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Sexual Pleasure Matters (Especially for Women) — Data from the German Sexuality and Health Survey (GeSiD)

Verena Klein^{1,2} · Ellen Laan³ · Franziska Brunner¹ · Peer Briken¹

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Abstract

Introduction Sexual pleasure has been a neglected issue in sexual health policies. Emerging trends in public health, however, emphasize the importance of sexual pleasure in preventing negative sexual health outcomes.

Methods Using data from the German Sexuality and Health Survey (GeSiD), we tested the assumption that sexual pleasure is associated with sexual health, including a special focus on the role of gender. Participants were interviewed about their sexual experiences and health between October 2018 and September 2019. The analytical sample included 3472 partnered and single women and men who had been sexually active with a partner in the past 12 months. We examined if sexual pleasure was associated with various sexual health indicators (i.e., communication about sexually transmitted infections (STIs), condom use, and absence of sexual problems).

Results Women reported less sexual pleasure than men. Results further indicate that sexual pleasure was associated with more sexual health indicators in women than in men.

Conclusions Supporting emerging trends in public health our results emphasize the importance of sexual pleasure in preventing negative sexual health outcomes.

Policy Implications.

To promote (especially women's) sexual health, our results call for the implementation of comprehensive sexuality education programs that focus on more positive aspects of sex, such as sexual pleasure and agency.

Keywords Sexual health · Sexual pleasure · Gender differences · Representative data · Sexuality

Sexual pleasure is broadly defined as “the physical and/or psychological satisfaction and enjoyment derived from shared or solitary erotic experiences, including thoughts, fantasies, dreams, emotions, and feelings” (World Association of Sexual Health [WHO], 2019). In Western societies, sexual pleasure and its pursuit are seen as some of the most important goals of non-reproductive sexual activity (van Lunsen et al., 2013). With that in mind, it is surprising that sexual pleasure has received scant attention in research (Jones,

2019). Although the *World Health Organization* (World Health Organization, 2006) has acknowledged the possibility of having *pleasurable sexual experiences* in its definition of sexual health, the sexual health discourse has traditionally had a disproportionate focus on the negative outcomes of sex, like sexually transmitted infections (STIs), sexual dysfunctions, and unwanted pregnancy (Fine & McClelland, 2006; Higgins & Hirsch, 2007, Mitchell et al., 2021). Emerging trends in public health, however, challenge this view and emphasize the importance of sexual pleasure for sexual health and sexual rights (Ford et al., 2019; Gruskin & Kismödi, 2020; Kismödi et al., 2017; Landers & Kapadia, 2020).

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Sexual Pleasure and Sexual Health

Why does sexual pleasure matter for sexual and public health? First and foremost, sexual pleasure is an integral part of sexual well-being and overall well-being (Anderson,

2013; Robinson et al., 2002). Integrating sexual pleasure into public health policies and sex education was found to increase people's knowledge about sexuality, sexual communication, and safer sex behaviors — all crucial aspects of sexual and public health (Ford et al., 2019; Higgins & Hirsch, 2007; Landers & Kapadia, 2020). For instance, one sexual health model predicts that women and men who enjoy and seek sexual pleasure are more likely to make adaptive, health-promoting decisions (e.g., to negotiate safe-sex practices) (Robinson et al., 2002). That said, sex education is more effective when combining healthy images of desire and pleasure alongside safer sex messaging (Philpott et al., 2006), rather than just focusing on negative consequences of sex. Despite the theoretically established importance of sexual pleasure in the context of sexual health, there remains a paucity of empirical research concerning its associations with specific sexual health outcomes. In the present study, we aimed to test the assumptions made by prior research empirically. More precisely, we investigated whether people who experience sex as more pleasurable are more likely to make sexually healthy decisions (e.g., communicate about STI risk with a new partner, negotiating condoms use, use condoms).

Of course, the sexual pleasure discourse is broader than merely its relationship with sexual health behavior. A second aim of this paper was to investigate, in line with other representative surveys (e.g., *National Survey of Sexual Health and Behavior (NSSHB)*), pleasurable sex and its associations with different sexual behaviors. For instance, different waves of *NSSHB* assessed the prevalence and general predictors of pleasurable sex. This US nationally representative survey asked about participant's experience with pleasure during the last partnered sexual event among ethnically diverse samples (Townes et al., 2021) and various age groups (Schick et al., 2010). Another line of research examined sexual behaviors (Herbenick et al., 2019) and sexual techniques related to (women's) sexual pleasure (Herbenick et al., 2018), as well as lack of pleasure relative to sexual pain (Carter et al., 2019).

Sexual Pleasure and Gender

Sexual pleasure is crucial in shaping individuals' sexual well-being (Abramson & Pinkerton, 2002). For instance, women are more likely to report higher rates of sexual desire when their pleasure is prioritized (Rubin et al., 2019). Experiences of sexual pleasure are, however, embedded in a gendered context that disadvantages women (i.e., the pleasure gap; for a review, see Laan et al., 2021), and in most contemporary societies, women's sexual pleasure is still generally subordinated to men's pleasure (Hall, 2019; Hall & Graham, 2012). Evidence suggests that in the heterosexual context,

sex that women experience is different, and substantially less positive than the sex that men experience (Conley & Klein, 2022). Research shows that women experience orgasms at far lower rates than men (e.g., Conley et al., 2011; Frederick et al., 2018), that pain associated with sex is much more common among women (Carter et al., 2019; Elmerstig et al., 2013), and that women are subject to far more violence in heterosexual sexual encounters than their male counterparts (Brunner et al., 2021; World Health Organization, 2013). We aimed, therefore, to investigate the relationship between sexual pleasure and sexual health outcomes for women and men separately to examine, whether there are gender differences in these relationships.

The Present Study

Using a representative population sample, we examined the association between sexual pleasure and sexual health outcomes, with a special focus on gender. Sexual pleasure can be experienced through different kinds of rewards and sexual behaviors such as feeling sexually aroused or connected to a partner (Pascoal et al., 2016). Most national representative sex surveys so far have mostly used only one item measures to assess sexual pleasure. For instance, the *National Health and Social Life Survey (NHSLS; Laumann et al., 1994)* that surveyed adults in the USA included one item on pleasure (“...how physically pleasurable did you find your sexual relationship...?”) (for a critical discussion, see McClelland, 2010). In the present study, we used seven items from the original *Amsterdam Sexual Pleasure Index (ASPI; Vol 0.1; Werner et al., 2021)* that operationalize pleasure in a more in-depth and multifaceted way. Defining sexual pleasure broadly as “the enjoyment one derives from (individually or mutually) rewarding sexual activities” (e.g., Pascoal et al., 2016; Philpott et al., 2006), the ASPI assesses individuals tendency to experience sexual pleasure (Werner et al., 2021).

The aims of the present study were twofold. First, we examined gender differences in reported sexual pleasure. Second, we tested the hypothesis that sexual pleasure has a positive relationship with sexual health outcomes. To do so, we included various indicators of sexual health, long with more classic sexual health indicators, such as communication about sexually transmitted infections (STIs) and condom use. Since the expansive definition of sexual health developed by the WHO includes concepts such as the absence of disease, we conceptualize sexual health and well-being more broadly by additionally assessing the absence of sexual problems (e.g., arousal difficulties, pain during sex).

Having a more pleasure-inclusive concept of sexual health and well-being, we additionally examined the relationship between pleasure and orgasm frequency and engagement in oral sex. Orgasm frequency and orgasm

consistency have been shown to increase women's well-being and satisfaction (e.g., Laan et al., 2021). So as not to suggest that pleasurable sex is or should be limited to penetrative sex, oral sex engagement was also included, as oral stimulation of the glans clitoris is the most reliable source for women's orgasm experiences (e.g., Frederick et al., 2018).

Method

Data Collection and Procedure

Using a two-stage stratified and clustered probability sample design, data were collected as part of the German national sex survey (German Health and Sexuality Survey (GeSiD) Study, for a detailed description of the survey methods and recruitment strategy, see Matthiesen et al., 2021). Interviews were conducted between October 2018 and September 2019 by a social research institution (KANTAR). After providing informed consent, participants proceeded to take part in a combination of a face-to-face computer-assisted personal interview and a computer-assisted self-interview. The interviews covered different areas of sexual (health) behavior such as sexual experience; same sex experiences; gender identity and sexual orientation; safer sex practices; and sexual attitudes. Participants received a total amount of 30 Euro compensation for participation. The Ethical Board of the State Psychotherapy Chamber in Hamburg approved the study procedures.

The response rate was 30.2% (AAPOR Response Rate 4); and the cooperation rate 37.9% (AAPOR Cooperation Rate 4). Data were weighted to adjust for unequal probabilities of selection in terms of age, sex, age, nationality, education, and region which led to it being broadly representative of the German population compared to the 2018 Mikrozensus (Census).

Sample

The analytical, weighted sample for the present study included 3472 partnered and single cisgender women and men (46.3% women, 53.7% men) who had been sexually active (with a partner) in the past 12 months and who completed the sexual pleasure measure. All participants were German-speaking residents, aged between 18 and 75 years ($M = 44.22$, $SD = 15.73$) (for a detailed sample description, see Table 1). No forced-choice response format was chosen, which explains why the sample size varies over the dependent variables.

Measures

Sexual Pleasure

Sexual pleasure was measured with seven items from the *Amsterdam Sexual Pleasure Index* that showed acceptable to excellent psychometric properties in a validation study (Werner et al., 2021). Participants indicated their impressions of the amount of pleasure they derive from sexual acts, whereby most items focused on shared experiences with a partner (e.g., "I can engage in sex in such a way that I really enjoy it," "I feel connected to my partner during sex.," "I enjoy it when my body reacts to sexual stimuli.," "I love to show my partner how excited I am during sex.") (Werner et al., 2021). Items were rated on a 5-point scale ranging from totally disagree to totally agree. These items were combined into a pleasure scale, with higher numbers indicating greater pleasure. Cronbach's alpha for the scale in the present sample was 0.84.

Sexual Health Outcomes

Sexual Communication About STIs and Condom Use

People who were single at the time of participation and sexually active with a partner in the last 12 months were asked, "Please think of the last time you had sex. Did you discuss HIV/Aids and sexually transmitted infections before having sex?" Condom use discussion was assessed with the following item: "Did you discuss the use of condoms before having sex?."

Partnered women and men who were sexually active in the last 12 months were asked to answer the items on communication about STIs and condom use based on their experiences with their current, steady partner using the following two items: "Think back to the time when you first had sex with (...): Did you talk about HIV/Aids and other sexually transmitted infections before the first time you had sex with (...)?" and "Did you discuss the use of condoms before having sex with (...) for the first time?" For all sexual communication about STIs and condom use items, participants either indicated yes or no.

Safer Sex Intention

We asked participants: "Do you currently have condoms at home or in your bag?" on a binary scale (yes/no).

Table 1 Sociodemographic characteristics and sexual health indicators of the sample ($N=3472$)

	% (unweighted n ; weighted n)	
Age		
18–25	11.5 (531; 400)	
26–35	20.7 (935; 720)	
36–45	19.1 (674; 664)	
46–55	24.3 (679; 844)	
56–65	16.5 (530; 572)	
66–75	7.9 (248; 273)	
Gender		
Female	46.3 (1,826; 1,606)	
Male	53.7 (1,771; 1,865)	
Sexual identity		
Exclusively heterosexual	96.8 (3,405; 3,270)	
Non-exclusively heterosexual	3.2 (125; 108)	
	Women	Men
Singles' sexual communication about STIs		
Yes	35 (59, 48)	29.7 (64, 79)
No	65 (122, 90)	70.3 (198, 188)
Singles' sexual communication about condom use		
Yes	65.4 (127, 92)	65 (168, 177)
No	34.6 (57, 48)	35 (100, 95)
Safer sex intention		
Yes	30.7 (593, 492)	30.9 (536, 573)
No	69.3 (1,223, 1,109)	69.1 (1,228, 1,283)
Partnered women's and men's sexual communication about STIs		
Yes	31.9 (521, 429)	30 (420, 440)
No	68.1 (991, 915)	70 (969, 1029)
Partnered women's and men's sexual communication about condom use		
Yes	58.9 (964, 823)	57.7 (878, 890)
No	41.1 (604, 573)	42.3 (581, 652)
Condom use		
Yes	49.5 (870, 705)	46.4 (712, 719)
No	50.5 (723, 721)	53.6 (757, 831)
Orgasm occurrence		
Yes	75.4 (1,175, 1,055)	95.4 (1,417, 1,486)
No	24.6 (408, 343)	4.6 (60, 72)
Absence sexual problems		
No	45.8 (783, 664)	32.2 (561, 557)
Yes	54.2 (900, 785)	67.8 (1,097, 1,175)

Numbers do not always add up to the sample size due to missing information. Percentages are based on weighted analyses

Condom Use

Partnered individuals additionally answered the item: “Did you use a condom when you had sex with (...) for the first time?” Again, participants were provided with a binary yes/no response format.

Absence of Sexual Problems

Participants were asked to read the following instruction: “Please specify for each of the following difficulties whether you have ever experienced it over a period

of several months.” Women were then presented with descriptions of hypoactive sexual desire, arousal difficulties, orgasm difficulties, and pain during sex. Men indicated whether they had experienced hypoactive sexual desire, erectile difficulties, difficulties with premature ejaculation, or delayed ejaculation. Participants who indicated having one of the listed problems specified if they experienced this problem in the past 12 months. Based on those yes/no answers, we build the variable *absence of sexual problems* by including all participants that indicated having at least one problem during the last 12 months in the “no” category and participants without any problems in the “yes” category.

Orgasm Occurrence

Participants indicated if they had an orgasm during their last sexual encounter (“Did you have an orgasm the last time you had sex?”). The response scale included the options (“No,” “Yes, once,” or “Yes, several”). We merged “yes, once” and “yes, several” into a single “yes” category.

Engagement in Oral Sex

Participants indicated their engagement in oral sex as one option on a scale that measured different sexual behaviors (“Think of the last time you had sex. What type of sex did you have then?”) on a yes/no scale.

Sociodemographic Characteristics

We asked for current relationship status dichotomized (i.e., single and married/in a relationship). In addition, the following question was used to address sexual identity: “Please select the answer which describes best how you see yourself at present?” Answers were anchored on a 7-point scale. The first five points ranged from 1 = exclusively heterosexual to 5 = exclusively homosexual/gay, while the final two points denoted asexual and other identities (see Table 1).

Statistical Analysis

Statistical analysis was based on the weighted sample using the “complex sampling” module in IBM SPSS Statistics, version 27. Given the discussed gendered context of pleasure, a Levene test was calculated to test whether variances in the sexual pleasure measure differed between genders. Gender

differences were examined using *t*-test. Logistic regression analyses adjusted for age were calculated to examine the strength of the association between sexual pleasure as predictor and sexual health indicators as outcome variables. Considering that some of the sexual health outcomes (e.g., talking about STIs, using a condom) could vary by age and relationship status, logistic regression analysis was adjusted for age. The results of the logistic regression for the outcomes sexual communication about condom use and sexual communication about STIs were reported for single and partnered people separately.

Results

Gender Differences in Sexual Pleasure

Results of the Levene’s test indicated that equality of variances for the women and men sample was not given, $F(1, 3793) = 19.98, p < 0.001$. Consequently, a *t*-statistic not assuming homogeneity of variance was calculated. Women reported significantly lower sexual pleasure ($M = 3.84; SD = 0.79$) than did men ($M = 3.99; SD = 0.70$), $t(3243) = 5.90, p < 0.001$.

Sexual Health Outcomes

Descriptive statistics for all dependent variables are shown in Table 1. As presented in Table 1, women reported lower percentages of orgasms than men did. Absence of sexual problems was more commonly reported by men than women (see Table 1).

In women, sexual pleasure showed an association with safer sex intention. Among partnered women, we also found a positive association between pleasure and sexual communication about STIs and condom use, as well as with actual condom use. Sexual pleasure was significantly associated

Table 2 Results of the logistic regression analyses predicting sexual health outcomes as a function of sexual pleasure in the women’s sample

Dependent variables	<i>N</i> ^a	Nagelkerke <i>R</i> ²	<i>OR</i>	95% <i>CI</i>
Singles’ sexual communication about STIs ^b	138	.044	1.04	.97–1.12
Singles’ sexual communication about condom use ^b	139	.035	1.00	.93–1.07
Safer sex intention	1600	.008	1.03*	1.00–1.05
Partnered women’s sexual communication about STIs ^c	1344	.078	1.03*	1.01–1.06
Partnered women’s sexual communication about condom use ^c	1395	.071	1.04**	1.01–1.06
Condom use ^c	1427	.135	1.03**	1.01–1.05
Orgasm occurrence	1398	.11	1.12***	1.09–1.15
Engagement in oral sex	1427	.097	1.10***	1.08–1.13
Absence of sexual problems	1449	.140	1.15***	1.11–1.17

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

^aTotal sample size of participants that answered that dependent variable

^bsingles

^cpartnered women

with the absence of sexual problems, orgasm frequency, and engagement in oral sex in the total women's sample (see Table 2).

In the men's sample, sexual pleasure was not associated with communication about STIs, communication about condom use, safer sex intention, or condom use. Results further indicated that sexual pleasure was associated with the absence of sexual problems, engagement in oral sex, and orgasm frequency in the men's sample (see Table 3).

Discussion

Research and sexual health policies have a long history of neglecting the role of sexual pleasure in preventing negative sexual outcomes (Ford et al., 2019). Our results point to the importance of sexual pleasure for sexual health — and even more pronounced for women. Aligning with the current public health discourse, sexual pleasure in our study was associated with making sexually healthy decisions (e.g., condom use, STI communication) and sexually satisfying experiences (e.g., oral sex engagement, absence of sexual problems, and orgasm frequency).

Although odds ratios were overall small, sexual pleasure was associated with more sexual health indicators in women than in men. Ample evidence indicates that both women and men value men's sexual pleasure more, and men are more likely to demand it during an encounter (McCabe et al., 2010; McClelland, 2011; Muehlenhard & Shippee, 2010). Globally speaking, men seem to have a better access to sexual pleasure and autonomy than women do (Hall, 2019; Higgins & Hirsch, 2007). Aligning with this assumption, in our study, men were more likely to report experiencing sexual pleasure than women. Based on those observed gender differences, it could be assumed that whereas men's pleasure seems to be a "normal," present condition, women's

sexual pleasure seems to be more often absent, an add-on, or at least less prioritized. That said, the results might not be a function of pleasure being more important for women, but rather men's scores lack variability (i.e., for men, sex is almost invariably pleasurable). This lower variability in scores might explain why sexual pleasure plays a more predictive role in women's sexual health than in men's.

Interestingly, pleasure had a greater influence on communication about STIs and condom use for partnered women than it did for single women. Public health research has emphasized that safer sex communication is interwoven with gendered power inequalities (Wingood & DiClemente, 2000). Women face more stigma when negotiating condom use (Peasant et al., 2015; Woolf & Maisto, 2008) as well as when expressing themselves in a sexually assertive manner (Klein et al., 2019). Women and men are especially likely to conform to traditional gender expectations surrounding sexual behavior (female submission vs. male dominance) in initial states of dating (Eaton & Rose, 2011). Sexual communication and safer sex negotiations, however, need some degree of assertiveness, which might undermine women's conformity to gender norm expectations in the casual context. Nevertheless, the sample size of single women was small in the present study, what might explain the different role pleasure plays for single versus partnered women when it comes to communication about STIs and condom use.

Since our data are cross-sectional, all that is known is that sexual pleasure and the investigated sexual health indicators are associated. That said, it is possible that for instance being able to communicate about STI risk makes sex more pleasurable (by removing concerns about STIs etc.) or STI communication might be a good proxy for comfort with sexuality. There is also the possibility that sexual pleasure and safer sex practices may be linked via another third factor such as being comfortable with one's sexuality. Moreover, we have focused on condom use as main safe-sex practice, which

Table 3 Results of the logistic regression analyses predicting sexual health outcomes as a function of sexual pleasure in the men's sample

Dependent variables	<i>N</i> ^a	Nagelkerke <i>R</i> ²	<i>OR</i>	95% <i>CI</i>
Singles' sexual communication about STIs ^b	267	.015	1.02	0.95–1.09
Singles' sexual communication about condom use ^b	273	.065	0.93	0.86–1.01
Safer sex intention	1857	.004	1.02	0.99–1.05
Partnered men's sexual communication about STIs ^c	1470	.055	1.01	0.98–1.04
Partnered men's sexual communication about condom use ^c	1542	.077	1.00	0.97–1.03
Condom use ^c	1550	.131	0.99	0.96–1.02
Orgasm occurrence	1558	.023	1.07**	1.01–1.13
Engagement in oral sex	1540	.086	1.08***	1.05–1.12
Absence of sexual problems	1732	.022	1.05***	1.03–1.08

p* < .01; *p* < .001

^aTotal sample size of participants that answered that dependent variable

^bsingles

^cpartnered men

leaves out other safe-sex practices mostly practice by women who have sex with women such as dental dams and gloves. A closer examination of the interplay between sexual pleasure and sexual health among gender diverse samples would be an interesting venue for future research. Another limitation is that we have assessed some health behaviors such as condom use discussion retrospectively meaning that single and partnered people answered questions about different time periods. Consequently, we cannot exclude the possibility of recall biases. Although our cross-sectional, correlational study points to associations between sexual pleasure and sexual health behaviors, prospective studies that assess the influence of sexual pleasure on sexual risk and risk-reduction practices are warranted.

The present study included a large, representative sample with a balanced distribution of women and men; it is however important to keep in mind that our sample draws from Germany, a Western liberal country when it comes to sexual attitudes (i.e., acceptance of same-sex behavior, abortion, sex work; Klein & Brunner, 2018). Sexual pleasure has different meanings and varies in ascribed significance over different cultures (Hall & Graham, 2012), which limits the generalizability of our result to other cultural contexts. Societal and cultural judgements about sex, shame, and guilt have negative effects on both sexual pleasure and health (Hull, 2008).

Conclusion

Sex education as well as research on adolescent sexual development has primarily focused on the prevention of negative health outcomes (e.g., unwanted pregnancy, sexually transmitted infections), which has especially influenced the perception of young women's sexuality (Fine & McClelland, 2006; Tolman & McClelland, 2011). Given that young women's sexual development is taking place in a social context saturated by often conflicting messages about women's sexuality, sexual desire, and pleasure (Fine & McClelland, 2006; Klein et al., 2018), our results point to the importance of comprehensive sexuality education programs that promotes women's pleasure. In supporting young women and men to develop a satisfying, and pleasurable approach to sexuality and close relationships, sex education for young men about women's pleasure is also needed. Promoting "cliteracy," teaching girls and boys that biologically speaking no gender differences in the capacity for pleasure and the mechanisms of pleasure exist, should be an important part of pleasure-prioritized sex education (Laan et al., 2021).

Our results indicate that more effort is needed to close the pleasure gap between women and men. Continuing to underestimate pleasure as a means to a healthy sex life

will only hinder our ability to understand how to improve sexual health, especially for women. In order to promote the sexual health of women especially, our results call for the implementation of policies and comprehensive education plans that focus on more positive aspects of sex, like pleasure, desire, and agency (Anderson, 2013; Ford et al., 2019; Gruskin & Kismödi, 2020).

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Availability of Data and Material Data are available on request.

Declarations

Conflict of Interest The authors declare no competing interests.

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