What Can Sexual Orientation Reveal About the Gender Gap in Confidence?*

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Abstract

The gender gap in wages and representation has broad implications for equity and efficiency. Research often attributes these disparities to gaps in confidence, competitiveness, or risk preferences between men and women. Studies show that, on average, women are less confident than equally-performing men. However, little attention has been given to confidence gaps across gender and sexual orientation. Using an established experimental design, I show that while the gender gap in confidence is reproduced, sexual orientation affects women's outcomes but not men's. Lesbian women exhibit a much smaller gender gap in confidence than the typical gap observed between men and women.

Keywords: discrimination, sexual orientation, gender, confidence, beliefs, experiment

JEL Classification Codes: C91, D91, J16, J71

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Declarations of interest: none.

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1 Introduction

Understanding the gender gap in various economic outcomes, such as wages, insurance coverage, and representation, is critical to promoting equity, economic efficiency, and social well-being. Consequently, these disparities have gained significant scholarly attention over the past several decades (Blau and Kahn, 2017; Goldin, 2014). Recent research has tried to identify the underlying causes of these disparities. On the one hand, men and women might be treated differently due to discrimination. On the other hand, they may differ in their economic behavior, exhibiting different levels of confidence, competitiveness, or risk preferences, for example. These behavioral differences have been extensively studied through various experiments (Exley and Kessler, 2022; Niederle and Vesterlund, 2007; Croson and Gneezy, 2009; Hernandez-Arenaz and Iriberri, 2018). However, potential behavioral gaps across both gender *and* sexual orientation remain largely unexplored. Including sexual orientation acknowledges that behavior can vary within gender groups due to the distinct social and economic challenges faced by LGBTQ+ individuals, as well as potential differences in their preferences. This paper is the first to investigate confidence differences based on sexual orientation in addition to gender.

Research indicates that the LGBTQ+ individuals – estimated at eight percent of the world population, i.e., representing 640 million people or twice the US population size (World Population Review, 2025b)¹ – are more likely to face economic challenges such as being uninsured or earning lower salaries compared to their non-LGBTQ+ counterparts – with the exception of lesbian women, who experience different economic outcomes (Badgett et al., 2021). A meta-analysis found that, on average, homosexual and bisexual men earn 11 percent less than their equally-qualified peers, while lesbian women tend to earn more than their heterosexual counterparts (Klawitter, 2015).² Few experiments have investigated whether there exist potential differences in economic behavior between LGBTQ+ individuals, which could explain variations in economic outcomes such as differences in wages; Aksoy and Chadd (2025) and Buser et al. (2018) have examined the sexual orientation gap in competitiveness and shown that while gay men compete less than heterosexual men, lesbian women compete (less or) as much as heterosexual women.

¹These figures are evolving: in a poll in 2012 "only" 3.5 percent identified as non-heterosexual while this number doubled and reached 7.6 percent in 2023. Furthermore, if we only look at generation Z (born between 1997 and 2012) around one in five considers themselves as non-heterosexual (Gallup, 2024).

²While the wage premium for lesbian women appears to have declined over the last years, the wage penalty for gay men seems stable (Financial Times, 2024).

Furthermore, Aksoy et al. (2024) found that gender diverse people (who do not identify as either male or female) are on average less confident and exhibit more pessimistic self-evaluations than equally-performing men on a math and science test.

However, to the best of my knowledge, there are no studies that examine the sexual orientation gaps in confidence. Confidence plays a crucial role in many real-world contexts, such as job interviews or scholarship applications, where individuals are required to evaluate their own performance and skills. Motivated by Aksoy et al. (2024) and Exley and Kessler (2022) and their experimental design, I conduct an online experiment to investigate potential differences in confidence across gender *and* sexual orientation. Specifically, I examine whether sexual orientation gaps in confidence exist and whether the gender gap in confidence varies across sexual orientations. I find that while the gender gap in confidence is reproduced, sexual orientation affects women's outcomes, but seems to have no effect on men. Lesbian women show indeed a much smaller gender gap in confidence to the typical gap observed between men and women, with lesbian women's confidence levels approaching those of heterosexual men.

This paper contributes to three key streams of literature. First, it builds on the (labor market) discrimination literature, beginning with Becker (1957)'s model of taste-based discrimination towards minorities and extending to the theory of statistical discrimination advanced by Phelps (1972) and Arrow (1973). It examines behavioral mechanisms—specifically, confidence gaps—that may (at least partially) account for gaps in economic outcomes. Second, it extends the existing literature on gender gaps in confidence by highlighting that this gap may be smaller for a specific subgroup. Third, it contributes to the flourishing stream of "the LGBTQ+ Economics" (Badgett et al., 2021) and documents novel sexual orientation gaps in confidence.

The remainder of this paper is organized as follows: Section 2 describes the design and Section 3 presents the key results. I finally discuss these results and conclude in Section 4.

2 Design

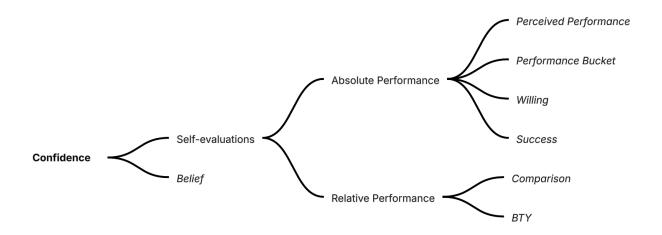
2.1 Overview

I run an online experiment on Prolific where participants have to go through 5 different parts. First, participants complete a math and science quiz containing 10 questions (Part 1). Second, I elicit their belief on their absolute performance by asking them how many questions they think they answered correctly out of the 10 (*Belief*). Third, I elicit their *Uninformed self-evaluations* by asking them six different questions which are detailed below (Part 2). Fourth, their true own score from the quiz is revealed. Fifth, they are asked again the exact same six questions representing their *Informed self-evaluations* (Part 3).

2.2 Eliciting Confidence: Belief and Self-Evaluations

Figure 1 illustrates how confidence is defined in this study, based on the six self-evaluation questions detailed below and the *Belief* question.³





By responding to the question "Out of the 10 questions in part 1, how many questions do you think you have answered correctly?" I measure the participants' beliefs about their absolute performance which I further name *Belief*. After the 10 quiz questions and this *Belief* question, participants are asked six different questions related to their own assessment of their performance in the test (*Uninformed self-evaluations*). The first question, referred to as the *Performance Bucket* asks them how well they think they performed on the test from Part 1 (from *terrible* to *exceptional*) whereas the next three

³This *Belief* question is sometimes referred to as *Confidence* in the literature; see Exley and Kessler (2022) for a discussion on whether self-evaluations measure a subjective form of confidence. For clarity, I define and measure overall confidence using the *Belief* question and the six *Self-Evaluation* questions, as illustrated in Figure 1. This approach slightly deviates from the pre-registration, where I originally referred to the *Belief* question as *Confidence*.

questions are statements to which participants can (dis)agree on a scale from 0 (*entirely disagree*) to 100 (*entirely agree*).⁴ These three questions are the following:

- I performed well on the test I took in part 1. (*Perceived performance*)
- I would apply for a job that required me to perform well on the test I took in part 1. (*Willing*)
- I would succeed in a job that required me to perform well on the test I took in part 1. (Success)

Finally, the last two questions concern their relative performance. I first assess participants' perceptions of their performance compared to others by asking how well they think they performed compared to the average score of all participants, ranging from "much worse" to "much better" (*Comparison*), and second, by asking them to estimate the percentage of participants who performed strictly better than them, from 0% to 100% (*BTY* which stands for Better-Than-You).

I then reveal their actual test score.⁵ Following this disclosure, the participants are again asked the exact same six questions (*Informed self-evaluations*). This design captures participants' perceptions of their performance before *and* after learning their actual performance. Uninformed self-evaluations reveal whether initial confidence levels vary across equally-performing individuals, particularly by gender or sexual orientation, with research showing that men often exhibit higher initial confidence than equally-performing women (Exley and Kessler, 2022). By informing participants of their true score, I mechanically eliminate any discrepancies in their beliefs about their absolute performance. This allows me to determine whether the gap in self-evaluations persists.

⁴The key distinction between *Belief* and *Perf bucket* (or *Perceived Perf*) is that *Belief* asks for a specific estimate of correct answers, which reflects a precise assessment of their knowledge score while *Perf bucket* and *Perceived Perf* are broader, more subjective evaluations of performance, influenced by factors like self-esteem, making it more likely to reveal differences between groups, even with the same performance. For example, lesbian women may exhibit more optimistic perceptions of their own performance, which *Perf bucket* and *Perceived Perf* capture more clearly than *Belief*, even if their specific estimates of correct answers are similar to those of equally-performing heterosexual women.

⁵My study makes two adaptations to Exley and Kessler (2022): the inclusion of two additional questions related to relative performance, *Comparison* and *BTY*, and providing participants with feedback solely on their absolute scores, without any information about their relative performance.

2.3 Data Collection and Payoffs

The experiment was conducted in June 2024 on Prolific, with data collected from 719 participants (following a pilot in March 2024 involving 157 participants).⁶ The Prolific platform allows researchers to pre-screen participants and target specific demographics, such as heterosexual women in the UK. Upon enrolling on the platform, participants answer several demographic questions that enable researchers to filter and select individuals that align with their study criteria. This functionality allowed me to create equally-sized groups of heterosexual men, heterosexual women, gay men, and lesbian women (all UK residents and whose approval rating was of 98% or higher, ensuring that they have a track record of completing studies reliably and accurately). The filters I used, typically collected during enrollment with the consent of the participants, focused on sexual orientation and gender. For sexual orientation, I included participants who identified as either *heterosex*ual or homosexual, while for gender, I retained those who identified as Woman (including Trans Female/Trans Woman) or Man (including Trans Male/Trans Man). For the main analysis, I created the two dummies *Female* (which takes the value of 1 if the person is prescreened as a woman (including trans female/trans woman) and 0 if prescreened as man (including trans male/trans man)) and Homosexual (which takes the value of 1 if the person is prescreened as homosexual and 0 if prescreened as heterosexual).⁷

I implemented the payment structure modeled after the approach used by Aksoy et al. (2024). Participants received a fixed payment of £3 and had the opportunity to earn additional payoffs based on their answers and a randomization process. If Part 1 (math and science quiz) was selected, they earned 10 pence for each correct answer on the test. If Part 2 (Uninformed self-evaluations) or Part 3 (Informed self-evaluations) was selected, they earned a guaranteed 50 pence.

⁶I received ethics approval from the Institutional Review Board from the University of Fribourg in June 2024 (Application No. 2024-06-03). The study was pre-registered (#180628) in June 2024 using AsPredicted. Since this is the first experiment investigating the sexual orientation gaps in confidence, I did not pre-register specific hypotheses or the expected direction of the findings. However, all other aspects of the study, including the methodology and main questions, were pre-registered as displayed in Online Appendix A.7, following a similar approach to Aksoy et al. (2024). The experiment was funded by the SES Foundation of the University of Fribourg and the Stonewall Foundation.

⁷To assess the reliability of Prolific's gender filter, I created an alternative dummy variable, *Women*, which takes the value of 1 if the respondent *self-identified* as a woman in my online survey, 0 if they *self-identified* as a man, and 2 if they selected "other" in response to the question: "What gender do you identify with?". Overall, over 99.5% of participants matched the gender information provided by Prolific. The results of the robustness check using this *Women* dummy therefore align very closely with the main findings.

3 Main Results

The average participant is 37.65 years old, achieves a (knowledge) score of 3.63 out of 10 on the math and science test, but estimates their own score to be 3 (for a complete overview of the descriptive statistics, refer to Appendix A.1).⁸ In my sample, heterosexual women perform worse on average than heterosexual men, with a coefficient of -0.383 (p < 0.05) and believe that they performed worse than equally-performing heterosexual men, with a coefficient of -0.617 (p < 0.01) as displayed in Appendix A.5. While the coefficients for *Homosexual* and the interaction term between *Female* and *Homosexual* (further *Female_Hom.*, which examines whether differences exist at the intersection of gender and sexual orientation) are not statistically significant for *Knowledge score*, the coefficient for *Female_Hom.* for *Belief* is close to being significant (p = 0.10).

The results presented in Table 1 reveal that heterosexual women have a significantly lower perceived performance compared to equally-performing heterosexual men, as indicated by the *Female* coefficient of -6.589 (p < 0.01). A similar trend is evident across all other outcomes, where heterosexual women consistently exhibit more pessimistic selfevaluations compared to equally-performing heterosexual men (when uninformed of their true score). It is important to note that the baseline group for this table is heterosexual men. Consequently, the *Female* coefficient reflects the gender gap between heterosexual women and heterosexual men. While this is not the "true" gender gap observed in the general population, it provides a closer approximation to reality compared to the gender gap in my sample, which overrepresents lesbian women and gay men.⁹ The coefficient for *Homosexual* is never statistically significant in Table 1, suggesting that gay men do not differ significantly from equally-performing heterosexual men in their self-evaluations of performance.

The combined effect of the three coefficients (i.e. the addition of the three coefficients *Female*, *Homosexual* and *Female_Hom*.) reveals the gap between lesbian women and heterosexual men. This total effect (called Combined Gap in the table) can be compared

⁸Participants are, on average, underconfident, with variations across gender and sexual orientation (see Appendix A.3 and A.4 for details). This underconfidence can affect how participants react to feedback. Indeed, Baumann et al. (2024) show causal evidence between confidence and belief updating; they find that individuals with underconfidence react less to positive feedback, which leads to pessimistic updating.

⁹The analysis of the gender gap in confidence (and self-evaluations) in the entire sample (all men vs. all women) is to be found in Online Appendix A.3. The results confirm the findings of Exley and Kessler (2022): Women provide more pessimistic self-evaluations of their performance on a math and science quiz than equally-performing men, in both uninformed and informed cases.

to the gender gap captured by the *Female* coefficient alone, which reflects the difference between heterosexual women and heterosexual men. For instance, in the case of *Perceived Performance*, the Combined Gap for lesbian women is -1.05, a statistically significant reduction from the original gender gap of -6.589 (the difference between the two gaps is significant with p = 0.011). Similarly, for *Performance Bucket*, the gender gap narrows from -0.548 to -0.225 (p = 0.007), and for *Willing*, from -8.448 to -1.768 (p = 0.011). This pattern holds across other outcomes, such as *Success* and *Comparison*. These results demonstrate that the gender gap in self-evaluations diminishes substantially and significantly for lesbian women and that lesbian women's self-evaluations are more similar to those of men. Consistent with these findings, there is no statistically significant difference between equally-performing men and lesbian women regarding both uninformed and informed self-evaluations (with the exception of *BTY (uninformed)*, p = 0.089) as displayed in Online Appendix A.6.

	(1)	(2)	(3)	(4)	(5)	(6)
	Perceived Perf.	Perf. Bucket	Willing	Success	Comparison	BTY
Female	-6.589***	-0.548***	-8.448***	-7.261***	-0.602***	5.169^{**}
	(2.226)	(0.120)	(2.477)	(2.689)	(0.123)	(2.418)
Homosexual	-0.924	-0.132	-0.857	-1.508	-0.129	1.297
	(2.238)	(0.125)	(2.797)	(2.697)	(0.129)	(2.387)
Female_Hom.	6.463**	0.455***	7.537**	7.887**	0.417**	-1.206
	(2.985)	(0.164)	(3.640)	(3.722)	(0.174)	(3.416)
Hetero Male Average	26.49	2.89	24.09	26.46	3.17	52.94
Female - Combined Gap (=Gap Hetero W vs Hetero M - Gap Lesbian W vs Hetero M))
Difference	-5.539	-0.323	-6.680	-6.380	-0.288	-0.092
P-value	0.011	0.007	0.011	0.021	0.023	0.972
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	719	719	719	719	719	719

Table 1: Uninformed Self-Evaluations

Robust standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes: Results are based on OLS regressions (which include a constant term), with the dependent variable for each model indicated in the corresponding column. Controls include Knowledge score, Right-wing, Ethnicity, Education, Employment status, Age, and Rural. The baseline group is hetero-sexual men. *Hetero Male Average* is the unadjusted mean for heterosexual men, before controlling for covariates. *Difference* represents the difference between the gender gap, as indicated by the coefficient for *Female* (comparing heterosexual men and heterosexual women), and the Combined Gap, which is the sum of the coefficients for *Female*, *Homosexual*, and *Female_Hom*. (capturing the gap between lesbian women and heterosexual men). The P-value corresponds to the two-sided t-test for the difference between these two gap estimates.

After revealing the participants' true scores, I proceed to the analysis of the informed self-evaluations in Table 2. I find again, across all outcomes, that heterosexual women evaluate their performance more pessimistically than equally-performing heterosexual men (although most coefficients are of a smaller size) and that gay men do not show any significant difference in self-evaluations of their performance compared to equally-performing heterosexual men. Comparing the combined effect of the three coefficients *Female*, *Homosexual* and *Female_Hom*. (which represents the gap between lesbian women and heterosexual men) with the gender gap between heterosexual men and women (*Female*),

Table 2 shows similar results to those observed in the uninformed condition: the gender gap in self-evaluations is substantially and significantly smaller for lesbian women. The similarity in results between the uninformed and informed self-evaluations suggests that differences in self-evaluations are not primarily driven by any (potential) gap in beliefs about one's absolute score. For the plot of the coefficients, please refer to Appendix A.2.

In contrast to Exley and Kessler (2022), who also include information about relative performance in their feedback, here participants receive feedback only on their own scores, not in relation to others. This allows me to additionally investigate whether on average, heterosexual women more strongly believe that they performed worse than others compared to equally-performing heterosexual men. The coefficient of the dummy variable *Female* is statistically significant for the two models *Comparison* and *BTY*, both before and after feedback. This suggests that heterosexual women indeed compare themselves, on average, more negatively to others than equally-performing heterosexual men both before and after feedback.

	(1)	(2)	(3)	(4)	(5)	(6)
	Perceived Perf.	Perf. Bucket	Willing	Success	Comparison	BTY
Female	-5.969***	-0.394***	-4.785**	-8.386***	-0.381***	5.122^{**}
	(1.616)	(0.0987)	(2.353)	(2.252)	(0.115)	(2.401)
Homosexual	-0.334	-0.0615	-0.165	-0.175	-0.0588	0.298
	(1.801)	(0.0989)	(2.511)	(2.531)	(0.119)	(2.500)
Female_Hom.	6.625***	0.481***	4.334	7.648**	0.312**	-1.758
	(2.368)	(0.135)	(3.356)	(3.352)	(0.158)	(3.466)
Hetero Male Average	28.42	3.16	25.32	27.36	3.18	51.78
Female - Combined Gap (=Gap Hetero W vs Hetero M - Gap Lesbian W vs Hetero M)						(1
Difference	-6.291	-0.419	-4.17	-7.473	-0.253	1.460
P-value	0.000	0.000	0.089	0.002	0.028	0.579
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	719	719	719	719	719	719

Table 2: Informed Self-Evaluations

Robust standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes: Same as for the Uninformed Self-Evaluations in Table 1.

Result (Female-Hom.). The gender gap in self-evaluations is significantly smaller for lesbian women.

I additionally conducted separate analyses for women (comparing heterosexual women to lesbian women) and men (comparing heterosexual men to gay men). These analyses reveal that in both informed and uninformed cases lesbian women provide more optimistic self-evaluations of their performance than equally-performing heterosexual women and that gay men do not show any significant difference in self-evaluations of their performance compared to equally-performing heterosexual men (see Online Appendix A.2 for details). I also compare men to women across my entire sample and, consistent with the literature, find that women provide worse self-evaluations of their performance than equally-performing men in both informed and uninformed cases (see Online Appendix A.3 for details).

Finally, as part of the exploratory analysis, I also test whether different groups (e.g., lesbian women, gay men, men, women, etc.) adjust differently to the feedback they receive. Overall, I observe minimal differences between groups, with a few notable exceptions in the men vs. women comparison (see Online Appendix A.4 for details). To test the robustness of my findings, I conduct two robustness checks: in the first, I exclude the observations who have incorrectly stated their absolute score even though their actual score was displayed in red on the same screen. Hence, I only include those who effectively are aware (not only informed) of their true absolute score. In the second robustness check, I additionally exclude participants who failed to answer two easy attention checks consecutively (an example of attention check is displayed in Figure A.16 in Online Appendix A.1).¹⁰ The two robustness checks align with the main findings, supporting the reliability of my findings and demonstrating the robustness of the study (see Online Appendix A.5 for details).

4 Discussion and Conclusion

In this experiment I investigate whether sexual orientation gaps in confidence exist and how the gender gap in confidence varies across sexual orientations. I base my experiment on Aksoy et al. (2024) and Exley and Kessler (2022)'s work which found gender differ-

 $^{^{10}\}rm{Among}$ participants, 12.4% failed to report their own displayed absolute score, while 2.5% failed both attention checks consecutively and 9.9% at least one main attention check.

ences in confidence (and self-evaluations) – specifically, that women, on average, report more pessimistic beliefs about their absolute performance and evaluate their performance more negatively compared to equally-performing men. While my findings confirm these previous results, they also reveal significant differences within the group of women. In particular, lesbian women provide more optimistic self-evaluations of their performance than equally-performing heterosexual women and exhibit a significantly smaller gender gap in self-evaluations compared to the typical gap observed between men and women, with lesbian women's confidence levels approaching those of (heterosexual) men. This discrepancy persists even after participants are informed about their actual scores, suggesting that lesbian women may inherently have more positive self-views, shaped by social or psychological factors, such as coping mechanisms or resilience. Alternatively, lesbian women may develop greater self-assurance and pride in their abilities due to facing challenges or discrimination. This experiment highlights that lesbian women appear to have a different perception of their performance and evaluate themselves differently compared to heterosexual women, which suggests a nuanced understanding of how sexual orientation intersects with gender in shaping self-evaluations of performance. On the other hand, gay men seem to show no significant difference in self-evaluations (informed and uninformed) compared to equally-performing heterosexual men. This suggests that sexual orientation may not be a strong predictor of confidence for men, or that any difference, if it exists, is too small to be detected with our sample.¹¹

Building on these findings, future research should explore the origins of confidence and the mechanisms that sustain it. Understanding potential triggers, such as social norms, early life experiences, and peer influences, may shed light on how confidence develops. This could help explain why gay men show no significant differences in confidence compared to equally-performing heterosexual men, while lesbian women do differ from their heterosexual counterparts.

One could also explore differences in economic behaviors between heterosexual and homosexual individuals, such as gaps in risk preferences, altruism, or optimism, and examine

¹¹Remember that my sample consists of UK residents. The UK ranks highly on the Global Acceptance Index (GAI), which measures overall LGBTQ+ acceptance. In contrast, for example, the US ranks lower (World Population Review, 2025a). Additionally, the "gay penalty" varies significantly across countries—ranging from 4-5% in the UK and France, to 12-16% in Canada and the US (Drydakis, 2019). This suggests that, in the UK, gay rights are well-established, and the general social climate may be more accepting of sexual diversity, which could help explain the lack of significant differences in confidence between gay men and heterosexual men.

whether accounting for sexual orientation reveals variations within genders. Documenting these behavioral differences between heterosexual and homosexual individuals, in addition to the traditional focus on gender differences between men and women, and further examining the extent to which these differences in economic behavior influence gender and sexual orientation gaps in economic outcomes, could offer valuable insight for designing targeted interventions aimed at reducing discriminatory economic outcomes and improving the lives of individuals of sexual orientation minorities. It seems that this new field is still in its early stages with many intriguing questions remaining to be explored and answered.

Declaration Regarding the Use of Generative AI

During the preparation of this work, the author used GPT-4 to improve the language. Following this, the author carefully reviewed and edited the content as necessary and assumes full responsibility for the final output.

Appendices

A.1 Descriptive Statistics

Variable	Mean	SD	Min	Max
Female	0.50	0.50	0	1
Homosexual	0.50	0.50	0	1
Rightwing	21.53	26.20	0	100
Ethnic	1.29	0.80	1	6
Educ	4.66	1.19	1	8
Employment	2.33	1.81	1	8
Rural	0.30	0.46	0	1
Age	37.65	12.59	18	80
Observations	719			

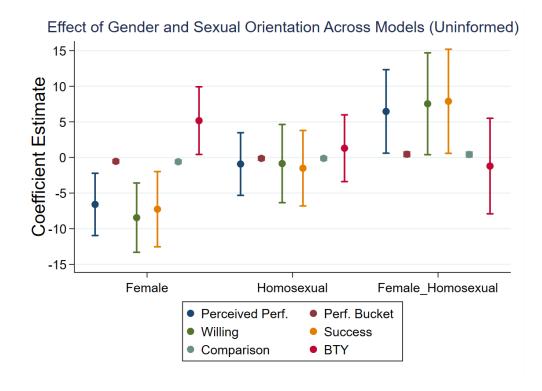
Table A.1.1: Descriptive Statistics of the Independent and Control Variables

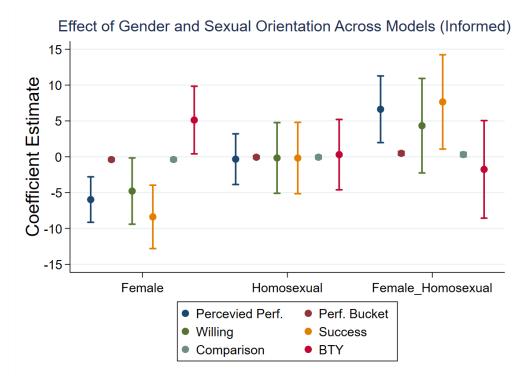
Notes: *Rightwing* is measured with a slider from entirely disagree to entirely agree to the following statement: "I feel favorably about conservative parties (like the Republican party in the USA)." *Ethnicity* is measured with the following question "Which of the following best describes your ethnic background?" and 6 possible categories. *Education* is measured with the following question "Please select the option that best represents your highest level of education completed" and 8 possible categories. *Employment Status* is measured with the following question "What is your current employment status?" and 8 possible categories. Finally, *Rural* is measured with the following question "Do you currently live in a rural area or an urban area?" with rural area or urban area as the two options.

Variable	Mean	SD	Min	Max
Knowledge score	3.63	1.80	0	9
Belief	3.00	1.82	0	10
Perceived performance (uninformed)	22.23	22.27	0	100
Performance bucket (uninformed)	2.58	1.22	1	7
Willing (uninformed)	19.45	26.18	0	100
Success (uninformed)	22.05	27.13	0	100
Comparison (uninformed)	2.85	1.31	1	7
BTY (uninformed)	56.03	23.20	0	100
Perceived perfomance (informed)	24.76	23.66	0	100
Performance bucket (informed)	2.94	1.39	1	7
Willing (informed)	21.56	26.49	0	100
Success (informed)	23.04	26.65	0	100
Comparison (informed)	2.95	1.45	1	7
BTY (informed)	54.81	24.98	1	100
Observations	719			

Table A.1.2: Descriptive Statistics of the Outcome Variables

A.2 Coefficient plots

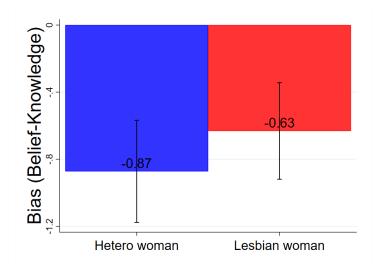




A.3 Underconfidence among Women

On average, both heterosexual and lesbian women underestimate their own scores. Lesbian women show slightly *less* underconfidence than heterosexual women, though this difference is not statistically significant (see Figure A.3.1). When controlling for relevant variables (such as age, education, rural/urban setting, political orientation, ethnicity and employment status) and performing a linear regression on the entire sample of women (see Table A.3.1), the coefficient for *lesbian woman* is not statistically significant (p = 0.135). Looking at the distributions, the histograms displayed in Figure A.3.2 show that there seems to be more heterosexual women underestimating their actual score than lesbian women.





Notes: *Bias (Belief-Knowledge)* represents the difference between the participant's perceived score (*Belief*) and their actual score, defined as the number of correct answers out of the 10 questions (*Knowledge*). The error bars displayed represent the confidence intervals at 95%. The stars come from the t-test performed and express * p < 0.1, ** p < 0.05, *** p < 0.01. n=359.

Table A.	3.1: Bias	among	Women
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	(1)
	Bias
lesbian woman	0.356
	(0.238)
Hetero Female Average	-0.87
Controls	Yes
Observations	359

Robust standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes: Results are based on OLS regressions (which include a constant term), with the dependent variable indicated in the corresponding column. Controls are Rightwing, Ethnicity, Education, Employment Status, Age and Rural. *Hetero Female Average* is the unadjusted mean for heterosexual women, before controlling for covariates.

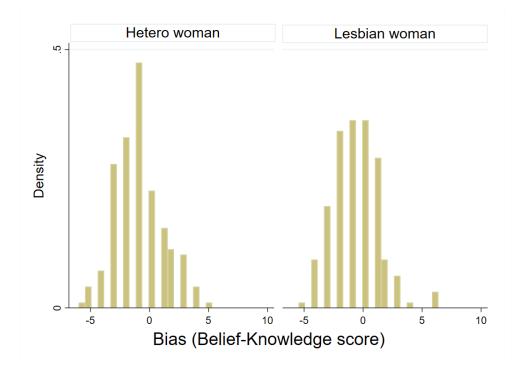


Figure A.3.2: Bias (Belief-Knowledge Score)

Notes: *Bias (Belief-Knowledge)* represents the difference between the participant's perceived score (*Belief*) and their actual score, defined as the number of correct answers out of the 10 questions (*Knowledge*).

A.4 Underconfidence among Men

On average, both heterosexual and gay men underestimate their own scores. Gay men show slightly *more* underconfidence than heterosexual men, though this difference is not statistically significant (see Figure A.4.1). When controlling for relevant variables (such as age, education, rural/urban setting, political orientation, ethnicity and employment status) and performing a linear regression on the entire sample of men, there seems to be no difference between gay men and heterosexual men in terms of bias as shown in Table A.4.1. Looking at the distributions, the histograms displayed in Figure A.4.2 show that there seems to be more gay men underestimating their actual score than heterosexual men.

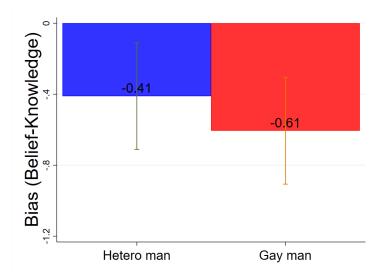


Figure A.4.1: Bias (Belief-Knowledge Score)

Notes: Bias (Belief-Knowledge) represents the difference between the participant's perceived score (Belief) and their actual score, defined as the number of correct answers out of the 10 questions (Knowledge). The error bars displayed represent the confidence intervals at 95%. The stars come from the t-test performed and express * p < 0.1, ** p < 0.05, *** p < 0.01. n=360.

Table A.4.1: Bias among Men

	(1)
	Bias
gay man	-0.000645
	(0.223)
Hetero Male Average	-0.41
Controls	Yes
Observations	360

Robust standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes: Results are based on OLS regressions (which include a constant term), with the dependent variable indicated in the corresponding column. Controls are Rightwing, Ethnicity, Education, Employment Status, Age and Rural. *Hetero Male Average* is the unadjusted mean for heterosexual men, before controlling for covariates.

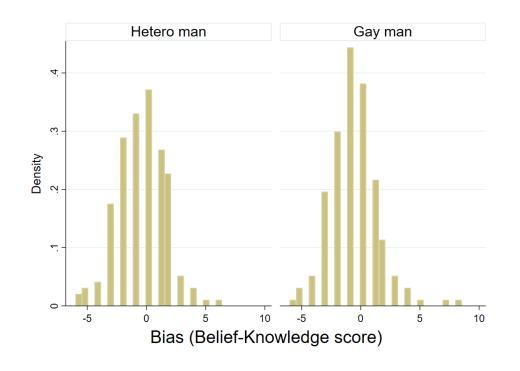


Figure A.4.2: Bias (Belief-Knowledge Score)

Notes: *Bias (Belief-Knowledge)* represents the difference between the participant's perceived score (*Belief*) and their actual score, defined as the number of correct answers out of the 10 questions (*Knowledge*).

A.5 Knowledge score and Belief

Table A.5.1 indicates that heterosexual women not only score lower on the math and science test but also tend to underestimate their absolute performance relative to equally-performing heterosexual men. Note that the interaction term *Female_Hom.* is on the verge of being significant (p = 0.10) in Model 2 (*Belief*). The difference between the two gaps (*Female* and Combined Gap) is statistically significant (p = 0.045) for Model 2 (*Belief*): the gender gap in the belief of own absolute performance is significantly smaller for lesbian women.

	(1)	(2)
	Knowledge score	Belief
Female	-0.383**	-0.617***
	(0.180)	(0.179)
Homosexual	0.0329	-0.0302
	(0.202)	(0.178)
Female_Hom.	-0.0964	0.399
	(0.263)	(0.242)
Hetero Male Average	3.73	3.32
Female - Combined Gap (=Gap Het	ero W vs Hetero M - Gap Lesbian W vs	Hetero M)
Difference	0.063	-0.369
P-value	0.734	0.045
Controls	Yes	Yes
Observations	719	719

Robust standard errors in parentheses

* p < 0.1,** p < 0.05,*** p < 0.01

Notes: Results are based on OLS regressions (which include a constant term), with the dependent variable for each model indicated in the corresponding column. Controls for the Model 1 are Rightwing, Ethnicity, Education, Employment status, Age and Rural as well as Knowledge score for Model 2. The baseline group is heterosexual men. *Hetero Male Average* is the unadjusted mean for heterosexual men, before controlling for covariates. *Difference* represents the difference between the gender gap, as indicated by the coefficient for *Female* (comparing heterosexual men and heterosexual women), and the Combined Gap, which is the sum of the coefficients for *Female*, *Homosexual*, and *Female_Hom*. (capturing the gap between lesbian women and heterosexual men). The P-value corresponds to the two-sided t-test for the difference between these two gap estimates.

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