

**Bisexual Erasure: Perceived Attraction Patterns of Bisexual Women and Men**

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**Authors' Note**

The first author uses they/them pronouns, the second, fourth, and fifth authors use she/her pronouns, and the third author uses he/him pronouns.

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### Abstract

Bisexual individuals face identity denial and erasure and qualitative analyses suggest that it may be gendered, such that people stereotype bisexual women as truly heterosexual and bisexual men as truly gay. Across three studies (total N = 787), we examined perceptions of bisexual targets' attraction patterns. Participants rated the attraction of either a female or male bisexual target to both the same gender/sex and opposite gender/sex. An internal meta-analysis revealed that heterosexual, lesbian, and gay participants all perceived bisexual men as more attracted to men than to women. No such pattern emerged for bisexual women. These differences between the perception of bisexual women and bisexual men were also reflected in the endorsement of an explicit measure of bisexual erasure. Our findings add to the understanding of the unique bias bisexual people face by showing that perceived attraction patterns may underlie the labelling of bisexual men as "actually gay".

*Key words:* bisexuality, bisexual erasure, LGBT, monosexism, sexual minorities

### Bisexual Erasure: Perceived Attraction Patterns of Bisexual Women and Men

Bisexual people face high levels of discrimination from heterosexuals as well as from within the LGBTQ+ (lesbian, gay, bisexual, transgender, Queer) community (Mulick & Wright, 2002). One particular form of prejudice bisexual people (i.e. people who are attracted to people of more than one gender/sex)<sup>1</sup> experience is *bisexual erasure*, that is, the tendency to question or deny the existence of bisexuality (Diamond et al., 2017; Maimon et al., 2019), despite the fact that bisexual people make up the largest group under the LGBTQ+ umbrella (Gates, 2011; Herbenick et al., 2010; see also Diamond & Rosky, 2016). Specifically, people stereotype bisexual individuals as being in denial about their true heterosexual or gay orientation (see Rust, 2002).

Several beliefs about bisexual people may feed into their erasure. For example, people believe that bisexuality is unstable (Burke & LaFrance, 2018) or that the number of bisexual men is negligibly small (Bailey, Dunne, & Martin, 2000). In this research, we focus on biased beliefs about sexual and romantic attraction patterns of bisexual people. Specifically, we examine whether others believe that both bisexual women and bisexual men are primarily attracted to men.

### **Gendered Patterns of Bisexual Erasure**

The perception of whether a bisexual individual is actually heterosexual or actually lesbian/gay differs between bisexual women and bisexual men, highlighting the importance of intersectionality in bisexual erasure (Crenshaw, 1989). Theoretical and qualitative analyses suggest that people often consider bisexual women to be in an experimental phase or seeking attention from men (Alarie & Gaudet, 2013). This is reflected in terms such as “lesbian until

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<sup>1</sup> Bisexuality has been defined in various ways (e.g. as attraction to men and women). We use it synonymously with plurisexual (i.e., attraction to more than one gender). This, our definition includes sexual as well as romantic attraction to men and women or to people regardless of their gender/sex (i.e. pansexual). We prefer to use the term “bisexual” because it the most widely used term, especially in lay discourse.

graduation,” which refers to women who engage in same gender/sex<sup>2</sup> sexual behaviour during their university years but revert back to heterosexuality after that. Similarly, “barsexual” refers to women who only engage in same gender/sex sexual behaviours in bars and clubs to attract attention from heterosexual men (Rupp & Taylor, 2010). Indeed, sexual behavior between women is often fetishized in the media as well as in pornography aimed at heterosexual men (see Worthen, 2013) – and young, heterosexual women report increasing pressure to publicly perform bisexuality to accommodate men’s sexual fantasies (Fahs, 2009). Thus, women who express same-sex desire may be viewed as simply giving in to this pressure (see Matsick & Rubin, 2018). In line with these ideas, women who kiss publicly are often perceived as heterosexual rather than bisexual or gay (Lanutti & Denes, 2012).

Male same-sex desire, on the other hand, is generally portrayed negatively (Herek, 1986; 2002). Thus, men experience considerable pressure to hide or downplay their same-sex attraction. In line with this argument, people perceive bisexual men to be in a phase of transition to or in denial of their true gay sexual orientation (Alarie & Guadet, 2013; Israel & Mohr, 2004). For example, in a qualitative interview study, heterosexual and gay people explicitly stated that if they saw two girls kissing in a bar, they would assume that they are heterosexual. However, they would assume that two men kissing in a bar were gay. Similarly, engaging in sexual acts with the same gender/sex was interpreted as an indication of being gay for men, but not for women.

Taken together, this body of research indicates a general belief that bisexual people are dishonest about their true attraction patterns such that women who identify as bisexual exaggerate their same-sex attraction while men who identify as bisexual downplay their same-sex attraction. Further, lesbian and gay individuals report that these stereotypes are

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<sup>2</sup> We use the term “gender/sex” throughout this manuscript to indicate that (a) “sex” is also socially constructed and (b) social/cultural factors and biology influence each other and are impossible to separate, and (c) because it is often unclear in the context of sexual orientation whether a specific individual is attracted to a specific sex (biological) or gender (identity or social role) (see also Hyde et al., 2019; Morgenroth & Ryan, 2020)

widespread in the LGBTQ+ community and that they contribute to prejudice against bisexual people (Matsick & Rubin, 2018). These patterns were particularly clear for beliefs about bisexual men, but less consistent for bisexual women.

### **What Drives Bisexual Erasure?**

The beliefs about bisexuality described above suggest a potential bias that could contribute to bisexual erasure. However, no research has directly examined these suggested monosexual and gendered attraction patterns. If people indeed engage in this bias, what psychological mechanisms might be responsible? First, the erasure of both bisexual women and men rests in part on the monosexist assumption that heterosexual, gay, and lesbian identities are the only genuine notions of sexuality. Monosexism refers to perception that only opposite<sup>3</sup> gender/sex and same gender/sex sexualities are valid. This ideology is in line with essentialist views of sexual orientation (Roberts, Horne, & Hoyt, 2015; Morgenroth, Kirby, Gee, & Ovett, 2020), or the belief that sexual identity groups are informative, immutable, and, *have clear-cut boundaries* (Haslam & Levy, 2006). Importantly, while these boundaries could theoretically divide people into an infinite number of groups, essentialist beliefs are often associated *binary* views, for example in the context of gender/sex (Morgenroth et al., 2020). Bisexuality may be perceived as blurring the clear-cut boundaries between “gay/lesbian” and “heterosexual” and thus those who hold essentialist views, specifically in terms of discreteness, may be particularly motivated to erase its existence.

However, monosexism alone cannot explain the suggested gendered pattern. If both bisexual men and women are perceived as more attracted to men, then androcentrism might be a more likely explanation. Androcentrism is a type of sexist bias that prioritizes maleness

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<sup>3</sup> Please note that we use the term “opposite gender/sex” as the terms “same sex attraction” and “opposite sex attraction” are commonly used terms in the context of sexual orientation. We do not mean to imply that there are only two genders/sexes or that the two most prevalent gender/sex groups (men/male and women/female) are oppositional or complimentary as implied by binary notions of gender/sex.

and masculinity over femaleness and femininity (see Bailey, LaFrance, & Dovidio, 2019). It thus can take two forms: (1) the privileging of men over women and (2) the privileging what it means to be a man in a certain culture (e.g. agency) over what it means to be a woman in a certain culture (e.g. communality), which is also referred to as *masculine defaults* (Cheryan & Markus, 2020).

Thus, because bisexuality creates ambiguity about sexual attraction patterns, androcentric views—both in terms of a privileging men over women (e.g., hostile sexism; more positive attitudes towards men compared to women) and in terms of privileging masculinity over femininity— may lead to the perception that bisexual women are more attracted to the opposite gender/sex and bisexual men are more attracted to the same gender/sex. In other words, to the extent that individuals value men and masculinity more than women and femininity, they may also assume that everyone shares these views and is therefore more attracted to men.

### **The Current Project**

Despite anecdotal, theoretical, and qualitative accounts of bisexual erasure, little quantitative research has examined the phenomenon directly. The limited quantitative research examines instances in which sexual identity is inferred from behavior (not explicitly stated; Lannutti & Denes, 2012), examines stereotypes about stability or attraction in general rather than direct judgments of individuals (e.g., Burke & LaFrance, 2018; Matsick & Rubin, 2018), or investigates male or female bisexuality compared to heterosexuality—not examining the intersection of gender/sex and bisexuality (e.g., Zivony & Saguy, 2018). We fill this gap in the literature by examining perceptions of women and men who explicitly identify as bisexual.

Building on Matsick and Rubin's (2018) notion that perceived attraction plays an important part in bisexual erasure, we report three studies<sup>4</sup> (two pre-registered) in which participants judged the extent to which a woman or a man who explicitly identified as bisexual was attracted to the same or the opposite gender/sex. We interpreted any significant difference between same and opposite gender/sex attraction as an indication of a bias in perceptions of bisexual individuals' attractions and thus as an indicator of bisexual erasure. Equal levels of attraction to both women and men is not necessary to identify as bisexual (see Galupo et al., 2017, for a discussion of the complexity of bisexual attraction), and assuming that an individual has a preference for one gender/sex does not necessarily erase bisexuality. However, if people consistently endorse the belief that bisexual women are more attracted to the opposite gender/sex and the reverse for bisexual men, without being given any such information, this would show a systematic bias in how female and male bisexuality is processed, a bias that contributes to bisexual erasure.

We test the following hypotheses<sup>5</sup>:

H1: Bisexual men, compared to bisexual women, will be perceived as more attracted to the same gender/sex.

H2: Bisexual people will be perceived as more attracted to men than to women:

H2a: Bisexual women will be perceived as more attracted to the opposite gender/sex compared to the same gender/sex

H2b: Bisexual men will be perceived as more attracted to the same gender/sex compared to the opposite gender/sex

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<sup>4</sup> We conducted a fourth study asking a similar research question, but that used different measures. Based on participant feedback, we believe that these changes made our hypotheses too transparent and elicited reactance from participants. We have not included that study in the meta-analysis, but it is discussed in the online supplement.

<sup>5</sup> The hypotheses below are those pre-registered for Study 3. While the overall predictions were the same across studies, the exact hypotheses changed slightly throughout the project. Please see [https://osf.io/v3a8u/?view\\_only=cf60ce5837674577a7d2c14c9e08c078](https://osf.io/v3a8u/?view_only=cf60ce5837674577a7d2c14c9e08c078) and [https://osf.io/ea9xj/?view\\_only=12fe088a68384875becaaac1788a006d](https://osf.io/ea9xj/?view_only=12fe088a68384875becaaac1788a006d) for the specific hypotheses and pre-registered analyses for both studies.

Exploratory analysis 1: We also recruited sizable numbers of heterosexual, lesbian, and gay participants in Studies 1-2 to conduct an exploratory test whether lesbian and gay individuals are equally as likely to erase bisexual women and men as heterosexuals. We also explore the role of participant gender/sex.

Exploratory analysis 2: Finally, we explore whether monosexist beliefs (in the form of sexual orientation essentialism) and androcentrism (in the forms of hostile sexism, valuing masculinity, attitudes toward women and men) moderate these effects to better understand the mechanisms that underlie bisexual erasure. We also include political orientation, perceptions of the instability of bisexuality, and perceptions that men are more promiscuous than women as exploratory moderators. Moderation by political ideology would suggest that bisexual erasure is driven by similar forces as other forms of prejudice against bisexual people, which is generally higher among conservatives. Moderation by the perception that men are more promiscuous would suggest that bisexual erasure is not so much about the perception of bisexual individuals, but instead about the perception of who is more likely to sexually engage with them.

### **Method**

We aggregate our studies meta-analytically, rather than presenting each study individually (a) because methods were similar across studies, and (b) to focus on the overall pattern of results to draw more robust conclusions. This approach is in line with recommendations to conduct internal meta-analyses of multi-study papers (Goh et al., 2016; Lakens & Etz, 2017; for examples, see Kreps, Laurin, & Merritt, 2017; Kirby & Kaiser, 2020; Kirby et al., 2020; Handron et al., 2017). The meta-analysis includes all included measures of biased perceptions of attraction patterns, including those for which we did not find an effect. We report continuous moderator analyses (Exploratory analysis 2) for



individual studies, rather than meta-analytically, because they were not included consistently across all three studies.

Full materials and data sets for all studies, including the pilot studies, are available at [https://osf.io/c528r/?view\\_only=8a1521f2b3f747ea97164f84341402db](https://osf.io/c528r/?view_only=8a1521f2b3f747ea97164f84341402db).

### **Participants**

In total, 787 participants took part in our studies. In Study 1, three undergraduate students recruited participants through personal contacts and social media. In Studies 2-3, we recruited participants through the Prolific website. Goal sample sizes (200, 256, and 336 for Studies 1-3, respectively) were based on power analyses (see online supplement) and pre-registered for Studies 2-3.

Across all studies, we excluded participants who identified as anything other than straight/heterosexual or lesbian/gay (90 in Study 1, 13 in Study 2, 8 in Study 3) as well as participants who did not correctly remember that the target was bisexual (4 in Study 1, 3 in Study 2, 16 in Study 3). In Study 1, we further excluded seven participants because they were under the age of 18, and in Study 3, we excluded two participants who could not correctly remember the target's gender/sex.

Of the final sample, 52.61% identified as women, 45.86% identified as men, and 1.53% identified as non-binary; 73.28% identified as heterosexual and 26.72% identified as lesbian or gay. In terms of nationality, the sample was primarily British (68.65%), US American (13.29%), and Canadian (7.74%). The average age of the sample was 30.77 ( $SD = 11.47$ ). For information regarding sample characteristics for the individual studies, see Table 1.

## **Design and Procedure**

We advertised the studies as examining perceptions of online dating profiles. After indicating their consent, participants were randomly assigned to the female target or male target condition and presented with the dating profile of “Sam,” who identified as bisexual. We manipulated gender/sex through profile pictures as well as explicitly stating their gender/sex in the profile. For Study 1, we chose the images based on a pilot study in which 38 participants rated 5 female and 5 male faces, which we selected from an AI-generated face database (Karras, Laine, & Aila, 2018). The chosen pictures were matched on attractiveness and gender typicality (i.e. the femininity of the female target picture was similar to the masculinity of the male target picture). For Studies 2-3 we used stimulus sampling and selected three pictures of women and three pictures of men from the same AI-generated face database. The images were matched on attractiveness, gender typicality, and age based on ratings obtained through another pilot Study in which 118 participants rated a random selection of 15 out of 30 faces. In addition to gender/sex and sexual orientation, the profile contained some gender-neutral information which was held constant across conditions.

After reading through the profile, participants responded to our key dependent variables, attention checks, and moderators. Lastly, they provided demographic information.

## **Measures**

Detailed information about all measures is shown in Table 2.

**Attraction measures.** In all three studies, participants rated the target’s sexual and romantic attraction to both the same and opposite gender/sex. The same gender/sex and opposite gender/sex attraction items were displayed on separate pages and in a randomized order. We calculated the attraction score by first creating a mean separately for opposite-sex and same-sex attraction. We then subtracted opposite-sex attraction from same-sex attraction,

so that positive values indicated more attraction to the same gender/sex, while negative values indicated more attraction to the opposite gender/sex.

In Studies 2 and 3, we also included two binary choice measures of attraction, one for romantic encounters and one for sexual encounters. In Study 2, we asked “Who do you think Sam is more likely to end up with in a long-term relationship?” (romantic encounter choice) and “On a typical night out, who do you think Sam is more likely to go home with?” (sexual encounter choice) with the response options “a man” and “a woman”, which we re-coded as same gender/sex or opposite gender/sex. In Study 3, we instead presented participants with pictures of three women and three men (matched in attractiveness based on the pilot study for Study 2). Participants then indicated who they believed the target was most interested in having a long-term relationship with and who the target was most likely to go home with on a typical night out. We then coded their selection as same gender/sex or opposite gender/sex.

**Explicit bisexual erasure measure.** In addition to the measures above, we included explicit bisexual erasure measures in Studies 2 and 3, to investigate whether these would show a similar pattern as the attraction measures in terms of whether bisexual women and men face similar or different levels of erasure. We developed four items about the erasure of female and male bisexuality respectively, but excluded the item “there are many women who have been intimate with other women even though they are straight” from the erasure of bisexual women scale to improve reliability of the scale.

**Moderator variables.** We included a range of exploratory moderator variables across the three Studies. In Study 1, we included sexual orientation essentialism and political ideology to test whether these ideologies affect the extent to which male and female bisexuality are erased.

In Study 3, we included several measures of androcentrism, namely a measure of valuing masculinity (here measured as agency) over femininity (here measured as

communality), hostile sexism, and attitudes toward men compared to women. For the valuing masculinity measure, we calculated the means for agency and communality and then subtracted the extent to which participants valued communality from the extent to which they valued agency. Thus, higher values indicate higher levels of valuing masculinity. For the attitudes toward men measure, we subtracted attitudes toward women from attitudes toward men (both measured using a feeling thermometer). Thus, higher values indicate relatively more positive attitudes towards men. Additionally, we included measures of instability of bisexuality and of the belief that men are more promiscuous than women.

### **Results**

Descriptive statistics for all measures are displayed in Table 3.

#### **Hypothesis Testing**

Statistics for the individual studies testing H1 and H2 are reported in Tables 4-7. Table 4 reports the results of a series of 2 (Target gender/sex: Female vs. Male) X 2 (Participant sexual orientation: Lesbian/gay vs. Heterosexual) ANOVAs on relative perceived attraction (continuous measure) for Studies 1 and 2. It reports results of a one-way ANOVA (Target gender/sex: Female vs. Male) for Study 3 because numbers of lesbian and gay participants were very low in this study. These ANOVAs test whether bisexual women, compared to bisexual men, are perceived as more attracted to the opposite gender/sex (H1), and whether this perception is equally endorsed by lesbian and gay participants compared to heterosexual participants. Table 5 reports the results of a series of logistic regressions for the romantic and sexual encounter choice measures, also testing H1.

Table 6 reports the results of a series of one-sample t-tests (split by target gender/sex and, for Studies 1 and 2, by participant sexual orientation) testing whether perceived attraction was above or below zero for the continuous attraction measure, thereby testing whether bisexual women and men were perceived as more attracted to one gender/sex than

the other (H2). Lastly, Table 7 reports the results of a series of Chi-squared goodness of fit tests testing whether perceived attraction differed from a 50/50 distribution in the expected direction (H2) for the romantic and sexual encounter choice measures.

As shown in Tables 4-7, individual studies showed some inconsistencies. For example, Study 1 showed moderation by sexual orientation. However, this did not replicate in subsequent studies or in a meta-analytic test of moderation. To facilitate more robust conclusions, we present our hypothesis tests below meta-analytically.

### **Meta-Analysis**

#### ***Analytic Strategy***

To examine whether bisexual men, compared to bisexual women, would be perceived as more interested in same versus opposite gender/sex partners (H1), we meta-analyzed four sets of measures separately for male and female bisexual targets: (a) perceptions of target's attraction to the same versus opposite gender/sex, (b) perceptions of target's sexual encounter choices, (c) perceptions of target's romantic encounter choices, (d) measures assessing erasure of bisexual men and bisexual women in general. For (a), we calculated a Cohen's *d* effect size subtracting estimates of opposite from same gender/sex attraction separately for male and female bisexual targets (values above 0 indicated more same sex attraction). For (b) and (c), we were interested in estimating an effect size for a chi-squared goodness-of-fit test, so we calculated an odds ratio that compared the number of same gender/sex versus opposite gender/sex chosen for a particular target to 50% chance. To compare to 50% chance, we used frequencies that added up to the same *N* as our data but had an equivalent number choosing same and opposite gender/sex. For (d), we calculated a Cohen's *d* effect size for change score measures (Morris & Deshon, 2002) to compare male relative to female erasure (values above 0 indicated more erasure of bisexual men than women).

For meta-analyses (a), (b), and (c), we used the MetaF.sps SPSS macro (Wilson, 2005) to conduct a sub-group analysis comparing the effect size for male versus female bisexual targets. For meta-analysis (d), we used the MeanES.sps SPSS macro (Wilson, 2005). In all cases, we weighted the analysis with inverse variance and used fixed effects because we were only interested in describing the present studies and methods were similar across studies.

To examine moderation by participant gender and sexual orientation, we had to modify the (a), (b), and (c) effect sizes above so that the comparison of male to female targets was captured within the effect size. We recalculated these so that higher values corresponded to perceptions of more same gender/sex attraction and interest for male compared to female targets.

**Results.** We first examined whether bisexual men, compared to bisexual women, would be perceived as more interested in same versus opposite gender/sex partners (H1). Indeed, participants judged bisexual men as relatively more attracted to same gender/sex partners than bisexual women,  $Q_B = 32.41, p < .001$ . Likewise, they judged bisexual men as more likely to choose someone of the same gender/sex for a sexual encounter compared to bisexual women,  $Q_B = 6.73, p = .009$ . However, there was no difference in judgments of bisexual women's versus men's likelihood of choosing same gender/sex partners for a romantic relationship,  $Q_B = 0.15, p = .702$ .

As further support for these findings, we included a measure in which we directly asked participants about their beliefs about bisexual men and women. Participants endorsed the idea that bisexuality is implausible for men more than they did for women,  $\bar{d} = 0.85, 95\% \text{ CI } [0.75 \text{ to } 0.96], p < .001$ .

Next, we separated these effects by male and female bisexual targets to examine whether bisexual women and men were perceived as more interested in the same gender/sex, opposite

gender/sex, or neither. Bisexual men were perceived as significantly more attracted to the same gender/sex (men) than opposite gender/sex (women),  $\bar{d} = 0.20$ , 95% CI [0.16 to 0.25],  $p < .001$ , but bisexual women were perceived as having similar levels of attraction to both same gender/sex partners (women) and opposite gender/sex partners (men),  $\bar{d} = -0.03$ , 95% CI [-0.10 to 0.04],  $p = .369$ . However, for sexual activity, both bisexual men,  $\overline{OR} = 2.91$ , 95% CI [2.03 to 4.17],  $p < .001$ , and women,  $\overline{OR} = 1.51$ , 95% CI [1.07 to 2.12],  $p = .018$ , were perceived as significantly more likely to choose someone of the same gender/sex over the opposite gender/sex for a sexual encounter. Finally, there was no difference in judgments of the likelihood of choosing same versus other gender/sex partners for a romantic relationship for either men,  $\overline{OR} = 1.13$ , 95% CI [0.84 to 1.51],  $p = .425$ , or women,  $\overline{OR} = 1.03$ , 95% CI [0.75 to 1.43],  $p = .840$ . None of the effects reported were moderated by participant sexual orientation,  $ps > .109$ , or gender/sex,  $ps > .446$ .

### **Moderators**

We included a range of exploratory moderators in Studies 1 and 3 (see Table 3 for descriptive statistics). To test whether these moderators affected the perceived same-sex versus opposite-sex attraction of female and male targets, we used the PROCESS macro for SPSS (v3.2, Model 1; Hayes, 2018). This approach uses logistic regression for dichotomous outcomes such as the romantic and sexual encounter choice measures of Study 3. As can be seen in Tables 8 and 9, none of the interaction terms were significant.

### **Discussion**

Across three studies, we found evidence for biased perception of bisexual men's attraction patterns, while the evidence for biased perception of bisexual women's attraction patterns was mixed, highlighting how sexual orientation and gender/sex intersect to create unique biases and forms of prejudice. More specifically, bisexual men were perceived as more same gender/sex attracted than opposite gender/sex attracted. Bisexual women, on the

other hand were seen as equally attracted to members of the same and the opposite gender/sex with the exception of the binary sexual attraction measure, for which we unexpectedly found that women were seen as more attracted to women rather than men.

The pattern of stronger erasure for bisexual men than women was mirrored in our findings regarding the explicit erasure of bisexual women and men, where endorsement of the erasure items for bisexual men was higher than the endorsement of the erasure items for bisexual women. While these findings contradict qualitative accounts and theoretical arguments, that bisexual women are perceived to be heterosexual (Alarie & Gaudet, 2013), they fit with findings showing that female bisexuality is generally more accepted than male bisexuality (Dodge et al., 2016), and with a clearer pattern of the erasure of bisexual men, compared to bisexual women, among lesbian and gay individuals (Matsick & Rubin, 2018).

At the same time, bisexual women may still face erasure in ways that were not well captured by our research methodology. While the means of the explicit erasure of bisexual women was below the midpoint, there was considerable variation in the endorsement of these measures and, indeed, about 20% of participants scored above the midpoint in this measure. One limitation of our methodology was that it only captured a single time point – participants may have responded differently about bisexual women's sexual orientation trajectories over their life course. Similarly, it is possible that female bisexuality is erased more often in more ambiguous contexts in which the sexual identity of a person is not known (e.g., when seeing two women kissing).

Our attraction measures included both sexual and romantic attraction. When examining these separately (i.e. in our binary measures), we only found support for our predictions for sexual attraction for bisexual men. Indeed, for bisexual women the pattern was opposite to our predictions as, similar to bisexual men, they were perceived as more attracted to members of the same sex. It could be that this was a reflection of the specific item



we used (going home with someone for casual sex). Perhaps going home with a woman was seen as less risky for the female target or perhaps participants were aware of the fact that casual heterosexual sex is often not particularly satisfying for women (see Conley et al., 2014).

We investigated a range of moderators, but did not find evidence for moderation by any of the included variables. This suggests that the phenomenon is widespread and common even among sexual minorities, a fact that highlights the importance of the topic. At the same time, the lack of moderation by variables such as sexual orientation essentialism and different measures of androcentrism is somewhat puzzling and leaves open questions about the mechanisms that underlie bisexual erasure.

Future research should explore these questions further. For example, instead of focusing on individuals' levels of sexist and androcentric beliefs, research could instead examine the extent to which participants view such beliefs as widespread. Even if participants themselves do not endorse sexist views, they may believe that others do and that such views would contribute to attraction levels. Similarly, if participants believe that ideals of hegemonic masculinity (i.e. the belief that men should be dominant and eschew femininity; see Smith et al., 2015) are widespread, they have more reason to believe that men may downplay their same-sex attraction and thus “adjust” their perceptions of men accordingly.

### **Theoretical and Practical Implications**

The majority of psychological research on prejudice against sexual minorities focuses on prejudice against gay individuals (and gay men in particular) or treats sexual minorities as a homogenous group (Dodge et al., 2016), despite the fact that bisexual people (a) form the largest group under the LGB umbrella (Diamond & Rosky, 2016; Gates, 2011; Herbenick et al., 2010; but see Bailey et al, 2016) and (b) are faced with unique stereotypes and types of prejudice (see Dodge et al., 2016). Our findings add to the understanding of these unique

stereotypes and the resulting erasure of bisexuality and is the first to study these issues among heterosexual and lesbian/gay participants while taking the intersection of sexual orientation and gender/sex into account, distinguishing between the erasure of bisexual women and bisexual men.

Advancing such understanding is important, as the denial of one's identity has negative effects such as low self-esteem (Cheryan & Monin, 2005; Townsend et al., 2009), which may be one reason that bisexual individuals report particularly poor health outcomes, not just compared to heterosexual people, but also compared to lesbian and gay individuals (Dodge & Sandfort, 2007). Indeed, *minority stress theory* (Meyer, 2003) directly links experiences of stigma and prejudice to negative mental health outcomes. Here, we show that in addition to the general negative attitudes bisexual individuals face from both within and outside of the LGBTQ+ community (Mulick & Wright, 2002), they also face a unique form of stigma – the erasure of their identities. Thus, interventions to improve the lives of bisexual people should focus not only on improving attitudes toward them, but also foster the knowledge that bisexuality is a valid sexual identity.

### **Limitations**

Our findings are not without limitations. First, while our meta-analysis revealed patterns in line with the erasure of bisexual men, results were inconsistent across studies. For example, we did not find evidence for bisexual erasure in Study 3. Clearly, more research is needed to understand the circumstances under which bisexual erasure does or does not manifest.

Moreover, we only investigated one out of many different biases that feed into bisexual erasure – the perception of same gender/sex and opposite gender/sex attraction in a context in which sexual identity is known (indeed, we excluded all participants who did not recall the target's sexual identity correctly). Arguably, bisexual erasure is likely more

pronounced in contexts in which sexual identity is not known or among people who pay little attention to information about someone's sexual identity.

Additionally, we used a target who was single, rather than in a relationship. It is likely that information about a same gender/sex or opposite gender/sex current partner may have changed our findings, with people inferring attraction from the current partner's gender/sex, even if the target's sexual identity (i.e. bisexuality) is known. Similarly, the targets we used were in their 20s, which may have affected results. For example, participants may have assumed that the relatively young targets, particularly young men, were still experimenting and just had not discovered their true gay identity yet, whereas older targets would be seen as truly bisexual. However, there is no research, to our knowledge, showing that older bisexual individuals face less erasure or prejudice than young bisexual individuals.

### **Conclusion**

We have shown that even when sexual identity is explicitly stated, bisexual men are assumed to be more attracted to other men than to women. This assumption made by both heterosexuals as well as lesbian/gay individuals, illustrating once more that bisexual people – in particular bisexual men - face marginalization not just in heteronormative contexts, but also in the LGBTQ+ community. As identity denial has important psychological consequences and bisexual people consistently show more negative mental health outcomes than other sexual minorities, interventions that focus on the acceptance of bisexuality need to focus not only on improving attitudes towards bisexual people, but also on eradicating bisexual erasure, making clear that bisexuality is as valid and meaningful as other sexual identities.

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## Tables

Table 1

*Demographic Characteristics Across Studies*

Characteristic	Study 1	Study 2	Study 3
Gender/sex (N)			
Woman	118 (61.46%)	124 (48.25%)	171 (50.59%)
Man	66 (34.38%)	127 (49.42%)	167 (49.41%)
Non-binary	7 (3.65%)	5 (1.95%)	-
Not specified	1 (0.52%)	1 (0.39%)	-
Sexual identity (N)			
Lesbian/gay	71 (36.98%)	128 (49.80%)	11 (3.25%)
Heterosexual	121 (63.02%)	129 (40.19%)	327 (96.75%)
Nationality (N)			
UK	102 (53.13%)	171 (66.54%)	259 (76.63%)
US	32 (16.67%)	34 (13.23%)	37 (10.95%)
Canada	3 (1.56%)	36 (14.01%)	21 (6.21%)
Other	54 (28.13%)	16 (0.06%)	21 (6.21%)
Not specified	12 (6.25%)	-	-
Age in years			
<i>M</i>	27.29	30.79	32.60
<i>SD</i>	11.56	10.84	11.46

Table 2  
*Measures*

Measure name	Study	Number of items	Response scale	A	Example item
Same-sex / opposite-sex attraction	1-3	9	1 (very unlikely) to 7 (very likely)	.93-.96	How likely do you think this person is to start a relationship with a member of the same sex?
Erasure of bisexual women	2-3	3	1 (strongly disagree) to 7 (strongly agree)	.70	Most “bisexual” women will end up in a heterosexual marriage.
Erasure of bisexual men	2-3	4	1 (strongly disagree) to 7 (strongly agree)	.80-.82	Most “bisexual” men just haven’t come out as gay yet.
Sexual orientation essentialism (adapted from Arseneau et al., 2013)	1	9	1 (strongly disagree) to 7 (strongly agree)	.66	Sexual orientations are categories with distinct and clear boundaries.
Political ideology	1	1	1 (very left wing / progressive) to 7 (very right wing / conservative)	-	Please indicate how you define your political views.
Instability of bisexuality (adapted from Mohr & Rochlen, 1999)	3	6	1 (strongly disagree) to 7 (strongly agree)	.93	Most people who identify as bisexual have not yet discovered their true sexual orientation.
Valuing masculinity	3		1 (not very valuable) to 7 (extremely valuable)		
Value of agency		5		.74	Ambition
Value of communality		5		.77	Compassion
Hostile sexism (short form; Rollero et al., 2014)	3	6	1 (strongly disagree) to 7 (strongly agree)	.91	Women seek to gain power by getting control over men.
Attitudes	3		0 (cold/unfavourable) to 100 (warm/favourable)		
Toward women		1		-	Men. Where do you place them on the scale?
Toward men		1		-	Women. Where do you place them on the scale.
Male promiscuity	3	6	1 (strongly disagree) to 7 (strongly agree)	.87	Men are generally open to having sex with many different people

*Note.* Items for which no reference is provided were developed by the authors for the purpose of the study.

Table 3  
*Descriptive Statistics*

Measure name	Study 1		Study 2		Study 3	
	M	SD	M	SD	M	SD
Same-sex / opposite-sex attraction	-0.15	0.81	0.11	1.04	0.10	0.80
Erasure of bisexual women			3.10	1.29	3.18	1.18
Erasure of bisexual men			4.09	1.38	4.05	1.30
Sexual orientation essentialism	2.99	0.74				
Political ideology	3.83	1.85				
Instability of bisexuality					3.13	1.45
Valuing masculinity					-0.68	0.85
Hostile sexism					3.09	1.51
Attitudes towards women vs men					-8.62	38.00
Male promiscuity					4.59	1.23

Table 4  
*ANOVA Results for Individual Studies*

	Df	<i>F</i>	<i>p</i>	Effect size
Study 1				
Target gender/sex	1, 186	9.91	.002	.38
Participant sexual orientation	1, 186	1.49	.224	.16
Target gender/sex X participant sexual orientation	1, 186	5.01	.026	.03
Study 2				
Target gender/sex	1, 253	7.97	.005	.35
Participant sexual orientation	1, 253	3.14	.078	.21
Target gender/sex X participant sexual orientation	1, 253	1.50	.222	.01
Study 3				
Target gender/sex	1, 336	0.05	.817	.03

*Note.* Effect size refers to Cohen's *d* for main effects and partial eta-squared for interaction effects.

Table 5  
*Logistic Regression Results for Individual Studies*

	Sexual encounter choice			Romantic encounter choice		
	Wald	<i>p</i>	<i>OR</i>	Wald	<i>p</i>	<i>OR</i>
Study 2						
Target gender/sex	4.94	.026	2.24	0.17	.681	1.16
Participant sexual orientation	1.06	.303	0.69	0.10	.749	0.89
Target gender/sex X participant sexual orientation	0.34	.559	1.35	0.98	.322	1.65
Study 3						
Target gender/sex	3.75	.053	1.69	1.92	.166	0.81

*Note.* Target gender/sex was coded such that 0 = female target and 1 = male target. Participant sexual orientation was coded such that 0 = lesbian/gay and 1 = heterosexual. Choice was coded such that 0 = same gender/sex chosen and 1 = opposite gender/sex chosen. *OR* = Odds ratio.

Table 6  
*One-Sample t-test Results from Individual Studies*

	<i>t</i>	<i>df</i>	<i>p</i>	Effect size
Study 1				
Female target				
Lesbian/gay participants	-3.08	33	.004	-0.53
Heterosexual participants	-1.84	59	.071	-0.24
Male target				
Lesbian/gay participants	0.52	35	.609	0.09
Heterosexual participants	-0.53	59	.595	-0.07
Study 2				
Female target				
Lesbian/gay participants	-1.38	65	.171	-0.17
Heterosexual participants	-0.23	66	.818	-0.03
Male target				
Lesbian/gay participants	0.75	61	.457	0.10
Heterosexual participants	3.34	61	.001	0.42
Study 3				
Female target	1.75	169	.082	0.13
Male target	1.67	167	.098	0.13

*Note.* Effect size refers to Cohen's *d*.

Table 7  
*Chi-squared Goodness of Fit Test Results from Individual Studies*

	Sexual attraction			Romantic attraction		
	$X^2$	$p$	Odds Ratio	$X^2$	$P$	Odds Ratio
Study 2						
Female target						
Lesbian/gay participants	1.25	.264	0.76	1.86	.172	0.71
Heterosexual participants	6.58	.01	0.52	3.36	.067	0.63
Male target						
Lesbian/gay participants	4.13	.042	1.70	0.58	.446	0.82
Heterosexual participants	3.16	.075	1.58	0.58	.446	1.21
Study 3						
Female target	41.51	< .001	2.95	4.61	.032	1.39
Male target	74.67	< .001	5.00	1.93	.165	1.24

*Note.* Odds ratios refer to the comparison of the observed distribution to a 50/50 distribution. Values below 1 indicate a higher likelihood to choose an opposite gender/sex partner, while values above 1 indicate a higher likelihood to choose a same gender/sex partner.



Table 8

*Results from Moderation Analyses on Continuous Attraction Measure*

Moderator	$\Delta R^2$	$F$	df	$p$
Essentialism	< .01	0.03	1, 185	.865
Political ideology	< .01	0.33	1, 178	.568
Instability of bisexuality	< .01	0.95	1, 334	.330
Valuing masculinity	< .01	1.51	1, 334	.220
Hostile sexism	< .01	0.15	1, 334	.703
Attitudes towards men vs. women	< .01	< 0.01	1, 334	.980
Male promiscuity	< .01	0.19	1, 334	.664

Table 9

*Results from Moderation Analyses on Encounter Choice Measures*

Moderator	Romantic encounter choice			Sexual encounter choice		
	$\beta$	$z$	$p$	$\beta$	$z$	$p$
Instability of bisexuality	-.25 [-.55, .05]	-1.62	.106	-.20 [-.58, .18]	-1.04	.297
Valuing masculinity	.18 [-.35, .72]	0.68	.497	.22 [-.45, .89]	0.64	.524
Hostile sexism	-.02 [-.31, .26]	-0.15	.883	.10 [-.25, .45]	0.46	.648
Attitudes towards men vs. women	-.01 [-.02, .01]	-1.03	.303	-.01[-.02, .01]	-0.99	.323
Male promiscuity	.08 [-.27, .44]	0.46	.643	.26 [-.18, .71]	1.17	.243

*Note.* Values in brackets refer to 95% confidence intervals. Regression coefficients are on a log-odds metric.