



Examining Associations Between Participant Gender, Desired Partner Gender, and Views Toward Sexually Coercive Behaviors

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Received: 27 May 2022 / Revised: 26 August 2022 / Accepted: 29 August 2022
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Abstract

Sexual coercion—pursuit of sexual activity with a partner who has not provided full consent (Huppin & Malamuth, *Sexual Coercion*, Hoboken, New Jersey, 2015) is a pervasive problem that carries psychological and financial costs. Although much past research has focused on sexually coercive acts performed by men and directed at women, the current work evaluates the independent and interactive roles of participant gender, desired partner gender, and sexual orientation in predicting individuals' views toward sexual coercion, a psychological outcome linked with coercive sexual behavior (e.g., Zinzow & Thompson in *Archives of Sexual Behavior*, 44:213–222, 2015). To this end, 1021 cisgender men and women ($M_{\text{age}} = 26.46$ years) who self-identified as heterosexual, gay/lesbian, or bisexual rated the acceptability of sexually coercive behaviors performed by individuals of their gender. Consistent with past behavioral research, men rated these acts to be more acceptable when performed by same-gender others than did women. Extending past research, this gender difference was observed across variation in desired partner genders and sexual orientations. Further, an attraction to women predicted higher acceptability ratings among men but not among women. Finally, identification as heterosexual (as compared to gay/lesbian or bisexual) predicted more favorable views toward these behaviors across participant gender. Taken together, these findings suggest that men who are attracted to women (specifically) may be most likely to view coercive behaviors as acceptable, and thus may be most likely to utilize them, when pursuing sexual activity.

Keywords Sexual coercion · Attitudes · Gender differences · Sexual orientation

Introduction

Coercive sexual behavior (i.e., pursuit of sexual activity when full and explicit consent has not been provided by one's intended partner; Huppin & Malamuth, 2015) has become increasingly recognized as a pervasive and costly issue in the USA. Per reports from the Centers for Disease Control and Prevention (CDC, 2022), millions of Americans each year are affected by sexual violence, with more than half of women and almost one-third of men experiencing victimization across their lifetimes. Although much (deserved) empirical attention has been devoted to understanding and improving the outcomes of survivors of such experiences (for meta-analyses, see, e.g., Dworkin et al., 2017; Oosterbaan et al., 2019; Taylor & Harvey, 2009), it

is equally (and critically) important to understand who is most likely to perpetrate these acts with the goal of prevention and/or intervention. Indeed, past research has revealed a robust gender difference in enactment of coercive sexual behaviors, with men consistently more likely to report a history of perpetration than are women (e.g., Bonneville & Trottier, 2021). However, limited research has systematically considered whether (or how) this gender difference might vary across sexual orientations (e.g., based on the gender of individuals to which the perpetrator generally is most attracted). (For notable exceptions, see Trottier et al., 2021b; VanderLaan & Vasey, 2009.) To help address this gap, the current research considers the independent and interactive roles of participant gender, desired partner gender, and sexual orientation in predicting men's and women's views toward sexually coercive behaviors. From a psychological perspective, individuals' attitudes toward and beliefs about sexual coercion can be valuable in identifying those who might be most likely to utilize these harmful tactics (e.g., Fernández-Fuertes et al., 2018; Marcus & Norris, 2014; Nunes et al., 2013; Zinzow & Thompson, 2015).

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Sexually Coercive Behavior, Gender, and Sexual Orientation

Sexual coercion includes, but is not limited to, the use of verbal pressure or physical force, lying or making false promises, and/or facilitating or taking advantage of a person's intoxication from drugs or alcohol to coerce sexual activity in the absence of full and explicit consent from one's intended partner (e.g., Bonneville & Trottier, 2021; Huppín & Malamuth, 2015). As noted above, one of the most consistent predictors of variation in engagement in coercive sexual behavior is the gender of the perpetrator. It has been repeatedly documented that men are more likely than women to employ non-physical (e.g., verbal) and physical tactics to coerce sexual contact from a non-consenting partner (e.g., Black et al., 2011; Bonneville & Trottier, 2021; Krahe et al., 2014; Struckman-Johnson et al., 2003). In one study of American college students, for instance, men were nearly twice as likely as their female peers to report using coercive tactics (e.g., emotional manipulation, lies, encouraging intoxication) following a partner's sexual refusal (Struckman-Johnson et al., 2003). Although this behavioral suite is not enacted by most men, nor is it exclusive to men (see, e.g., Trottier et al., 2021b), evolutionary principles may be applied to analyze why such coercive tactics are more commonly utilized by men than by women (e.g., Goetz & Shackelford, 2009; Huppín & Malamuth, 2015; VanderLaan & Vasey, 2009).

Across mammalian species (including humans), males' obligatory energetic and temporal investments in reproduction are minimal compared to those required by females (Trivers, 1972). Accordingly, mammalian males face relatively low biological costs and high potential fitness benefits (i.e., more offspring) when pursuing short-term sexual relationships that result in pregnancy. Consistent with this cross-species pattern, men more often than women report attitudes, desires, and behaviors conducive to capitalizing on potential reproductive opportunities that require minimal investment, including increased interest and engagement in casual, uncommitted sexual encounters (e.g., Buss & Schmitt, 1993; Howard & Perilloux, 2017; Petersen & Hyde, 2010; Schmitt, 2005; Schmitt et al., 2001, 2012). Men also are less likely than women to regret such encounters afterward (Kennair et al., 2016).

In line with this perspective, and on average, men display a variety of cognitive biases that may function to facilitate short-term mating strategies. For instance, men (more often than women) err toward perceiving sexual intent in faces or descriptions of members of the other gender, when interacting with potential partners, or when observing interactions between other men and women (Abbey, 1982; Farris et al., 2008; Haselton & Buss, 2000;

Howell et al., 2012; Lee et al., 2020; Perilloux et al., 2012). Indeed, links have been revealed between men's tendency to overperceive women's sexual intent and their own history of coercive sexual behavior (Bondurant & Donat, 1999; Bonneville & Trottier, 2021; Farris et al., 2008). In addition to this perceptual bias, men report a willingness to engage in sexual activity earlier (after less time has elapsed) than do women (e.g., Baranowski & Hecht, 2015; Buss & Schmitt, 1993; Edlund et al., 2021; Okami & Shackelford, 2001; Schmitt et al., 2001), which may prompt men to seek sexual engagement before their desired partners are ready. Although sexual coercion is a complex behavioral phenomenon with many potential ultimate and proximate causes beyond the examples offered here (and as noted in the "Discussion" section), in all, it is consistent with the evolutionary literature that men are likely to express more favorable views toward the use of sexually coercive behaviors compared to women.

The Relevance of Partner Gender

Intuitively, much of the same research establishing men's more frequent use of sexual coercion also suggests that women are considerably more likely than men to experience sexual victimization across their lifetimes (e.g., Banyard et al., 2007; Black et al., 2011; Krahe & Berger, 2013; Krahe et al., 2014; Struckman-Johnson et al., 2003). Again, women's increased likelihood of victimization—or the relative frequency of coercive sexual behaviors targeting women relative to men—might be analyzed by applying evolutionary principles. For mammalian females, a sexual encounter that results in pregnancy commits them to a minimum period of biological investment characterized by internal fertilization, gestation, and lactation (Trivers, 1972). Although the duration of this investment varies across species, in all mammals, females' obligatory investment is elevated compared to their conspecific male, whose required involvement often ends after conception. Thus, sexual encounters carry substantially higher energetic and temporal costs for females. The corresponding investment risk associated with intercourse has shaped women's mating psychology, resulting in greater partner choosiness and, as a result, more restricted sexual attitudes and behaviors than those typically exhibited by men (e.g., Buss & Schmitt, 1993; Howard & Perilloux, 2017; Jackson & Kirkpatrick, 2007; Petersen & Hyde, 2010; Schmitt, 2005; Schmitt et al., 2001, 2012).

In this context, those individuals who desire women (rather than men) as sexual partners are more likely to be received with hesitation, resistance, or rejection in response to their sexual advances (e.g., Baranowski & Hecht, 2015; Edlund et al., 2021; Hald & Høgh-Olesen, 2010), and in

some instances may attempt to utilize coercive tactics to circumvent their desired partner's preferred behavioral strategy. Indeed, research suggests that coercive sexual advances often co-occur with non-coercive attempts at sexual engagement (e.g., asking for sex, withdrawing, paying compliments; Livingston et al., 2004). This research aligns with work indicating that the majority of sexually coercive acts are perpetrated by intimate partners (former, current) and acquaintances of the victim (e.g., friends, first dates; Black et al., 2011; Krahe & Berger, 2013; for a discussion of sexual coercion as functioning to prevent cuckoldry within intimate relationships, see Goetz & Shackelford, 2009).

The Interaction Between Perpetrator and Partner Gender

Previous research combined with evolutionary logic thus suggests that observed patterns pertaining to sexually coercive behavior (men more often using sexually coercive tactics and women more often being targeted) might be analyzed from the perspective of (a) the perpetrator's gender, (b) their intended partner's gender, and/or (c) an interaction between the perpetrator's and their intended partner's genders. Although these factors often are confounded in everyday interactions and much empirical work on this topic, it is possible to disentangle the independent roles of perpetrator and partner gender by assessing views toward sexually coercive behaviors held by (a) individuals who identify as men but who are not exclusively (or primarily) attracted to women and (b) individuals exclusively (or primarily) attracted to women but who do not identify as men. If men report more favorable views toward sexually coercive behaviors independent of an attraction to women, then this would support a link between sexual coercion and participant gender (beyond their desired partner's gender). If instead of (or in addition to) this possibility, individuals who are attracted to women report more favorable views toward sexually coercive behaviors regardless of their own gender, then this would suggest a unique link between sexual coercion and one's desired partner's gender (beyond participant gender).

In sum, though research conducted from diverse perspectives indicates that men are most likely to perpetrate sexual coercion and women are most likely to be targeted by these acts, the extant literature is limited by its predominant focus on men-targeting-women (i.e., heterosexual) assaults, the modest numbers of sexual minority participants included in these investigations, and the corresponding failure to test for differences in relevant outcomes across sexual orientations (e.g., Greathouse et al., 2015; Krahe et al., 2014; Trottier et al., 2021b). In this context, it remains important to consider potential interactions between an individual's gender and their desired partner's gender—as captured by sexual orientation, for example—in driving variation in

views toward, and possible engagement in, sexually coercive behaviors. Indeed, evolutionary psychological research examining sexual aggression in human populations (e.g., Camilleri & Quinsey, 2009; Figueredo et al., 2015; Gladden et al., 2008; Goetz & Shackelford, 2009; Lalumière et al., 1996; McKibbin et al., 2011) has largely excluded individuals who identify as sexual minorities or have not tested for potential variation across sexual orientations. (For a notable exception, see VanderLaan & Vasey, 2009.) In addition, relatively few studies have assessed women's views toward sexually coercive acts committed by women (see O'Connell & Marcus, 2016, as an exception). To help address these empirical dearths, we examined views toward coercive sexual behavior among men and women who identified as heterosexual, gay/lesbian, or bisexual.

The Current Research

The current work aims to disentangle the independent (and interactive) roles of participant gender, desired partner gender, and sexual orientation in predicting individuals' views toward sexual coercion, as assessed by the perceived acceptability of sexually coercive behaviors enacted by members of one's own gender. The decision to assess men's and women's perceived acceptability of sexually coercive behaviors performed by same-gender individuals was made based on several considerations. First, questions about sexual behavior, including sexual coercion, are sensitive and therefore vulnerable to socially desirable responding (Tourangeau & Yan, 2007). We therefore assessed views toward sexual coercion as opposed to actual engagement in these behaviors to reduce the sensitivity of our survey questions and to increase the variability on our outcome measure. (That is, individuals without a history of sexual behavior are able to respond to these items; O'Connell & Marcus, 2016). To further reduce the sensitivity of this measure, we asked men and women to rate the acceptability of these behaviors described as being performed by same-gender targets rather than asking directly about individuals' own potential use of the behavior. Indeed, past research has found such acceptability ratings to be correlated with participants' reported likelihood of engaging in these behaviors (Marcus & Norris, 2014; O'Connell & Marcus, 2016). Finally, unlike this past research, which focused exclusively on heterosexual interactions and vignettes, we did not specify the gender of the hypothetical target in order to allow for responses from individuals across sexual orientations.

First, we examined whether ratings of the acceptability of sexually coercive behaviors vary between men and women (across desired partner genders and sexual orientations). Consistent with the empirical literature reviewed above, and from an evolutionary perspective, we expected

that men would rate these behaviors as more acceptable than would women. Then, we evaluated the predictive value of participants' desired partner gender, independently and in combination with their own gender. Based on previous research and functional logic, we expected that individuals relatively attracted to women would perceive these behaviors to be more acceptable than would individuals relatively attracted to men. Finally, we examined differences across participants' sexual orientations, independent of and in interaction with participant gender.

Method

Participants

Participants were recruited as part of two larger studies on the experiences of cisgender men and women ages 18–36 who identified as gay/lesbian or bisexual (as compared to heterosexual)¹. Men were recruited from several sources, including Prolific Academic, Craigslist, a local Pride event, and a university-hosted webpage available for recruitment purposes [Penn State Studyfinder; studyfinder.psu.edu]. The majority (78%) of male participants in the final analytic sample were recruited from Prolific Academic (prolific.co); those recruited from this platform were compensated \$3.50. Those recruited from Craigslist (craigslist.org), the community event, and the university webpage had the option to enter a draw to win one of five \$100 Amazon.com gift cards regardless of qualification or participation status. Women were recruited through Prolific Academic (only) and were compensated \$4.75². Responses from male and female participants were screened prior to analysis. These procedures excluded participants for failing to identify their sexual orientation as heterosexual, gay/lesbian, or bisexual ($n = 10$); changing their reported age and/or sexual orientation across the survey ($n = 7$); repeated failures on attention checks ($n = 9$); failing to identify both their sex assigned at birth and gender identity as consistent with the recruited gender ($n = 9$); submitting multiple survey responses as indicated by duplicate IP addresses ($n = 12$); reporting an age outside of the target range for the studies ($n = 1$); and implausible response patterns within the survey ($n = 1$).

¹ The screening procedures and samples overlap with participants in Studies 2 and 3 of DeLPriore and Ronan (2022).

² Although we used Prolific Academic to recruit a majority of the male participants and all of the female participants included in the current analyses, these samples were collected at different timepoints. Because the minimum required payment on this platform increased in between these data collections, we were required to pay the female participants a higher amount than we paid the male participants.

The final analytic sample consisted of 1021 participants: 496 cisgender men (heterosexual: $n = 225$; gay: $n = 121$; bisexual: $n = 150$) and 525 cisgender women (heterosexual: $n = 175$; lesbian: $n = 175$; bisexual: $n = 175$). Their average age was 26.46 years ($SD = 4.84$, range: 18–36, $n = 1005$)³. Among those who provided race and/or ethnicity data ($n = 990$), most participants self-identified as non-Hispanic White (70.4%), Hispanic/Latino (9.7%), non-Hispanic Black (8.4%), Asian (7.0%), or multiracial (4.0%).

Measures

Sexual Orientation and Desired Partner Gender

We asked participants to report on their sexual orientation using categorical response options. Specifically, participants were asked “Do you consider yourself to be...?” and presented with the following options: “Heterosexual or straight,” “Gay or lesbian,” “Bisexual,” or “Something else”⁴. We also asked participants to rate their desired partner gender separate from their sexual orientations. Specifically, we presented the following item: “People are different in their romantic and sexual attraction to other people. Which of the following best describes your feelings?” Participants responded on the following scale: 1 = *Only attracted to females*, 2 = *Mostly attracted to females*, 3 = *Equally attracted to females and males*, 4 = *Mostly attracted to males*, and 5 = *Only attracted to males* (The Williams Institute, 2009). The pattern of means on this item was consistent with participants' categorical sexual orientations (see Table 1). This variable was standardized ($M = 0$, $SD = 1$) prior to analysis for interpretation purposes.

³ Additional analyses involving the male and female samples, though unrelated to the current work, revealed age differences across categorical sexual orientations. Although we did not formulate predictions relevant to participants' ages for the current work, we wanted to test the extent to which the current results might be influenced by these between-group differences. Specifically, we repeated the main analyses controlling for participant age. (These analyses excluded 11 participants who were included in the original analyses but who did not report on their current age.) The main pattern of results did not change when including this covariate; minor differences are noted in the body of the manuscript. These analyses are detailed in the Supplemental Materials – Appendix A.

⁴ Given that the current studies specifically recruited men and women who identified as heterosexual, gay/lesbian, or bisexual, participants who reported orientations outside of these categories were excluded from analysis unless they provided additional information that allowed us to classify them in one of the three target groups. One woman in the sample selected “something else” as her categorical response option but then described her sexual orientation as “bisexual/pansexual.” This woman, therefore, was coded as “bisexual” in subsequent analyses.

Table 1 Romantic and sexual attraction across participant gender and sexual orientation

Participant gender	Participant sexual orientation		
	Heterosexual	Gay/Lesbian	Bisexual
Men	1.16 (0.47)	4.81 (0.42)	2.43 (0.77)
Women	4.63 (0.58)	1.33 (0.53)	3.22 (0.68)

*n*s = 121–225. Responses range from 1 (exclusive attraction to women) to 5 (exclusive attraction to men)

Perceived Acceptability of Sexually Coercive Behaviors

To measure participants' perceptions of the acceptability of coercive sexual behaviors, we presented five items adapted from the Sexual Strategies Scale (Strang et al., 2013) and prefaced with the following prompt: "How acceptable is it for a man [woman] to do the following to convince someone to have sex with him [her]?" These items were (1) get the person drunk or high; (2) tell the person lies (e.g., saying "I love you" when he [she] does not); (3) accuse the person of "leading him [her] on" or being "a tease"; (4) continue to touch and kiss the person in the hopes that they will give in to sex; and (5) ask the person repeatedly to have sex. Consistent with past research (e.g., O'Connell & Marcus, 2016), male participants rated how acceptable they believed these behaviors to be for men, and female participants rated how acceptable they believed these behaviors to be for women. Responses were made on a 5-point scale: 1 = *Completely unacceptable*, 2 = *Mostly unacceptable*, 3 = *Neither acceptable nor unacceptable*, 4 = *Mostly acceptable*, and 5 = *Completely acceptable*. The items were averaged to create an aggregate measure, with higher scores corresponding to greater perceived acceptability of sexually coercive behaviors. This measure was sufficiently reliable ($\alpha = 0.85$), and the overall mean score ($n = 1011$) was 1.52 ($SD = 0.70$)⁵.

Results

Differences Based on Participant Gender

First, we tested for the established gender difference in perceived acceptability of coercive sexual behaviors. This

⁵ The sexual coercion acceptability variable was positively skewed, with 1 as the modal response. To examine the potential influence of the variable distribution and model specification on the obtained results, we used the *glm* function in R (version 4.0.0) to fit Poisson regression models that account for the positive skew. The results were consistent with those obtained when fitting the original linear regression model (i.e., the obtained results were not sensitive to the distribution of the outcome variable or the model fit). For ease of interpretation, we present the original linear models in the manuscript and the Poisson models in the Supplemental Materials – Appendix B.

difference was evaluated using a one-way analysis of variance (ANOVA), with participant gender as the predictor variable. Acceptability ratings varied based on participant gender, $F(1, 1009) = 67.78$, $p < 0.001$, $\eta^2 = 0.06$, $d = 0.52$. Consistent with past behavioral research, men rated sexually coercive behaviors enacted by members of their own gender as more acceptable ($M = 1.70$, $SD = 0.78$) than did women ($M = 1.35$, $SD = 0.55$). Extending past findings, this difference was observed across the variation in desired partner genders and sexual orientations within our sample.

Differences Based on Desired Partner Gender

Next, we evaluated the association between desired partner gender and perceived acceptability of coercive sexual behavior, as well as the interaction between desired partner gender and participant gender. First, we tested for differences in acceptability ratings based on desired partner gender (standardized) across variation in participant gender and sexual orientation. This linear regression analysis revealed an association between desired partner gender and perceived acceptability of sexual coercion, $\beta = -0.07$ ($SE = 0.02$), $t(1009) = -2.25$, $p = 0.03$, $R^2 = 0.01$, with greater acceptability reported by participants who indicated a relatively strong attraction to women (compared to those who indicated a relatively strong attraction to men).

We extended this model by regressing perceived acceptability on participants' desired partner gender (standardized), participant gender (dummy coded: 0 = men, 1 = women), and the interaction between these variables. The main effects model ($R^2 = 0.06$) no longer revealed an effect of desired partner gender controlling for participant gender, $\beta = -0.02$, $p = 0.50$. However, the main effect of participant gender persisted controlling for desired partner gender, $\beta = -0.25$ ($SE = 0.04$), $t(1008) = -7.93$, $p < 0.001$, suggesting a stronger unique contribution of participant gender (identifying as a man) compared to desired partner gender (an attraction to women) to variation in the perceived acceptability of sexual coercion.

This main effect of participant gender was qualified by a significant two-way interaction with desired partner gender, $\beta = 0.12$ ($SE = 0.04$), $t(1007) = 2.85$, $p = 0.01$, $R^2 = 0.07$. Simple slopes tests revealed that men with a relatively strong attraction to women rated sexual coercion to be more acceptable than did men with a relatively strong attraction to men, $\beta = -0.11$ ($SE = 0.03$), $t(1007) = -2.47$, $p = 0.01$ (see Fig. 1). The association between desired partner gender and perceived acceptability of sexual coercion was weaker and non-significant for female participants, $\beta = 0.07$, $p = 0.12$. We also conducted regions of significance tests to evaluate potential gender differences among participants who reported a strong desire for female ($-1 SD$ from the mean) or male ($+1 SD$) partners. The gender difference was

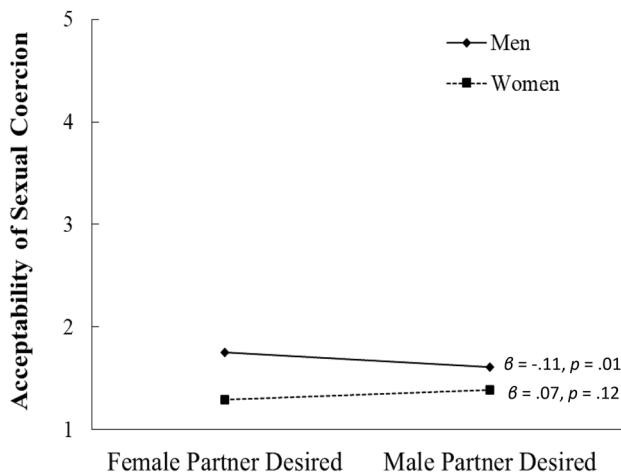


Fig. 1 Perceived acceptability of sexually coercive behaviors across participant gender and desired partner gender. *Note.* Standardized regression coefficients and significance tests reflect simple slopes for men and women

significant both for participants reporting a strong desire for female partners, $\beta = -0.34$ ($SE = 0.06$), $t(1007) = -7.63$, $p < 0.001$, and for participants reporting a strong desire for male partners, $\beta = -0.16$ ($SE = 0.06$), $t(1007) = -3.62$, $p < 0.001$. In each of these cases, men perceived sexually coercive behaviors performed by same-gender individuals to be more acceptable than did women. Taken together, these results suggest that associations between desired partner (target) gender and views toward sexual coercion may depend on the perpetrator's (here, the participant's) gender. That is, an attraction to women predicted increases in the perceived acceptability of sexual coercion among men but not among women. On the other hand, the statistical contribution of participant gender persisted independent of desired partner gender: men rated these behaviors as more acceptable than did women regardless of whether they most desired female or male partners.

Differences Based on Sexual Orientation

Finally, we evaluated differences in the perceived acceptability of sexually coercive behaviors across participants' sexual orientations. Specifically, we conducted a two-way ANOVA including both categorical sexual orientation (heterosexual, gay/lesbian, bisexual) and participant gender (men, women) as predictors. This analysis revealed main effects of both participant gender, $F(1, 1005) = 58.78$, $p < 0.001$, $partial \eta^2 = 0.06$, and sexual orientation, $F(2, 1005) = 7.09$, $p < 0.001$, $partial \eta^2 = 0.01$ (see Fig. 2). Pairwise comparisons involving sexual orientation were made using Fisher's LSD. These tests revealed that heterosexual participants ($M_{\text{marginal}} = 1.62$, $SE = 0.03$) were more accepting of these behaviors than either gay/lesbian participants

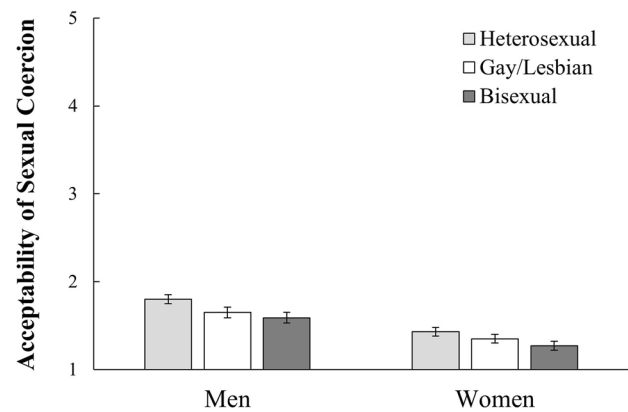


Fig. 2 Perceived acceptability of sexually coercive behaviors across participant gender and sexual orientation. *Note.* Means are observed; error bars reflect the standard error

($M_{\text{marginal}} = 1.50$, $SE = 0.04$), $p = 0.02$, $d = 0.24$, or bisexual participants ($M_{\text{marginal}} = 1.43$, $SE = 0.04$), $p < 0.001$, $d = 0.32$. (It is worth noting that the difference between heterosexual and gay/lesbian participants was not significant [$p = 0.17$] when controlling for between-group differences in participant age; see footnote 3) Gay/lesbian and bisexual participants' ratings did not significantly differ from each other ($p = 0.22$), nor was the interaction between participant gender and sexual orientation significant ($p = 0.74$, $partial \eta^2 = 0.001$). In sum, the observed effect of categorical sexual orientation on perceived acceptability of coercive sexual behaviors did not depend on the participant's gender, nor did the effect of participant gender vary based on sexual orientation⁶.

Discussion

Although the gender difference in engagement in sexually coercive behavior has been reliably documented, much less is known about the extent to which views toward (and potential use of) such behaviors varies across desired partner gender and sexual orientation (e.g., Greathouse et al., 2015; Trottier et al., 2021b). The current work found male (versus female) gender identification to be the most robust

⁶ The current studies also included a continuous measure of variation in sexual orientation. Specifically, participants were asked to rate their orientations on a 7-point scale: 1 = *Exclusively heterosexual*, 4 = *Equally heterosexual and homosexual*, and 7 = *Exclusively homosexual* (Kinsey et al., 1948). This variable was standardized ($M = 0$, $SD = 1$) prior to analysis for interpretation purposes. We conducted analyses comparable to those conducted using the categorical sexual orientation measure. The main pattern of results was the same: main effects of participant gender and sexual orientation (measured continuously) were observed in the absence of a two-way interaction. We detail these analyses in the Supplemental Materials - Appendix C.

unique predictor of increased perceived acceptability of sexually coercive acts performed by same-gender individuals, with this effect persisting while controlling for variation in desired partner gender. In addition to being a man, identifying as heterosexual (versus gay/lesbian or bisexual) predicted greater acceptance of coercive sexual behavior regardless of participant gender. (Although, some of the observed difference between heterosexual and gay/lesbian participants may have been accounted for by between-group differences in age; see footnote 3) An attraction to women also predicted increases in the perceived acceptability of these behaviors, but only among men. Taken together, this research suggests that the most favorable views toward sexually coercive behaviors (and thus perhaps the highest risk of engaging in these behaviors) is likely to be demonstrated by men who are attracted to women.

From an evolutionary perspective, there are reasons to expect that the most accepting views toward sexually coercive behaviors would be reported by men who desire female partners. As noted above, the target mate pool for these men (i.e., women) is more restricted when selecting mates, on average, due (in part) to mammalian females' relatively high obligatory investment associated with reproduction (Trivers, 1972). Comparatively, sexual encounters carry relatively low biological costs and greater fitness benefits for men, whose greatest limitation to reproductive output is access to receptive, fertile women as mates. These conflicting sexual strategies likely have shaped men's mating psychology in various ways, including (but not limited to) the cognitive biases described above (e.g., sexual over-perception and upset over sexual rejection; e.g., Buss, 1989; Farris et al., 2008; Perilloux et al., 2012). It is thus in line with a functional perspective that men who are attracted to women might be more accepting of the use of coercive sexual tactics as compared to women, or as compared to men who are attracted to men (e.g., Trottier et al., 2021b; VanderLaan & Vasey, 2009). (Although compatible with an evolutionary analysis, it is worth noting that sexual over-perception and sexual rejection are not the only, nor primary, risk factors for sexually aggressive behavior among men, as discussed below.)

The differences observed between men across desired partner gender also are consistent with this logic. Though some research finds that gay and bisexual men are likely to be equally (if not more) permissive in their sexual attitudes and behaviors than are heterosexual men (e.g., Everett, 2013; Howard & Perilloux, 2017; Schmitt, 2007), their target partners more often are members of their same gender (i.e., other men). In this context, their risk of sexual rejection may be decreased (on average) compared to men who desire female partners, thus reducing exposure to one potential risk factor for sexual coercion (Lamarche & Seery, 2019). Indeed, the current results suggest that men who are

relatively attracted to women are likely to possess more favorable views toward these behaviors than are men who are relatively attracted to other men.

On the other hand, findings from our women participants support the idea that desired partner gender is insufficient to explain observed variation in the perceived acceptability of sexually coercive behaviors. Women attracted to women rated these behaviors as less acceptable than did men attracted to women. Further, women attracted to women did not report higher acceptability ratings compared to women attracted to men. (Indeed, non-significant trends indicated the opposite: that women attracted to men may be more accepting of these behaviors than are women attracted to women.) These findings suggest that neither participant gender nor desired partner gender alone can fully explain variation in these views. Instead, male gender in combination with an attraction to women predicted elevation in the focal outcome, with male gender being a stronger unique predictor than attraction to women.

In addition to the interaction between participant gender and desired partner gender, we observed a statistical (main) effect of sexual orientation on sexual coercion acceptability. That is, identifying as heterosexual predicted greater perceived acceptability compared to identifying as gay/lesbian or bisexual. This effect was observed across participant gender; that is, a heterosexual orientation predicted greater acceptance of sexual coercion across men and women. This finding was not predicted in advance by our evolutionary framework, which posited an interaction between participant gender and sexual orientation in this context. It is possible that the observed pattern of results reflects participants' implicit assessments regarding their own potential risk of being targeted by these behaviors. (That is, participants who perceived themselves to be at relatively high [versus low] risk based on their sexual orientations rating these behaviors as less acceptable, on average.) Indeed, some research has found that sexual minority women, and non-monosexual (e.g., bisexual) women in particular, experience an elevated risk of being victimized compared to heterosexual women (e.g., de Visser et al., 2003; Kuyper & Vanwesenbeeck, 2011; Trottier et al., 2021b), with these acts more often being perpetrated by men than by other women (Krahé & Berger, 2013). Similarly, gay and bisexual men have been found to have higher rates of sexual victimization compared to heterosexual men (de Visser et al., 2003; Kuyper & Vanwesenbeeck, 2011). Further, it should be noted that the average acceptability ratings for all participant groups corresponded to relatively unfavorable views toward coercive sexual behavior (i.e., observed differences on the outcome measure reflect variation at the low [unacceptable] end of the rating scale; see Figs. 1 and 2). That is, all participant groups reported (average) scores consistent with viewing these behaviors as unacceptable.

This research contributes to the evolutionary psychological literature by applying a functional framework to analyze variation in views toward sexual coercion in a way that is inclusive of individuals with diverse sexual orientations. Specifically, this perspective predicted that men (vs. women) and those relatively attracted to women (vs. men) would be most accepting of (and therefore, potentially most open to utilizing) coercive tactics in the pursuit of sexual activity. Indeed, it is important and relevant to consider the experiences of LGB+ individuals from an evolutionary perspective (Bailey et al., 2016), especially given the relatively negative views of this community toward the field (Jonason & Schmitt, 2016). Despite recent progress in including the experiences of this community's members within the empirical literature (e.g., Alley et al., 2021; Howard & Perilloux, 2017; Russell et al., 2018), almost all research on sexual coercion or aggression conducted from an evolutionary perspective has focused explicitly on heterosexual encounters or failed to consider variation that exists across sexual orientation within their samples (e.g., Camilleri & Quinsey, 2009; Figueredo et al., 2015; Gladden et al., 2008; Goetz & Shackelford, 2009; Lalumière et al., 1996; McKibbin et al., 2011; for an exception, see VanderLaan & Vasey, 2009).

Limitations and Future Directions

The current work extends the extant literature by disentangling the independent contributions of participant (perpetrator) and partner (target) gender to variation in perceived acceptability of (and potential engagement in) sexually coercive behaviors, and by broadening this discussion to include the experiences of gay, lesbian, and bisexual men and women. Our examination of women's perceptions of sexual coercion by members of their same gender is particularly valuable given the relative absence of such measures in past research. That is, most studies on sexual coercion that include female participants exclusively focus on their experiences as victims or on their perceptions of sexually coercive acts committed by men (e.g., Haworth-Hoepfner, 1998; Tomaszewska & Schuster, 2020; for exceptions, see Camilleri et al., 2009; Muñoz et al., 2011; O'Connell & Marcus, 2016). Despite these contributions, the current work is limited in several ways that we hope will encourage future research.

First, due to time and budget constraints, data from male and female participants were collected at different times (as noted in footnote 2). Although the data collection procedures were nearly identical, it is difficult to know precisely how the lagged nature of the female data collection may have influenced the differences observed across men and women. The most notable time-linked difference was the COVID-19 pandemic, which emerged after we recruited our sample of

men but before we recruited our sample of women. Though we are encouraged that the observed gender difference (i.e., men rating sexually coercive acts as more acceptable than did women) was consistent with established behavioral patterns (e.g., Bonneville & Trottier, 2021; Krahé et al., 2014), future work should attempt to replicate the current results in a sample of men and women recruited at the same time and from the same source(s).

Additional limitations center around our primary outcome measure: perceived acceptability of sexually coercive behaviors. As noted earlier, given the sensitivity of self-report questions about sexual behavior (e.g., Tourangeau & Yan, 2007), we chose to assess participants' views toward sexual coercion rather than their past sexually coercive behavior, *per se*. (Indeed, research has revealed moderate to strong associations between participants' beliefs about and/or attitudes toward sexual coercion and their actual use of these behaviors [e.g., Fernández-Fuertes et al., 2018; Nunes et al., 2013; Zinzow & Thompson, 2015; for a meta-analysis on the relationship between sexual coercion perpetration and beliefs about rape, see Trottier et al., 2021a].) We took further steps to minimize social desirability (floor) effects by asking participants to report on their perceived acceptability of sexually coercive behaviors performed by same-gender others, rather than asking participants to report on their own potential use of these behaviors. Though past research found a strong correlation between such acceptability ratings and participants' reported likelihood of engaging in similar behaviors (O'Connell & Marcus, 2016), the current research is limited in that it did not include a direct measure of participants' own expected probability (nor their history) of sexually coercive behavior.

Further, our measure assessed participants' perceptions of sexually coercive behaviors performed by members of their same gender, specifically, which allowed participants to rate their perceptions of these behaviors independent of their desired partner gender. However, we cannot know with certainty the gender of the target that participants were imagining when responding to these items. (For instance, we assumed that gay men were rating their own views of the acceptability of men's use of coercive sexual tactics targeting other men [consistent with gay men's orientation], but it is possible that they were rating their views of the acceptability of men's use of coercive sexual tactics targeting women. This possibility, however, would not account for the differences in acceptability ratings observed between men based on desired partner gender.) Potential extensions of the current work could compare heterosexual and sexual minority men's and women's views toward sexually coercive behaviors performed by members of other genders, in addition to their own gender, and across target genders. An implicit assumption of this work is that these views will diverge; however, this possibility remains untested herein.

Limitations also pertain to our focal theoretical perspective. Although evolutionary logic was applied to formulate our predictions and frame our analyses, some of the predictions and results are not uniquely accounted for by a functional perspective. Indeed, some of the current findings also are consistent with social construction perspectives on gender and coercive sexual behavior, which propose that men will report more favorable views toward sexual coercion than will women due to cultural stereotypes that dictate how men and women are expected to behave in sexual situations (e.g., Bates et al., 2019). That evolutionary and sociocultural perspectives may generate overlapping predictions and results might be expected given that ultimate and proximate explanations (respectively) for human behavior often are complementary, and ultimate processes can shape proximate mechanisms (e.g., Scott-Phillips et al., 2011). Though evolutionary and social learning perspectives may generate complementary findings in many empirical cases, and these perspectives converge in viewing sexually coercive behaviors as categorically unacceptable, additional research is needed to formulate and evaluate specific predictions that might be uniquely generated by one or the other perspective.

Finally, it is important to note that the current investigation was not designed to provide a comprehensive overview of all variables known to predict engagement in sexually coercive behaviors. Indeed, sexual aggression is a complex phenomenon linked with myriad biopsychosocial risk factors. For instance, more favorable attitudes toward and/or increased likelihood of sexually coercive behavior has been linked with past developmental experiences (e.g., maltreatment during childhood; Forsman et al., 2015), situational factors (e.g., alcohol use; Bonneville & Trottier, 2021; Krahe & Berger, 2013), individual difference measures (e.g., psychopathy, short-term mating orientation; Gladden et al., 2008; Muñoz et al., 2011; O'Connell & Marcus, 2016; Westerlund et al., 2010), and genetic variants (e.g., Johansson et al., 2008; Westerlund et al., 2010). (Although some of our predictions posited links between individuals' views toward coercive sexual behavior and the gender of their desired partners, it is important to clarify that the responsibility for engaging in these behaviors lies fully with the perpetrators and not with the survivors of these attempts.) Similarly, the current research was not intended (nor designed) to address controversies regarding the evolutionary origins of men's sexual aggression. Indeed, this research cannot help to distinguish whether sexual coercion is an adaptation, a byproduct of an adaptation, or non-functional pathology. (For in-depth discussions that more directly address this issue, please see, e.g., Gladden et al., 2008; Huppin & Malamuth, 2015.) In the same way, as noted above, testing evolutionarily informed hypotheses is not equivalent to endorsement of this behavioral pattern, which should be condemned regardless of the gender of the perpetrator or their intended targets.

Conclusion

Sexual violence affects millions of Americans each year (CDC, 2021). Given the prevalence and costs of this behavior, it is important to consider the myriad risk factors for perpetrating these acts in order to aid in their prevention. We examined the relative contributions of participant gender, desired partner gender, and sexual orientation to variation in the perceived acceptability of this behavior performed by same-gender individuals. We found the most favorable views toward sexually coercive behaviors reported by men attracted to women, with male gender being a stronger unique predictor than the gender of one's desired partners.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s40806-022-00337-w>.

Acknowledgements Thank you to Grace Leri, Amarillys Aponte-Lee, and Olivia Ronan for their contributions to this research.

Author Contribution Danielle J. DelPriore was responsible for project administration, funding acquisition, study conceptualization, data collection, formal analyses, data visualization, and writing and editing the manuscript.

Funding This research was supported by Research Development Grants and Undergraduate Research Grants from The Pennsylvania State University, Altoona College.

Declarations

Ethics Approval The Office for Research Protections at Penn State University reviewed the proposed studies (00011519 and 00014755) and determined that they met criteria for exempt research and therefore did not require review by the Institutional Review Board.

Consent to Participate Implied informed consent was obtained from all participants and written documentation was waived.

Consent for Publication Not applicable.

Conflict of Interest The author declares no competing interests.

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