

# **More Evidence of Biases Against Men than Against Women in Faculty Hiring**

A Compendium of All Experimental Studies of Faculty Hiring

Lee Jussim

Date: Jul 30, 2025

URL: <https://unsafescience.substack.com/p/more-evidence-of-biases-against-men>

## **Summary Up Front**

Far more and far better experimental studies find biases against men than against women in academic hiring. That's the whole summary. Read on for the details



Given the intensity and dominance of the academic rhetoric about patriarchy, gender gaps in salary and STEM, the nearly monomaniacal emphasis on biases against women, and even outright delusions of biases against hiring women, one might wonder: “Well, what have other experimental studies of sex bias in hiring by faculty found?”

Glad you asked. In this post, I provide a compendium and brief summary of major findings of every *experimental* study assessing sex biases in academic hiring that I am aware of.<sup>[1]</sup> To be included here, the study needed to:

1. Have a sample of faculty as those making hiring judgments. So, studies of undergraduate or graduate students or laypeople are excluded.

2. Be a true experiment, i.e., randomly assign faculty to judge at least one male applicant and at least one female applicant with identical qualifications. Thus, these are audit, or audit-like studies, which means they *assess* hiring biases, but do not directly assess gaps or the explanations for gaps in specific fields or departments. The great strength of experimental studies is that they can and do hold “everything else constant,” which they can do because the applicants are not real people. In a typical experiment of this genre, some faculty are asked to evaluate “John” and others are asked to evaluate “Jennifer” – and both receive *identical* information about John and Jennifer. Therefore, if faculty favor one over the other, the only possible explanation can be some sort of sex bias.

These, then, are NOT studies that document real gender gaps in academia and then conduct statistical analyses to attempt to assess why they exist. Real world studies are important because they are about the real world, rather than hypothetical applicants, but they inevitably suffer a major shortcoming. Because they are nonexperimental, it is almost impossible for them to establish whether biases *caused* whatever gap was found – this is basic “you can’t infer cause from correlation” stuff. Nonetheless, although I do not review the nonexperimental studies here because it would make this post insanely long and complex (the nonexperimental studies often have highly sophisticated and complex statistical analyses in their attempts to test explanations for gaps), I do review one at the end finding pretty much the same thing as found in the totality of the experiments.

## **EXPERIMENTAL STUDIES OF GENDER BIAS IN FACULTY HIRING**

**OR**

**THE MYTH OF PERVASIVE BIAS AGAINST WOMEN IN ACADEMIC HIRING IS MAINTAINED BY IGNORING THE PUBLISHED EVIDENCE OF BIAS AGAINST MEN**



Main finding is in bold italics.

### Studies Finding More Bias Against Women than Men

Eaton, A. A., Saunders, J. F., Jacobson, R. K., & West, K. (2020). How gender and race stereotypes impact the advancement of scholars in STEM: Professors' biased evaluations of physics and biology post-doctoral candidates. *Sex Roles*, 82, 127–141. <https://doi.org/10.1007/s11199-019-01052-w>. This paper reports an experimental study of 251 U.S. biology and physics faculty, who evaluated otherwise identical applicants for a post-doctoral position and who varied on the basis of their sex and race (race effects are beyond the scope of this post). ***Physics faculty showed biases favoring male applicants; biology faculty showed no bias.***

Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty's subtle gender biases favor Male students. *Proceedings of the National Academy of Sciences*, 109(41), 16474–16479. <https://doi.org/10.1073/pnas.1211286109>. Reports one experiment, N=127, ***finding biases against hiring women in biology, chemistry and physics at six top U.S. universities.*** I described this study here in more detail, when introducing our failure to replicate it and reversal.

Steinpreis, R. E., Anders, K. A., & Ritzke, D. (1999). The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study. *Sex roles*, 41(7), 509-528. 238 U.S. psychology professors evaluated the otherwise identical vitas of either an applicant with a male name or female name. In addition, applicants' vitas indicated either greater or lesser accomplishments, as one might find among more senior versus more junior applicants, respectively. ***The main result was bias favoring men for the more junior applicants and no bias for the more senior applicants.***

I note here that these three studies have a ***combined*** sample size of 616 participants. Please pay attention to the sample sizes in the studies finding biases against men.



### Studies Finding More Biases Against Men than Women

Carey, J. M., Carman, K. R., Klayton, K. P., Horiuchi, Y., Htun, M., & Ortiz, B. (2020). Who wants to hire a more diverse faculty? A conjoint analysis of faculty and student preferences for gender

and racial/ethnic diversity. *Politics, Groups and Identities*, 8, 535–553. N=869. **“UNM faculty are more than 10% points more likely to favor a woman candidate to a man, all else equal... At UNR, these preferences are slightly smaller, but are still positive and statistically significant.”**

Carlsson, M., Finseraas, H., Midtbøen, A.H. & Rafnsdottir, G. (2020). Gender bias in academic recruitment? Evidence from a survey experiment in the Nordic region. *European Sociological Review*, 1– 12. doi: 10.1093/esr/jcaa050. N=775. **“Contrary to our expectations, we find that, for both competence and hireability, female CVs get higher ratings than male CVs.”**

Henningsen L., Horvath L. K., Jonas K. (2021). Affirmative action policies in academic job advertisements: Do they facilitate or hinder gender discrimination in hiring processes for professorships? *Sex Roles*, 86, 34–48. <https://doi.org/10.1007/s11199-021-01251-4>. N=481. **“...evaluators rated the female applicant as more hireable than the male applicant...”**

Honeycutt, N., Lewis, N., Careem, A., & Jussim, L. (in press). Are STEM faculty biased against female applicants? A robust replication and extension of Moss-Racusin and colleagues (2012). *Meta-Psychology*. **Across three experiments, over 1100 faculty across STEM fields were biased in favoring of hiring women over men for a lab manager position.**

Solga, H., Rusconi, A. & Netz, N. (2023). Professors’ gender biases in assessing applicants for professorships. *European Sociological Review*. Advance online publication. <https://doi.org/10.1093/esr/jcad007>. N=1818. **“...we observe a notable female advantage for both outcome variables (Table 3): female applicants’ mean ratings are 0.30 rating points (i.e. 19 per cent of one standard deviation; hereafter: SD) higher for invitation and 0.20 points (13 per cent of one SD) higher for perceived qualification than male applicants’ mean ratings.”**

Solga, H., Rusconi, A. & Hofmeister, S. (2025). Gender bias in assistant professor recruitment: Does discipline matter? *Research Policy*, 54. <https://doi.org/10.1016/j.respol.2024.105170>. N=9054. **“Our analyses provide evidence that female applicants for assistant professorships do indeed receive higher ratings than male applicants, both in terms of being perceived as qualified for the position and being invited for an interview...”**

Williams, W. M., & Ceci, S. J. (2015). National hiring experiments reveal 2:1 faculty preference for women on STEM tenure track. *Proceedings of the National Academy of Sciences*, 112(17), 5360–5365. **Five experiments, N=871 U.S. STEM faculty, found, overall a 2:1 bias favoring women in hiring.** That is, with otherwise identical records, faculty rated women as the top candidate twice as often as they rated men as the top candidate.

## Homework Assignment for Ambitious Readers



Note that the studies finding biases against men have vastly larger sample sizes than those finding biases against women — meaning that they should also be given vastly more credibility and weight. Nonetheless, I have some hypotheses:

1. The studies finding biases against women will be cited at vastly higher rates than those finding biases against men. Let’s operationalize “vastly” as, on average, across the sets of 3 and 7 papers, at least 3x as many citations per year post-publication.
2. Even Stronger Hypothesis: I hypothesize that the three studies finding biases against women will be, in total, cited more frequently than all 7 of those finding biases against men **combined**.

This is not hard to find out via Google Scholar, but this post is long enough and I do have other fish to fry, so I did not do it. **If you do, please post the results in the comments, and I may add it in at the end. Let me know if you would like me to credit you.**

**Update 7/30/25**

Several commenters diligently did their homework: Michael Mills, David Freeman, and Edgy04. You can find their results in the comments. I did not double check their raw citation counts, but all three converged on the same results, so, until someone says “they got it wrong” I am banking on it. Note: They did their analyses on 7/29, so subsequent citation counts will be higher.

Here is the upshot:

	Total Pubs	Total N	Total Citations	Citations/Year
<b>FINDINGS:</b>				
Bias against women	3	616	6211	141.2
Bias against men	7	14975	770/776*	32.1/32.3*

Data based on 7/29/25 Google Scholar citation counts. \* I was not sure what to do about Honeycutt et al (in press) and Solga et al (2025), because they are so recent. [So](#) I did it two ways: The first number is without them; the second is with them. See Computational Appendix for how I computed citations/year, which differ from results reported by Michael Mills and Edgy04, who provided citation count data in the comments



Cartoon by GetMilked.

As Michael Mills pointed out, these results confirm both of my hypotheses about how academia's monomiacal focus on biases against women would lead to vastly greater citations to studies finding biases against women than finding biases against men. One can argue that the "biases against men" studies are generally more recent, so of course their citation counts are lower. Indeed. But this is fully accounted for by the citations/year analysis, which shows a *yearly rate* of citations to biases against women findings nearly five times that of citations to biases against men findings.

# SMASH THE MATRIARCHY



But its actually worse than that. The seven papers finding biases against men have over 20x the total sample size (14975) as do the 3 papers finding biases against women (616). So its 7/10 papers, but, by the sample size standard (which is how the results would be weighted in most meta-analyses), *over 95% of the evidence collected so far finds biases against men.*

And it gets even worse. 95% of the evidence (the 7 papers finding biases against men) have been cited 12.5% as often as the papers producing 5% of the evidence (the papers finding biases against women). Even accounting for years since publication, the papers producing 95% of the evidence are cited at less than 1/4 the rate as those providing 5% of the evidence.



### **Do Studies of Real World Academic Hiring Show the Same Pattern?**

Yes but one example will have to suffice, albeit a rich one. In 2010, the National Research Council (NRC) published an epic report that, among other things, included data addressing the gender bias in hiring issue.

National Research Council. (2010). *Gender differences at critical transitions in the careers of science, engineering, and mathematics faculty*. The National Academies Press.

The NRC examined hiring data from 545 TT searches from 1995 to 2003 at 89 R1 institutions in geoscience, engineering, mathematics, CS, economics and physics. Table 4 shows that women were hired at a rate higher than their presence in the applicant pool *in every field*. For example,

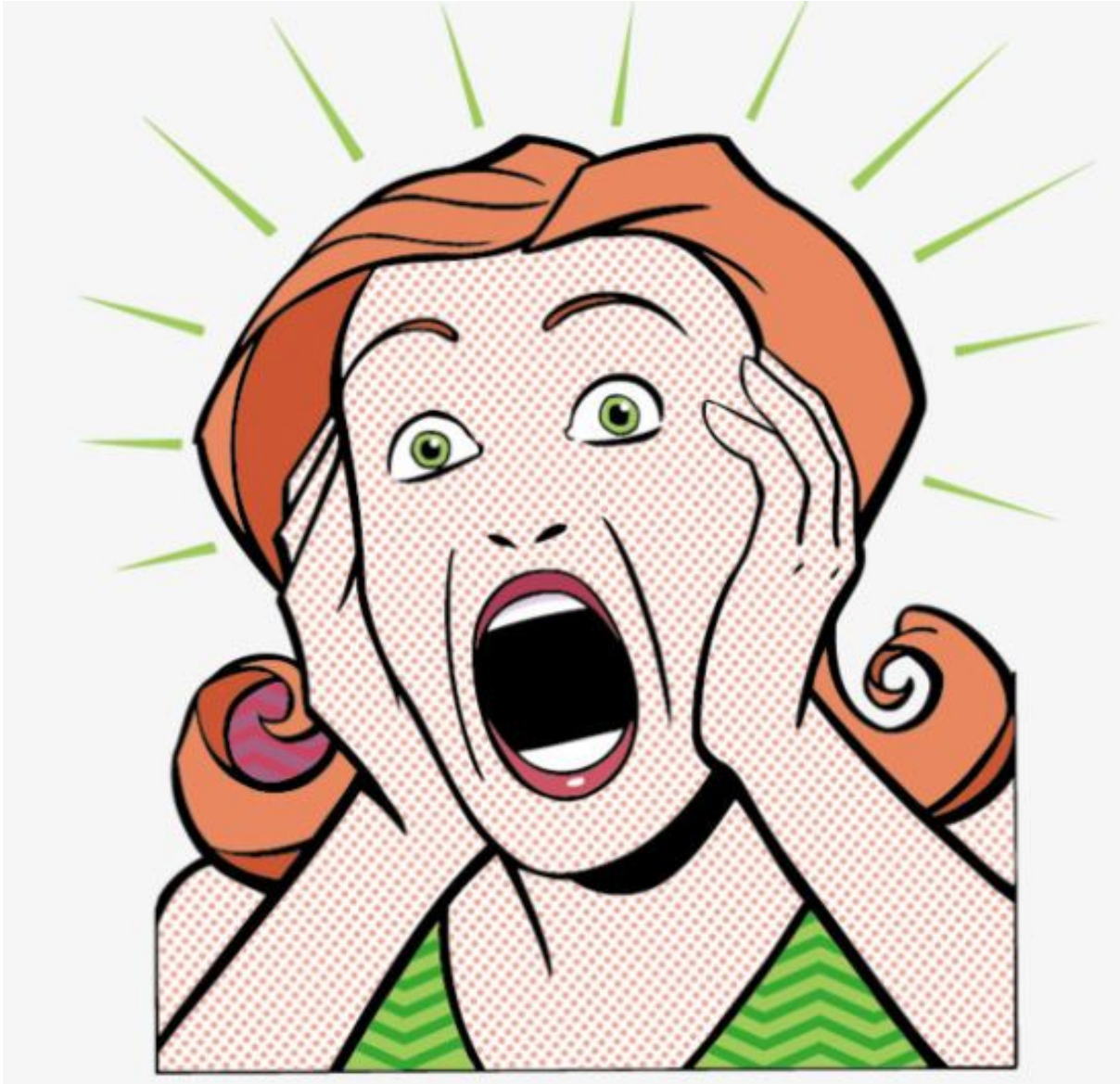
in biology, women comprised 26% of the applicant pool and received 34% of the job offers. So there is not a shred of evidence of *faculty biases against women applicants* across a slew of fields here, as far back as 1999.[2]

**Table 4. Data from the NRC report (2010)**

**Table 4. Data from the NRC report (2010).**

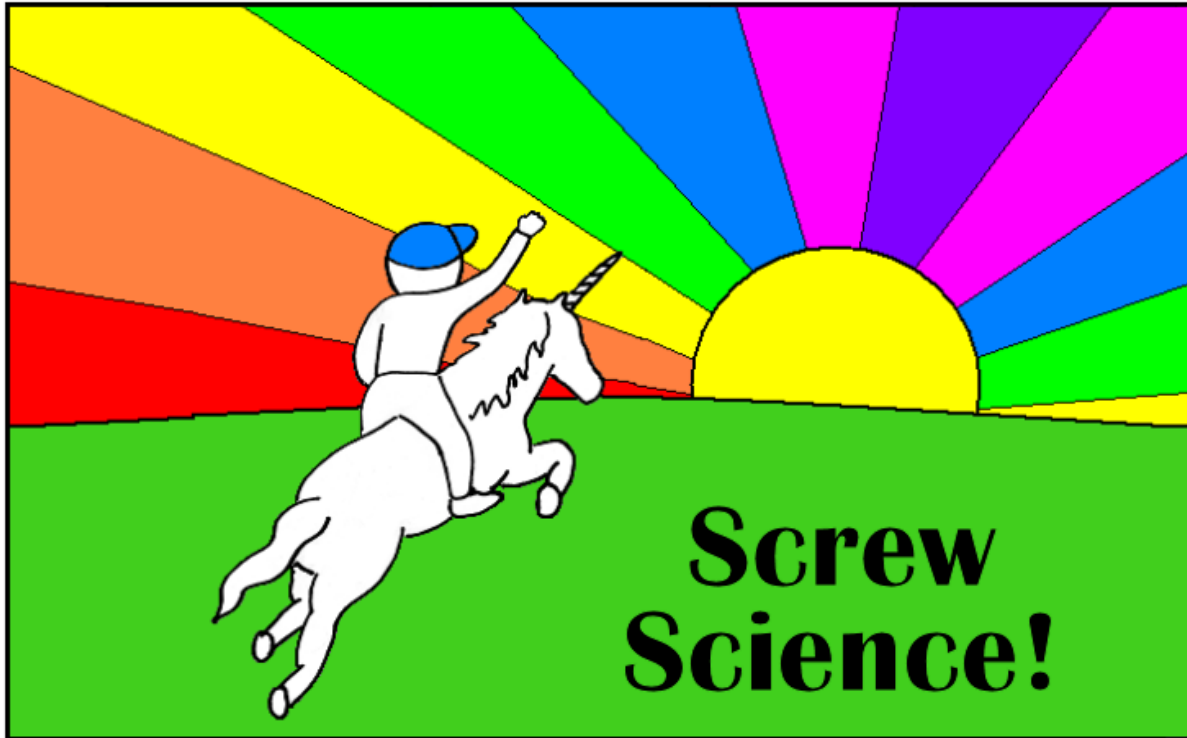
Field	Transitions for PhD-to-tenure-track positions by field at the research institutions surveyed			
	Doctoral pool	Pools for tenure-track positions		
	Percentage of female PhDs (1999–2003)	Mean percentage of female applicants	Mean percentage of female applicants invited to interview	Mean percentage of first offers that went to women
Biology	45	26	28	34
Chemistry	32	18	25	29
Civil engineering	18	16	30	32
Electrical engineering	12	11	19	32
Mathematics	25	20	28	32
Physics	14	12	19	20

Source:National Research Council (NRC). (2010). *Gender differences at critical transitions in the careers of science, engineering, and mathematics faculty*. The National Academies Press...



## CONCLUSIONS

1. Most experimental studies find biases against men in academic and STEM hiring.
2. The NRC study described herein indicates that, at least in the U.S., this pattern *actually* does characterize real hiring.
3. The longstanding academic rhetoric about gender bias in academia or STEM is basically unhinged from the full scope of the data.



A question I have never had a good answer to, nor heard anyone come up with one for, is this:

What reform to academia could ensure greater fidelity between pervasive academic claims and the actual scientific data addressing those claims? I doubt cutting grant indirects or even DEI will have this effect – regardless of whether one thinks those reforms are good or justified. Pre-registration and public posting of data and code have not had this effect. What could?



### **Computational Appendix**

Here is how I computed citations/year:

$(\text{Total citations bias against women papers}) / (\text{Years post-publication})$ . Repeat for bias against men papers.

Years post publication = 2025-publication year. This means both Solga et al (2025) and Honeycutt et al (in press) get 0's, which is a bit odd. That is why I computed both total citations and citations/year with them and without them (the \*'d entries in the table).

		Years=2025-pub date				
	Years	Citations		Years	Citations	
Eaton	5	522		Solga 2023	2	20
M-R	13	4551		W&C	10	573
Steinpress	26	1138		Carey	5	58
<b>TOTAL YEARS</b>	<b>44</b>	<b>6211</b>	<b>TOTAL CITATIONS</b>	Henningsen	3	29
				Carlsson	4	90
	<b>citations/year=</b>	6211/44		Honeycutt	0	5
		<b>141.1591</b>		Solga 2025	0	1
				<b>TOTAL YEARS</b>	24	
			<b>Without: Honeycutt (in press); Solga (2025)</b>		770	<b>&lt;-TOTAL CITATIONS</b>
				<b>citations/year=</b>	770/24	
					<b>32.08333</b>	
			<b>With all papers:</b>		776	<b>&lt;-TOTAL CITATIONS</b>
				<b>citations/year=</b>	776/24	
					<b>32.33333</b>	

If you find an error here, let me know in the comments.

## Related Posts

### Commenting

Before commenting, please review my [commenting guidelines](#). They will prevent your comments from being deleted. Here are the core ideas:

1. Don't attack or insult the author or other commenters.
2. Stay relevant to the post.
3. Keep it short.
4. Do not dominate a comment thread.
5. Do not mindread, its a loser's game.
6. Don't tell me how to run Unsafe Science or what to post. (Guest essays are welcome and inquiries about doing one should be submitted by email).

### Footnotes

[1] All experimental studies of sex bias in academic hiring. If you know of anything I've missed, please add it in the comments.

[2] Not a shred of faculty biases against applicants. However, you might also note that fewer women applied for these jobs than received PhDs in the relevant fields – you can see this by comparing the first and second columns. For example, in biology, 45% of the PhDs went to women but only 26% of the job applicants were women. Whatever caused this dropoff, it is not *faculty biases in evaluations of applicants*. Whether it is any type of bias versus women simply making agentic choices about lifestyles and careers is beyond the scope of this essay.