


The Gender Gap: Who Is (and Is Not) Included on Graduate-Level Syllabi in Social/Personality Psychology

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Abstract

We contacted a random sample of social/personality psychologists in the United States and asked for copies of their graduate syllabi. We coded more than 3,400 papers referenced on these syllabi for gender of authors as well as other characteristics. Less than 30% of the papers referenced on these syllabi were written by female first authors, with no evidence of a trend toward greater inclusion of papers published by female first authors since the 1980s. The difference in inclusion rates of female first-authored papers could not be explained by a preference for including classic over contemporary papers in syllabi (there was evidence of a recency bias instead) or the relative availability of female first-authored papers in the published literature. Implications are discussed.

Keywords

eminence gap, gender, gender gap, meta science

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Questions of gender¹ and representation have been especially salient in social/personality psychology in recent years (e.g., Ledgerwood, 2017; Ledgerwood et al., 2015). The issue of gender representation became an especially hot topic again when a group of psychologists were invited to comment on scientific merit and eminence for a special section or “symposium” published in *Perspectives on Psychological Science* (Sternberg, 2016): Only one out of eight invited authors were women, something that created considerable concern and protest (Crandall, 2018). Not too long after this issue came out, another issue of the same journal came out on a similar topic: “Which article makes a difference?” that focused on revisiting the most often cited papers in journals owned by the Association for Psychological Science; that again, overwhelmingly represented male authors (92%). The protest this time became a firestorm that ultimately led the editor of the journal to resign (Flaherty, 2018).

There is no disputing that there is a gender gap in eminence in psychology almost irrespective of how one operationalizes “eminence” (for a detailed review, see Eagly & Miller, 2016). Rankings of psychologists using citation metrics, textbook coverage, and major awards, for example, yielded a list of 100 “extremely eminent psychologists,” which included only 14 women (Diener et al., 2014). Other efforts to rank scholars included even fewer women on their lists of eminent psychologists (e.g., Haggblom et al., 2002;

Simonton, 1992). A study that examined 611 faculty from 97 social psychology programs in the United States and Canada found that male scholars scored higher on a composite measure of cumulative scientific impact ($d = .41$) even when controlling for men’s longer average career span ($d = .25$), something shaped to a considerable degree by the fact that male psychologists are cited more often than female psychologists (Brown & Goh, 2016; Geraci et al., 2015). Despite having gender parity in membership in the Society of Personality and Social Psychology, on average only 25% of the recipients of its major awards are women (Brown & Goh, 2016).

There are similar gender gaps with respect to who presents at social/personality psychology’s biggest conference. An analysis of gender representation in symposium presentations at the Society for Personality and Social Psychology found that there were consistently more men than women symposium presenters. Put another way, “when walking into

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a symposium, 28% of the time, audience members only saw one woman presenting her research, and 15.5% of the time, no women at all” out of four presenters on a given symposium (Johnson et al., 2017). Similar patterns emerge with respect to who gets invited as colloquium speakers at prestigious universities: Men are more likely than women to be colloquium speakers (Nittrouer et al., 2018).

One largely unexplored factor that may contribute to these gender gaps is whose work we choose to teach in graduate seminars. Given the existing stereotype about male (vs. female) brilliance (Meyer et al., 2015) and the relative lack of apparent scientific eminence among female (vs. male) psychologists reviewed above, we hypothesize that one link in the broad chain of factors contributing to the eminence gender gap is that female authors are likely to be underrepresented on graduate course syllabi relative to their male peers (the *gender gap hypothesis*).

The reasons female authors might be underrepresented on course syllabi, however, could be varied. One explanation for any observed gender gap is that instructors may internalize cultural prejudices and biases that tend to favor men over women, and these preferences become expressed in the form of a greater preference for male over female-authored papers (the *bias hypothesis*). However, more benign explanations for a possible gender gap are possible as well, including the *classics* and *availability hypotheses*. The goal of this study was to test whether these more benign explanations might account for any possible gender gap between authors included on graduate-level syllabi in social/personality psychology.

The Classics Hypothesis

The *classics hypothesis* is that instructors favor teaching classic papers over teaching more contemporary material, a choice that would advantage male over female-authored papers (where classic papers are defined as those that were published more than 20 years ago). Although the number of female PhDs awarded in psychology has eclipsed the number awarded to men in recent years (more than 72% were awarded to women in 2013), historically, PhDs in psychology were predominately if not overwhelmingly men (e.g., women represented 18.0% of all doctorates in 1958, National Science Foundation, National Center for Science and Engineering Statistics, 2015). Together these trends suggest there should be a deeper corpus of classic papers written by male than female authors. If instructors favor teaching classics over more contemporary material, they will have a shallower pool of possible female-authored papers to choose from, which in turn could explain any observed gender gap in authors included on course syllabi. If the classics hypothesis is true, (a) instructors should reveal a preference for older over contemporary papers, and (b) male and female authors should be included on syllabi at levels approaching

parity as the publication date of papers included on syllabi becomes more contemporary.

The Availability Hypothesis

A second reason why male-authored papers may be included on graduate syllabi at higher rates than female-authored papers is that the relative availability of publications authored by male versus female social/personality psychologists (a problem that the classics hypothesis also implies). There may not be gender parity on graduate syllabi in social/personality psychology simply because there are more male-authored papers available to include than female-authored papers (the *availability hypothesis*). Even controlling for career stage, female psychologists publish fewer papers than their male peers in general (Ceci et al., 2014), and this gap is particularly exaggerated in social/personality psychology in particular. Women were first authors for 34% and 44% of the papers published between 2004 and 2013 in the *Journal of Personality and Social Psychology (JPSP)* and *Personality and Social Psychology Bulletin (PSPB)*, respectively (Brown & Goh, 2016). If the availability hypothesis is true, then the observed gender gap in citations on graduate-level syllabi should disappear once we consider the base rate of available male- and female-authored papers.²

The goal of the study presented here was to examine whether there is a gender gap in representation on graduate-level syllabi, and if so, whether it can be explained by a preference for classic over more contemporary papers or the relative availability of male- versus female-authored manuscripts. Our approach embraces the strong inference approach urged by Platt (1964), and his recommended practice of using negative testing strategies. Although an absence of support for the classics or availability hypotheses will not provide evidence in support of a bias hypothesis, failure to support either the classics or the availability hypothesis nonetheless rules out these comparatively more benign explanations for the gender gap, which in itself represents an advance in knowledge.

Method

Syllabi Selection Criteria

To find graduate-level syllabi for this project, we first identified every social and/or personality PhD program in the United States using the Social Psychology Network's PhD ranking list (<http://www.socialpsychology.org/ranking.htm>) and Graduate Programs GeoSearch (<http://www.socialpsychology.org/maps/gradprograms>). We identified 120 programs. We then created a list of social/personality faculty names and email addresses for each program by going to the psychology department websites. Finally, we used random.org (<http://random.org>) to randomly select one faculty

Table 1. Percentage of Female First Authors Included on Syllabi as a Function of Decade Paper Was Published.

Decade	Pre-1960	1960–1969	1970–1979	1980–1989	1990–1999	2000–2009	Post-2010	Total
Female	2.9	0.9	9.1	29.6	27.3	30.2	32.3	27.9

member from each program to contact for graduate-level syllabi, including a request that if they did not teach a core graduate course in social/personality psychology, to forward our request to a faculty member who did. We also specified that we were primarily interested in courses designed for first-year graduate students as an orientation to the field. If—after sending a reminder—we did not obtain a syllabus, we contacted a second randomly selected faculty member from the same university with the same request.

Inclusion criteria for syllabi were that the course name had to include the words “social” or “personality” and the course had to be graduate level. Our final sample was $N = 72$ syllabi that combined yielded a pool of 3,415 assigned readings. The usual response rate for email requests for survey participation is about 37% (Sheehan, 2001); the 60% response rate achieved here is therefore very good. Sixty-seven percent of the contributing instructors were male, who on average received their PhD in 1997 ($SD = 10.77$, with a range from 1969 to 2015).

Syllabi Coding

Three coders coded papers cited on syllabi for the following characteristics: Gender of all authors, each author’s h -Index (when it was available on Google Scholar profiles or could be calculated using Publish or Perish [<https://harzing.com/resources/publish-or-perish>]), the total number of authors, the journal the article appeared in, the number of citations the article had received since publication, and topic in social/personality psychology.³ Chapters, journal articles, and all other assigned papers were included in our sample.

Comparison Article Coding

One reason female authors might be represented on syllabi at different rates than males is that females publish at lower rates than their male counterparts (Ceci et al., 2014). To get a better handle on whether the gender representation on graduate syllabi is (or is not) consistent with the number of high-quality papers from which instructors can select, we also obtained the names of all authors, the authorship order, and the year of publication for all papers published in the *Journal of Social and Personality Psychology* from its first volume in 1965 to August 2017 ($N = 9,799$ papers) and the *Personality and Social Psychology Bulletin* from its first volume in 1974 until April of 2018 ($N = 4,291$ papers).^{4,5} As noted above, 75% of the readings included on our syllabi were journal papers; in addition, *JPSP* and *PSPB* combined accounted for 33% of the readings cited on our sample of course syllabi

(other journals accounted for less than 7% of the papers cited each). For these reasons, focusing on *JPSP* and *PSPB* as benchmarks seemed to be a reasonable choice.

We determined the gender of the first authors for each comparison publication using the R package “gender” (Mullen et al., 2015). This package was designed to predict gender from first names using historical data. For the purpose of this research, we used the SSA method, which predicted the gender of first names in our corpus by comparing them with name frequencies in the U.S. Social Security Administration (SSA) baby name database between the years 1930 and 1989. Using the SSA database as a referent, if the probability that the name refers to a man exceeded .5, the package predicts the author is a man. If the probability that the name refers to a man was less than .5, the package predicts the author is a woman. Names that could not be compared with the SSA database returned an error message. Author names that returned an error message were coded manually or by doing a web search using the authors’ full names to find the authors’ website to visually identify the author gender by examination of the author photo. If this strategy failed, we used the authors’ first names in concert with a Google image search and coded gender according to whether the majority of the images the search yielded were men or women.

Results

We first tested two major questions: (a) Is there a gender gap—that is, a more than chance difference in the gender of authors represented on graduate course syllabi in social/personality psychology? And if so, does it vary by authorship position, decade, gender of instructor, or topic? and (b) Is there evidence that the gender gap reflects a preference for assigning classic over more contemporary papers (the classics hypothesis) or reflects the lower base rate availability of female to male-authored papers (the availability hypothesis)?

The Gender Gap

We found evidence of a gender gap in the authors included on graduate-level syllabi in social/personality psychology: Male authors exceeded female authors cited on syllabi at every level of authorship and across every decade we examined at better than chance (50%) levels (see Table 1).

The gender gap between men and women was greatest for first authors and tended to decrease as authorship order increased, but was never at parity or reversed in direction

Table 2. Percentage of Female Authors Included on Graduate Syllabi in Social/Personality Psychology as a Function of Authorship Position.

Author position	Percentage female authors
First	28
Second	33
Third	36
Fourth	43
Fifth	38
Sixth	49
Seventh	39
Last	30

Table 3. Percentage of Female First Authors as a Function of the Decade the Instructor Earned His/Her PhD.

Decade instructor earned PhD	Percentage female first authors
Before 1980	22
1980–1989	21
1990–1999	34
2000–2009	29
After 2010	25

regardless of authorship position (see Table 2). Because there has been a tendency for more senior authors sometimes taking the last position, irrespective of contribution, we also coded for gender of the last author of a manuscript: Only 29.8% of last authors were women. Because we found weak differences as a function of authorship position (and regardless of whether we treated first or last author as the senior author), for the remainder of the analyses, we focused on the first author position.⁶

The syllabus gender gap was influenced by instructor characteristics, such as the year they earned their PhD and their gender. Instructors who earned their PhD before 1990 had the fewest female first-authored papers on their syllabi relative to instructors who received their PhD after 1990, $\chi^2(4) = 32.46, p < .001$, Cramer's $V = .10$ (see Table 3). Instructors who earned their PhD between 1990 and 1999 cited more female authors (34%) than instructors who earned their PhDs any other decade (including those who received their PhD in the 2010s): Both early-career and late-career PhD holders did a poorer job including female first-authored papers on their syllabi than their mid-career peers. Female instructors included more female first-authored papers on their syllabi than male instructors (34% vs. 24%), $\chi^2(1) = 37.94, p < .001$, Cramer's $V = .11$.

Gender Gap by Topic

The gender gap in first authors included on syllabi also varied as a function of paper topic. The gender gap was the

Table 4. Percentage of Female First Authors by Paper Topic.

Paper topic	Percentage female first authors
Best practices	0
Replicability	10
Methods—general	16
Overarching themes in S/P	12
History	8
Attitude change/persuasion	12
Judgment and decision-making	16
Attitude structure	16
Prosocial behavior	18
Evolutionary	19
Social influence	22
Personality	23
Group processes	25
Social neuroscience	30
Social cognition	24
Meta-theory	21
Aggression	28
Emotion	40
Attraction	36
Intergroup relations	31
Self	33
Prejudice/discrimination	44
Close relationships	50
Culture	51
Health	50

Note. Remainder of papers were not codable.

greatest for papers that focused on methods and best practices and came closest to parity for four topics: prejudice, close relationships, cultural psychology, and health (see Table 4).

The Classics Hypothesis

One reason why female authors might be underrepresented relative to male authors on graduate-level syllabi is that instructors might favor teaching classics relative to teaching more contemporary material. If the classics hypothesis is true, we should observe (a) a greater inclusion of earlier than more recently published papers on social/personality syllabi, and (b) that male and female authors would be included at closer to parity rates for papers that are more recently published.

Contrary to the classics hypothesis, we found that instructors strongly favored recently published to classic papers on their syllabi rather than the converse: 68% of the papers included on our sample of syllabi were published since 2000 (see Table 1). The gender gap of papers included on syllabi varied as a function of the decade the cited papers were published, $\chi^2(6) = 114.15, p < .001$, Cramer's $V = .18$. Almost no female first-authored papers before 1969 were included

Table 5. Logistic Mixed-Effects Regression Examining How Instructor Gender, Publication Decade, and Their Interaction Affected the Likelihood That the First Author of an Assigned Article Was Female.

Fixed effects	Model
(Intercept)	-1.251*** (0.081)
Teacher gender (female)	0.339* (0.137)
Decade published	29.120*** (4.863)
Decade published polynomial	-15.485*** (4.410)
Gender by decade interaction	27.576** (9.210)
Gender by polynomial decade interaction	-11.422 (8.078)
AIC	3,731.321
BIC	3,774.105
Log Likelihood	-1,858.661
Number of obs.	3,334
Number of groups: instructor	68
Var: instructor (Intercept)	0.135

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion.

* $p < .05$. ** $p < .01$. *** $p < .001$.

on syllabi in our sample. Although there was a large gain in inclusion of female authors of papers published between ~1960 and 1980, there were no significant gains in female first authors' representation of papers published 1980 and forward, $\chi^2(2) = 4.41$, $p = .11$, Cramer's $V = .04$. Female first-authored papers represented on average just under 30% of the papers included on syllabi that were published from 1980 to present and represented only 13% of the papers included on syllabi pre-1980.

To test whether female instructors might differ from their male counterparts in assigning female first-authored papers as a function of decade of publication, we ran a logistic mixed-effects regression to examine how instructor gender, publication year, and their interaction affected the likelihood that the first author of an assigned article was a woman. The fixed effects for this model were instructor gender, publication decade (and its quadratic effect), and the interaction between instructor and publication decade (and its quadratic effect). The random effect for this model was the instructor of the course because papers were nested within instructor.

As one can see in Table 5, we observed main effects for instructor gender and publication decade. Female instructors were more likely than their male counterparts to assign female first-authored papers, and the probability of assigning female first-authored papers increased in more recent than distal decades. Tests of the polynomial effect of publication year, however, confirmed that the relationship between

publication decade and inclusion of female first-authored papers was not linear; the probability of assigning female first-authored papers increased for papers published in the 1960s–1980s, but then remained level from the 1980s forward (see Figure 1). The interaction between publication decade and instructor gender indicated that the probability of female instructors including female first-authored papers on syllabi increased more over time than it did for male instructors, approaching parity for papers published in more recent decades. Gender of instructor therefore matters: Male instructors have a larger gender gap on their syllabi do female instructors.

As can be seen in Figure 1, and contrary to the classics hypothesis, instructors favored more recently published over classic papers on their syllabi. In short, these findings suggest that the observed gender gap on graduate syllabi in social/personality psychology is not attributable to a preference for classics over more contemporary material: If anything, there seems to be a strong recency preference instead. Moreover, female instructors are approaching gender parity in their inclusion of female and male first-authored papers on their syllabi for papers published since 2000; male instructors, in contrast, continue to assign nearly twice as many male first-authored papers as female first-authored papers published during the same time period.

The Availability Hypothesis

Another possible explanation for why female-authored papers are included at lower rates than male-authored papers on graduate-level syllabi is the relative availability of papers authored by women versus men in our top tier journals. Because we had the entire population data for papers published in *JPSP* and *PSPB*, we could more firmly establish the relative availability of papers with female versus male authors, and then subsequently compare that distribution against those included on graduate-level syllabi in our corpus within any given decade of publication. If the syllabi gender gap reflects the existing publication gender gap (Brown & Goh, 2016; Ceci et al., 2014), there should be no significant difference between female representation in our syllabi corpus and what we observe in the field's major journals.

As can be seen in Table 6, although on average there was no difference in the availability of female first authors in *JPSP* and those appearing on syllabi, Z -tests of two proportions indicated that there was nonetheless a significant gender gap in the percent of female first-authored papers cited on syllabi and the percent published in *JPSP* across every decade except one (1980–1989). There was also a significant gender gap on average between papers included on syllabi and papers published in *PSPB*, and for every decade except 1980–1989 (replicating the pattern observed for *JPSP*). Taken together, these results are inconsistent with the availability hypothesis.

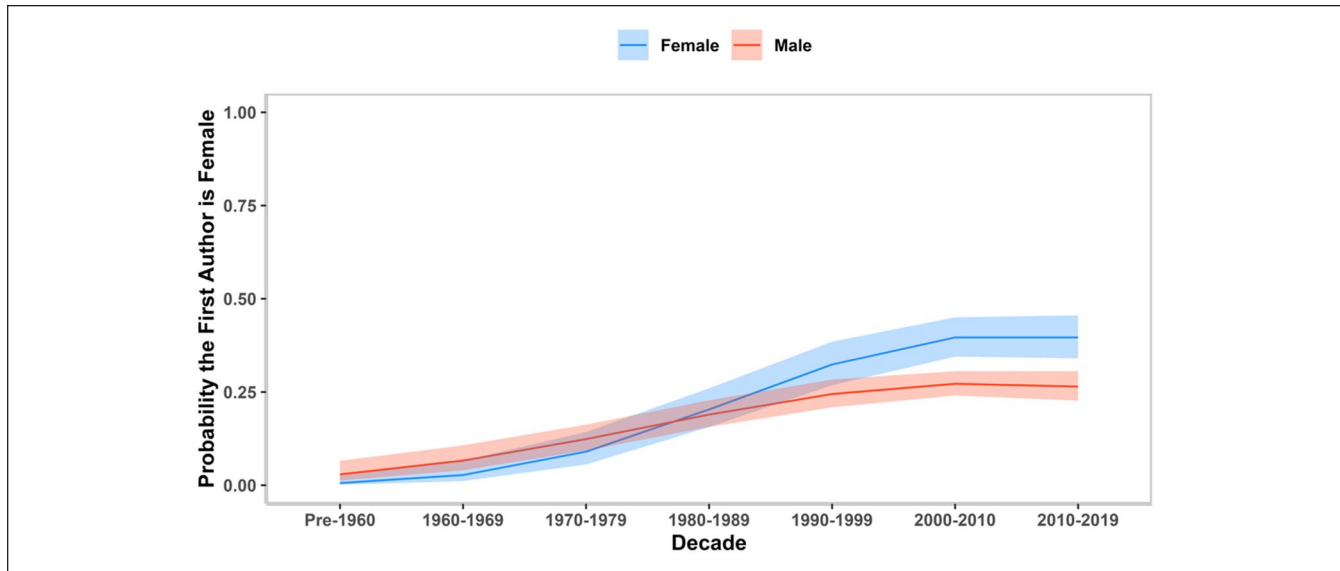


Figure 1. The interactive effect of instructor gender and decade on the probability of including female first-authored papers on graduate-level syllabi as a function of decade of publication.

Table 6. Comparison of the Percentage of Papers by Female First Authors Included on Syllabi (Overall) and Available in Various Top Tier Journals in Social Psychology by Decade.

Decade	Syllabi %	JSPS %	PSPB %
Pre-1960	2.9	—	—
1960–1969	0.9	10.3*	—
1970–1979	9.1	15.7*	20.8*
1980–1989	29.6	25.2	26.5
1990–1999	27.3	31.6*	34.2*
2000–2009	30.2	36.3*	41.5*
2010 to present	32.3	45.0*	47.4*
Total	27.9	27.1	36.1*

Note. JPS = *Journal of Personality and Social Psychology*; PSPB = *Personality and Social Psychology Bulletin*.

* $p < .05$.

Other Results

One exploratory question we examined was whether there were gender differences in the impact of papers included in syllabi and in the relative status of the authors, as measured by citation count and h -index, respectively. If gender biases are contributing to the gender gap, it is possible that female first-authored papers might have to be more impactful and their authors higher in status than male first-authored papers/authors before they get included on syllabi. We did not find support for this possibility. Male ($M = 1,583.61$, $SD = 5,223.97$) and female ($M = 1,469.89$, $SD = 5,527.74$) first-authored papers included on graduate syllabi were cited at similar rates, $t(3,257) = 0.61$, $p = .54$, 95% confidence interval (CI) = $[-250.64, 478.09]$, $d = .027$ and female first authors included on syllabi had lower h -indices than male first authors ($M = 44.66$, $SD = 35.85$ and $M = 60.99$ and

$SD = 37.33$, respectively), $t(2,080) = 9.18$, $p < .001$, 95% CI = $[12.84, 19.82]$, $d = .44$.⁸ Taken together, these results suggest that female authors do not need to overperform their male counterparts on citation counts or h -indices to be included on graduate-level syllabi. Instead, female first-authored papers included on graduate syllabi were equally (citation count) or less impactful (h -index)⁹ than their male counterparts.

Discussion

This study presents an audit of the gender representation of authors included on graduate-level syllabi in social/personality psychology. To examine whether female first authors are represented at expected rates given their representation in top tier social/personality psychology journals, we obtained a random sample of graduate-level syllabi from current faculty in social/personality psychology. We coded the more than 3,400 papers cited on these syllabi for gender of first author and a host of other characteristics. We found that less than 30% of the papers referenced on these syllabi were written by female first authors, a result that is different from the expected value of ~50%. The gender gap on syllabi, however, differed as a function of instructor gender and decade papers were published. Female instructors assigned more recently published papers (post-1990) at levels approaching gender parity, and female first-authored papers at levels significantly higher than their male counterparts.

We also tested two possible explanations for the observed gender gap in papers included on graduate-level syllabi in social/personality psychology: The classics hypothesis and the availability hypothesis, both relatively benign but plausible explanations for the gender gap. We found no support for

the classics hypothesis. On average, instructors of graduate-level seminars in social/personality psychology showed a strong preference for teaching contemporary over older publications.

We also tested whether the inclusion rate on graduate syllabi could be explained by the relative availability of papers authored by female versus male authors in top tier journals in social/personality psychology. Results did not support the availability hypothesis as an explanation for the gender gap of papers included on graduate-level syllabi. Even when considering the differential availability of papers that are female-versus male-authored, the gender gap between authors included on syllabi existed for all but one decade examined. Ironically, the exceptional decade was close to 30 years ago (the 1980s) rather than the most recent decade examined (the 2010s): Inclusion rates have been flat since the 1990s. That said, our analysis of papers included on syllabi as a function of decade (independent of the comparison of available papers in *JSPS* and *PSPB*) does provide some hint that there is an availability effect. As female first-authored papers became more numerous in the 1990s and forward, female instructors' rate of inclusion of female first-authored papers increased to close to gender parity.

An important qualification to the other results, however, is that we also observed that the gender gap was not evenly distributed across paper topics. For some topics, male and female authors were approximately equally represented on graduate-level syllabi (prejudice, close relationships, culture and health). For other topics, the gender gap was much larger, with percentages of female first-authored papers between 0% and 15% (best practices, replicability, attitude change and persuasion, etc.). Finding that the gender gap varies by topic raises a number of important questions. Is it the case, for example, that women publish more on the topics of prejudice, close relationships, and so on than other topics, and possibly more than men? Similarly, do women publish less in some of the areas where the gender gap was the greatest, such as best practices, replicability, attitude change, and persuasion? In other words, the relative availability of papers to include may vary by article topic. Moreover, these results suggest that topic choice may be heavily gendered, whether through self-sorting or through graduate student selection and socialization. It would be useful for future research to examine these issues more closely to explore the implications of topic may have for likelihood of both being included on graduate-level syllabi and for achieving eminence in social/personality psychology.

Exploratory analyses also revealed that male- and female-authored papers included on syllabi had similar citation rates, albeit different *h*-index scores, measures we used as proxies for article impact and author status. Although article content may matter more than total citations or author status, to the extent that these variables count in what gets included on graduate syllabi, instructors for the most part appear to be using similar criteria regardless of author gender—an argument

against gender bias in article selection. Gender disparities in overall citation rates of male- versus female-authored papers (Brown & Goh, 2016; Geraci et al., 2015) and gender differences in self-citation rates (male authors self-cite 70% more than female authors, King et al., 2017), however, places female authors at a disadvantage on both metrics, which in turn could carryover to affect the inclusion of female authors on graduate syllabi, even in the absence of bias in article selection.

Even in the absence of apparent bias in article selection on the basis of quality, however, the large disparity between male and female authors on graduate syllabi nonetheless has a number of implications, in part because different social groups experience exactly the same information in psychologically distinct ways because of a history of prejudice and discrimination (Emerson & Murphy, 2014; Kray & Shirako, 2012; Markus & Moya, 2010; Roberson & Kulik, 2007). Historically discriminated groups—because of their history of exclusion—are particularly sensitive to cues that signal respect and inclusion (and conversely, to cues that signal disrespect and exclusion, for example, Bergsieker et al., 2010; Murphy et al., 2007; Steele, 1997, 2010; Steele et al., 2002; Walton & Cohen, 2007). Numbers matter: Environments that do not include members of one's group at a critical level are generally perceived as more threatening than those that do (e.g., Avery, 2003; Inzlicht & Ben-Zeev, 2000, 2003) with attendant consequences, such as increased blood pressure, anxiety, and depression, as well as lowered performance expectancies and actual performance (see Emerson & Murphy, 2014 for a review). Applied to the current research, female graduate students are likely to notice that despite their larger numbers in the classroom (they currently outnumber males by about seven to three in social/personality psychology programs, National Science Foundation, National Center for Science and Engineering Statistics, 2015), they are underrepresented on course syllabi by the opposite of this ratio (male first-authored papers outnumber female first-authored papers by roughly a 7-to-3 ratio), which could negatively affect their sense that they belong in the field or are likely to thrive in it.

Just as a critical mass of employees from historically discriminated groups can improve workplace satisfaction and performance by reducing underrepresented people's concerns about belongingness (Allmendinger & Hackman, 1995; Inzlicht & Ben-Zeev, 2000, 2003; Niemann & Dovidio, 1998; Sekaquaptewa & Thompson, 2003; Thompson & Sekaquaptewa, 2002), it logically follows that increasing the representation of female scholars' work on graduate course syllabi would have similarly beneficial consequences. Adding more citations to female scholars' work on syllabi may not by itself solve the eminence gender gap, but it nonetheless is one very easy way to turn the dial toward greater gender inclusiveness in social/personality psychology.

An obvious implication of our findings is therefore that instructors should be sensitive to the gender representation of authors included on their syllabi. Given that there is an

increasing supply of papers published by female first authors in social/personality psychology journals and a preference for including more recently published papers, there is little reason not to aim for something approximating gender parity on social/personality syllabi (something female instructors are already close to achieving).

Although this project focused on a narrow consideration of gender representation on graduate syllabi, its findings should be also taken as a call for giving greater attention to representation of author diversity more generally. It is much more difficult to code more than 3,400 papers on syllabi (much less 14,000+ papers published in *JPSP* and *PSPB*) for nonbinary conceptions of gender, sexual orientation, racial category, disability status, and so on than it is to code for a binary classification of gender, but our findings suggest that the instructors should attend to diversity of syllabi content not only with respect to gender but also other underrepresented groups and identities as well.

Conclusion

In conclusion, we found a distinct gender gap favoring male over female authors on graduate-level syllabi in social/personality psychology despite a recency bias in papers included on them and increasing gender parity in the papers available from which to draw. Our approach embraced the strong inference approach urged by Platt (1964), and his recommended practice of using negative testing strategies—that is, a preference for ruling out explanations, rather than taking a hypothesis confirmation approach. Although an absence of support for the classics or availability hypotheses does not provide evidence in support of a bias hypothesis, failure to support either the classics or the availability hypothesis nonetheless rules out these comparatively more benign explanations for the gender gap, which in itself represents an advance in knowledge.

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Methodology File

This study did not include any measures or manipulations.

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Notes

1. The differences between biological sex and gender are important. Gender is a social construct and identity, whereas sex refers to biological sex assessment (American Psychological Association [APA], 2010). What we are capturing when coding the gender/sex prototypicality of a name (which we use to identify gender/sex in this research), however, is a complicated one—assigned names capture aspects of both gender and sex. Moreover, there is much debate about whether or when it is appropriate (if ever) to use women/men as adjectives because these terms are formally nouns. We opted to follow the advice of Maggio (1992) who argued in her book on bias-free language that the use of the word “female” is appropriate when needed as an adjective, so long as the word “male” would be used in similar context.
2. The availability hypothesis is not an alternative to the idea that there may be a gender gap in inclusion of authors on graduate-level syllabi, but instead represents a strong test of the hypothesis that there is a gender gap in inclusion rates on graduate-level syllabi.
3. Two independent coders identified the topic of each article using the topics included in Finkel and Baumeister’s (2019) graduate-level textbook, as well as contemporary topics defined inductively by the researchers as commonly occurring in the corpus of syllabus papers (e.g., papers about replicability).
4. A single author could be counted multiple times toward this total *N* if he or she was the first author of more than one paper in a given journal or syllabi.
5. We also had population information of authors published in *Personality and Social Psychology Review (PSPR)*. Because only 0.7% of the papers included in our sample syllabi were published in *PSPR*; however, we did not conduct a comparison against this corpus. We also contacted the *Journal of Experimental Social Psychology* for author names and papers, but Elsevier declined to provide them.
6. We did not find any differences in conclusions as a function of whether we defined the gender gap in terms of first or last authored papers. We also coded ~20% of our papers (*N* = 700) for gender of corresponding author. Ninety-seven percent of corresponding authors were also the first author, 2% were the second author, and the remaining 1% were the third or greater listed author on these manuscripts. Our results did not change as a function of whether we operationalized the gender gap in terms of first or corresponding author.
7. These means may seem to be exceptionally high. Papers such as Kahnemann and Tversky (1979), with a whopping 45,472 citations, and Markus and Kitayama (1991), with 17,101 citations (and other very highly cited papers), are contributing to these estimates.
8. We had more missing data on *h*-index scores than total citations which accounts for the differences in the degrees of freedom for citation counts and *h*-index analyses versus our other analyses.
9. Testing these effects with papers nested within instructor did not yield different conclusions.

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