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ORIGINAL ARTICLE

Orgasm Frequency Predicts Desire and Expectation for Orgasm: Assessing the Orgasm Gap within Mixed-Sex Couples

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Abstract

While previous research has established the existence of an orgasm gap between men and women, research exploring this phenomenon within dyadic samples of mixed-sex couples has been limited. The current study aims to investigate the impact of this orgasm disparity on novel sexual outcomes for couples, including desire and expectation for orgasm. We conducted secondary data analyses on a sample of 104 sexually active mixed-sex couples using an online Qualtrics panel (M_{age} = 43.9 years; 94.2% heterosexual; 79.3% White). Cisgender men and women within the couple reported on their sexual satisfaction, orgasm frequency, desired orgasm frequency, expectation for how often people should orgasm ("orgasm expectation"), and perceptions of their partner's orgasm frequency. An orgasm gap emerged, and men significantly underreported the size of the orgasm gap in their relationships. In a dyadic path model, men's and women's own orgasm frequency positively predicted their desire and expectation for orgasm. Additionally, women's orgasm frequency predicted men's orgasm expectation. This relationship between orgasm frequencies and expectancies may partially explain women's lower orgasm importance compared to men. A cycle of orgasm inequality within relationships may be perpetuated when women who experience less frequent orgasms lower their desire and expectation for orgasm. Sex educators, activists, and therapists should work to improve entitlement to sexual pleasure and orgasm, particularly for women who wish to increase their orgasm frequency.

Keywords Orgasm gap · Female orgasm · Sexual satisfaction · Sexuality · Couples · Sexual pleasure · Sexual desire · Close relationships

Orgasm Frequency Predicts Desire and Expectation for Orgasm: Assessing the Orgasm Gap within Mixed-Sex Couples

The "orgasm gap" refers to the well-established discrepancy in orgasm frequency between cisgender men and women when engaging in heterosexual partnered sex, with men having more orgasms than women on average (e.g., Frederick et al., 2018; Garcia et al., 2014; Piemonte et al., 2019; see Mahar et al., 2020 for a review). Research has shown that the orgasm gap is exacerbated in casual sex encounters (Armstrong et al., 2012; Piemonte et al., 2019), but still exists within committed relationships that span many years (Frederick et al., 2018; Jones et al., 2018). Previous research has established the existence of this disparity across various samples and sexual contexts, but the majority of this work has been between-subjects, comparing samples of men and women. There has been limited research exploring the orgasm gap in couples from a dyadic perspective. Two recent studies have done so, using heterosexual couples who were newlyweds (Leonhardt et al., 2018) or in committed relationships (Jones et al., 2018). Both studies identified orgasm gaps within the dyadic pairs, with men having more orgasms than their partners. The current study expands on prior work by investigating the relationship between the orgasm gap and individuals' desire and expectation for orgasm, to further understand how the orgasm gap may be perpetuated in couples.

Previous work has established a consistent positive relationship between orgasm frequency and sexual satisfaction (Haavio-Mannila & Kontula, 1997; Haning et al., 2007; Pascoal et al., 2014). In fact, studies have found that experiencing orgasm is one of the strongest predictors of sexual satisfaction in general, and especially for women (Haavio-Mannila & Kontula, 1997; Haning et al., 2007). Additionally, an individual's partner's orgasm rate is highly correlated with an individual's own sexual satisfaction, and both men and

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women have been shown to base their sexual satisfaction at least partially on the perceived pleasure or orgasm of their partner (Kontula & Miettinen, 2016; Leonhardt et al., 2018; McClelland, 2011; Young et al., 1998).

Sexual satisfaction is positively correlated with several other sexual measures, including sex frequency, sexual communication, commitment, and relationship satisfaction, as well as general psychological well-being (Byers, 2005; Davison et al., 2009; Leonhardt et al., 2018; Litzinger & Gordon, 2005; Sprecher, 2002; Young et al., 1998). As such, experiencing greater orgasm frequency for one's self and one's partner has benefits for individuals' and couples' sexual and relationship outcomes. Although research has identified this link between orgasm frequency, sexual satisfaction, and beneficial outcomes for couples, the orgasm gap persists within mixed-sex couples over time. We aim to investigate how orgasm inequality may be perpetuated in relationships by looking at participants' expectation and desire for orgasm.

Previous research has found that some heterosexual women enter partnered sex *without* the expectation to orgasm (Goldey et al., 2016), and as such, may choose not to pursue orgasm very strongly in some partnered contexts (Gusakova et al., 2020). If women do not feel empowered to ask for or take steps to achieve orgasm with their partners, they may begin to develop a different threshold for their sexual satisfaction than men do (e.g., the absence of pain or degradation rather than the presence of pleasure or orgasm; McClelland, 2010). Individuals often interpret their sexual experiences in the context of expectations associated with their social group, which is particularly relevant for women's experience with orgasm (McClelland, 2010). While orgasm is not always the end goal of a sexual encounter or the only measure of sexual satisfaction, it is important to consider how gender norms shape the forms of pleasure men and women expect, and are thus satisfied by, during heterosexual sex.

Expectancy formation is a cognitive process which connects past experiences with future expectations, desires, and behaviors (Bandura & National Institution of Mental Health, 1986; Hogben & Byrne, 1998). One recent study found that orgasm, sexual pleasure, and emotional closeness expectancies informed men's and women's sexual desire, such that increased expectations for orgasm, pleasure, and emotional closeness predicted higher sexual desire (Blumenstock, 2021). Importantly, expectancies are often formed by previous experiences (Bandura & National Institution of Mental Health, 1986). Thus, women's experience with orgasm in their relationships likely shapes their orgasm expectations and desires. When women who value orgasm experience orgasm more frequently during sex with a partner, they should expect more frequent orgasms and desire sex more (Blumenstock, 2021; Hogben & Byrne, 1998). Research has also shown that when women treat orgasm as a goal in their sexual encounters and take steps to pursue it, they are more likely to experience orgasm (Gusakova et al., 2020). Expectancy-value theory asserts that individuals' motivation to pursue a goal is informed by their expectations for success as well as the value they place on the outcome (Eccles et al., 1983; Wigfield & Eccles, 2000). Thus, if women lower their expectations or desire for orgasm when they experience low orgasm frequency, they likely pursue orgasm less. As a result, the orgasm gap may be perpetuated over time within their relationships.

Current Study

In the current research, we aim to replicate studies that demonstrate the gendered orgasm gap (see Mahar et al., 2020 for a review) using heterosexual dyadic pairs. In addition to men's and women's individual orgasm frequencies, we use an orgasm frequency discrepancy value to conceptualize the size of the orgasm gap between partners in each relationship (see also Wetzel & Sanchez, 2022). Previous research has found that men overestimate women's orgasm frequency in general, compared to women's reports (Frederick et al., 2018; Shirazi et al., 2018; Wetzel & Sanchez, 2022), but limited research has investigated partner orgasm perceptions in a dyadic context (i.e., do men overestimate their own partner's orgasm frequency?). One such study found that 42% of newlywed husbands misperceived their wives' orgasm frequency (25% overreported and 17% underreported; Leonhardt et al., 2018). The current research will similarly investigate participants' reports of their partners' orgasm frequencies and their estimates of the size of the orgasm gap. Finally, using dyadic correlational data from both romantic partners, we test whether men's and women's orgasm frequencies are associated with their orgasm expectations and desires, such that a lower orgasm frequency would predict lower expectation and desire for orgasm in their relationships (see Fig. 1 for hypothesized path model).

The present study reports on data from a larger data collection effort (see Cultice et al., 2021), in which men and women within existing mixed-sex relationships reported their own orgasm frequency, their perception of their partner's orgasm frequency, sexual satisfaction, and other sexual outcomes, including sex frequency, desired sex and orgasm frequency, and expected sex and orgasm frequency (i.e., how often people "should" have sex or have an orgasm). The current research contributes novel information to the study of orgasm, sexual satisfaction, and sexual outcomes by utilizing a dyadic sample of couples and by investigating the relationship between orgasm frequency, sexual satisfaction, orgasm desire, and orgasm expectations.

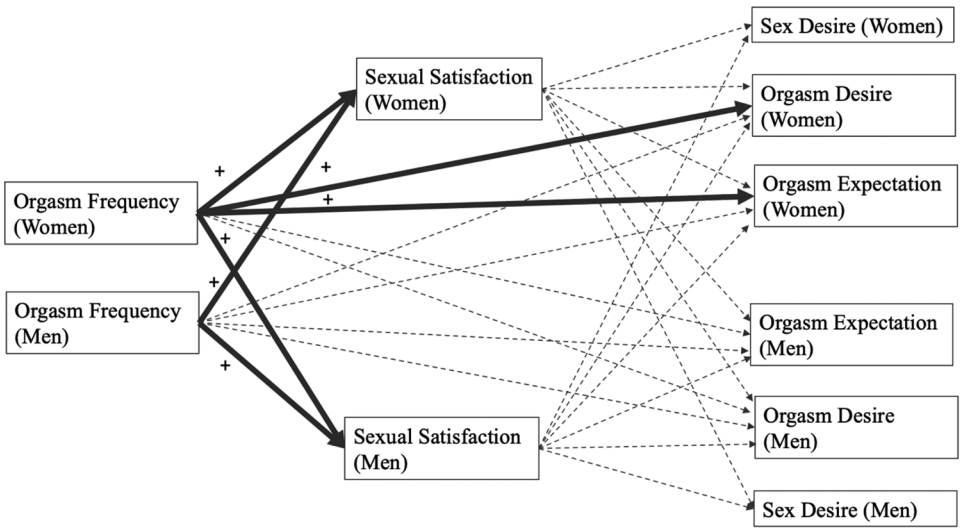

Fig. 1 Hypothesized Path Model. *Note.* Both actor and partner effects (for men and women within the dyad) were considered in the model for all outcomes. Error covariances were specified between men's and women's reports of orgasm frequency, sexual satisfaction, sex desire, and orgasm expectation. Solid lines indicate predictions for significant path estimates ($p < .05$)

Overview of Hypotheses

In the current research, we predict that an orgasm gap will exist within the mixed-sex dyadic pairs, with men having more frequent orgasms than their female partners. We also predict that men will underreport the size of the orgasm frequency discrepancy within their relationships, while women will report it accurately. Further, we predict that our dyadic path model will replicate evidence that increased orgasm frequency for oneself and one's partner results in increased sexual satisfaction for both men and women. Finally, we expect women's orgasm frequency to predict women's desire and expectation for orgasm, while we do not expect these relationships for men (see Fig. 1).

Method

Participants and Procedure

A sample of 104 sexually active mixed-sex couples (i.e., one man and one woman) who reside in the United States and had been in a relationship for at least four months were recruited using an online Qualtrics panel for a larger study on growth mindsets and sexual satisfaction (Cultice et al., 2021). Qualtrics manages representative, online panels of prospective research participants that are accessible to academic researchers. We worked closely with participant recruitment specialists at Qualtrics in order to obtain a high-quality dyadic sample. Qualtrics screened their participant pool for qualifying couples who were 1) located in the United States, 2) sexually active, 3) mixed-sex (i.e., one man and one woman), and 4) who had been in a relationship for at least four months. We requested these qualifications so that we would be able to test for gender differences in sexual experiences among people in established relationships.

A separate screening processes conducted by Qualtrics determined if both members of each couple would be present to take the survey. Both partners were present at their computer to complete the survey. They jointly read the following instructions: *One of you will be "Partner A" and one of you will be "Partner B." It doesn't matter who is Partner A and who is Partner B. Your decision has no significance to the research. Simply, Partner A will complete the survey on the computer first; then Partner B will complete the survey second.* After determining who is Partner A and who is Partner B, they were instructed to complete different parts of the survey separately, reading instructions such as: *This portion of the survey is for Partner A only. Partner B: please leave the room. Partner A: when you are alone at the computer, please click the forward arrow to begin your portion of the study. Remember, your partner will not be able to see your responses to the survey questions.* When both couple members had completed their individual section of the survey, they were asked to jointly return to the computer to read our debriefing statement. Couples were jointly compensated approximately $20 for their participation. The survey took participants 15.8 min on average to complete. Procedures regarding this data, collected from October 15 to October 29, 2019, were reviewed and approved by the Rutgers Review Board for compliance with standards for the ethical treatment of human participants.

The current study is a secondary analysis of data collected from this sample. We only report measures administered that pertain to the current analysis. For a full description of measures as they were presented to participants in this sample, https://osf.io/btcn2/?view_only=ca473bcaa9914cfb9ce60e4ae0523c99. For data and analyses pertaining to the current study, https://osf.

Table 1 Demographics for the Dyadic, Mixed-Sex Couples in the Sample

Couples *N*	104
Total Participants	208
Length of Relationship in Years *M* (*SD*)	17.7 (14.0)
Married (%)	
Yes	85.6
No	14.4
Live Together (%)	
Yes	99.0
No	1.0
Children (%)	
Yes	71.2
No	28.8
Age *M* (*SD*)	43.9 (14.5)
Sexual Orientation (%)	
Heterosexual (Straight)	94.2
Bisexual or Pansexual	4.8
Gay or Lesbian	1.0
Race/Ethnicity (%)	
White	79.3
Hispanic/Latino	10.1
Black/African American	5.8
East Asian	1.4
American Indian or Alaska Native	1.4
Multiracial	1.4
Not listed above	1.4

Each couple consisted of one cisgender man and one cisgender woman. Participants could select more than one racial/ethnic category. Additional racial/ethnic categories (e.g., Middle Eastern, South Asian, Southeast Asian, and Pacific Islander) with no participant representation in the sample have been removed from the table

io/mtkqa/?view_only=49264a683f914ffe97360bebd7796497. At the beginning of the study, participants provided their partner's initials, which were incorporated throughout the survey for clarity.

All participants identified as cisgender, most (94.2%) were heterosexual, and 79.3% of the sample was White. Participants had to be at least 18 years of age to participate (M_{age} = 43.9 years, SD_{age} = 14.5 years). The couples were in relationships ranging from 6 months to 61.9 years in length (M = 17.7 years, SD = 14.0 years). In the sample, 99% of the couples cohabitated, 85.6% were married, and 71.2% had children. Participant demographics can be found in Table 1. Participants were instructed to complete survey measures independently, without input from their partner, and without knowledge of their partner's responses. Descriptive statistics for all measures are included in Table 2.

Measures

Sexual Satisfaction

To measure sexual satisfaction, we administered the Index of Sexual Satisfaction (ISS; Hudson et al., 1981; as used by Babin, 2013). Using a scale from 1 (*none of the time*) to 7 (*all of the time*), participants answered twelve items including "It is easy for me to get sexually satisfied by *[Partner's Initials]*", and "I think that my sex life with *[Partner's Initials]* is wonderful." Scores were averaged such that higher scores indicated greater sexual satisfaction.

Sex Frequency, Desire, and Expectation

Sex was defined at the beginning of the survey as oral sex, penetrative sex, or any other sexual activities that could

Table 2 Descriptive Statistics and Corresponding Gender Differences for Study Measures

Study Measure	Range	Men		Women				
		Mean	*SD*	*Mean*	*SD*	*t*	*p*	*d*
Sexual Satisfaction	1–7	6.00	0.91	5.80	1.06	2.86	**.005****	.28
Sex Frequency	1–5	4.02	0.92	4.06	0.93	-1.00	.320	-.10
Sex Desire	1–5	4.38	0.79	4.13	0.93	3.12	**.002****	.31
Perceived Partner Sex Desire	1–5	4.11	0.93	4.37	0.78	-2.52	**.013***	-.25
Sex Expectation	1–5	4.40	0.70	4.23	0.73	2.87	**.005****	.28
Orgasm Frequency	1–5	4.69	0.56	4.01	0.97	6.54	**<.001*****	.65
Perceived Partner Orgasm Frequency	1–5	4.24	0.86	4.73	0.57	-5.26	**<.001*****	-.52
Orgasm Desire	1–5	4.74	0.51	4.59	0.62	2.46	**.016***	.24
Perceived Partner Orgasm Desire	1–5	4.74	0.53	4.76	0.47	-0.65	.515	-.07
Orgasm Expectation	1–5	4.60	0.57	4.52	0.57	1.52	.131	.15
Reported Orgasm Gap	-4 to +4	0.45	0.94	0.72	1.03	-4.15	**<.001*****	-.41
Actual Orgasm Gap	-4 to +4	0.68	1.05	0.68	1.05	–	–	–

Paired samples *t*-tests between men and women are reported for each study variable

* $p < .05$; ** $p < .01$; *** $p < .001$

potentially lead to orgasm. Participants were asked how often they and their partner have any kind of sex using the following question: "How often do you and *[Partner's Initials]* have (oral, penetrative, etc.) sex?" (Sex Frequency). Then, participants were asked how often they would *like* to have sex with their partner (Sex Desire), and how often they think their partner would like to have sex with them (Perceived Partner Sex Desire). Finally, they were asked how often they expect couples should have sex (Sex Expectation). All of these questions were asked on a five-point scale from 1 (*never*) to 5 (*3 or more times a week*).

Orgasm Frequency, Desire, and Expectation

Participants were asked how often they orgasm when they engage in (oral, penetrative, etc.) sex with their partner: "When you and *[Partner's Initials]* have sex, how often do you orgasm?" (Orgasm Frequency). They were then asked the same question regarding how often their partner orgasms (Perceived Partner Orgasm Frequency). Next, they were asked the ideal amount that they would like to orgasm while having sex with their partner (Orgasm Desire), and the ideal amount that they believe their partner would like to orgasm while having sex with them (Perceived Partner Orgasm Desire). Finally, they were asked how often they expect people should orgasm when engaging in sexual activity (Orgasm Expectation; with the question "How often should people orgasm when they are having sex?"). Participants had the option to select "I'm not sure" for these questions; these participants were excluded from relevant analyses (less than 2% of the sample). With the "I'm not sure" option removed all questions were coded on a five-point scale from 1 (*never*) to 5 (*every time*) (all response options had textual description; see Table 3).

Demographics

In addition to questions about gender, partner gender, sexual orientation, and race/ethnicity, participants were asked about the length of their relationship with their partner, whether they live with their partner (cohabitation), whether they are married to their partner, and whether they have children with their partner (see Table 1). After this, participants were debriefed and released from the study.

Analytic Strategy

We used paired samples *t*-tests to examine the differences between men's and women's reports on various study measures. Of particular importance, we compared men's and women's orgasm frequencies within each dyad. Then, we calculated an orgasm frequency discrepancy score for each dyad by subtracting women's orgasm frequency from men's, such that positive values would always indicate the extent to which men had more orgasms than their partners. We also calculated a reported orgasm gap score for each member of the dyad by subtracting each participant's self-reported orgasm frequency with their report of their partner's orgasm frequency. We could then compare participants' reports of the orgasm gap to the actual orgasm gap for each couple using a paired samples *t*-test. We used correlations to observe the associations between the size of the orgasm gap and other sexual measures for the couples.

Because the interdependence among couples' data violated the assumption of independence, we tested our predicted relationships between both partners' orgasm frequencies, sexual satisfaction, and outcome variables utilizing the Actor-Partner Interdependence Model approach (APIM; Kashy & Kenny, 2000). APIM models were conducted via path analysis on the dyad dataset with Mplus Software (Muthén & Muthén, 2017). Dyadic analyses using the APIM and maximum likelihood estimation account for the interdependence among couples while also estimating both actor effects and partner effects. In this model, for example, actor effects refer to the effect of one's own orgasm frequency on one's own sexual satisfaction, while a partner effect refers to the effect of one's own orgasm frequency on one's partner's sexual satisfaction. Because we utilized a sample of mixed-sex couples, we used gender to distinguish between dyad members. According to past research on model fit (Hu & Bentler, 1999; Kline, 2011), good fitting models have comparative fit index (CFI) values that exceed .95, root mean

Table 3 Orgasm Frequencies and Perceptions for Dyadic Partners

	Women's self-report	Men's self-report	Women's report of partner	Men's report of partner		Women's accuracy	Men's accuracy
Never	0.0%	0.0%	0.0%	0.0%			
Rarely	8.8%	1.0%	1.0%	4.9%	Under	4.8%	5.9%
About half of the time	19.6%	1.9%	2.9%	12.7%	Accurate	86.5%	66.7%
More than half of the time	33.3%	24.0%	18.3%	36.3%	Over	8.7%	27.5%
Every time	38.2%	73.1%	77.9%	46.1%			

Some percentages do not add to 100% due to rounding

square error approximation (RMSEA) values below .06, and a standardized root mean square residual (SRMR) below .08.

Results

Demographics for the sample can be found in Table 1. Descriptive statistics and gender differences for all study measures can be found in Table 2.

Orgasm Frequency, Discrepancy, and Perceptions

A paired samples *t*-test revealed a significant within-dyad difference between men's and women's orgasm frequency, with men reporting a significantly greater orgasm frequency ($M = 4.7$, $SD = 0.6$) than their partners reported ($M = 4.0$, $SD = 1.0$), $t(101) = 6.54$, $p < .001$, Cohen's $d = 0.65$. Men reported that their partners experienced orgasm significantly more frequently ($M = 4.2$, $SD = 0.9$) than their partners reported, $t(101) = -4.06$, $p < .001$, $d = .40$. There was no difference between women's reports of their partner's orgasm frequency ($M = 4.7$, $SD = 0.6$) and their partners' reported orgasm frequency, $t(103) = -1.07$, $p = .287$.

Both men ($M = 0.5$, $SD = 0.9$) and women ($M = 0.7$, $SD = 1.0$) did report that there was an orgasm gap in their relationships, compared to a value of zero to indicate no orgasm difference, $ts(101) = 4.85$ and 7.03, $ds = .48$ and .70, respectively, $ps < .001$. However, a paired samples t-test comparing men's reports of the orgasm gap to the actual size of the gap for each couple ($M = .7$; $SD = 1.0$) found that men in the sample significantly underreported the size of the orgasm discrepancy in their relationships, $t(101) = 4.06$, $p < .001$, $d = 0.40$ (Fig. 2). Women's average reports, however, did not significantly differ from the couple's actual orgasm frequency discrepancy value, $p = .287$. Men's reports of the size of the orgasm gap were significantly smaller than women's reports, $t(101) = -4.15$, $p < .001$, $d = -.41$ (Fig. 2). The size of the orgasm gap was not correlated with men's or women's ages or the length of their relationships, $ps > .10$.

A paired samples *t*-test also revealed that there was a significant discrepancy between women's self-reported orgasm frequency ($M = 4.0$, $SD = 1.0$) and their desired orgasm frequency ($M = 4.6$; $SD = 0.6$), $t(101) = 6.57$, $p < .001$, $d = 0.65$. Men, however, did not differ in their self-reported ($M = 4.7$, $SD = 0.6$) and desired orgasm frequencies ($M = 4.7$; $SD = 0.5$), $p > .10$. These results indicate that women in the sample desired more orgasms than they currently experienced, while men did not. Women reported a lower desired orgasm frequency than their male partners, however, $t(101) = 2.46$, $p = .016$, $d = .24$.

In terms of partner accuracy, 86.5% of women and 66.7% of men reported their partner's orgasm frequency in congruence with how their partner reported on the five-point scale. In the sample, 27.5% of men overreported their partner's orgasm frequency, while only 5.9% underreported. For women, 8.7% overreported and 4.8% underreported their partner's orgasm frequency compared to their partner's report (see Table 3; as presented in Leonhardt et al., 2018).

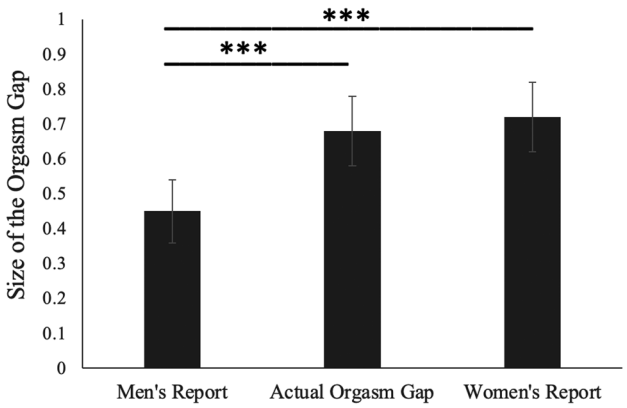

Fig. 2 Participants' Reports of the Size of the Orgasm Gap. *Note.* Using paired samples *t*-tests, men significantly underreported the size of the orgasm gap as compared to the actual orgasm gap in their relationship and compared to women's reports. Orgasm frequency was measured on a scale of "*Never*" (1) to "*Every time*" (5). Given this scale, orgasm gap perception scores could range from -4 (women having more orgasms) to +4 (men having more orgasms). Error bars represent ± 1 SE. * $p < .05$. ** $p < .01$. *** $p < .001$

Orgasm Gap and Sexual Outcomes

We also investigated how sexual outcomes related to a greater *discrepancy* in orgasm frequency (i.e., greater orgasm gap) for each couple. For women, a greater orgasm gap was significantly correlated with women reporting less desire for orgasm ($r = -.27$, $p = .007$), less expectation for orgasm ($r = -.24$, $p = .013$), and lower sexual satisfaction ($r = -.22$, $p = .025$). The size of the orgasm gap did not correlate with how often women wanted to have sex with their partner, how often they believed couples should have sex, or with women's perceptions of how often their partner wanted sex or orgasm (Table 4).

For men, a greater orgasm gap in the relationship (with men having more orgasms) was correlated with men's reports of lower sex frequency ($r = -.23$, $p = .023$) and lower perceptions of their partner's desire for sex ($r = -.23$, $p = .022$). However, the size of the orgasm gap was not correlated with men's perceptions of their partners' orgasm desire, their expectation for how frequently people "should" orgasm, their own sex or orgasm desire, or their own sexual satisfaction (Table 4).

Given that these correlations do not account for the interdependence of the couples nor the likely shared covariance among partners' sexual outcomes, we explored

Table 4 Correlation Table of Study Variables for Women and Men

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Actual Orgasm Gap		.94***	-.07	.00	-.22*	-.19	-.10	-.13	-.11	-.85***	.25*	-.27**	.05	-.24*
2. Perceived Orgasm Gap	.85***		-.04	.01	-.26**	-.22*	-.17	-.12	-.15	-.84***	.38***	-.18	.09	-.20*
3. Age	-.08	-.06		.83***	.01	-.30**	-.28**	-.28**	-.26**	.02	-.06	.11	-.02	-.05
4. Length of Relationship (Years)	.00	-.03	.80***		-.03	-.26**	-.31**	-.23*	-.23*	-.07	-.10	.04	.03	-.13
5. Sexual Satisfaction	-.09	-.05	-.11	-.09		.51***	.60***	.22*	.40***	.48***	.33***	.34***	.13	.24*
6. Sex Frequency	-.23*	-.16	-.34***	-.33***	.46***		.70***	.56***	.54***	.37***	.22*	.23*	.10	.34***
7. Sex Desire	-.06	-.06	-.27**	-.16	.30**	.57***		.37***	.53***	.31**	.20*	.18	.05	.15
8. Perceived Partner Sex Desire	-.23*	-.14	-.27**	-.23*	.49***	.65***	.50***		.43***	.25*	.20*	.22*	.23*	.19
9. Sex Expectation	.00	.01	-.14	-.13	.27**	.44***	.54***	.35***		.28**	.20*	.21*	.24*	.27**
10. Orgasm Frequency	.40***	.44***	-.14	-.12	.41***	.22*	.25*	.20*	.22*		.19	.42***	.20*	.38***
11.Perceived Partner Orgasm Frequency	-.67***	-.81***	-.04	-.04	.32***	.33***	.25*	.29**	.14	.18		.38***	.50***	.29**
12. Orgasm Desire	-.02	-.06	.12	.11	.25**	.07	.40***	.16	.22*	.33***	.28**		.41***	.58***
13.Perceived Partner Orgasm Desire	.01	.00	.08	.14	.21*	.08	.39***	.26**	.26**	.42***	.27**	.78***		.24*
14. Orgasm Expectation	-.12	-.05	-.13	-.17	.34***	.20*	.38***	.34***	.29**	.41***	.32***	.52***	.60***	

Correlations for women ($n = 104$) are presented above the diagonal, whereas correlations for men ($n = 104$) are presented below the diagonal

* $p < .05$; ** $p < .01$; *** $p < .001$

the relationships between orgasm frequency and outcome variables using path analysis which accounted for both interdependence and the relationships between the outcomes of interest.

Path Analysis Model

Of the sexual outcomes measured in the current study, we were particularly interested in the relationships between orgasm frequency, sexual satisfaction, and desire and expectation for orgasm (see Fig. 1). Specifically, we wanted to test whether women's orgasm frequency predicted women's desire and expectation for orgasm. Our dyadic path model used an Actor-Partner Interdependence Model (APIM) data structure to explore the relationships between both partners' orgasm frequencies and sexual satisfaction on their sex desire, orgasm desire, and orgasm expectation (results depicted in Fig. 3). Orgasm frequency was used to predict sexual satisfaction, and both orgasm frequency and sexual satisfaction were used to predict orgasm desire and orgasm expectation. We included desired sex frequency in the model to control for general sex desire while assessing orgasm desire. Both actor and partner effects (for men and women within the dyad) were considered in the model for all outcomes. Error covariances were specified between men's and women's reports of orgasm frequency, sexual satisfaction, sex desire, and orgasm expectation. Fit statistics for our model indicated a good fitting model, χ^2 (4, $N = 104$) = 2.46, $p = .65$; CFI = 1.00; TLI = 1.00; SRMR = 0.026; RMSEA = 0.00 (90% CI [0.00, 0.12]). All significant and non-significant paths within the model are reported in Table 5. All significant error covariances are displayed in Fig. 3. Relevant paths are discussed below.

Orgasm Frequency and Sexual Satisfaction

Our path model replicated existing research which finds that sexual satisfaction is significantly predicted by both one's own and partner's orgasm frequency. Women's sexual satisfaction was predicted by her own (β = .45, $p < .001$) and her partner's (β = .33, $p = .006$) orgasm frequency. Men's sexual satisfaction was similarly predicted by his own (β = .37, $p = .004$) and his partner's (β = .28, $p = .004$) orgasm frequency. The model accounted for 34.8% of the variance in women's sexual satisfaction and 24.3% of the variance in men's sexual satisfaction, $ps < .01$.

Orgasm Desire and Expectation

Consistent with our expectations, we found that women's orgasm frequency significantly predicted women's desire

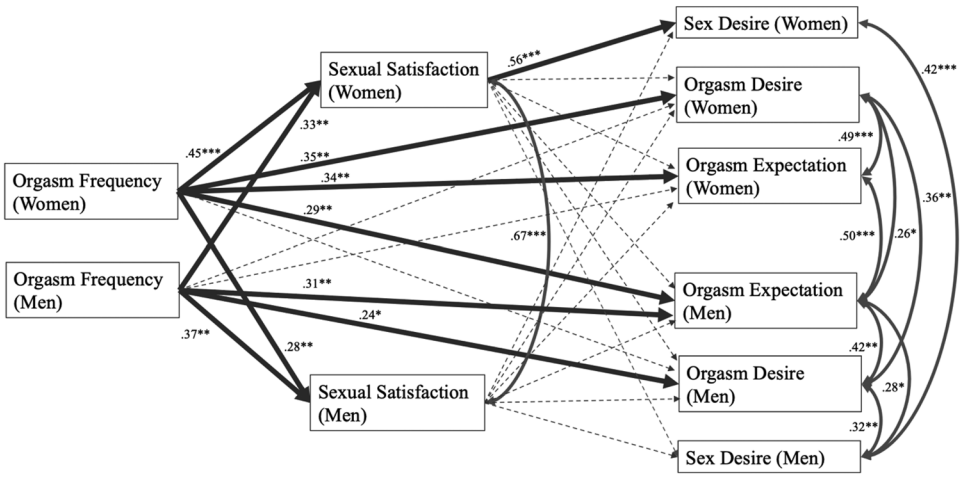

Fig. 3 Orgasm Desire and Expectation Dyadic Path Model. *Note*. Solid lines indicate standardized beta values that are significant at the .05 level. Significant error covariances are shown. For both men and women, orgasm frequency was related to one's own sexual satisfaction and their partner's sexual satisfaction, as well as one's own orgasm desire and expectation. Women's orgasm frequency also predicted their partner's orgasm expectation. * $p < .05$. ** $p < .01$. *** $p < .001$

(β = .35, $p = .001$) and expectation (β = .34, $p = .004$) for orgasm. In addition, men's orgasm frequency similarly predicted men's desire (β = .24, $p = .045$) and expectation (β = .31, $p = .009$) for orgasm. Women's orgasm frequency also predicted men's expectation for how often people should orgasm (β = .29, $p = .006$). The model accounted for 24.1% of the variance in women's orgasm desire ($p = .002$), 16.3% of the variance in women's orgasm expectation ($p = .036$), and 25.6% of the variance in men's orgasm expectation ($p = .007$). The model did not explain a significant proportion of the variance in men's orgasm desire (12.6%; $p = .096$). See Table 5 for a description of all paths included in the model.

Discussion

The current research replicated the existence of the orgasm gap using a dyadic sample and found evidence that men underreport the size of that gap compared to their female partners' reports. Importantly, our dyadic path model revealed that individuals' orgasm frequency predicts their

Table 5 Orgasm Desire and Expectation Dyadic Path Model Results

Effect		Men's standardized coefficient	Men's SE	Men's *p* value	Women's standardized coefficient	Women's SE	Women's *p* value
Predictor	Outcome						
Actor Effects							
Orgasm Frequency	Sexual Satisfaction	0.37	0.13	**.004****	0.45	0.10	**< .001*****
	Orgasm Desire	0.24	0.12	**.045***	0.35	0.11	**.001****
	Orgasm Expectation	0.31	0.12	**.009****	0.34	0.12	**.004****
Sexual Satisfaction	Orgasm Desire	0.13	0.21	.525	-0.09	0.17	.600
	Orgasm Expectation	0.22	0.17	.180	-0.07	0.19	.723
	Sex Desire	0.04	0.20	.830	0.56	0.14	**< .001*****
Partner Effects							
Orgasm Frequency	Sexual Satisfaction	0.33	0.12	**.006****	0.28	0.10	**.004****
	Orgasm Desire	0.08	0.12	.501	0.11	0.10	.278
	Orgasm Expectation	0.14	0.12	.255	0.29	0.11	**.006****
Sexual Satisfaction	Orgasm Desire	0.29	0.16	.065	-0.01	0.24	.974
	Orgasm Expectation	0.11	0.16	.498	-0.14	0.20	.487
	Sex Desire	0.04	0.14	.757	0.33	0.22	.142

"Actor effects" indicate individual effects for men and women separately. For example, men's orgasm frequency predicted their own sexual satisfaction (β = .37), and women's orgasm frequency predicted their own sexual satisfaction (β = .45). "Partner effects" indicate the effects of participants' scores on their romantic partner's outcomes. For example, men's orgasm frequency predicted their female partner's sexual satisfaction (β = .33), and women's orgasm frequency predicted their male partner's sexual satisfaction (β = .28)

* $p < .05$; ** $p < .01$; *** $p < .001$

desire and expectation for orgasm. Men's expectation for how often people should orgasm was additionally predicted by their female partner's orgasm frequency. Implications of these results are discussed.

The Orgasm Gap

The current research replicates the existence of the orgasm gap within the context of dyadic couples in committed long-term relationships, with men having more orgasms than women (Frederick et al., 2018; Jones et al., 2018; Leonhardt et al., 2018). Relationships in our sample spanned from 6 months to 61.9 years, and the length of the couple's relationship was not correlated with the size of the orgasm gap for that relationship. So, although women's orgasm frequency has been shown to increase the more familiar the sexual partner becomes (Armstrong et al., 2012), our data suggest that once couples reach the threshold of a committed relationship, the length of that relationship no longer influences the size of the orgasm gap.

We also found that men underreported the size of the orgasm gap in their own relationships, replicating existing findings that men tend to overestimate women's orgasm frequency (Shirazi et al., 2018; Wetzel & Sanchez, 2022). However, in most existing work, men overreport women's orgasm frequency compared to average reports from women in general, rather than their own partners. For example, samples of men report that women orgasm at least 18% more frequently than samples of women report, and report the size of the orgasm discrepancy between themselves and their partners to be at least 33% smaller than women report it to be (Shirazi et al., 2018; Wetzel & Sanchez, 2022). Uniquely, the dyadic nature of our sample allows us to directly compare men's reports of their partners' orgasm frequency to their partners' self-reported orgasm frequency. While the response options for orgasm frequency were limited and open to differences in interpretation, it seems that men were more likely to choose the ego-attractive option when reporting their partners' orgasm frequency (e.g., "every time" as opposed to "over half of the time") compared to their partners' self-report. This finding expands on one recent study focused on couples, which found that 25% of husbands within newlywed dyadic pairs overreported and 17% underreported their wives' orgasm frequency (Leonhardt et al., 2018). In our sample, 27.5% of men overreported their partners' orgasm frequency and 5.9% underreported, compared to their partners' reports.

It's important to consider how gender differences in orgasm expectations (e.g., men's orgasm is the expected result of sex while women's orgasm is perceived as a bonus or achievement; Armstrong et al., 2012; Chadwick & van Anders, 2017; Fahs, 2011; Klein & Conley, 2021; Matsick et al., 2016) may influence how participants chose to respond to the orgasm frequency measures, given the subjective and limited response options. For example, if a man and a woman both objectively experience orgasm at an equal frequency (e.g., 90%), their subjective reports on the scale may differ because of gendered expectations. The woman may have a low expectation for her orgasm frequency and thus, a frequency of 90% is reported as "every time." In contrast, if men always expect to orgasm, they may interpret and report the same orgasm frequency instead as "over half of the time." Research finds that women have lower expectations for experiencing orgasm during sexual activity than men do (Blumenstock, 2021). These gendered orgasm expectations may influence participants' subjective reports on the limited response options used in our study, and results should be interpreted within this context.

However, if an objective orgasm frequency (e.g., 90%) is likely to be subjectively overreported for women ("every time") and underreported for men ("more than half of the time") by both members of the couple, this provides even stronger support for our results. In other words, if gendered orgasm expectations do systematically bias our results in this way, the orgasm gap would be larger in actuality than identified in our results. We find that the orgasm gap between men and women is still substantially large ($d = .65$) despite these potential biases. Thus, we maintain that the differences in orgasm frequencies are compelling in our data.

We also attempted to conceptualize this discrepancy as a form of inequality within sexual relationships by correlating the *size* of the orgasm gap with sexual outcomes. Measuring the size of the orgasm gap measures the size of the orgasm inequality within a given relationship, which allows us to consider orgasm differences in a novel way (see also Wetzel & Sanchez, 2022). A greater disparity in orgasm frequency for the couple (i.e., greater orgasm inequality) was associated with women's lower desire and expectation for orgasm, as well as men's reports of lower sex frequency and perception of their partner's lower desire for sex. Additionally, greater orgasm inequality in the relationship was associated with lower sexual satisfaction for women, but not for men.

Orgasm Expectations and Desire

Our dyadic path model replicated previous findings that men's and women's sexual satisfaction is predicted by both their own and their partner's orgasm frequency (e.g., Haavio-Mannila & Kontula, 1997; Haning et al., 2007; Pascoal et al., 2014; Young et al., 1998). In other words, an individual is more sexually satisfied when both that individual and their partner experience orgasm more frequently. Importantly, our dyadic path model also provided evidence that women's orgasm frequency predicts women's desire and expectation for orgasm, while sexual satisfaction does not. Women

who experienced orgasm more frequently reported a greater desired orgasm frequency and a greater expectation for how often people "should" orgasm. For women, lower orgasm desire and expectation were also directly correlated with a larger orgasm frequency discrepancy in the relationship.

However, contrary to our hypotheses, the relationships between orgasm frequency and orgasm expectation and desire existed for men as well, though the model did not account for a significant proportion of the variance in men's orgasm desire. While we cannot make causal conclusions based on correlational data alone, these results provide evidence that both men and women base their expectation and desire for orgasm, at least partially, on how often they experience orgasm in their relationship. This finding aligns with expectancy formation research, which demonstrates that expectancies are formed by experiences, and expectancies inform future behavior (Bandura & National Institution of Mental Health, 1986; Blumenstock, 2021; McNulty & Karney, 2002; Ragsdale et al., 2014). The more frequently sex with a particular partner results in orgasm, the more expected that result should be. Thus, it is not surprising that this psychological process functioned similarly for men and women in our sample.

In addition, men whose female *partners* experienced orgasm more frequently also reported a greater expectation for how often people "should" orgasm. This finding gives evidence to the power of women's orgasm frequency in particular for shaping orgasm expectations. Our "orgasm expectation" measure was phrased as how often *people* should orgasm, and did not differentiate between how often men versus women should orgasm. Thus, when men's partners experience a lower orgasm frequency, men, similarly to women, reduce their expectations for the frequency of orgasm that should be expected.

Decreased orgasm desire and expectation could be conceptualized as a "devaluation" of orgasm. In the realm of relationship research, individuals in committed relationships may devalue attractive alternatives when those alternatives represent a threat to their relationship (Lydon et al., 1999, 2003). More broadly, people tend to devalue domains where their ingroup performs unfavorably in comparison to others (e.g., Schmader et al., 2001). Thus, it is intuitive that those who experience a lower orgasm frequency in their relationships reduce their desired orgasm frequency and their expectation for how often people should orgasm. However, it is women who typically experience lower orgasm frequencies than their partners *and* report a lower desired orgasm frequency than their partners. Thus, in the context of the orgasm gap, women's devaluation of orgasm may be perpetuated by their lower orgasm frequency.

Research has found that women place less importance on orgasm than men, and value emotional intimacy more strongly than physical pleasure (Mark et al., 2014; Ott et al., 2006; Regan & Bersched, 1996). However, women also expect less physical pleasure from oral and vaginal sex (Ott et al., 2006) and consistently experience orgasm less frequently than men (e.g., Mahar et al., 2020). The current research provides evidence that women's lower orgasm frequency likely contributes to this observed reduction in orgasm importance for women. If orgasm frequency predicts orgasm desires and expectations for both men and women, then women's lower orgasm frequency would contribute to women's lower orgasm expectation and desire relative to men.

This orgasm devaluation may serve to mitigate the gendered orgasm discrepancy's potential negative effect on women's sexual satisfaction, however. We suggest this conclusion given our present finding that women's lower desire and expectation for orgasm were unrelated to women's sexual satisfaction in their relationship. Multiple discrepancies theory (MDT) posits that a person's level of satisfaction, in any domain, is largely a result of the discrepancy between what that person has and what they want, what relevant others have, and what they believe they deserve (Michalos, 1985). According to this theory, if a person hopes to improve their satisfaction, they can either increase what they have, or decrease what they want or expect. By extending this theory into the realm of sexual satisfaction, individuals with low orgasm frequency could increase their sexual satisfaction either by increasing their orgasm frequency (e.g., Haavio-Mannila & Kontula, 1997; Haning et al., 2007), or by decreasing their desire and expectation for orgasm.

It is important to clarify that orgasms, while one of the strongest predictors of sexual satisfaction for men and women, are not the only route to sexually satisfying or pleasurable sexual experiences. Orgasm is often used in sexuality research as a proxy for sexual pleasure, when, in fact, orgasm experiences are not always positive. People report experience with "bad" orgasms, including pressure to orgasm (Chadwick et al., 2019). Orgasm coercion can have negative psychological and relationship consequences (Chadwick & van Anders, 2022). Many scholars have pushed for more diverse representations of sexual pleasure in research (Chadwick et al., 2019; Jagose, 2010). There is not a universal way to be sexually satisfied, and the authors do not wish to imply that lack of orgasm is a loss, deficit, or dysfunction. Some individuals may not wish to prioritize orgasm or may choose to value other aspects of a sexually pleasurable experience (e.g., intimacy; Ott et al., 2006). However, it remains important to consider how gender dynamics and inequities shape our sexual expectations and beliefs (Blumenstock, 2021; McClelland, 2010), including women's decision to reduce the importance they place on orgasm. This research provides evidence that women's lower orgasm frequency relative to men may contribute to women's decision to place less importance on orgasm as a sexual outcome.

While orgasm is not always desired or even positive, women often get the message that their orgasm is not prioritized culturally or by their partners (Armstrong et al., 2012; Klein & Conley, 2021). Research shows that when women place more focus on their own orgasm, view their orgasm as more important, take steps towards achieving orgasm, and engage in sexual activities that prioritize the stimulation they need to orgasm, they experience more orgasms (Frederick et al., 2018; Gusakova et al., 2020; Willis et al., 2018). Thus, if women increased their expectation and desire for orgasm, their orgasm frequency would likely increase as a result. As such, we expect that the relationships identified in our path model, between orgasm frequency and orgasm desire and expectation, are likely bidirectional.

According to theory on expectancy formation, the relationship between expectancies, desires, and behaviors can move in both directions (Bandura & National Institution of Mental Health, 1986; Blumenstock, 2021). Thus, cyclical patterns likely occur for men and women between low expectations and low orgasm frequency, and similarly between high expectations and high orgasm frequency. This cycle between experiences and expectations could explain why the orgasm discrepancy for a given couple typically reproduces rather than improves over time. According to expectancy-value theory, individuals' motivation for pursuing a certain outcome is informed by their expectation that they can achieve the outcome, as well as the value they place on it (Eccles et al., 1983; Wigfield & Eccles, 2000). Thus, when women reduce orgasm expectations and desires, they likely pursue orgasm less. Lower orgasm pursuit has been shown to predict lower orgasm likelihood (Gusakova et al., 2020). The current research stresses the importance of increasing women's expectations for and entitlement to physical pleasure, including orgasm, during heterosexual sex, with the hope of breaking a cycle of orgasm inequality for women who *do* wish to have more orgasms in their sexual relationships.

Closing the Orgasm Gap

There have been a range of biological and evolutionary perspectives proposed for why the orgasm gap exists. Evolutionary theorists have questioned the evolutionary purpose of the female orgasm (e.g., does it increase reproductive success, or is it simply an evolutionary leftover?; Lloyd, 2005; Pavličev & Wagner, 2016; Puts et al., 2012), and argue that its lesser role in reproduction may contribute to greater variation in women's orgasm frequency (Pavličev & Wagner, 2016). Importantly, men's most reliable route to orgasm is stimulation of the glans of the penis, while women's most reliable route to orgasm is stimulation of the external glans of the clitoris (Mintz, 2017). The penis is stimulated directly during vaginal intercourse, while the external clitoris is typically not. This anatomical difference in areas of the body that are stimulated during vaginal intercourse may appear to serve as a biological explanation for the orgasm gap. However, vaginal intercourse is not the only sex act that couples engage in, and is, in fact, the sex act with the lowest orgasm likelihood for women (Frederick et al., 2018).

Because vaginal intercourse is culturally prioritized as the main and most important sex act in a heterosexual context (Braun et al., 2003; Byers et al., 2009; Peterson & Muehlenhard, 2007), many sexual encounters lack the clitoral stimulation that would be required to facilitate women's equal orgasm frequency (Mintz, 2017). Thus, our societal conceptualization of sexuality creates an orgasm disparity out of what is, in actuality, an anatomical similarity (i.e., the penis and clitoris are homologous structures; Mintz, 2017; Nagoski, 2015). While biological factors certainly play a role in orgasm experiences, there is little evidence for a sex difference in biological *capacity* to experience orgasm. To the contrary, many women have a shorter orgasmic refractory period than men, which allows them to potentially experience more orgasms in a shorter period of time (Gérard et al., 2021).

Other research has similarly established that the orgasm gap is largely a result of societal and interpersonal factors as opposed to biological inevitability (see Mahar et al., 2020 for a review). This conclusion can be further illustrated by the fact that, when women have sex with other women, their orgasm rates rival men's (Frederick et al., 2018). Additionally, during masturbation, women typically orgasm at similar rates and in a similar time frame to men (Kinsey et al., 1953). Women's orgasm rates also increase substantially when sex acts that stimulate the external clitoris are included (Frederick et al., 2018; Salisbury & Fisher, 2014; Shirazi et al., 2018). Thus, the existence of the orgasm gap depends on context (Mahar et al., 2020). As such, women's low orgasm frequency does not represent psycho-physical dysfunction (Armstrong et al., 2012; Chadwick et al., 2019; Wade et al., 2005), and the orgasm gap is not an inevitable fact of nature. There is potential for the orgasm gap to be reduced or eradicated, as evidenced by a body of research which finds that improving communication, performing oral and manual sex, incorporating concurrent clitoral stimulation during intercourse, increasing sexual variety, and increasing the length of sexual encounters lessens heterosexual orgasm disparities, to name just a few examples (Frederick et al., 2018; Jones et al., 2018; Leonhardt et al., 2018).

The present findings contribute to an understanding of how orgasm inequality may be reproduced within committed relationships. Our results indicate that there is a relationship for both men and women between their orgasm experiences and their orgasm expectations and desires. For both men and women, experiences form expectations, and these expectations have been shown to impact sexual desire (Bandura &

National Institution of Mental Health, 1986; Blumenstock, 2021). Thus, individuals who orgasm more also tend to expect and desire orgasm more, while those who orgasm less tend to expect and desire orgasm less. These findings may partially explain why women report lower orgasm importance compared to men, particularly when women are in relationships with an orgasm gap. When women reduce their orgasm expectation and desire, they likely reduce their pursuit of orgasm (Eccles et al., 1983; Gusakova et al., 2020; Wigfield & Eccles, 2000). Thus, a cycle of continuing orgasm frequency discrepancies may be perpetuated within the couple. This theory may additionally explain why the size of the orgasm gap does not correlate with the length of a given relationship, as the cycle of orgasm inequality may reproduce rather than improve with time. Ultimately, this research suggests that we should work to increase both women's and men's expectations for women's orgasm frequency during heterosexual sex, in order to break this cycle for couples who wish to eliminate their orgasm gap.

Limitations

The current research should be interpreted in the context of limitations. Importantly, this study is correlational and cross-sectional, so causal relationships cannot be established, and these data cannot capture how sexual outcomes for couples, including the orgasm gap, may shift over time. The current study also grouped all types of relationships together. Future research would benefit from a systematic longitudinal investigation across relationship styles and contexts (e.g., whether couples live together, have children, are married, etc.).

Additionally, this research was conducted as a secondary data analysis of an existing dataset, and some measures could have been improved if written for the current study hypotheses. Self and partner orgasm frequency reports measured with five-point scales were particularly limited, as they were likely open to differences in interpretation (e.g., "about half of the time" versus "over half of the time"). In particular, gendered expectations about orgasm frequencies may have shaped how participants responded on this subjective scale (e.g., an orgasm frequency of 90% reported as "every time" for women but "over half of the time" for men). Other orgasm frequency measures have used nine-point scales defined by percentage point ranges (e.g., 1–10%, 11–20%; Garcia et al., 2014; Shirazi et al., 2018), or a continuous 0–100% scale for a more precise report (e.g., Wetzel & Sanchez, 2022). However, existing studies have similarly used five-point scales to measure orgasm frequency. One such study subsequently divided participants into three categories (Never-Rarely, Half of the Time, Usually-Always; Frederick et al., 2018). Importantly, existing dyadic work has used five-point scale measures of orgasm frequency to report accuracy of partner reports and to predict outcomes in path analysis (Jones et al., 2018; Leonhardt et al., 2018). As such, our measure is consistent with prior dyadic work in this area. Each of the aforementioned orgasm frequency scales has strengths and limitations.

Additionally, our measure of orgasm expectations differed from measures typically used in expectancy research, which assess participants' perceived likelihood of an outcome for themselves (Blumenstock, 2021). In contrast, our measure of orgasm expectations assessed participants' belief regarding how often people *should* experience orgasm. As such, our findings should be properly contextualized when compared with existing expectancy theory. However, we argue that the current research measures an expectation construct of equal theoretical importance.

Our convenience sample also lacked diversity in representation of racial, sexual, and gender minority groups. The intimate justice framework (McClelland, 2010) highlights how expectations for sexual experiences are shaped by additional identity factors beyond gender, such as race and sexual orientation, which create important intersections with gender. These intersections were not assessed in the current research, which limits this manuscript's assessment of pleasure expectation and entitlement. Future research with more diverse populations on these topics is needed.

Future Research Directions

Future research should continue to focus on women's potential devaluation of orgasm and methods by which couples can eradicate sexual pleasure and orgasm gaps within their relationships. Future research should test the proposed relationship between orgasm experience and orgasm importance more directly through quasi-experimental methods. For example, researchers could manipulate whether individuals imagine they orgasm or do not orgasm in a hypothetical scenario, in order to see whether their orgasm importance and sexual satisfaction would differ as a result. Future research could also apply expectancy-value theory to orgasm goal pursuit (Eccles et al., 1983; Gusakova et al., 2020; Wigfield & Eccles, 2000), in order to directly examine the relationships between orgasm desire and expectation, orgasm goal pursuit, and orgasm frequency.

Practice Implications

This research ultimately begs the question: how can we increase the kind of pleasure that women expect to experience when engaging in heterosexual sex? While orgasm and sexual pleasure are two separate constructs

(e.g., Blumenstock, 2021), this research stresses that it is imperative to increase women's entitlement to both. If orgasm frequency predicts orgasm desire and expectations, gender differences in orgasm frequency may be perpetuated rather than reduced over time when women reduce their orgasm desire and expectations. Additionally, the current findings may help to explain why women sometimes place less importance on orgasm compared to men. Sexual counselors and therapists may want to focus on improving women's entitlement to and expectation for orgasm, especially for women who wish to increase their orgasm frequency. These results may also be useful to therapists and counselors working to improve sexual outcomes for couples with a large or persistent orgasm disparity. Finally, sex educators and activists can use this research to inform the public about how the orgasm gap may persist over time.

Conclusion

The current research provides further evidence that the orgasm gap exists within mixed-sex relationships and men underreport its size. Our dyadic path model indicates that lower orgasm frequency predicts lower desire and expectation for orgasm for both men and women. These patterns shown in our model support the idea that individuals partially base their orgasm desire and expectation on how often they experience orgasm during partnered sex. This finding may explain why women often report lower orgasm importance compared to men, since they also tend to experience a lower orgasm frequency than men. When women lower their desire and expectation for orgasm, orgasm inequality may be perpetuated within the couple. Ultimately, this research demonstrates the importance of increasing women's expectations for the frequency of orgasm that they could experience, and are entitled to experience, in sexual encounters with men.

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Availability of Data and Material Data and materials for this study can be found at https://osf.io/btcn2 and https://osf.io/mtkqa.

Declarations

Ethics Committee Approval This study was approved by the Rutgers University Institutional Review Board.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Conflicts of Interest/Competing Interests The authors have no conflicts of interest to declare that are relevant to the content of this article.

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