussion has been tipping points. This refers to levels of emissions that will lead to catastrophic effects in the climate system, and we have reached this in several important instances. The first of no return is when dynamic processes take over and it is out of our control, as we are seeing with the Arctic ice. Sadly, soon there will be far too late in the summer season, and this has real effects on a regional and global scale in terms of temperature and animals who rely on the ice over this period. This year was the 3rd highest annual sea ice level recorded. We need to accept that this is not well.

It’s affecting us now. We are seeing accelerated climate change ahead of scientific predictions. Increased intensity and duration of extreme weather, unprecedented heat waves, record wildfires and intensifying droughts, as well as warming and acidifying oceans leading to mass coral destruction. The average global temperature of the Earth is rising, that’s just a fact. It’s an obvious lack of proof for these occurrences, which has also been known for over a century, the conference and I hope the ideas of fact will be acknowledged.

We must get back to CO2 levels at 350ppm or lower by 2050 and limiting and surpassing those limits, and policies and temperatures that will lead to disastrous consequences. This will need strong policies and strong action from our governments.

I am disappointed by the lack of action for climate change mitigation, but I’m hoping conferences like this will turn it around. Interests are still aligning with big business such as the fossil fuel industry, instead of the best interests of Earth – our home. We are discussing future generations and non-human species to live in a world they have not created.

Everyone can help by pushing for good government policies and changing to more sustainable behavior before it’s too late. We are working in a regime where mitigation may eventually no longer be an option. Where we will have to fight to adapt to the grim future we have created.

But if significantly is better now, we have a chance to change history... or otherwise, we will be left behind in.

On a scale of 1 – 10, with 1 being not at all and 10 being extremely, rate your initial perception of the scientist based on the attributes below.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely |
|---|---|---|---|---|---|---|---|---|---|-----------|
| Objective | | | | | | | | | | |
| Relaxed | | | | | | | | | | |
| Driven | | | | | | | | | | |
| Dramatic | | | | | | | | | | |
| Competent | | | | | | | | | | |
| Competent | | | | | | | | | | |
| Disciplined | | | | | | | | | | |
| Shrewd | | | | | | | | | | |
| Rational | | | | | | | | | | |
| Dissatisfied | | | | | | | | | | |
| Self-controlled | | | | | | | | | | |
| Level-headed | | | | | | | | | | |
| Impertinent | | | | | | | | | | |
| Clumsy | | | | | | | | | | |
| Caring | | | | | | | | | | |
| Sceptical | | | | | | | | | | |
| Expensive | | | | | | | | | | |
| Warm | | | | | | | | | | |
| Trustworthy | | | | | | | | | | |
| Approachable | | | | | | | | | | |
| Ingrained | | | | | | | | | | |
| Impartial | | | | | | | | | | |
| Aliasing | | | | | | | | | | |
| More accurate to you think than this? | | | | | | | | | | |

Your initial perception of the scientist based on the attributes above.
2.4 The Roles of a Scientist

Below are 5 idealised roles scientists can play in science, advocacy and communication adapted from Pelto (2007) and Ripley (2014).

Please select the role you think scientists should ideally have in relation to climate change discourse, and the role you would be comfortable with yourself (for this exercise, please assume your work has relevance to the climate change discourse).

| Pure Scientist | Scientists should ideally have this role | I would be comfortable with this role |
|----------------|----------------------------------------|-------------------------------------|
| Focuses solely on generating facts and delivering them to the pool of human knowledge, with no consideration for their use or utility, and no direct connection with decision-makers, who are left to find out for themselves what they need to know. |  |  |

| Science Communicator | Scientists should ideally have this role | I would be comfortable with this role |
|----------------------|----------------------------------------|-------------------------------------|
| Engages with society to make aware and discuss the results and implications of the research that it has funded, including the task of raising the alert if the implications of a piece of research point to a significant societal threat or opportunity. This includes explicitly engaging with public discourse and collaboration with social scientists to ensure evidence-based approach to communication. |  |  |

| Science Advisor | Scientists should ideally have this role | I would be comfortable with this role |
|-----------------|----------------------------------------|-------------------------------------|
| Seeks to stay removed from explicit considerations of policy and politics but answers factual questions posed by a decision-maker. A key characteristic is to avoid questions that cannot be resolved by scientific inquiry. |  |  |

| Issue Advocate | Scientists should ideally have this role | I would be comfortable with this role |
|----------------|----------------------------------------|-------------------------------------|
| Engages with a decision-maker and the public seeking to reduce the scope of choice available by promoting a particular course of action that they justify using their expert knowledge and understanding. |  |  |

| Incentivist of Policy Alternatives | Scientists should ideally have this role | I would be comfortable with this role |
|-----------------------------------|----------------------------------------|-------------------------------------|
| Engages in decision-making, contributing knowledge and understanding collaboratively with other participants (such as other schools of academia and the public) to expand and clarify the scope of choice available, and to converge collectively on an agreed way forward. |  |  |

If you have any additional comments, please add them here.
2.5 Debrief

Thank you for your participation in my study! Please read the below before closing your browser.

Purpose of the Study

Earlier in the study, I informed you that the purpose of the research was investigating peer-group perceptions of climate change advocacy amongst environmental scientists. In actuality, my study is about how potential implicit gender bias might influence perceived attributes of environmental scientists acting as advocates by their peers. You have been shown an advocacy piece that was randomly assigned either a female or male image and name. The gender aspect was not mentioned at the beginning of the study, and the articles and images used were fabricated. The results will be used to investigate bias that could be present based on the influence of gender and scientific norms in society and academia.

Unfortunately, in order to properly test my hypotheses, I could not provide you with all of these details prior to your participation. This ensures that your reactions in this study were spontaneous and not influenced by prior knowledge about the purpose of the study. The initial information about the study was not entirely accurate, and a fabricated advocacy piece was used in conjunction with a randomized selection of a fictitious male or female scientist to investigate the real purpose of the study; the influence of gender on peer perception of scientists acting as advocates, specifically relating to climate change. If I had told you the actual purposes of my study, it would be unlikely any unconscious and implicit bias could be reliably investigated in the responses. Implicit bias comes from repeated contact with ingrained cultural stereotypes and is an automatic bias that affects thoughts and actions in unconscious ways. This needed to be measured without self-mediation by participants. I regret the deception, but I hope you understand the reason for it.

Your results are anonymous, and data will be aggregated in the final report to further ensure responses cannot be matched with participants.

Why is this important to study?

It is important for scientists to be involved in the talks around climate change and communicate their work and ideas to the public and decision makers to engage, educate and foster democratic discussion in the context of current knowledge and uncertainties. There is an ongoing reluctance which can be excused to scientific norms, fear of backlash and loss of credibility. Sticking to these norms allow scientists to avoid losing standing within their peer group and the public. Many core values of science are often seen as ‘masculine’ and it is often viewed as inappropriate to have feminine attributes that appear at odds with the objectivity of science. This is worrying from a gender perspective for female scientists in the public eye, as female attribute stereotypes tend not to be associated with science, and combined with the emasculating realm of media, may lead to tougher judgments. If peers view female scientists as less credible or more negatively if they enter the public sphere - explicitly or implicitly - this has the potential to be detrimental to the retention of women in science, reinforce implicit bias, lead to professional issues and peer rejection, and elicit resentment in a portion of the scientific community who will communicate the importance of climate change action to the public. Additionally, it will ultimately cut the diversity of perspectives that are needed to create a more complex picture of the world in scientific exploration and innovation.

Confidentiality and how your data will be used

Please note that although the purpose of this study is different from the originally stated purpose, everything else on the information sheet that was attached to the original email is correct. This includes the ways in which your data is kept confidential. This survey was used to collect research data for my dissertation, including general information about gender, education level and ethnicity, and responses about advocacy. Your input will be used to investigate whether there is an implicit gender bias based on attributes against those who advocate publicly about climate change. No names, cookies or IP information was released as part of this research. Every response has been anonymized by the survey software 'LimeSurvey' and identifiable to the researcher. The responses will be stored anonymously on the survey software and the KCL OneDrive of the researcher for the duration of the research. Both are password protected. Study data will be stored with King’s College London for one year after the completion of the research. Any email addresses used to contact participants are kept separately from responses in a password protected file and will be deleted within 3 months of the project submission date. This data will be solely used by the researcher and not shared.

Now the study is complete, it is not possible to identify and delete your responses. This is because the results are anonymised; so single surveys will not be possible to identify. All responses have been anonymized and will be aggregated and presented as a group in the final report to ensure responses cannot be matched with participants.

I would appreciate if you would not disclose the research procedures and/or hypotheses to anyone who might participate in this study in the future as this could affect the results of the study.

Useful Contact Information

If you have any questions or concerns regarding this study, its purpose or procedures, please feel free to contact:

***Please copy this text if you would like it for future reference or contact the above. Once again, thank you for your participation in this study!***
### 3.0 Breakdown of Results: Participant Demographics

**Table S1:** Participant demographic information, broken down by the scientist assigned to each participant.

| Demographic               | M1 | M2 | F1 | F2 | Total |
|---------------------------|----|----|----|----|-------|
| **Total Participants**    | 21 | 16 | 27 | 27 | 91    |
| **Participant Gender**    |    |    |    |    |       |
| Female                    | 7  | 3  | 7  | 6  | 23    |
| Male                      | 11 | 10 | 17 | 19 | 57    |
| Prefer not to say         | 3  | 3  | 3  | 2  | 11    |
| **Academic Level**        |    |    |    |    |       |
| PhD                       | 1  | -  | -  | 2  | 3     |
| Post Doc                  | 2  | 6  | 7  | 6  | 21    |
| Lecturer                  | 13 | 8  | 10 | 11 | 42    |
| Professor                 | 5  | 2  | 10 | 8  | 25    |
| **Ethnicity**             |    |    |    |    |       |
| White – British           | 13 | 10 | 21 | 17 | 61    |
| White – Irish             | 1  | -  | -  | 2  | 3     |
| Asian / Asian British – Indian | - | -  | -  | 1  | 1     |
| Asian / Asian British – Pakistani | 1 | -  | -  | -  | 1   |
| Other – European / European British | 2 | 3  | -  | 4  | 10   |
| Other – White (not stated) | 2 | 3  | 5  | 2  | 11   |
| Other – White American    | -  | -  | -  | 1  | 1     |
| Other – Jewish            | -  | -  | 1  | -  | 1     |
| Other – Not stated         | 2  | -  | -  | -  | 2     |
4.0 Breakdown of Results: Gender Perceptions

Table S2: P-values of permutation tests to assess differences in rankings between the fictitious scientists: MC (n=37), FC (n=54), M1 (n=21), M2 (n=16), F1 (n=27) and F2 (n=27). P-values are highlighted where significant to at least p ≤ 0.1.

| Attributes       | P-Values for Comparisons |
|------------------|---------------------------|
|                  | MC vs FC | F1 vs F2 | F1 vs M1 | F1 vs M2 | F2 vs M1 | F2 vs M2 | M1 vs M2 |
| Objective        | 1        | 0.21     | 1        | 0.32     | 0.77     | 0.99     | 0.75     |
| Restrained       | 1        | 1        | 0.26     | 1        | 0.4      | 1        | 0.74     |
| Emotive          | 0.11     | 0.28     | 0.78     | 0.4      | 0.13     | 0.14     | 0.53     |
| Dramatic         | 1        | 0.13     | 0.57     | 0.58     | 0.57     | 0.14     | 0.99     |
| Competent        | 1        | 0.15     | 1        | 1        | 0.27     | 0.35     | 0.1      |
| Competitive      | 0.17     | 0.61     | 0.77     | 0.27     | 0.43     | 0.2      | 0.88     |
| Decisive         | 1        | 1        | 0.57     | 1        | 1        | 0.53     | 0.74     |
| Sincere          | 0.82     | 0.79     | 1        | 0.51     | 0.78     | 1        | 0.49     |
| Rational         | 1        | 1        | 1        | 0.16     | 1        | 0.39     | 0.15     |
| Dispassionate    | 1        | 0.78     | 0.78     | 1        | 0.08*    | 0.56     | 0.74     |
| Self-controlled  | 0.66     | 0.78     | 1        | 0.55     | 0.42     | 1        | 0.44     |
| Level-headed     | 1        | 0.61     | 1        | 0.55     | 0.45     | 0.77     | 0.34     |
| Impersonal       | 0.08     | 0.57     | 1        | 1        | 0.36     | 0.37     | 0.33     |
| Credible         | 1        | 0.21     | 1        | 1        | 0.27     | 0.75     | 1        |
| Caring           | 1        | 1        | 1        | 0.26     | 1        | 0.76     | 0.49     |
| Sceptical        | 1        | 0.27     | 1        | 0.21     | 1        | 0.21     | 0.98     |
| Expressive       | 0.4      | 1        | 1        | 0.53     | 1        | 0.34     | 0.51     |
| Warm             | 0.69     | 0.39     | 1        | 1        | 0.32     | 0.28     | 1        |
| Trustworthy      | 0.67     | 1        | 1        | 0.76     | 1        | 0.53     | 0.74     |
| Approachable     | 0.82     | 0.79     | 0.78     | 0.7      | 1        | 0.25     | 0.16     |
| Logical          | 1        | 0.15     | 1        | 0.06*    | 0.39     | 0.21     | 0.08     |
| Impartial        | 1        | 0.59     | 1        | 0.43     | 0.76     | 1        | 0.49     |
| Biased           | 1        | 0.34     | 0.39     | 0.3      | 0.57     | 0.98     | 0.54     |
| Accurate         | 1        | 1        | 0.58     | 1        | 0.54     | 1        | 0.78     |

* p ≤ 0.1
Table S3. As Table S2 but for the combined attribute scales designed to represent stereotypical associations with ‘Science’, ‘Media’, ‘Male’ and ‘Female’.

| Comparison (X vs Y) | ‘Science’ | ‘Media’ | ‘Male’ | ‘Female’ |
|---------------------|-----------|---------|--------|----------|
| MC vs FC            | p = 1     | p = 0.47| p = 1  | p = 0.27 |
| F1 vs F2            | p = 1     | p = 0.34| p = 0.68| p = 1    |
| F1 vs M1            | p = 1     | p = 1   | p = 1  | p = 1    |
| F1 vs M2            | p = 0.004*1 | p = 1  | p = 0.35| p = 0.63 |
| F2 vs M1            | p = 1     | p = 0.25| p = 0.86| p = 0.28 |
| F2 vs M2            | p = 0.78  | p = 0.37| p = 1  | p = 0.12 |
| M1 vs M2            | p = 0.006*2 | p = 1  | p = 0.76| p = 1    |

* p ≤ 0.05
** p ≤ 0.01

1. Y>X = 52% (46-56%), Y<X = 35% (30-41%), Y=X = 13%
2. Y>X = 53% (7-58%), Y<X = 33% (28-39%), Y=X = 14%
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