Perception Isn't Reality: Ad Men and Women See the Gender Pay Gap—and Each Other—Differently

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Abstract

Our study investigated the size of the gender pay gap in the American advertising industry, controlling for all known factors that explain a gap. We found women were paid 5% less than men, and 8% less if they were mothers. While most men and women believe in the existence of a gender pay gap, they both overestimate its size, with men closer in estimating the industry's true size, and women closer in estimating the size of the general population pay gap. Further, women believed they were personally immune from a pay gap, when in fact, the average woman is losing $271,829 over her career due to gender. The role of social dynamics was also investigated, which found male managers were more likely to stop pay equity progress for women through unresponsiveness, as well as the finding that men who are uncomfortable working with women were paid more.

1. Introduction

Broadly, the gender pay gap in the United States has been well documented; according to the most recent Census Bureau reporting, women make 81 cents on the dollar to men (down from 84 in 2022, and generally wider for Black and Hispanic women), which is more pronounced in sectors like management, corporate, and business occupations of which advertising would fall, although the advertising industry was not specifically investigated (Goldin 2024). Within the US advertising industry, recent independent surveys size the gap at 8.2%, a $9K difference in median pay between women and men (Calfee 2024). For comparison, women in the adjacent field of marketing have been found to experience a larger gap, making 17.8% less than men on

average (Rogers, 2025). This figure is similar for ad women in the UK, who have seen a gap of 17.4% (IPA, 2023). Historically the existence of a gender pay gap—broadly and in the advertising industry—has been attributed to individual-based factors like one's education, occupation choice and work experience. And although women making gains in these variables has led to a decrease in the gap (Blau and Kahn 2017; Kiecker, et al 1991), it doesn't explain the continued existence of a sizeable gender pay gap.

The configuration of the advertising industry creates many opportunities for gender-based prejudices to flourish. There has been a longstanding culture of structural irregularity, from no standard certifications, degrees or requirements, inconsistent titles across agencies and varying definitions of roles and responsibilities, no pay benchmarks and scant and inconsistent participation of agencies in auditing fair pay, and non-public salary data (Taylor and Hovland, 1988). As a result, understanding of the actual state of equal pay in United States advertising agencies is deficient, with *Ad Age* reporting that 'There is still no yardstick to measure salaries and positions of women in advertising compared with those of men' (Stein 2017). This paper serves to establish a contemporary benchmark, validating the current size of the gap in the American ad industry by examining all known variables that contribute to gender-based gaps in pay.

We further add to the existing literature by investigating the relationship between men and women and its bearing on pay, explored through workplace comfort between the sexes and salary conversations about between men and women. We also investigated if the gender of one's manager contributes to a pay gap within the advertising industry, as prior literature suggests the presence of female managers reduces the gender pay gap while male managers are more apt to promote and reward their male employees (Cullen & Perez-Truglia, 2019; Abraham 2017; Cardoso & Winter-Ebmer, 2010; Hirsch 2013). Historically there has been a longstanding 'fraternity culture' in advertising agencies which reinforces male-centric norms

and customs, particularly in the Creative department; this gender-based experience may adversely affect women's professional mobility (Grow et al. 2012; Broyles and Grow 2008; Windels and Mallia 2015).

The overarching research questions for this study are:

- To what extent is there a gender pay gap in the advertising industry controlling for prior pregnancy, race/ethnicity, education, geography, seniority, average hours worked per week, years of experience, type of advertising agency, company structure and size, and agency department?

- What role, if any, does social dynamics between men and women co-workers—such as sharing salary, and comfort working together—play in contributing or diminishing discriminatory pay?

- What role does the sex of one's managers play in closing or reenforcing the pay gap in the advertising industry?

2. Methods and Materials

Survey Details. This study is quantitative non-experimental correlational research. All procedures were reviewed and approved by the Institutional Review Board of the University of California-Los Angeles for the protection of human subjects. Informed consent was obtained for experimentation with human subjects.

Sample and demographics. The only mandatory inclusion criteria for our target population were to be currently working as part of the advertising industry in the U.S. The total analytic sample size consisted of 926 participants (details of the demographics are shown in Table 1 in Supplementary Materials).

With a female majority in the industry–reported 61.01% from a survey of 116 advertising agencies by the 4A's (2023) and 69.5% female in an analysis of the Association of National Advertisers membership (2024)—we sought a similar female-skewing gender sample. The sample was primarily younger—18 to 35-year-old (58.2%)—which is similar to industry reported averages (40.2 median age; Bureau of Labor Statistics, 2023), is primarily located in the Western region of the U.S. (40.4%) followed by the Northeast region (25.6%) which also reflects the major advertising employment markets (IBIS World, 2024), is majority White/Caucasian (66.5%) which is also representative of the makeup of the industry (65% white, 4As 2023), the highest level of education is a bachelor's degree (73.3%), the majority are in advertising/full-service (61.7%), are primarily at a publicly traded company (54.7%), are at a company of 500 people or more (29.1%) (See Table 3 in Supplementary Materials).

Most of the sample had no dependents (63.2%); participants who did have dependents included those with children under the age of 18 living with them (26.9%). Women in the sample who had been pregnant was small (21.1%), and participants who had taken leave for the birth of a child was similar (19.3%). Few participants (2.7%) indicated they were caretakers of an elderly or disabled person.

Administration of survey. This study employed a grass-roots convenience sampling, as there was concern agencies would be unlikely to participate or to encourage employee participation or could ask their employees not to participate. It should be noted that there are limitations in self-selected participation, including the likelihood of attracting respondents who are invested in participating because they strongly believe or disbelieve in a gender pay gap, which must be accounted for in modelling (Heckman, 1979; Bethlehem, 2010).

The self-administered survey was distributed recurrently on professional platform LinkedIn, with reach amplified through prominent industry voices like Cindy Gallop, and in various department, location and demographic specific groups on Fishbowl, an anonymous social platform owned by workplace review site Glassdoor; individuals were also invited to participate and share with their networks. It was further shared with professional organizations (American Advertising Federation, ThinkLA); clubs (Ladies Who Strategize, Sweathead); alumni networks (Virginia Commonwealth University Brandcenter, Miami Ad School); and by underrepresented professional groups (Asians in Advertising, the Hispanic Marketing Council, Three's a Crowd, IN FOR 13). Additional schools, professional programs and networks beyond the mentioned had been contacted to share with their networks, but either did not respond or did so after the close of the survey. This outreach achieved an analytic sample of 926 respondents, above the minimum of 693 participants needed as determined through analysis to ensure representative sample. As noted prior, the final demographic and geographic sample recruited reflected existing industry composition.

Priori power analysis. An a priori power analysis was conducted using G*Power v3.1.9.4 to determine the minimum sample size required to find significance with a desired level of power set at .80, an alpha (α) level at .05. For the initial research aim (gender differences with base salary) the analysis assumed a linear multiple regression analysis assuming up to 60 predictors, and a moderate effect size of $f^2 = .05$ (Cohen's d = .45). Based on this analysis, it was determined that a minimum of 693 participants were required to ensure adequate power. With a final sample size of 926 valid respondents, power to detect a significant effect in the population was achieved and approximately .35% of the total population were recruited for this study (Cohen 1988; Faul et al. 2007).

Variables and continuous salary variable. Following prior gender pay gap studies (Kiecker et al. 1991; Deitrick et al. 2007; Penner et al. 2023; Sin et al. 2017), this study focused on respondent gender as the independent variable, and self-reported annual base salary as the study outcome to answer the primary research aim.

Additional demographic questions were included such as the region of the country the respondent lived in, race/ethnicity, age, educational attainment, marital status, and dependency information (children, caretakers, pregnancy, etc.). Pregnancy, being an important argument for differences in salary for women due to maternity leave and difficulty rejoining the workforce—also known as the 'motherhood penalty' (Cukrowska-Torzewska and Matysiak 2020; Goldin et al. 2022)—was asked along with the set of personal dependency questions. Pregnancy was folded into the gender variable to answer this question so that there were three categories for gender: male, female never been pregnant, and female had been pregnant.

Also included were individual-level covariates that could influence salary, such as professional title, department, years working in the advertising industry, hours worked per week, and self-assessed work performance level. Potentially influential company-level covariates were also captured: size of the company (by number of employees), company structure (private/independent, holding company network), and type of advertising company (full service; specialized, including branding, digital or social, experiential, pharmaceutical, shopper marketing, customer relationship management; media and PR; and in-house).

Questions were included to explore social attitudes and perceptions around gender and income. This included belief that the respondent is paid fairly, understands pay structure and salary determinations at their company, has comfort working with the opposite sex, their

perception of gender salary differences, attitudes around sharing salary with coworkers, etc. The survey questions are in the Supplementary Materials.

Categorical study variables were assessed to ensure that at least 10% of the sample was present in all levels of a categorical variable to ensure proper estimation. If this was not the case, levels were combined into conceptually homogenous groupings or set to missing.

Data management and data analysis. The survey was hosted on SurveyMonkey. Names, emails, name of employer, or other directly identifying information were not requested in the survey. The identity of respondents was fully anonymized, and data was kept confidential and on an encrypted secure database. There was only one wave of data collection, conducted from March 6th, 2023, to May 26th, 2023, which achieved the desired sample size required for acceptable power with a total of 1025 initial respondents. The data was screened to ensure validity of cases, a missing values analysis was conducted, and the variables of interest were subjected to univariate assumptions testing to assess normality and identify extreme outliers (Field 2013; Tabachnick and Fidell 2007). The screening process removed a total of 99 cases due to non-consent, did not work in the advertising industry, or immediate drop-off. The analytic sample for this study was 926 respondents.

Raw data can be accessed at the OFS data repository https://osf.io/t3vs9/

Data Analysis. Descriptive statistics were conducted for all study variables split by gender to describe the sample characteristics. Frequencies and percentages were conducted for categorical means and standard deviations were conducted for continuous variables of interest

– all split by gender (see Table 1 in Supplementary Materials. Details about the data analysis are in Supplementary Materials).

3 Results

The size of the advertising industry pay gap

Our analysis found there is indeed a gender pay gap in the American ad industry when controlling for prior pregnancy, region of the country, race/ethnicity, highest level of education, seniority, average hours worked per week, years of experience, type of advertising agency, company structure, company size, and department. The only covariate that was not statistically significant in the model was race/ethnicity but was included as an important control given the existing evidence on race-based pay gaps in other industries. Controlling for all other known factors that impact salary, women who have *never* been pregnant make significantly less salary than their male counterparts. The advertising industry gender pay gap is 5%, compounded by motherhood to 8%.

Female respondents who had never been pregnant accrued less log base salary compared to males, controlling for females who were pregnant (B = -.051, Std.B = -.106, p = .027). A respondent who was female and had been pregnant at one time accrued less log base salary compared to males (B = -.084, Std.B = -.176, p = .011). Male participants had significantly higher log base salaries compared to both the female-pregnant and female-never pregnant groups (See Figure 1 below and Table 2 in Supplementary Materials).

Controlling for all known factors that might explain pay gap differences in the model (adjusted), the estimated average base salary for men is $135,496 (See Table 4 in Supplementary Materials). For women who have been pregnant, the adjusted mean salary is

$124,623, and $128,815 for women who had never been pregnant (see Figure 1). The adjusted average gender pay gap between all men, regardless of parenthood, and women who had children was $10,873, or an 8.36% difference between men and women. The adjusted average gender pay gap between men and women who had never had children was $6,682, or a 5.06% difference.
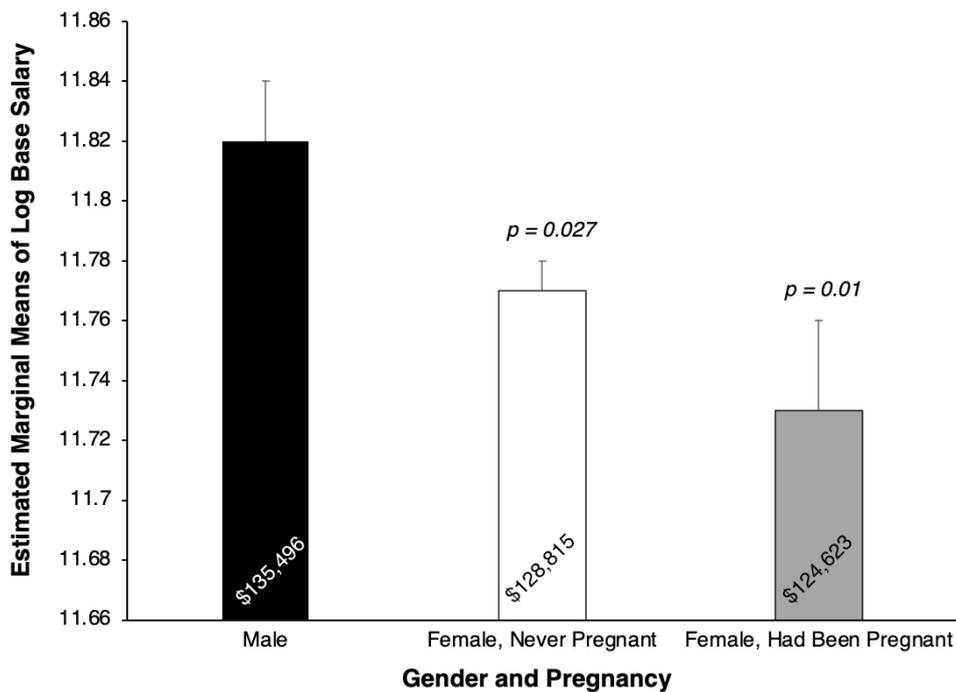

Figure 1. Adjusted estimated marginal means of log base salary for participants as a function of gender and pregnancy. Statistical comparisons were made between Male versus Female, Never Pregnant and Male versus Female, Had Been Pregnant participants. P-values above histogram bars indicate that even after adjusting for all other covariates shown to influence salary, both female groups had significantly lower salaries compared to the male group, regardless of pregnancy status. Dollar value at the bottom of each histogram bar indicates the converted salary value from the log base salary.

For illustration purposes, holding this pay gap constant over a 25-year career would equate to a considerable loss of $271,829 for women who had been pregnant and $167,042 for women who had not. It's worth noting research indicates that the motherhood penalty does not typically hold constant, but diminishes as children leave home; earnings, however, are still less

for both groups of women compared to men, and to men who become fathers, who experience a positive bump for having children (Goldin et al. 2022).

The final model had a sample size of 780 participants due to listwise deletion of missing data. The joint test of significance for the model was statistically significant $F_{(37, 742)} = 43.76$, $p < .001$. The model fit statistics indicate a strong fit of the data with an R^2 of .686 and an adjusted R^2 of .670. This suggests that 67.0% of the variance in log base salary is explained by the model. The remaining 33% is unaccounted for, either because we didn't identify variables or couldn't measure them. One such unobserved variable is discrimination, because by its nature it's hard to observe and therefore measure; this is likely a good portion of the 33% variation we can't capture, whether that be a mix of gender, racial, or some other form of discrimination.

Pay misperceptions of men and women

Most men and women in the study correctly believed in the existence of a gender pay gap in their industry. Both genders overestimated the size of this gap, with men more closely estimating the true size; a quarter of men believed men made 15% more than women (higher than the actual 5-8% gap), and a similar percentage of women (23%) significantly overestimated the size of the gap, thinking men were making closer to 20% more. Women's perception may be influenced by widely shared macro pay gap data of women making 83 cents on the dollar compared to men (Goldin 2024). While the advertising industry is doing better than that, women are still being paid significantly less than their male peers.

There was a notable cognitive dissonance for women around this disparity: while 96% of women in the study believed a gender pay gap existed, only 33% believed they personally received less than market salary for their role due to their gender (see Table 5 in Supplementary Materials), when in fact, women on average made less than men.

What's contributing to pay misconceptions?

Interestingly, 42.4% of the total sample indicated they had no understanding of the pay structure at their agency with a much higher percentage for women (47.4%) compared to men (30.1%). Likewise, 45.5% of the sample had no understanding of how salary decisions were made at their agency, with a much higher percentage for women (49.2%) compared to men (36.5%).

The lack of transparency from agencies in communicating pay structure and process is coupled with a muzzling culture; 68.1% of respondents said they, at one time, worked at a place where pay conversations were discouraged by employers, by 70.2% of women and 63.1% of men. This may be why 20% of respondents incorrectly thought there could be legal repercussions to discussing salary.

Interplay of social dynamics and the pay gap

Comfort between men and women co-workers: Although most of the sample was comfortable working closely with a member of the opposite sex, women's comfort (80.7%) was less than men's comfort (92.3%). Seventy-eight percent of the sample was comfortable being managed by a member of the opposite sex, with women less comfortable (73.2%) than men (91.3%). It is worth noting the possibility that women's discomfort could be proxy for sexual harassment or fear of it.

We further investigated how social comfort between genders might impact the pay gap. Figure 2 shows regression analysis of interactions of salary and gender with three of the exploratory questions: A) Comfort working closely with the opposite gender; B) Comfort having your team composed primarily of the opposite gender; and C) Belief that gender discrimination has negatively impacted your career. In panel A, there is a significant income gap with men who are uncomfortable working closely with women making more than women. In panel B, there is a significant income gap with men who are uncomfortable on a team composed primarily of women making more than women. In panel C, there is a significant income gap with women who indicate that gender discrimination has had a lot of impact on their career making more than men. While women who are less comfortable around men are paid less, men who are uncomfortable working closely or predominately with women are paid more; though the reason why is unknown, a study from LeanIn.org and SurveyMonkey showed an increase in discomfort of male managers working with women after the rise of the #MeToo Movement, which could be playing a role here as well (SurveyMonkey & LeanIn.org, 2019). However, is worth reiterating that most men were comfortable working closely with women, it was specifically the highest compensated men, who are likely in positions of authority, who were less so.
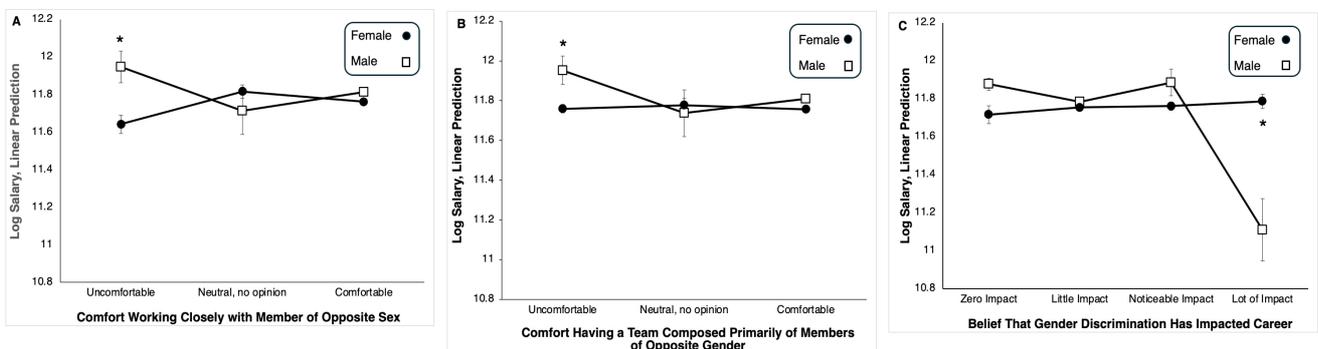

Figure 2. A linear regression analysis was conducted interacting gender (male/female) with the exploratory questions (comfort and belief one was discriminated against) to see their combined effect on log transformed base salary while controlling for all of the other covariates in our primary analysis model. Interactions of gender with (A) Comfort working closely with member of the opposite gender, (B) Comfort having a team composed primarily of members of the opposite gender, and (C) Belief that gender discrimination has impacted your career, on log transformed salary. Values are shown as the adjusted estimated marginal means (± standard error of the mean) of log base salary. Error bars that cannot be viewed

are within the areas of the line markers (Female, black circle; Male, white square). The asterisk in each panel indicates statistically significant differences between men and women.

How men and women coworkers discuss pay. Only 34.2% of respondents shared salary with co-workers of all genders. Women were more likely to share *only* with other women (38.2%) than were men who only shared with women (18.6%), men however were far less likely to share only with male peers (1.8%) and were more likely to not share at all (32.8%) compared to women (29.0%). The top reason for both men and women not sharing was discomfort (64.4%), with women less likely to share due to pro-social reasons like not causing workplace strife; notably this fear was largely unfounded, as 83.2% of respondents who shared salaries thought it was a positive experience.

Relationship between employee and manager. Most of the sample brought up career advancement with their supervisor (77.0%) with women (79.2%) more likely to have career advancement conversations than men (71.6%). Of those participants, 47.5% found their managers supportive, while 39.2% were indifferent/ineffective, and 13.3% were unsupportive. The majority of managers were identified as male (63.3%). Women indicated they met significant levels of indifference/ineffectiveness (41.1%) from managers compared to men (12.5%). Conversely, men indicated greater levels of unsupportive leadership (37.5%) compared to women (11.6%); men were more likely to receive a direct answer from a male manager about career advancement than woman were, even if the answer was "no." Only 26.7% of the total sample brought their perceived pay gap to their supervisor/manager, with little variation between sexes.

4. Discussion

The following is a brief overview of our primary findings and a key interpretation of why the

pay gap still exists:

1. Eliminating all known factors that contribute to a pay gap from previous studies, we found a pay gap in the ad industry up to 9%, similar to the findings by Calfee (2024) and lower than the national average of 17%.

2. Women are aggressively mitigating known personal factors that contribute to an individual's discrepancy in pay (e.g., education, negotiating) but are still being underpaid.

3. Women's attempt to correct pay gaps are stymied by managers who tended to be male, commonly through a response of indifference, which is not experienced equally by their male peers; this leads the authors to conclude gender discrimination from decision makers play a decisive role.

Managerial Implications

Our analysis eliminated all known possible reasons for a gap in pay, including personal variables that contribute to a pay gap; women are doing everything in their power to ensure optimal pay and yet the pay gap persists, suggesting gender-based discrimination is the primary cause. Ad agencies must now contend with their responsibility in addressing this problem.

- *Greater transparency in how salary decisions are made.* In the present study, only 10% of women and 15% of men said they clearly understood how pay decisions were made at their agency. Salary transparency can have a significant impact in closing the gap; an extensive study in Denmark found when firms shared gender-disaggregated salary data internally, the gender pay gap reduced by 13%, largely from curbing men's excessive wage growth (Bennedsen et al., 2022). The policy didn't hurt firm profitability and led to more women being promoted and hired.

- *Ongoing auditing of pay.* Agencies may consider detailed auditing of compensation

patterns to see if there are gendered trends, including whether women are more likely to be offered lower base salaries with alternative compensation, and if alternative forms truly add up to equitability. A long-term view is especially important for mothers, as studies have found the higher 'motherhood penalty' impacts women in the years *prior* to having a child, and up to 10-20 years after (Cortés and Pan 2023).

- *Greater employee awareness that salary discussions are a protected right.* The majority of respondents have, at some point, worked at an agency that discouraged salary discussions, with 20% of respondents not sharing their salary for fear of legal repercussions. Employers have a duty to let workers know of this right.

- *Curb discriminatory manager responses to salary complaints.* Women were more likely to report manager indifference after bringing up a suspected pay gap, with managers tending to be male. Workplaces could consider additional bias training for managers, policies that ensure formal pay requests are not limited to the direct manager level, and more managers who are women.

- *Improve professional relations between sexes.* While the reason for greater earnings for men who report being uncomfortable working closely with women is unknown, the notorious 'fraternity culture' of advertising could be at play; prior research has found men who hold power tend to reward other men they share bonds with by giving opportunities or advantages–while not doing the same for women–in what is known as homosocial reproduction (Kanter 1977; Windels and Mallia 2015). Encouraging meaningful professional collaboration between sexes may increase comfort and decrease homosocial reproduction.

Extensions and Limitations

- Future studies are needed on gender-based harassment, and exploring the relationship between gendered comfort and pay (like why male high earners don't associate with women).

- Further studies should be made into intersectional identities beyond the one's investigated in this study, including the role, if any, of sexuality, religious beliefs, citizenship status, physical or mental conditions.

- Additional investigation is needed on the pay experience of women of color in advertising, as they did not see a greater gap in pay compared to white women, which is atypical from historic pay gap study outcomes. This anomaly could have several sources, such as industry involvement around Diversity, Equity and Inclusion efforts, or the overwhelmingly and disproportionately white (65%) composition of the industry (Rittenhouse 2023).

- Research is needed to determine if the additional compensation women receive (65% saw some other additional compensation compared to 55% men, e.g. more PTO) are strategies by employers to give women lower base salaries, or if women actively negotiate these additions to get fairer total compensation packages

- While the geographic location of participants was accounted for, remote work may be an area of deeper inquiry for gender pay equity if it remains a common practice in advertising, especially as hybrid or remote options support pregnancy and child-rearing.

Advertising employees overestimate progress on pay equity, but the industry-wide gap shows perception is not reality. Agencies must act to change this to ensure advertising—which both reflects and shapes culture—equitably values and retains women, so the media reaching millions won't disproportionately be created by men.

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Disclosure of interest

The authors declare that there is no conflict of interest. During this study Watts was employed at an in-house advertising agency, which was not involved.

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