

Heteronormative Definitions of Sex: The Roles of Androcentrism, Phallocentrism, and Objectification

Brendan M. Fee¹, Kira K. Means², and Thekla Morgenroth²,

¹The Graduate Center, City University of New York

²Purdue University

Author Note

Brendan M. Fee  <https://orcid.org/0009-0005-3729-9100>

Kira K. Means  <https://orcid.org/0000-0001-7172-4928>

Thekla Morgenroth  <https://orcid.org/0000-0001-9876-5017>

The first author uses he/him pronouns, the second author uses she/her pronouns, and the third author uses they/them pronouns. Correspondence should be addressed to Brendan Fee, The Graduate Center, City University of New York, New York, New York, USA. Email: bfee@gradcenter.cuny.edu. Word count: 8,592

Abstract

Heteronormativity is the presumption of cisheterosexuality that establishes two discrete, assigned-at-birth sexes which determine one's gender, and that prescribes the behaviors and roles permitted for women and men, including in the context of sexual intimacy. Under heteronormativity, "real" sex is narrowly defined as consisting of a man penetrating a woman's vagina with his penis. Empirical research has demonstrated that this definition of sex is widely adopted and reproduced both at the societal and interpersonal levels. We sought to investigate specific sub-ideologies of heteronormativity—androcentrism, phallocentrism, and sexual objectification—that might clarify the processes through which people determine what behaviors are seen as "real" sex and what behaviors are not. To accomplish this, we explored the extent to which participants defined a range of heteronormative and non-heteronormative behaviors as sex, and the ways in which proximity to heteronormativity (among targets and participants) might systematically influence those perceptions. Across three multi-national studies (total $N = 1,337$), participants defined phallocentric behaviors (involving a penis or phallus) and objectifying behaviors (involving a woman as a "passive" partner) as sex to a greater extent compared to non-phallocentric and non-objectifying behaviors. Endorsement of objectification moderated this relationship, such that straight men high in appearance-based objectification gave lower ratings of sex to non-heteronormative behaviors. Implications and future directions are discussed.

Keywords: Heteronormativity, definitions of sex, androcentrism, phallocentrism, objectification

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“Ah, penetration! So fundamental and so specific that not even dildo-in-vagina, let alone orgasmic oral sex, counts as real sex. The insistence on sex = penis-in-vagina intercourse is a crucial underpinning of heterosexualism as discourse and institution, cultural form and language. That we authors choose to give this activity its full name—penis-in-vagina intercourse—whereas it normally needs no linguistic marker, illustrates its institutional status as the generic sex act.” (Myerson et al., 2007, p. 92).

Heteronormativity, as extensively detailed by feminist and Queer¹ critical theorists, is the institutionalized presumption of cisheterosexuality; it establishes (as naturally occurring) and enforces (culturally and legally) the existence of two discrete, opposing, innate sexes (female and male) which determine one’s gender (woman or man) and the behaviors and roles permitted within each of these genders (feminine or masculine; Berlant & Warner, 1998; Butler, 1997, 2002; Ingraham, 1994; Jackson, 2004, 2006; van der Toorn et al., 2020). Among these prescribed roles, heteronormative behaviors in romantic and sexual relationships are of central importance (e.g., complementarity; Hamilton, 2014), as heteronormativity privileges heterosexual relationships above all other expressions of human desire (Eaton & Matamala, 2014; Martin, 2009) and stresses the essential, reproductive capacities of heterosexual couplings (Jackson,

¹ Throughout this manuscript, we capitalize Queer and not straight because Queer refers to a group identity that functions similarly to a racial identity (Native American, Asian, etc.). We apply similar logic as the capitalization of Black and not white (see <https://www.ap.org/the-definitive-source/announcements/why-we-will-lowercase-white/>; <https://www.cjr.org/analysis/capital-b-black-styleguide.php>). Straightness does not function as an identity in the same way as Queerness (a marginalized identity with a distinct culture); straight is the dominant group and is deemed “default” in a heteronormative society.

2006). Importantly, heteronormativity describes a large, interrelated cluster of ideologies that collectively function to reify existing hierarchies of gender and sexuality (such as the gender/sex binary, cisnormativity, patriarchy, etc.).

As illustrated in the quotation above, a key aspect of this dominant ideology is the narrow definition of penile-vaginal intercourse (PVI) as “*the generic sex act*”, which minimizes the legitimacy and importance of non-coital sexual behaviors (Myerson et al., 2007, p.92; Reinholtz et al., 1995) and delimits the sexual agency of women, Queer individuals, and anyone else who is unwilling or unable to participate in PVI (Diorio, 2016). PVI-as-sex upholds the idea that the man (and/or the phallus/penis) is the “activating agent” of sex, and that the female body is “only activated when penetrated” (Fahs & McClelland, 2016, p. 398).

Though the pervasiveness of the idea that PVI is “real” sex is well documented (Gute, Eshbaugh, & Wiersma, 2008; Horowitz & Spicer, 2013; Pitts & Rahman, 2001; Sanders & Reinisch, 1999), the mechanisms of heteronormative ideology that inform narrow definitions of sex are less clear. Potential sub-ideologies of heteronormativity (i.e., androcentrism, phallocentrism, and sexual objectification) are worth examining, as they might provide more specific insights on the salient belief systems people rely on when they endorse narrow definitions of sex. Through this approach, we sought to examine perceptions of heteronormative and non-heteronormative sexual behaviors, the extent to which participants define different behaviors as sex, the ways in which proximity to heteronormativity (among both targets and participants) influences those perceptions, and the psychological processes underlying the endorsement of narrow definitions of sex.

Heteronormativity and Permitted Sexual Behaviors

Heteronormative sex prototypically consists of an “*active*” man (whose masculinity is affirmed by being sexually active) penetrating, with his penis, a “*passive*” woman (whose femininity is affirmed by being sexually attractive to men²; Eaton & Matamala, 2014; Jackson, 2004; Holland, 2000). As such, heteronormative gender roles are deeply intertwined with sexual agency—men are encouraged to assume a dominant, empowered (active) sexual role, where women are relegated to a disempowered, accommodating (passive) role (Kiefer & Sanchez, 2007; Fahs & McClelland, 2016). At the heart of this narrow definition is the basic tenet that man is the agentic *subject* of sexual relations and woman is the compliant *object*.

Behaviors not involving PVI (i.e., virtually all Queer sex, but also “role-reversing” heterosexual sexual behaviors such as woman-on-man penetration) are proscribed (Myerson et al., 2007) by heteronormativity. Further, non-coital heterosexual sexual behaviors such as oral sex and manual stimulation are often colloquially labeled as “foreplay” and are presumed to be inferior—a lesser stand-in or a lead up to penetration, the real thing (Bansal et al., 2023). Among heterosexual people, it is seen as aberrative to not enjoy PVI (Diorio, 2016).

Heteronormative definitions of sex have a wide array of negative consequences. For example, the legal scope of rape in many Western countries was, until recently, limited to forced PVI. Other forms of assault (e.g., forced oral sex, forced genital fondling, etc.) often lacked legal grounding as rape (Peterson & Muehlenhard, 2004; Reinholtz et al., 1995). This legal policy is simultaneously reflected in, and a reflection of, lay perceptions of rape (Conaghan, 2019; Siegel et al., 2021). Adams-Clark and Chrisler (2018) found that participants exhibited less victim blaming and minimization toward rape victims involving PVI than toward rape victims involving

² Note: We place scare quotes on the words “active” and “passive” to call attention to (while critiquing) the heteronormative, essentialist tendency to designate one partner (the man, the one penetrating) as agentic or dominant and the other as submissive (the woman, the one being penetrated).

forced oral sex or digital sex. Further, rape victims are less likely to consider themselves as having been raped if they do not consider what happened to them as “real” sex (i.e., forced PVI; Peterson & Muehlenhard, 2004). Although the U.S. government broadened its definition of rape in 2012 to include more than just forced PVI (United States Department of Justice, 2012), it remains fairly narrow. Further, despite incremental reforms to legal codes, pervasive rape myths (Edwards et al., 2011) and rape culture (Kessel, 2022) continue to justify and socially legitimize sexual violence (Siegel et al., 2021). This narrow construction of sex by state authority and lay perception alike harms victims of sexual harassment and assault.

Within relationships, heteronormative definitions of sex can also reduce sexual comfort and pleasure. PVI can be painful or otherwise unpleasurable for women (Ayling & Ussher, 2008; Diorio, 2016; Banaei et al., 2021; Bergeron et al., 2011; van Anders et al., 2022). However, as sex is normatively presupposed to feature PVI, women in intimate relationships with men are encouraged to subordinate their sexual pleasure for the benefit of men, who often expect penetrative sex (Donaldson & Meana, 2011; Farmer & Meston, 2007; Tosh & Carson, 2016). Indeed, women have been found to feel guilt and shame for experiencing pain during PVI, considering themselves “inadequate” as a partner and as a woman (Ayling & Ussher, 2008).

Given its pervasiveness and its consequences, the processes underlying heteronormative definitions of sex are worth investigating empirically. In previous quantitative research examining definitions of sex, participants typically viewed a list of behaviors and indicated whether each behavior “counted” as sex (see Sanders & Reinisch, 1999). Perhaps unsurprisingly, PVI has received near-total endorsement as sex across the body of this research (Gute, Eshbaugh, & Wiersma, 2008; Horowitz & Spicer, 2013; Pitts & Rahman, 2001; Sanders & Reinisch, 1999). However, researchers have more recently identified that individual definitions of sex are often

ambiguous and are flexible in relation to motivated definitions of sex (Peterson & Muehlenhard, 2007). For example, labeling behaviors as sex (or not) can be influenced by the perceived social consequences (e.g., social desirability, self-image protection) of doing so (Den Haese & King, 2022; Peterson & Muehlenhard, 2007; Sewell & Strassberg, 2015).

Given evidence in support of contextual fluidity in definitions of sex and the dearth of quantitative research regarding the influence of heteronormative ideology on these definitions, we looked to identify possible factors that explain variance in definitions of sex within the context of hegemonic heteronormativity. There are several possible, non-mutually exclusive sub-ideologies within heteronormativity that could explain why heteronormative sexual behaviors (e.g., PVI) might be defined as sex to a greater extent, while non-heteronormative sexual behaviors might be seen as failing to meet that distinction. Indeed, these potential sub-ideologies of heteronormativity are also sub-ideologies (along with others like cisgenderism and sexism) of related belief systems discussed previously (e.g., patriarchy). Here, we focus on how (1) androcentrism and (2) phallocentrism are salient sub-ideologies of heteronormativity that could shape perceptions of the “active” partner, as well as how (3) the sexual objectification of women is a sub-ideology of heteronormativity that shapes perceptions of the “passive” partner across different sexual encounters. The relationship between the three sub-ideologies of heteronormativity we examined, the expectations resulting from these ideologies in the context of sexual encounters, and heteronormative definitions of sex are illustrated in Figure 1.

The “Active” Partner

One set of possible factors involves perceptions of the masculine attributes of the “active” partner. Androcentrism describes the centering of men and their needs throughout society; it endows men with agency and humanity, as the default standard of gender, and delimits

women as other (e.g., the use of *he* as the gender-neutral singular pronoun; Bailey et al., 2018; Bem, 1993; Hegarty et al., 2013).

As a sub-ideology of heteronormativity, we argue that androcentrism specifically speaks to the imperative of male agency and subjecthood that is denied to everyone else, illustrated in the socio-linguistic context, but extending to the real world (Martin & Papadelos, 2017; McConnell-Ginet, 2010). Thus, androcentrism could result in participants declining to define as sex behaviors in which a man is not the “active” partner, capturing that the default definition of sex is one in which man has assumed the role of grammatical and practical subject (and woman the object). For example, a participant high in androcentric views might be reluctant to define a sexual act involving two women as sex. This participant has come to associate *sex* with *an “active” man engaging in a sexual act*; they therefore might not view any sexual interaction that does not involve this as sex.

Alternatively (or jointly), phallocentrism could play a role in participant heteronormative definitions of sex. Phallocentrism, as distinguished from (but related to) androcentrism, is centered on the phallus as a signifier, “the supreme symbol of masculine power and, concurrently, of feminine lack” (Rine, 2010, p.1); the lack of completeness and the accompanying desire to fill this lack (Lacan, 2006 [1966]; Luepnitz, 2003). A phallogentric world, then, is a binary world that organizes itself around what (cis)men have and what (cis)women do not; the phallus symbolizes this partition. We contend that phallogentricism, within the larger constellation of roles demanded by heteronormativity, is a sub-ideology that functions to invest the penis (phallus) with agency—specifically, the agency to initiate, dominate, and penetrate (Fahs & McClelland, 2016; Pitagora, 2019). This serves the broader heteronormative aims of empowered masculinity and male subjecthood. As such, phallogentricism is clearly related

to androcentrism—however, it is possible that the investiture of the penis/phallus is not entirely equivalent to the investiture of man with agency.

Though widely observed in empirical work (see Dworkin & O’Sullivan, 2005; Impett & Peplau, 2003; Jeffrey & Barata, 2017; Laan et al., 2021; Schatzel-Murphy et al., 2009), disentangling androcentric and phallogentric elements of heteronormative sexual perceptions and behaviors is a difficult theoretical and empirical task, one that to our knowledge has not yet been attempted. As PVI can be understood to align with androcentrism and phallogentrism, one possible approach is to label behaviors involving/focusing on a penis/phallus as phallogentric, and behaviors involving/focusing on a man as androcentric. These distinctions are, of course, not mutually exclusive, reflecting the multidimensionality of heteronormative expectations. Operationalizing phallogentric sex in this manner, however, might meaningfully distinguish it from androcentric sex in both penetrative and non-penetrative contexts, by perhaps invoking the symbolic power of the phallus (its status as “activating agent”), with or without it being attached to a man (Fahs & McClelland, 2016). In this way, participants could be less likely to define certain behaviors as sex, either by minimizing sex in which a penis/phallus is not involved (a phallogentric orientation) or by minimizing sex in which a man is not the “active” partner (an androcentric orientation).

The “Passive” Partner

As discussed, heteronormativity marginalizes women, transgender and/or non-binary individuals, and/or all members of the LGBTQ+ community, in part by establishing binary, heterosexual gender roles as the default and by investing men with sexual agency. Another possible contributor to heteronormative definitions of sex resides with idealized constructions of the “passive” partner. In a heteronormative society, women are socialized to take on a non-

agentic, submissive sexual role (Fahs & McClelland, 2016; Kiefer & Sanchez, 2007). As such, some women refrain from engaging in agentic sexual behaviors (e.g., sexual assertiveness, positive sexual affect, condom use) because they view traits associated with sexual agency negatively (Fetterolf & Sanchez, 2015; Ward et al., 2018). Generally, women are more likely to associate sex with submissiveness (Kiefer, Sanchez, Kalinka, & Ybarra, 2006).

One possible explanation for these findings is the pervasiveness of sexual objectification (Szymanski et al., 2011; van Anders et al., 2022). Heteronormativity, by divesting agency from women and essentializing their reproductive capacities, characterizes women as objects, “offerings gifted to men” (van Anders et al., 2022, p. 401). Sexual objectification is an inherently dehumanizing act that rationalizes violence against the objectified “passive” partner (Drolet & Drolet, 2019; Loughnan et al., 2013; Reimer et al., 2022).

Through cultural normalization (for example, via media portrayals and sex education, van Anders et al., 2022; Ward et al., 2018; 2022), sexual objectification is endemic among men but has also been internalized by women (i.e., self-objectification; Fredrickson & Robertson, 1997)—often engendering significant mental and physical consequences (e.g., poor body image, low desire, disordered eating; Roberts et al., 2018; Szymanski et al., 2011; van Anders et al., 2022; Ward et al., 2022). Given its pervasiveness, we argue that sexual objectification is a salient sub-ideology of heteronormativity that affects definitions of sex—because women are regularly seen as objects that *sex is done to*, sexual behaviors in which women do not take on a “passive” role might be seen as failing to qualify as sex.

The Present Project

We sought to examine definitions of sex across a wide range of sexual behaviors and to explore the roles of androcentrism, phallocentrism, and objectification (as sub-ideologies of

heteronormative ideology) in these definitions. In Studies 1a and 1b³, we took first steps to explore these questions and further explored whether participants' identities moderate these perceptions. More specifically, as heterosexual people benefit (e.g., the institutions of heterosexual marriage and the family) from the heteronormative system (Ngyuen, 2023), they might be more likely to endorse heteronormative definitions of sex. Heterosexual men might be especially prone to support heteronormative definitions of sex, as their sexual pleasure (see “the orgasm gap”; Wolfer & Carmichael, 2025) and socio-cultural status (e.g., the gendered division of labor) is placed above that of heterosexual women in heteronormative systems.

Because Studies 1a and 1b are very similar in methods and analyses, we present them together. Study 2 investigated sexual objectification of women among straight men as a psychological mechanism underlying the endorsement of heteronormative definitions of sex. Throughout all three studies, we operationalized participants' definition of sex as the extent to which participants viewed a given behavior as sex. All materials and data are available at https://osf.io/4vnqc/?view_only=4d51424e4f3b469c8d1e6dc576ded439.

Study 1

In Study 1, we tested our hypothesis that a sexual behavior's proximity to heteronormative sex would correspond to that behavior being defined as sex to a greater extent. We explored the roles of androcentrism, phallocentrism, and objectification in these definitions. While each of these three constructs can be thought of as individual difference dimensions (i.e., a

³ In Study 1b, we pre-registered the following hypotheses (see <https://aspredicted.org/q42c-4jhz.pdf>): H1: Participants are phallocentric in their perceptions of sex such that they will rate sex acts that involve a phallus-like object as more sex-like and more sexually satisfying. H2: A phallocentric perception of sex will be associated with bisexual erasure. We only report results for the first part of H1 in this manuscript (ratings of sex acts that involve a phallus as more sex-like). Measures and results for H2 as well as results regarding perception of satisfaction can be found in the online supplement for full transparency.

set of beliefs and ideologies held by participants), sexual behaviors themselves can also be more in line with androcentric, phallogentric, and objectifying expectations. Here, we explored the role of (1) androcentrism by comparing definitions of sex for behaviors with men as “active” partners versus definitions of sex for behaviors with women as “active” partners (interpreting higher ratings of the former compared to the latter as evidence for the role of androcentrism); (2) phallogentricism by comparing ratings for behaviors involving a phallus or phallus-like object (i.e., a penis or a dildo) versus behaviors without (interpreting higher ratings of the former compared to the latter as evidence for the role of phallogentricism); and (3) objectification by comparing definitions for behaviors with women as “passive” partners versus behaviors with men as “passive” partners (interpreting higher ratings of the former compared to the latter as evidence for the role of objectification).

In this paper, we operationalize “active” and “passive” in the sociolinguistic, grammatical sense: in our measures, the “active” partner is the subject of the sentence, the person who does an action to someone else; the “passive” partner is the object, who is acted upon by the subject. Indeed, grammatical object/subjecthood has found to be psychologically meaningful with respect to perceptions of power (e.g., Todd, 2014). Indeed, gendered male subjecthood (“active”) and female objecthood (“passive”) contribute to real (i.e., behavioral) and virtual subsuming of the feminine by the masculine (known as “psychological invisibility”; McConnell-Ginet, 2010, p. 169; see also Martin & Papadelos, 2017).

One possible point of contention for this operationalization, despite the power of grammatical subject/objecthood, is its ability to speak to woman-on-woman sexual behavior. We recognize that categorizing, for example, “A woman going down on a woman” as sexually objectifying is possibly problematic. Our labeling of such behaviors as objectifying, however,

represents the reactionary viewpoint of the straight male gaze. As such, we draw from work that depicts lesbian sex as eroticized for the gratification of men (Annati & Ramsey, 2022; Louderback & Whitley Jr., 1997; Puhl, 2010). Thus, behaviors with a “passive” woman are, in Studies 1a and 1b, operationalized as objectifying from the heteronormative perspective. We address this issue further in Study 2.

Additionally, we explored if the gender/sex and/or sexual orientation of participants moderated these effects. Although heteronormativity is internalized and often perpetuated by all members of society—even those it marginalizes (Kitzinger, 2005)—we expected men (compared to women) and straight participants (compared to Queer participants) to define non-androcentric, non-phallogentric, and non-objectifying behaviors as sex to a lesser extent. This prediction was grounded not only in the idea that men and straight people (especially straight men) would be more likely to endorse an ideology that benefits them, but also in previous work (often conducted on heterosexual populations) that found heteronormative definitions of sex predominant (see Gute, Eshbaugh, & Wiersma, 2008; Horowitz & Spicer, 2013; Pitts & Rahman, 2001; Sanders & Reinisch, 1999).

Methods

Participants

In both Study 1a ($n = 262$) and 1b ($n = 552$), participants were recruited on social media (Reddit). For Study 1a, we did not run a power analysis and left the survey open for six days. For Study 1b, we had a goal sample size of 100 (after exclusions), based on a power analysis using G*Power for a repeated-measures ANOVA with an expected effect size of $f = 0.33$. This goal sample size had not been met by day 10 of data collection but then was substantially exceeded within the next 24 hours, after which we closed the survey. There was no incentive for

participants. Median survey completion time was 3 minutes and 24 seconds for Study 1a, and 4 minutes and 45 seconds for Study 1b. Full demographic information for all studies is displayed in Table 1.

Procedures and Measures

Ethics approval was granted by the third author's institution (Human Research Protection Program, approval #IRB-2024-1288) before participant recruitment. Participants were recruited on social media and gave their informed consent before completing sexual behavior ratings and demographic questions.

Sexual Definition Ratings. In a within-subject design, each participant rated several behaviors (28 in Study 1a, 12 in Study 1b), presented in random order, and indicated to what extent they viewed the given behavior as sex (1 = “definitely NOT sex”, 11 = “definitely sex”). Participants were told to assume that all people involved in the scenarios had consented to and were enjoying the behaviors, and that the terms “woman” and “man” referred to cisgender women and men. All behaviors involved two people, sometimes of the same gender/sex and sometimes of different genders/sexes with the gender/sex of the “active” and “passive” partners varying across behaviors. Participants rated multiple gender/sex combinations for the same behavior.

Because we were interested in investigating several different factors, we grouped the items together in several different ways, creating partially overlapping scales addressing androcentrism, phallocentrism, and objectification respectively. Because of this overlap, these scales are not independent and cannot be compared to each other directly.

First, we aimed to compare androcentric to non-androcentric behaviors. We defined androcentric behaviors as those in which the “active” partner was a man (e.g., “A man

penetrating a man's anus with his penis" and "A man penetrating a woman's anus with his penis"); and defined non-androcentric behaviors as those in which the "active" partner was a woman (e.g., "A woman penetrating a woman's vagina with a dildo" and "A woman penetrating a man's anus with a dildo). Second, we aimed to compare phallogentric to non-phallogentric behaviors, creating a measure with behaviors involving a phallus (e.g., "A man penetrating a woman's anus with his penis") and a measure of non-phallogentric behaviors (e.g., "A man going down on a woman"). Finally, to examine objectification, we defined potentially objectifying sexual behaviors as those in which the "passive" partner was a woman (e.g. "A man penetrating a woman's vagina with his penis") and non-objectifying in which the "passive" partner was a man (e.g. "A man penetrating a man's anus with his penis"). Table 2 lists all behaviors as well as the scales in which they were included.

In Study 1a, we also included seven behaviors that are often perceived as not overtly sexual (e.g., "Two men cuddling."). These seven behaviors were not included in any analyses. In Study 1b, we reduced the number of scenarios to make them more comparable across measures, for example by eliminating references to penetration with a penis and only focusing on penetration with a dildo. We did so a) to better isolate the manipulation of gender/sex of the "active" and "passive" partners and b) to more effectively distinguish androcentric orientations (the "active" man) and phallogentric orientations (his penis). Thus, behaviors with men as "active" partners were no longer over-represented in phallogentric behaviors and behaviors including a phallus were no longer over-represented in behaviors with men as "active" partners, making it possible to examine each effect separately. In Study 1b, each partner coupling contained one item describing penetration with a dildo, one item describing oral sex, and one item describing manual stimulation, with the gender/sex of both actors being systematically

manipulated.

Results

To explore the roles of androcentrism, phallocentrism, and objectification in definitions of sex, we first ran a series of paired-samples *t*-tests. In Study 1a, we found support for the effect of all three factors: Androcentric behaviors ($M = 8.62$, $SD = 1.80$) were more strongly viewed as sex compared to non-androcentric behaviors ($M = 8.10$, $SD = 2.18$; $t(261) = 14.20$, $p < .001$), phallocentric behaviors ($M = 8.78$, $SD = 1.80$) were more strongly viewed as sex compared to non-phallocentric behaviors ($M = 7.43$, $SD = 2.52$; $t(261) = 16.99$, $p < .001$), and objectifying behaviors ($M = 8.67$, $SD = 1.83$) were more strongly viewed as sex compared to non-objectifying behaviors ($M = 8.03$, $SD = 2.16$; $t(261) = 14.88$, $p < .001$).

In Study 1b, we found that, surprisingly, non-androcentric behaviors ($M = 9.17$, $SD = 2.08$) were more strongly viewed as sex compared to androcentric behaviors ($M = 8.92$, $SD = 2.27$; $t(551) = -9.07$, $p < .001$), unlike Study 1a. As in Study 1a, we found that phallocentric behaviors ($M = 9.31$, $SD = 2.25$) were more strongly viewed as sex than non-phallocentric behaviors ($M = 8.91$, $SD = 2.25$; $t(551) = 5.68$, $p < .001$). When comparing phallocentric behaviors to oral and manual stimulation (in line with our pre-registration) separately, using a repeated-measures ANOVA with a Greenhouse-Geisser correction and pairwise comparisons, we found that oral behaviors ($M = 9.43$, $SD = 2.23$) and phallocentric behaviors ($M = 9.31$, $SD = 2.25$) were rated similarly ($p = .509$), while manual stimulation ($M = 8.39$, $SD = 2.69$), was rated lower than both (both $ps < .001$), $F(1.959, 1077.23) = 105.10$, $p < .001$, $\eta^2 = .16$. Mirroring findings from Study 1a, we found that potentially objectifying behaviors ($M = 9.16$, $SD = 2.12$) were more strongly viewed as sex than non-objectifying behaviors ($M = 8.93$, $SD = 2.26$; $t(550) = 6.59$, $p < .001$).

Next, we examined whether these three effects were moderated by participant gender/sex and sexual orientation. Participants were binarily coded as either “straight” if they identified their sexuality as straight or heterosexual ($n_{Study\ 1a} = 132$; $n_{Study\ 1b} = 245$) or as “Queer” if they identified as bisexual, pansexual, lesbian, gay, asexual, or other ($n_{Study\ 1a} = 130$; $n_{Study\ 1b} = 305$). Because the number of participants who did not identify as women or men (i.e., non-binary / genderfluid) was small, we only constructed and compared two categories of gender: self-identified women ($n_{Study\ 1a} = 126$; $n_{Study\ 1b} = 261$) and men ($n_{Study\ 1a} = 121$; $n_{Study\ 1b} = 231$).

We ran a series of mixed 2 (Androcentric vs. non-androcentric / phallocentric vs. non-phallocentric / objectifying vs. non-objectifying) X 2 (Participant gender: woman vs. man) X 2 (Participant sexual orientation: Queer vs. straight) ANOVAs with repeated measures on the first factor. In Study 1a, neither gender nor sexual orientation affected the extent to which participants defined heteronormative vs. non-heteronormative behaviors as sex (see Table 3). However, we found consistent main effects of gender and sexual orientation such that women, compared to men, and Queer people, compared to straight people, gave higher ratings overall. In other words, Queer people and women more strongly defined behaviors as sex, regardless of type of behavior.

In Study 1b, the effect of androcentrism was moderated by participant sexual orientation. Both Queer participants and straight participants gave higher ratings of sex to behaviors when the “active” partner was a woman (both $ps < .001$), but the effect was slightly stronger among straight participants. The effects of phallocentrism and objectification were not moderated by participant gender/sex or sexual orientation. However, as in Study 1a, there was a consistent main effect of participant sexual orientation such that Queer participants gave higher ratings across all behaviors.

Discussion

Across two studies, we found that behaviors involving a phallus and those with women as “passive” partners were defined as sex to a greater extent than behaviors without a phallus and behaviors with men as “passive” partners, respectively. These findings provide evidence for the presence of heteronormative ideology in definitions of sex. Findings regarding androcentrism were inconsistent between the two studies and may have been driven by behaviors involving a penis that were included in Study 1a but not in Study 1b. In Study 1a, participants defined androcentric behaviors (which included penetration with a penis) as sex to a greater extent than non-androcentric behaviors, but Study 1b participants did not do so, potentially because we replaced penetration with a penis with penetration with a dildo.

These effects of phallocentrism and objectification were not moderated by gender or sexual orientation. However, Queer participants gave higher ratings of sex than straight participants across all behaviors in both studies; in Study 1a, women gave higher ratings of sex than men across all behaviors. This suggests that overall, straight men are the most restrictive when it comes to defining what counts as sex. Study 2, therefore, focused on straight men’s perceptions of sex. Because our investigation of objectification had thus far been rather indirect, we examined the role of this construct more directly.

Study 2

Study 2 investigated further the role of sexual objectification in heteronormative definitions of sex. As our operationalization of objectification in Study 1a and 1b was limited to the sociolinguistic realm of grammatical passivity, we sought to replicate and strengthen our findings by measuring sexual objectification in men to directly examine how the sexually

objectifying beliefs of straight men might affect their definitions of sex. To potentially untangle “passive” partner perceptions from perceptions of the “active” partner (e.g., androcentric or phallocentric perceptions), we only presented participants with behaviors involving a woman as the “active” partner. This allowed us to compare perceptions of sex featuring women as “passive” partners with those featuring men as “passive” partners, while removing the potential confounds of “active” men and their penises.

First, we predicted⁴ that participants would label behaviors of “active” women who have a woman as a partner as engaging in sex to a larger extent than “active” women who have a “passive” man as a partner, in line with the results of Studies 1a and 1b (H1).

We also predicted that participants would label “active” women who have a woman as a partner as more masculine compared to “active” women who have a man as a partner (H2), and that participants who label “active” women with a woman as a partner as more masculine compared to “active” women with a man as a partner would also be more likely to label “active” women who have a woman as a partner as engaging in sex than “active” women who have a man as a partner (H3). We based this on the speculation that women would be seen as more viable “passive” partners than men, even if another woman was the “active” partner. This “active” partner would therefore be invested with higher ratings of masculinity.

Finally, we more closely examined the endorsement of objectification. Straight men, compared to other demographic groups, are more likely to hold heteronormative beliefs, including adherence to strict gender roles and beliefs about what sex is (and what sex is not), and are more prone to specific instances of sexual objectification (Reimer et al., 2022). We predicted that participants who objectify women would give higher ratings of masculinity to “active”

⁴ The preregistration for Study 2 can be found at <https://aspredicted.org/hy4b8q.pdf>.

women who have a woman partner (a more viable “passive” object) than those who have a man as a partner (H4).

For a more comprehensive understanding of participant perceptions of heteronormative and non-heteronormative sexual behaviors, we also included a free response question that allowed participants to provide their own labels and opinions for each behavior. Though we did not pre-register any hypotheses for these free responses, we speculated that participants with particularly strong negative views would be more likely to offer this opinion. We also used the free response section to observe whether participants interpreted our manipulations as we intended (e.g., perceptions of a woman penetrating a man as being non-heteronormative, despite it being a heterosexual coupling).

Materials and Methods

Participants

We recruited a sample of 523 self-identified heterosexual, cisgender/sex men residing in the United States using Prolific, an online survey delivery platform. We determined sample size by using WebPower to conduct an *a priori* power analysis for PROCESS Model 7, moderated mediation (Hayes, 2022; Xu et al., 2024), with small to moderate estimated effect sizes ($\beta = .25-.30$) and an alpha level of .05. After exclusions (three excluded for non-consent to data usage, 12 excluded for indicating they were not, in fact, heterosexual and/or did not identify as a man), the final sample included 508 straight men. All included participants had less than 10% of data missing, in accordance with our preregistered exclusion criteria. Full demographic information is reported in Table 1.

Design, Procedure, and Measures

As in Study 1, ethics approval was granted by the third author’s institution before

participant recruitment. Participants were recruited using Prolific for a study titled “Perceptions of different sexual behaviors.” Participants gave their informed consent, completed survey instruments (sexual definition ratings, masculinity of “active” partner ratings, objectification of women), then answered demographic questions. Participants were given US\$1.00 for their participation in the study. Median survey completion time was 5 minutes and 51 seconds.

Participants were randomly assigned to one of two conditions: woman as the “passive” partner condition ($n = 256$) or man as the “passive” partner condition ($n = 252$). The “active” partner was always a woman. Sexual behavior and masculinity of “active” partner questions were administered with counterbalanced order.

Sexual Definition and Masculinity Ratings. Participants indicated their views regarding three sexual behaviors, delivered in random order: (1) penetration with a dildo; (2) oral sex; (3) manual stimulation (e.g., “Emily penetrates Jacob with a dildo.”). Names of the partners, chosen from a list of common names in the United States for adults currently aged 20-35, varied across each behavior and across each condition group; a second women’s name replaced the man’s name for the woman as the “passive” partner group.

For each scenario, participants were asked how likely they would be to describe the given behavior as having sex (1 = not likely, 7 = very likely), hooking up (1 = not likely, 7 = very likely), and fooling around (1 = not likely, 7 = very likely). They were also given a free response option where they were asked if there was any other way they would describe the behavior.

Next, they were asked to rate the “active” partner (in the example given above, Emily) on the dimensions of masculinity and femininity (1 = not at all, 7 = extremely). Ratings on femininity were reverse-coded and averaged with masculinity ratings to create a composite rating of masculinity.

Sexual objectification. The extent to which participants endorsed objectifying beliefs about women was measured using the Objectification Perpetration Scale (OPS; Reimer et al., 2022). Participants responded to 16 items on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Each item belonged to one of two related subscales; sex-based objectification (10 items, $\alpha = .78$; e.g., “It is reasonable to expect that if I pay for dinner, a woman will pay me back with a sexual favor”) and appearance-based objectification (6 items, $\alpha = .78$; e.g., “I rate women’s attractiveness based on her sexual body parts (e.g., breasts, butt)”).

Results

Descriptive statistics and bivariate correlations for the degree to which behaviors were defined as sex, averaged ratings of masculinity of the “active” partner, and objectification of women (by subscale) are presented in Table 4.

Test of Hypotheses

To examine the possible effect of the gender/sex of an “active” woman’s “passive” sexual partner on participant ratings of the “active” woman’s masculinity and on the degree to which participants labeled their behavior as sex, we conducted independent-samples *t*-tests. Participants rated women with women as “passive” partners ($M = 3.34, SD = 1.16$) as more masculine than women with men as “passive” partners ($M = 2.83, SD = 0.95; t(506) = -5.40, p < .001; d = -0.48$), supporting H1. Participants also showed stronger agreement that behaviors were sex for women with women as “passive” partners ($M = 5.08, SD = 1.57$) compared to women with men as “passive” partners ($M = 4.36, SD = 1.62; t(506) = -5.04, p < .001; d = -0.45$), in line with Study 1 and supporting H2.

To assess the role of perceived masculinity as a mediator to the relationship between the

gender/sex of an “active” woman’s “passive” partner and the degree to which participants labeled her behaviors as sex, we conducted a mediation analysis using the PROCESS macro for SPSS (Hayes, 2022; Model 4). Contrary to H3, the indirect effect of perceived masculinity was not significant, $B = -0.07 [-0.15, 0.006]$. While the a-path from gender/sex of the “passive” partner to perceived masculinity was significant, $B = 0.51 [0.32, 0.70]$, $SE = 0.09$, $p < .001$, the b-path from perceived masculinity to definitions of sex was not $B = -0.13 [-0.26, 0.002]$, $SE = 0.07$, $p = .054$; the direct effect of “passive” partner gender/sex on definitions (c’-path) was significant, $B = 0.78 [0.49, 1.06]$, $SE = 0.14$, $p < .001$.

Finally, to test H4, we conducted a moderated mediation analysis to examine the possible moderating effect of participant objectification of women on the mediation model described above. Contrary to our prediction, but unsurprisingly given the non-significant path from masculinity to ratings of sex, the index of moderation was not significant, $B = -0.005, [-0.05, 0.03]$. The moderation on the a-path was also not significant, $B = 0.04 [-0.20, 0.28]$, $SE = 0.12$, $p = .757$.

Exploratory Analyses

To explore the role of objectification in a way that does not rely on the mediating effect of masculinity, we ran a simple moderation model ($R^2 = .07$, $F(1, 252) = 12.12$, $p < .001$) with the gender/sex of the “passive” partner as the predictor, ratings of sex as the outcome, and appearance-based objectification as moderator (PROCESS Model 1). Appearance-based objectification was found to moderate ratings of sex ($B = -0.26$, $SE = 0.11$, $p = .015$) such that the gender/sex of a woman’s “passive” partner did not affect the extent to which participants view a behavior as sex for those who scored low in appearance-based objectification (below

2.88) but did affect these views in participants who scored higher in appearance-based objectification. The interaction is illustrated in Figure 2. There was no such effect for sex-based objectification.

Finally, we explored the negativity in free response descriptions of each presented sexual scenario. 189 out of 508 participants (37.2%) gave some kind of response (excluding “no” and “NA”). Three research assistants rated a total of 134 unique participant descriptions (ICC = 0.87), in which participants responded to the question, "Is there any other way you would describe this behavior?" Research assistants rated each response on a five-point Likert scale (1 = Not at all negative, 5 = Extremely negative), according to the extent that each statement displayed a negative judgement toward a particular sexual behavior and/or toward a person participating in that kind of behavior. The scores of participants who provided multiple descriptions were averaged. We defined a negative judgement as a statement that contained objectification of women, homophobia, disgust, and/or moral opposition. Free response descriptions were presented in a random order to the raters, grouped by the behavior that participants were describing.

Examples of descriptions that were rated as highly negative included “immoral”, “deviant”, “gross”, “unnatural”, and “strange behavior.” Illustrating the power of heteronormativity in definitions of sex, we found that more free response descriptions were volunteered for non-heteronormative behaviors. More specifically, a high concentration of particularly negative comments was observed in response to woman on man penetration. Descriptive statistics for response negativity are displayed by behavior in Table 5. Conducting an independent-samples *t*-test, we found that behaviors with a man as the “passive” partner ($M =$

2.08, $SD = 1.28$) were described significantly more negatively than behaviors with a woman as the “passive” partner ($M = 1.52$, $SD = .91$; $t(95.68) = -2.80$, $p = .006$).

We surmised that participant negativity toward non-heteronormative sexual behaviors may be associated with endorsement of other sub-ideologies of heteronormativity. Therefore, we ran correlation analyses testing the possible relationship between negativity in participant free responses and objectification of women (both subscales and overall), and the possible relationship between negativity scores and ratings of sex. We found that negativity was associated with participants’ objectification of women, such that higher negativity was associated with stronger overall objectification (across sex- and appearance-based subscales). A similar effect was found between negativity scores and sex-based objectification, such that higher negativity was associated with stronger objectification. No such effect was found between negativity scores and appearance-based objectification, nor between negativity scores and ratings of sex. Full descriptive and correlation results among participants who responded to the free response section are displayed in Table 6.

Discussion

In Study 2, we found that participants rated women with women as “passive” partners as more masculine than women with men as “passive” partners. Participants also showed stronger agreement that behaviors were sex for women with women as “passive” partners compared to women with men as “passive” partners. Both results supported our hypotheses, offering evidence for the prevalence of objectification and heteronormative thinking among straight men.

However, results from our mediation analyses did not support our hypothesized model that ratings of masculinity would mediate the relationship between the gender/sex of an “active”

woman's "passive" partner and participant ratings of sex. Similarly, our prediction that participant objectification of women would moderate this mediation model was not supported.

Though this particular model was not supported, we found some evidence in support of an objectification driven model of participant perceptions of non-heteronormative sex. Appearance-based objectification perpetration moderated the relationship between the gender/sex of an "active" woman's "passive" partner and participant ratings of sex, such that participants high in appearance-based objectification gave lower ratings of sex to behaviors with a woman as the "active" partner and a man as the "passive" partner. This finding provides evidence that straight men's objectification of women is an important factor that seems to influence the extent to which straight men view particular (i.e., heteronormative) behaviors as sex. This interpretation supports the findings of Studies 1a and 1b, but should be interpreted with caution given the exploratory nature of this analysis.

Finally, exploratory analyses of participant free response descriptions of sexual behaviors revealed a consistent pattern of negativity in response to non-heteronormative sexual scenarios, although less than 40% of the sample gave a response. The two scenarios involving penetration (woman-woman penetration and woman-man penetration) drew the majority of unique comments (which were optional). Responses to woman-man penetration elicited the most negative reactions from straight men. This supports previous literature indicating that heteronormative thinking polices the behaviors of heterosexual couples that subvert the strict gender roles prescribed to them (Diorio, 2016; Jackson, 2006; Pollitt et al., 2021). Further, perhaps unsurprisingly, we found that negativity of free response descriptions predicted participant lower ratings of sex, and that negativity predicted increased sexual objectification of women.

General Discussion

Research examining perceptions of sexual behaviors has established that PVI is commonly identified as “real” sex (Gute, Eshbaugh, & Wiersma, 2008; Horowitz & Spicer, 2013; Pitts & Rahman, 2001; Sanders & Reinisch, 1999). Across three studies, we we explored the androcentric, phallocentric, and objectifying sub-ideologies of heteronormativity that inform narrow definitions of sex.

Broadly, this research demonstrated that, in line with previous studies, PVI remains the generic definition of sex (Myerson et al., 2007; Reinholtz et al., 1995). More specifically, we found that behaviors involving a phallus and behaviors in which the “passive” partner was a woman were defined as sex to a greater extent compared to non-phallic behaviors and those in which the “passive” partner was a man, even when the “active” partner was a woman. Among the three heteronormative constructs we measured, phallocentrism and sexual objectification most clearly influenced definitions of sex.

We also found that, compared to women and Queer participants, straight men gave the narrowest and most heteronormative definitions of sex. This finding supports critical feminist literature, which has elaborated at length on the advantages wrought by men through the systemic subjugation of women; straight men indeed stand to gain the most from endorsing constructions of sexuality that invest them with power and agency (Bem, 1993; Fetterolf & Sanchez, 2015; Jackson, 2004, 2006; Nguyen, 2023; Warner, 1991; Wittig, 1992[1980]; Wolfer & Carmichael, 2025). Given the chance to elaborate in Study 2, the straight men who gave a free response employed narratives of disgust, moral opposition, and homophobia when describing sexual behaviors in which the “passive” partner was a man, even though the behaviors in question occurred between a man and a woman. These negative descriptions were associated

with objectification of women, providing additional evidence for objectification as a factor that might influence the construction of heteronormative definitions of sex, defined as penetrative sex between a man (with his penis) and a woman (a “passive” object) (Roberts et al., 2018; Reimer et al., 2022).

Theoretical and Practical Implications

This project synthesizes literature across critical feminist and social psychology perspectives to advance novel understanding of three specific sub-ideologies within heteronormativity that inform narrow, penetration-dominant definitions of sex. While our findings were in line with evidence of heteronormative behaviors and perceptions of sex (Fahs & McClelland, 2016; Pitagora, 2019; van Anders et al., 2022; Ward et al., 2022), this project, to our knowledge, is the first empirical examination of how androcentric, phallogentric, and objectifying ideologies inform definitions of sex. Our findings contribute novel evidence detailing the roles of these heteronormative sub-ideologies in delimiting which behaviors “count” as sex and which do not.

Practically, this research can help explain both the psychological underpinnings behind narrow definitions of sex, as well as the political motivations behind the propagation of dominant heteronormative ideology at the systemic level. Our findings can be addressed to the persistence of rape culture and the justification of violence against women and the Queer community (Conaghan, 2019; Siegel et al., 2021). Rather than viewing the harmful consequences of androcentrism, phallogentricism, and objectification as aberrative and surprising, we might do better to recognize how heteronormativity baked into our legal and social institutions (e.g., defining “real” sex as PVI) systematizes inequality and discrimination—even if the façades of these systems have appeared to soften. So long as certain (i.e., non-heteronormative) forms of

sexual behavior between consenting adults are subordinated (socially and legally) beneath an institutionally approved kind of sex (heteronormative sex; penetration), those who participate in the former (e.g., Queer people) can be marginalized and exploited by those who demand that “real” sex is strictly defined as the latter (Butler, 1997; Cornwall, 1997; Nguyen, 2023).

Limitations and Future Directions

Our studies are not without limitations. First, as this is a first step in proposing the existence of androcentrism, phallocentrism, and objectification as sub-ideologies of heteronormativity, exploring the possible additive or tensive interactions between the three is crucial for future research. As discussed, these constructs clearly overlap, and are difficult to parse apart. Therefore, future efforts should theorize and test when, how, and for whom each of these sub-ideologies serve to reify heteronormativity.

Relatedly, while we found strong evidence for the presence of phallocentrism and objectification in heteronormative definitions of sex, the role of androcentrism was less clear. Androcentrism was found to be present in Study 1a but not in 1b. This finding may have been driven by methodological differences between these two studies. In Study 1b, to ensure that male actors were not over-represented in phallocentric behaviors (as was the case in Study 1a), we eliminated references to penetration with a penis and only focused on penetration with a dildo. It is indeed possible, however, that as far as heteronormative definitions of sex go, the presence of a man as the “active” partner (androcentrism) is only as important as his ability to penetrate a “passive” woman with his penis (phallocentrism, objectification). As our proposed model is refined, it should address these critical interactive effects.

In Study 2, we explored free response descriptions of different sexual behaviors among straight men. Many participants (out of the minority who provided a response) who chose to

share their thoughts on non-heteronormative behaviors (particularly those involving a man being penetrated) expressed highly negative views. Several believed that men who engaged in non-heteronormative sex forfeited their status as men. The disgust that certain men communicated evokes the concept of precarious manhood (Vandello et al., 2008). Where being a “female” is ascribed (though *femininity* is conditional on reproductive capacity and meeting beauty standards; Chrisler, 2013), manhood is something that must be earned *through* masculinity; it is tenuous, requiring “public and exclusive” proof (p. 1327; such as physical toughness, aggression, sexual prowess), and it needs to be constantly defended from challenges (Vandello et al., 2008; Vandello & Bosson, 2013). Subsequent work might explore if straight men are also reluctant to endorse non-heteronormative sex because they perceive such behaviors as threatening to their manhood.

It is also worth remarking that straight men are probably not the only group to respond negatively to non-heteronormative sexual behaviors. Future research might compare straight men’s responses to those of different genders and sexualities in a similar design to that of Study 2.

While we maintain that adherence to heteronormative ideology is a potentially compelling mechanism through which narrow definitions of sex are expressed, there are parallel or alternative psychological processes that may also be at work (e.g., identity-based factors, lack of familiarity with certain behaviors, cognitive dissonance) when people endorse PVI as sex. Future research should directly examine the interplay between ideological (endorsement of heteronormativity), identity-based (e.g., strategic self-presentation; see Borinca, Iacoviello, & Valsecchi, 2021; Vandello & Bosson, 2013), and contextual factors that might influence definitions of sex. For example, our finding that straight men more commonly endorse

heteronormative definitions of sex may indeed be due to their ideological rigidity but may also be due to their schema of sexual behaviors, or their cultural exposure to alternative forms of sexuality. Each of these alternative explanations, however, indicate the pervasive internalization of hegemonic heteronormativity, especially among straight men, albeit through different possible mechanisms.

Further exploration of the effects of sampling, demand characteristics, and participant identities on definitions of sex is warranted. Although online samples allowed us to collect data from a large, diverse population, a limitation to our approach is that we did not account for how pre-existing, counter-stereotypical norms (e.g., those on social media) might differentiate our samples from non-online populations. As such, it is possible that online participants, particularly those who identify as Queer and/or progressive, would be motivated to signal endorsement for non-heteronormative sex as a function of social desirability, especially in the within-subjects design of Studies 1a and 1b. Future work should specifically control for these alternative explanations of our findings.

More generally, the importance of intersectionality across gender, race / ethnicity, political ideology, religiosity, culture, and class in any analysis of heteronormativity cannot be overstated. Indeed, the scientific foundations of sexuality research—down to the terminology used to describe its most elemental features—originate not only from a heteronormative perspective, but from a Eurocentric, white, capitalist perspective as well (Monge-Nájera, 2017; Myerson et al., 2007; Nguyen, 2023). Participants in these studies were primarily located in Western countries; we emphasize caution in generalizing results beyond this limited context.

Conclusion

We found preliminary but compelling evidence that definitions of sex (i.e., what can be labeled as “real” sex) are often phallogentric and women-objectifying in nature. These findings provide support for the pervasiveness of heteronormative ideology—that it is indeed “produced in almost every aspect of the forms and arrangements of social life” (p. 555), including the supposed privacy of the bedroom (Berlant & Warner, 1998).

It is worth noting that heteronormative ideology (while culturally prescribed) is not at all fixed—as a historical process that evolves across time and context, it can certainly be dismantled, along with the hierarchical systems that enforce its norms (Myerson et al., 2007; Nguyen, 2023). For example, exposing straight men to Queer, non-traditional norms can lower their endorsement of masculinity (Borinca & Gkinopoulos, 2025). While harmful, dominant ideologies must be redressed collectively, psychological research is well positioned to provide insight into the dimensions of heteronormativity that vary across identity and context, and, ultimately, how such harmful ideologies can be mitigated in the context of sexuality and beyond.

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Declaration of Interest Statement

The authors report there are no competing interests to declare.

Data Availability Statement

All data, measures, coding directions, and variable naming guides are available on OSF, at https://osf.io/4vnqc/?view_only=4d51424e4f3b469c8d1e6dc576ded439.

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