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Orgasm Equality: Scientific Findings and Societal Implications

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Abstract

Purpose of Review Studies have consistently found that there is a gendered orgasm gap, with men experiencing orgasm more frequently than women in heterosexual sexual encounters. This literature review aims to highlight the current state of research on orgasm equality and to explore the reasons underlying this orgasm gap.

Recent Findings Our review of recently published studies indicates that the gendered orgasm gap still exists today. Additionally, these studies underscore how sociocultural factors can contribute to the differences in reported orgasm frequency between men and women in heterosexual encounters.

Summary This review suggests that our cultural prioritization of penile-vaginal intercourse over more clitorally focused sexual activities is linked to the gendered orgasm gap. Additional related contributing sociocultural factors may include women's lack of entitlement to partnered sexual pleasure, societal scripts about masculinity, and women's cognitive distractions during partnered sex. Recommendations to increase orgasm equality are discussed.

Keywords Orgasm gap · Orgasm equality · Female orgasm · Women's orgasms

Introduction

During heterosexual sexual encounters between cisgender women and cisgender men, women have substantially fewer orgasms than men. This phenomenon has been termed the orgasm gap. That women have fewer orgasms during partnered sexual encounters than men has been documented in the literature for over 20 years (e.g., [1]), although the first use of the term "orgasm gap" we could find in the academic

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Department of Psychology, University of Florida, P.O. Box 112250, Gainesville, FL 32611-2250, USA literature was by Wade and colleagues [2] when reporting that, in a survey of over 800 undergraduate students, 91% of men versus 39% of women reported usually or always experiencing orgasm in partnered sex. The wide-spread use the term, however, is likely attributed to a flood of popular press articles (e.g., [3–5]) reporting a discrepancy between men's perceptions of if women orgasmed (85%) versus women's reports of their own orgasms (64%) [6]. Nevertheless, the term is now mainly used to refer to the discrepancy in orgasm rates between women and men, although other types of orgasm gaps also exist, including between (a) women engaged in partnered sex versus masturbation, (b) women engaged in sex with other women versus with men, and (c) women engaged in casual versus relationship sex. The current paper will first review the research findings on such discrepancies, with a special focus on studies comparing the orgasm rates of women versus men. Then, research that helps explain the gendered orgasm gap will be reviewed and promising methods to close the gap discussed.

Discrepancies in Orgasm Rates

The orgasm gap between women and men is a robust finding in the literature. As two pivotal examples, Herbenick et al. [6] reported that in a United States probability sample of 1931



The term cisgender refers to an individual whose gender identity (e.g., woman) matches their sex assigned at birth (e.g., female). To date, all but one study conducted on the orgasm gap has focused on cisgender individuals and/or has not reported individuals' gender identity. For this reason, we limit our review to heterosexual sex between cisgender women and men.

sexually active adults (ages 18–59), 91% of the men versus 64% of the women reported experiencing orgasm during their most recent partnered sexual event, and Garcia et al. [7] reported that in a nationally representative sample of sexually active adults, on average, when having sex with a familiar partner, heterosexual men orgasmed 86% of the time while heterosexual women orgasmed 62% of the time. Studies published within the last 5 years that report on frequency of orgasm by gender for partnered sex are reported in Table 1.²

Table 1 also includes notations regarding sexual orientation/partner gender and the context of the sex (e.g., relationship vs. casual sex), as both have been found to be related to orgasm rates. As can be seen in the table, when looking across studies, the orgasm gap is larger in casual sex than in relationship sex. Underscoring these cross-study comparisons, in a study of over 12,000 undergraduates from 17 different universities, Armstrong and colleagues [15], reported that 31% of men and 10% of women reported reaching orgasm in first-time hookups, while 85% of men and 68% of women reported reaching orgasm during their last sexual encounter that occurred in the context of a committed sexual relationship. Interestingly, however, even in the context of a familiar partner, a recent large-scale survey of 2850 individuals [7] revealed that lesbian women are more likely than either heterosexual or bisexual women to orgasm during partnered sex, a finding subsequently replicated in an even larger survey (i.e., over 50,000 individuals) of dating, married, remarried, or cohabiting people [9•]. A small sampled study of bisexual women [16] may shed some light on why bisexual women's orgasm rates are closer to those of heterosexual women than to lesbian women. This study found that among 14 bisexual-identified women who had engaged in one-night stands with both men and women, 64% reported frequently or always orgasming when their partner was a woman while only 7% of these same women reported frequently or always orgasming when their partner was a man [16]. In short, research finds that women's orgasm rates seem to be context-dependent (i.e., sex with a man vs. another woman; casual vs. relationship sex), with women least likely to orgasm during casual sex with male partners. An essential next question is the mechanisms underlying this gendered orgasm gap. A review of the literature indicates that the most robust explanations

A literature search of Google Scholar and University of Florida's OneSearch was conducted with a particular focus on articles published since January 2015. We searched for peer-reviewed English-language articles with the keywords of "orgasm gap," "orgasm equality," "orgasm inequality," "pleasure gap," gender "orgasm rate," or gender "orgasm frequency." This search yielded 83 articles. After excluding articles on irrelevant topics, we were left with 24 articles. References of these articles were manually searched to identify additional studies.



are sociocultural. Before detailing such sociocultural factors, however, it is important to discuss and rebut biological explanations.

Rebutting Biological Explanations for the Gendered Orgasm Gap

Some have proposed an anatomical or biological explanation for the orgasm gap—suggesting that this gap exists because women's orgasms are complicated and elusive (see [17] for review) or in other words, that "women's bodies are simply not designed to have orgasms at the same frequency as men" (p. 1) [18]. However, based on the previously detailed research finding that women's orgasm rates vary by context, many scholars contend that the gendered orgasm gap is primarily rooted in sociocultural factors [19, 20]. Bolstering this notion are findings pertaining to orgasm rates during masturbation. One older, classic survey [21] found that about 60% of women reported that they usually or always orgasm when masturbating, compared with 29% during partnered sex. In another now classic study, Hite [22] reported that 95% of the women in her convenience sample who masturbated reached orgasm easily and regularly. A more recent study, conducted with a convenience sample of over 3500 Portuguese women, revealed that 92% of women who masturbated were able to reach orgasm this way [23]. In short, women's higher rate of orgasm during certain contexts as compared to others (i.e., masturbation vs, partner sex; sex with women vs. sex with men; casual sex vs. relationship sex with men) points to non-biological explanations for the gendered orgasm gap. Thus, we focus on potential non-biological explanations in this review. Prior to detailing such non-biological explanations, it is important to have a basic understanding of women's genital anatomy and sexual response.

Women's Genital Anatomy and Sexual Response

There are still many debates in the scientific literature surrounding women's genital anatomy and sexual response (e.g., if orgasms resulting from vaginal stimulation versus clitoral stimulation are biologically distinct; the percentage of women who experience pleasure from stimulation of what had been termed the G-spot) [24]. While a detailed review of both these controversies and women's genital anatomy and sexual response are beyond the scope of this paper, a few key pieces of information are essential. First, women's genital anatomy consists of highly connected internal and external structures. The internal structure is the vaginal canal. The external portion is called the vulva and it includes the vaginal opening, the inner and outer lips, the clitoral hood, the clitoral glans, and the mons pubis. One recent study found that only about 18% of women indicate that vaginal

Table 1 Descriptive results from recent research examining orgasm frequency by gender for partnered sex

Author [ref.]	Men % orgasm	Women % orgasm n Men	n Men	n Women	n Women Question wording	Sexual orientation and/or partner gender	Relationship to partner	Sample type
Andrejek and Fetner 87.3% orgasmed (2019) [8]	87.3% orgasmed	62.9% orgasmed	71	116	For participants' most recent sexual encounter, they were asked, "during this most recent sex act, did you have an orgasm?" with response options: yes, no, and I do not know/do not remember	92.3% heterosexual 7.7% LGBTQ+	66.5% spousal partner 33.5% non-spousal partner	Recruited using computer-assisted telephone interviews with adults from a
Frederick et al. (2018) ^a [9•]	95% usually-always 65% usually orgasm ^b -always or	65% usually -always orgasm ^b	26,032	24,102	"During the past month, how often did you reach orgasm when you were intimate?" with responses reported as: never-rarely, half of the time, or usually-always	Only heterosexual identified participants reported in this table.	Participants were all married, remarried, cohabiting, or dating/seeing one person	National U.S. sample. Survey posted to major U.S. news
Jones et al. (2018) [11]	Orgasmed 80–100% of encounters (4.80)	Orgasmed 60–80% 142 of encounters (3.86)	142	142	"In what percent of your sexual encounters do you reach orgasm?" Response options ranged from 1 (θ –20%) to 5 (8θ –100%)	142 heterosexual couples in committed relationships	All participants were married, cohabitating, or dating their partner	Convenience sample recruited through listservs, clinical settings, and social madia
Leonhardt et al. (2018) [12]	87% orgasm consistently ^b	49% orgasm consistently ^b	1683	1683	Participants were asked how frequently they generally had an orgasm in their sexual relationship. Response options ranged from 1 (0–20% of the time) to 5 (81–100% of the time). "Consistent orgasm" was operationalized by original authors as	Heterosexual couples Newlywed couples	Newlywed couples	Nationally representative survey of newly married couples
Piemonte et al. (2019) [13]	81.9% orgasmed ^c	32.0% orgasmed ^c	354	1225	"During fyour most recent sexual encounter with a People who engaged in Casual sex partner member of the opposite gender], did you a heterosexual casual orgasm?" with response options: yes, no, and sex encounter	People who engaged in a heterosexual casual sex encounter	Casual sex partner	Convenience sample recruited by undergraduate
Struckman-Johnson et al. (2017) [14]	86.4% orgasmed	48.3% orgasmed	119	303	For the most recent incident of sex ^d in a parked car, participants were asked about occurrence of orgasm with the response options: yes, no, and do not know.	95.7% $(n = 112)$ of men and 99.0% $(n = 298)$ of women reported an having an opposite gender partner for the encounter	15.7% stranger/acquaintance 17.6% new relationship partner 66.4% serious relationship/married	Convenience sample reporting on their most recent incident of sex in a parked car

^b For these studies, we report the most stringent orgasm category utilized by the original authors. In the Frederick et al. [9•], this was usually-always orgasm. In Leonhardt et al. [12], the response options for participants' frequencies of orgasm ranged from orgasming 0–20% of the time to 81–100% of the time; we report the percentages who orgasmed 81–100% of the time. ^a Because this article and another article by the same lead author (i.e., [10]) use different samplings of the same dataset, we only include the most recently published article in this table

d "having sex while parked" is defined as "engaging in masturbation (to self), genital touching (with another), and oral, vaginal, or anal sex while in a parked or non-moving vehicle" with only one participant reporting non-partnered sex.



^c Total across three studies

penetration alone is sufficient for orgasm to occur, although reports vary depending on the way the question is worded [25].³ When Mintz [19] asked a convenience sample of over 500 undergraduate students to indicate "their most reliable route to orgasm," only 4% indicated penetration alone. Forty-three percent said they most reliably orgasmed when pairing penetration with clitoral stimulation (e.g., with hands or vibrators), and 34% said they most reliably orgasm during sexual activities focusing exclusively on clitoral stimulation (e.g., oral sex, manual stimulation, vibrator stimulation).⁴ Other research has similarly found that women most frequently report orgasming during sexual activities that involve clitoral stimulation [27] and, during heterosexual sexual encounters, are more likely to orgasm during penetrative sex when concurrent clitoral stimulation is present [26, 28]. As aptly pointed out in a review article by Graham, although there is "substantial variability in the capacity for, and experience of, orgasm across women" (p. 265) and it is thus essential to "avoid pathologizing normal variation in the experience of orgasm." (p. 267), "there is now good evidence that many women require clitoral stimulation to reach orgasm, and a relatively small proportion report that they always experience orgasm during intercourse" (p. 258) [24]. This conclusion is essential to understanding potential sociocultural explanations for the orgasm gap.

Sociocultural Explanations for the Gendered Orgasm Gap

In all sexual contexts in which women have the most orgasms (e.g., masturbation, relationship sex, sex with other women), there tends to be greater focus on clitoral stimulation. Research finds that when women masturbate the vast majority stimulate their clitoris, either alone or coupled with penetration [22, 29, 30]. Additionally, in casual sex, women receive less oral sex and other forms of clitoral stimulation than they do in relationship sex [31]. Finally, one study found that women in same-sex relationships reported more frequent orgasms resulting from their partners' stimulation of their clitoris and from oral sex than women in heterosexual relationships [32•]. In short, these findings suggest that a likely reason for the gendered orgasm gap is that during heterosexual sexual encounters, many women are not getting the clitoral stimulation they may need to orgasm [19]. This lack of clitoral stimulation has been theorized to be linked to several underlying cultural

⁴ In this convenience sample, 19% said they rarely if ever orgasmed with a partner.



factors including our cultural overvaluing of intercourse, women's lack of entitlement to sexual pleasure, a conflation of penetration-based orgasms and masculinity, and our lacking sex education system.

Cultural Overvaluing of Intercourse

Scholars have implicated our cultural devaluing of women's sexual pleasure and clitoral stimulation, and parallel overvaluing of men's sexual pleasure and intercourse to underlie the orgasm gap (e.g., [2, 33]). This overvaluing of intercourse is reflected in what has been termed our current cultural script for heterosexual sex, which proceeds as follows: foreplay (just to get the woman ready for intercourse), intercourse, male orgasm, and sex over [18, 33, 34]. In this scenario, the man is responsible to give the woman an orgasm during intercourse giving by lasting long and thrusting hard [34].

This cultural prioritization of intercourse is reflected and perpetuated in our language and media. We use the words sex and intercourse⁵ as if they were one and the same and relegate everything before to "foreplay," implying it is a lesser form of sex than intercourse [35]. Recent studies indicate that media images of heterosexual sex generally portray women orgasming from intercourse alone, if they orgasm at all. To illustrate, content analyses of pornography indicate that the orgasm gap is reflected there, with only about 17-18% of women in comparison to 76-78% of men shown to reach orgasm, and most of women's orgasms shown to be achieved through vaginal or anal intercourse [36, 37]. One recent study used content analysis to code PornHub's 50 most viewed videos of all time and found that in the videos where women are shown reaching orgasm, only 25% of the orgasms involve some form of direct or indirect clitoral stimulation [36]. Additional evidence of media emphasizing intercourse is a study that textually analyzed top articles from Men's Health, a popular men's magazine, and discovered a focus on female orgasms achieved through vaginal penetration [38]. Even in instances where these articles encouraged sexual variety, they spoke of variety almost exclusively in terms of intercourse positions [38]. Such popular press advice runs counter not only to research that indicates that most women do not orgasm from penetration alone, but also to findings that combining intercourse with other more clitorally focused sexual activities during partnered sex is associated with women's increased orgasm frequency [9•, 39]. For example, one study found that

³ Shirazi et al. [26] demonstrated that the way questions are phrased regarding the occurrence of orgasm during intercourse modulates women's reported frequency of such orgasms, with the highest rate of orgasm reported when the question specifies that intercourse include concurrent clitoral stimulation and the lowest rate of orgasm reported when the question specifies no such concurrent stimulation, with a mid-range rate found when this was left unspecified.

⁵ Given our cultural usage of the words sex and intercourse as equivalent, research asking about women's orgasms during "sex" could lead to lower reports of orgasms than actually occur during partnered sexual activity because many heterosexual women exclude activities that are associated with increased likelihood of orgasm (e.g., receiving oral sex) from their personal definitions of sex [9•, 35]. Researchers are thus advised to use precise wording in their studies of orgasm.

women report more frequent orgasms if their sexual encounters include deep kissing, manual genital stimulation, and/or oral sex in addition to intercourse [9•].

Women's Lack of Entitlement to Sexual Pleasure

Research suggests that women may set the bar for satisfactory sex quite low—specifically, the absence of pain and degradation rather than as the presence of pleasure and orgasm [40]. Indeed, research finds that many heterosexual women express going into partnered sexual activity expecting not to orgasm [41] and valuing their partners' orgasms more than their own [42, 43]. In fact, when women report on their sexual satisfaction, these reports often reflect their perception of their partners' sexual satisfaction rather than their own [44, 45]. Women prioritizing providing their partners—rather than themselves-pleasure during sexual encounters has been connected with them feeling less entitled to sexual pleasure and also less likely to communicate to their partners how they need to be stimulated in order to orgasm, two factors positively associated with reaching orgasm in the research literature $[9^{\bullet}, 11, 46, 47].$

Women's lack of entitlement to sexual pleasure may be especially pronounced during casual sex. One qualitative study [31] found a double standard in which both men and women question women's (but not men's) entitlement to pleasure in hookups, while believing strongly in women's (as well as men's) entitlement to pleasure during relationship sex. This sexual double standard seems to translate directly to behaviors focused on clitoral stimulation. A large-scale study [15] found that "men are more likely to engage in cunnilingus—a practice strongly associated with women's orgasm—in relationships than in hookups. In contrast, women engage in fellatio at high rates across all contexts" (p. 362). Relatedly, another practice strongly related to women's orgasms—clitoral self-stimulation during intercourse—was found to be more common in relationship sex than in casual sex. According to the authors, these findings suggest that the orgasm gap is larger in casual sex because women are less likely to feel entitled to seek their own sexual pleasure and men are less motivated men to provide their partners with pleasure, with both resulting in less clitoral stimulation for women.

Conflation of Penetration-Based Orgasms and Masculinity

While studies on casual sex [15, 31] position men as not caring about women's pleasure, other findings suggest that men care deeply about women's pleasure—although they may be misguided about how to provide that pleasure. As detailed above, our cultural script gives men responsibility for "giving" women orgasms by lasting long and thrusting hard [38]. A qualitative study found that men often felt distressed and sometimes emasculated when their female partner

does not orgasm [48]. Similarly, a recent vignette study found that men reporting having higher sexual self-esteem and feeling more masculine when they imagined that their partner orgasmed during sex versus imagining that she did not [49]. The female partner that the men were instructed to imagine was an attractive woman that they had had sex three times with, so neither a first-time hookup nor a relationship partner. Whether and how men's feelings of masculinity would change when imagining differing types of partners (e.g., first time hookup, girlfriend) is an empirical question awaiting study and could shed light on the seemingly contradictory findings that men do not care about women's pleasure during hookups and findings that men care so deeply about women's orgasms that they see "giving" one to be a reflection of their manhood.

Regardless of the results of such future research, existing research indicates that women are expected to protect men's egos by orgasming during intercourse. One qualitative study [28] found that female participants reported being concerned that it would hurt the male partner's ego if they did not have an intercourse-based orgasm. The women in this study also believed that asking their partners for clitoral stimulation would hurt their partners' feelings. Given such findings, it is no wonder that a majority of women report having faked an orgasm during intercourse, with some of the most common reasons for faking being to protect their partners' egos and to give their partners pleasure [28, 34, 50]. Women also report faking orgasms to avoid appearing abnormal, because they, too, believe they should be orgasm from intercourse alone [34]. A qualitative study found that women report feeling abnormal or dysfunctional when they do not orgasm during penilevaginal intercourse [45].

In sum, several deeply intertwined sociocultural factors related to expectations of female orgasm during intercourse are linked to the gendered orgasm gap. Nevertheless, additional sociocultural factors have been implicated in women's comparatively lower rate of orgasm when compared to men.

Additional Sociocultural Factors

Two additional cultural factors that may underlie the orgasm gap are women's cognitive distraction during sexual encounters and our lacking sex education system. Regarding the latter, the United States' sex education system often presents sex as dangerous rather than pleasurable and particularly fails to cover women's sexual pleasure by excluding mention of women's external genital anatomy or women's orgasms [20, 51, 52].

Women also report higher levels of both overall cognitive distractions and appearance-focused cognitive distractions during sexual activity than men [53] and these cognitive distractions are linked to lower levels of sexual satisfaction [54] and orgasm [55]. One specific area of appearance-focused cognitive distraction is women's genital self-image, with



women's positive feelings towards their genitals associated with sexual satisfaction and enhanced orgasmic capacity with a partner [56, 57]. Another common focus of cognitive distraction (for both women and men) is performance anxiety, including worries about pleasing one's partner and about if one is going to orgasm. While for men, there is often concern about orgasming too quickly, for women, the concern often focused on taking too long to orgasm [24]. Regardless of the content of the performance-based worry, there is evidence that mindfulness, an approach characterized by "acceptance and non-judgment of the present moment," may enhance women's orgasmic capacity by decreasing cognitive distractions, such as concerns about appearance or performance, during sexual activity (p. 418) [58]. Mindfulness is useful in taking the focus away from a performance-oriented view of sex and placing the focus on pleasure and eroticism. Indeed, despite the focus of this review on the gendered orgasm gap, it is essential to underscore that pressure to achieve orgasm is linked to stress in women [50] and that pressure to achieve orgasm (for both women and men) makes orgasm less likely, given that orgasm is often the result of a pleasuring/eroticism process rather than a performance imperative [33]. Additionally, women differ greatly in how important orgasm is to their sexual satisfaction [24]. Thus, prior to turning to strategies to close the orgasm gap, it is important to examine the issue of the importance of orgasm to women's sexual satisfaction.

How Important Is Orgasm to Women's Sexual Satisfaction?

As detailed in a seminal review article [24], women differ greatly in how important orgasm is to their sexual satisfaction. Such individual differences may also be reflected in seemingly contradictory research findings, with some research finding that many women report feeling sexual satisfaction even when they do not orgasm [50] and other research reporting that women's orgasms are associated with increased sexual satisfaction and positive outcomes [10, 13, 31]. While we do not dispute either set of findings, we also acknowledge that it is difficult to separate the importance women place on their own orgasms from the sociocultural factors that underlie the gendered orgasm gap. To explain, given our cultural scripts that prioritize penetrative sex, when women are unable to reliably orgasm through this method of stimulation, they may come not to expect orgasms [41] and—as a way of reducing feelings of abnormality—come to view their own orgasm as unimportant [59]. Potentially bolstering this view is the finding that both men [44] and lesbian women are more likely than heterosexual women to include orgasm as a metric of their partnered sexual pleasure [41, 46]. In other words, those most likely to orgasm during partnered sexual encounters due to being less negatively affected by the prioritization of intercourse are those most likely to view orgasm as most important. While we are not suggesting that orgasm be set as an imperative goal to achieve, that orgasm must be equally important to all women, or that that every sexual encounter needs to be completely synchronous (i.e., equally pleasurable and orgasmic for both partners), consistent and robust research findings concerning a gendered orgasm gap points to an underlying societal issue to be addressed.

Recommendations for Closing the Orgasm Gap

Given that sociocultural factors have been implicated in the orgasm gap, it is likely that sociocultural interventions could prove useful in closing the gap. In the conclusion of a recent study on women's pursuit of orgasm, it was proposed that an effective societal intervention may be simply to "acknowledge that broad claims about women's biological capacity for orgasm are facile" (p. 8) [18]. Additionally, societal-level advocacy work aimed at women and men promoting clitoral knowledge and the equal valuing of women's and men's most reliable routes to orgasm will be useful.

Nevertheless, such awareness raising alone is likely insufficient, given that one study found that teaching women about their clitoris is linked to orgasm frequency during masturbation but not during sex with a partner [2]. Instead, the most empirically supported technique for women struggling with orgasm concerns is to direct them to figure out what type of clitoral stimulation they need via masturbation and then to help them transfer this type of stimulation to partner sex or in other words, helping them to engage in sexual behaviors in which they get the same type of stimulation alone as with a partner [33]. For women to get the same sexual stimulation alone as with a partner entails replacing our current cultural script for sex (i.e., foreplay, intercourse, male orgasm, sex over) with turn-taking scripts (e.g., oral sex during which the female orgasms followed by intercourse during which the male orgasms; stimulation of the clitoris to prepare the woman for intercourse, followed by intercourse during which the male orgasms, then followed by vibrator stimulation during which the woman orgasms) or scripts where penetration is consistently paired with clitoral stimulation (e.g., via an intercourse position which provides clitoral stimulation to the women; using a hand or a vibrator during intercourse). The underlying strategy in teaching individuals to utilize such new scripts is consistent with research finding that women are most orgasmic when including a variety of activities (e.g., oral sex, manual stimulation, intercourse) in their sexual encounter [9•]. In short, closing the orgasm gap will require teaching women and their male partners specific skills and methods with which to apply clitoral knowledge to their sexual encounters [60].

Three recent studies show that this method holds promise. One study found that undergraduate women who took a Human Sexuality course covering topics such as women's genital anatomy and pleasure, cultural factors underlying the



orgasm gap, and evidence-based methods to enhance women's orgasm (e.g., mindfulness, masturbation training with transfer to partner sex via sexual communication and new sexual scripts) showed improvements on measures of sexual functioning, including attitudes towards women's genitals, cognitive distraction during sexual activity, and entitlement to pleasure when compared to students who took quasicontrol courses [61]. Another study found that women who read a book (Becoming Cliterate [19]) combining feminist analysis of the cultural reasons for the orgasm gap and the same evidence-based methods to enhance women's orgasm improved on multiple measures of sexual well-being, including orgasm [62]. Finally, another study [63] found that men who read a summary chapter aimed at male readers of this same book (Becoming Cliterate [19]) showed improvement on clitoral knowledge, sexual communication, dysfunctional beliefs about women's sexual satisfaction, and dysfunctional beliefs conflating masculinity and sexual performance. Additional interventions aimed at both women and men to close the orgasm gap should continue to be developed and empirically evaluated.

Importantly, such future interventions and research should be more inclusive of individuals who are transgender or non-binary. We could locate only one study on orgasm frequency not exclusively focused on cisgender individuals. This study found that cisgender women in relationships with cisgender women orgasmed more than both cisgender women in relationships with cisgender men and individuals in relationships that include one or more transgender or non-binary partners [64]. Additional work should explore how the orgasm gap affects gender minority individuals and aid in developing inclusive interventions for these individuals.

Conclusion

Published studies, including those in the last 5 years (see Table 1), show that we have far to go in achieving orgasm equality. We could locate only one study in which men's and women's rates of orgasms converged. This study [15] found a 92% orgasm rate among women and a 96% rate among men during sex that took place in the context of a relationship where the women received oral sex and engaged in clitoral self-stimulation during intercourse. According to these authors, "This convergence suggests that a gender gap in orgasm is not inevitable, but it is largely a consequence of the social organization of sexuality" (p. 375) [15]. We agree with this conclusion and suggest taking it a step further. If the orgasm gap is a consequence of our social construction of sexuality, we have the power to deconstruct it and create a world of orgasm equality. We hope that this review is a step in that direction.

Compliance with Ethical Standards

Conflict of Interest Elizabeth A. Mahar, Laurie B. Mintz, and each declare no potential conflicts of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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