

Dear participant,

We are asking you to participate in a research study entitled "Perceptions of Fairness in Academic Networks." This study is being led by Dr. Lisette Espín-Noboa, postdoc at the Complexity Science Hub Vienna (CSH), and Central European University (CEU). The Faculty Advisor for this study is Dr. Fariba Karimi, Professor at Graz University of Technology and Team Lead at CSH.

What the study is about

This research aims to explore fairness from various stakeholders' perspectives in academic hiring. It has a twofold objective: (1) to identify the factors that influence scientists' decisions in hiring, and (2) to examine scientists' perceptions of fairness in evaluating others' decisions in hypothetical hiring scenarios. In particular, we want to know when meritocracy is more important than personal networks, and to what degree network effects influence academic decision-making.

What we will ask you to do

We will ask you to answer four types of questions: (1) your demographics, (2) vignettes, (3) self-assessment, and (4) your academic profile. The survey contains 33 to 40 questions, including the assessment of fairness in hypothetical scenarios about hiring in academia (i.e., vignette questions). The survey has no time constraint, thus, once you start, you can fill the form at your own pace. Nevertheless, we estimate a duration of approximately 15 minutes to finish the entire survey. After you complete the survey, you will be taken to a Google form to enter your email address. This lets us know you are finished (so we will stop sending reminders) and ensures you will receive a copy of the manuscript once it is published. Your email address will only be used for sending you the manuscript and will not be shared or used for any other purposes.

Why you were selected

You were selected to participate in this survey because you are the corresponding author of at least one scholarly paper published between 2010 and 2023 that is indexed by SCOPUS.

Risks and discomforts

We do not anticipate any risks from participating in this research.

Benefits

We foresee two main benefits from this research. First, reflecting on an experience (i.e., hiring in academia) may lead you to a better understanding of yourself and your unconscious biases. Second, the information from this study can help decision-making processes (both algorithmic and human-driven) become fairer by highlighting the advantages, disadvantages, and potential biases associated with relying on personal networks, particularly in hiring decisions.

Incentives for participation

In this survey, you will have the opportunity to download your collaboration and citation networks in two forms: (1) as compressed anonymized csv files, and (2) as a PNG image. Further information is provided below.



Privacy

In this survey, we will collect three types of data for each participant: (1) consent form (this document), (2) questionnaire responses, and (3) academic networks.

- 1. After accepting this consent form, you can immediately proceed to the survey questionnaire.
- 2. This questionnaire is completely anonymous. We will not collect information that identifies you (e.g., email address attached to answers).
 - a. In the beginning and towards the end of the questionnaire, you can choose whether to provide your email. If you do, you will receive a pre-print of the study's results and will no longer receive reminders about the survey. This feature was added based on feedback from the pilot phase.
 - b. For academic network questions (see point 3 below), where identification might be possible, you can choose one of three privacy levels. Regardless of your choice, we will anonymize your academic network data before analysis and remove all personal identifiers.
- 3. The academic networks refer to your collaboration and citation networks. While this information is public (e.g., via digital libraries, or co-authors' websites) we will treat them anonymously to keep the questionnaire anonymous. We will provide three privacy-aware options that you can choose from to provide your networks:
 - a. **Open**: We will directly ask for any identifier of your academic profiles (i.e., Google Scholar, ORCID, ResearchGate, any archival repository, personal website). Once we collect the academic networks and map them with the responses from the questionnaire, we will anonymize your data in a way that you cannot be identified.
 - b. **Strong privacy:** We will provide a link to download an anonymized version of your academic networks as compressed .csv files, and we will kindly ask you to upload them into the survey. The downloaded .zip file has two purposes. First, you get a copy of the data we are using (i.e., promoting transparency). Second, you can see that the data is anonymized (i.e., promoting trustworthiness). We will use the OpenAlex repository to access your publications, citations, and collaborators. Additionally, we will estimate yours and your collaborators' perceived gender (from first name), race and ethnicity (from lastname) using the Python libraries gender-guesser, ethnicolr, and ethnicseer. These libraries rely on common name associations and may not accurately reflect your or your collaborators' gender or ethnic identities. We acknowledge that gender and ethnicity are complex constructs. The 6 gender categories are: unknown (name not found), androgynous (non-binary), male, female, mostly male, or mostly female. The 4 race categories are: api, black, hispanic, and white. The 12 ethnicity categories are: MEA, IND, ENG, FRN, GER, ITA, SPA, RUS, CHI, JAP, KOR, VIE.
 - c. **Prefer not to disclose**: In this case, we will kindly ask you to provide some academic metric counts such as your number of publications, number of citations, h-index, number of collaborators, and number of awarded grants.



Confidentiality

Your confidentiality will be kept to the degree permitted by the technology being used and your choice of privacy (see above). We cannot guarantee against interception of data sent via the internet by third parties. Only the four members of this research team will have access to the data in either form: raw responses or aggregates.

Data security

The survey is being conducted with the help of the IT infrastructure of the Central European University (CEU). We anticipate that your participation in this survey presents no greater risk than everyday use of the Internet.

Please note that email communication is neither private nor secure. Though we are taking precautions to protect your privacy, you should be aware that information sent through email could be read by a third party.

Sharing de-identified data collected in this research

De-identified data from this study may be shared with the research community at large to advance science. We will remove or code any personal information that could identify you before files are shared with other researchers to ensure that, by current scientific standards and known methods, no one will be able to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data.

Taking part is voluntary

Your participation in this study is completely voluntary. You may refuse to participate before the study, discontinue at any time, or skip the optional questions with no penalty to you. Note that if you choose to discontinue at any time, we will not consider any of your responses for the study.

If you have questions

The main researcher conducting this study is Lisette Espín-Noboa, a postdoc at the Complexity Science Hub Vienna, and Central European University. Should you have any questions, please contact Dr. Espín-Noboa at espin@csh.ac.at.

By clicking on "I have read and understood the consent form and given my permission to participate in this study" in the main survey, you will be giving us your consent to be part of this study, and will be able to continue the survey. By not clicking the above mentioned button, you will not be contacted again for this study. If you take no action, we will send you three reminders via email every Monday within a month.

Statement of Consent

I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.