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Sexual (Double) Standards Revisited:

Similarities and Differences in the Societal Evaluation of Male and Female Sexuality

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Abstract

Past research has been inconclusive regarding the continued existence of the sexual double standard (SDS)—that is, differential expectations and evaluations of sexual activity for men (rewarded for sexual activity) and women (punished for sexual activity). Here, we present the similarities and differences (S&D) model of sexual standards, which significantly qualifies the traditional SDS by highlighting both similarities and differences between standards applied to women and men. Across two samples (student/community sample, crowdsourcing sample; N_{total} = 342) and seven sexual outcomes, high sexual activity was rated more favorably in men than in women (replicating previous research), and the opposite was true for low sexual activity (extending previous research). Importantly, moderate (not extremely low or high) sexual activity was rated most favorably in both genders, suggesting similar and curvilinear intragender trajectories. These findings illustrate a distinctly different perspective on male and female sexuality and open avenues for new research.

Keywords: sexual double standard, sexual norms, sexuality

Sexual (Double) Standards Revisited:

Similarities and Differences in the Societal Evaluation of Female and Male Sexuality

To what extent do men and women face different versus similar sexual norms? The seminal sexual double standard (SDS) proposes that evaluations of sexual activities depend on gender.[1] Under the umbrella of the SDS, multiple assumptions about the gendered nature of sexual norms have been summarized. First, a traditional SDS should manifest in more positive evaluations of (a) sexually active men and of (b) sexually *in*active women compared to an equally (in)active individual of the opposite gender (Crawford & Popp, 2003; Endendijk et al., 2020). Second, the SDS has repeatedly been introduced as (c) men being socially rewarded for sexual activity and (d) women being socially punished for sexual activity (Marks & Fraley, 2005; Wesche et al., 2021). Together, these *inter*gender effects (i.e., same level of sexual activity, different genders) and *intra*gender effects (i.e., same gender, different levels of sexual activity) would cumulate in the crossover pattern of a strong sexual double standard (Figure 1A, adapted from Marks & Fraley, 2005), suggesting that male and female sexual norms could hardly be more different.

Empirically, a meta-analysis found that, "[f]or men, frequent sexual activity was more expected, and evaluated more positively, than for women" (d = 0.25; Endendijk et al., 2020, p. 163). These *inter*gender differences were stronger in studies that operationalized the SDS as differences in societal expectations and respondents' perceived societal evaluations than as differences in respondents' personal evaluations. However, a more positive evaluation of high male than high female sexual activity is not equivalent to men being increasingly socially rewarded and women being increasingly socially punished for higher levels of sexual activity.

[1] The SDS does not specify expectations regarding nonbinary persons. We therefore follow previous research and focus on male and female targets.

The few studies that included multiple levels of sexual activity inconsistently found that both men and women were evaluated less favorably as the level of sexual activity increased, but these *intra*gender effects were heterogeneous across outcomes and studies, with higher sexual activity sometimes being evaluated more, equally, and less favorably than lower sexual activity (Marks et al., 2019; Marks & Fraley, 2005, 2007). In addition, little research exists comparing how men and women are evaluated for low sexual activity (Endendijk et al., 2020). To date, there is uncertainty about the (continued) existence of the SDS, with the tentative conclusion being that there may be a rather weak SDS for some types of sexual behavior, while for others there is a single standard for men and women (Bordini & Sperb, 2013; Endendijk et al., 2020; see Figure 1B-C, adapted from Marks & Fraley, 2005).

Similarities and Differences: The S&D Model

Here, we present the similarities and differences model (*S&D model*) of sexual (double) standards, which offers a critically different perspective on male and female sexual norms. The model is based on two central assumptions. First, the S&D model proposes that the associations between levels of sexual activity and evaluations are curvilinear (i.e., nonmonotonic) rather than linear (i.e., monotonic). According to the model, increasing sexual activity is increasingly socially expected and positively evaluated up to a certain maximum point: the ideal level of sexual activity (ILSA). Sexual activity and permissiveness above the ILSA are no longer viewed as positively, but are increasingly devalued. This curvilinearity along the continuum of very low to very high sexual activity is expected to occur for both target genders, suggesting a striking similarity between male and female sexual norms.

Importantly, the prediction of similar and curvilinear *intra*gender associations between sexual activity and evaluations does not imply the absence of differences. Instead, the second assumption of the S&D model is that the locations of the predicted curves differ between the

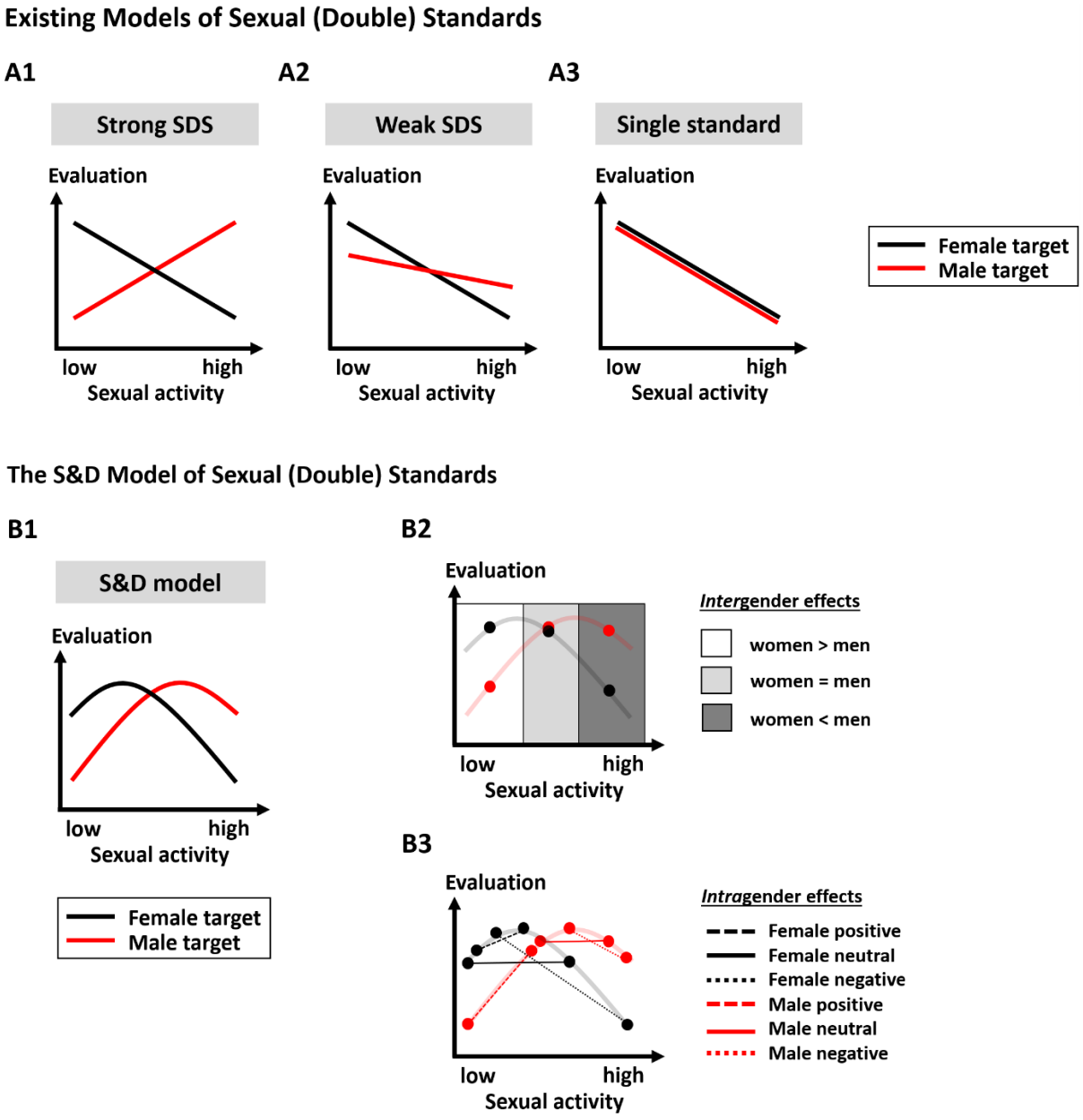
genders. Specifically, we predict that for a range of sexual activities, the ILSA will be located at higher levels of sexual activity for men compared to women. In other words, the S&D model predicts that the devaluation of sexuality will set in earlier for women. This assumption thus emphasizes the differences in sexual norms applied to the genders.

Figure 1 shows a schematic representation of the S&D model (Panel B1), which proposes the coexistence of (*inter*gender) differences and (*intra*gender) similarities. The model may explain part of the heterogeneity in previous research: Depending on the level(s) of sexual activity examined in a study, *inter*gender comparisons for a given level may indicate more favorable evaluations of female targets (area colored white), similar evaluations of female and male targets (area colored light gray), or more favorable evaluations of male targets (area colored dark gray; Panel B2), and (linear) *intra*gender effects may be positive (dashed lines), neutral (solid lines), or negative (dotted lines; Panel B3).

Preliminary qualitative and quantitative evidence supports the S&D model. First, in an interview study, single women reported feeling torn between appearing too prude and too permissive (Pickens & Braun, 2018), both of which were perceived as undesirable extremes compared to more moderate levels of sexual activity. Second, a survey by the medical service ZAVA found that male and female targets who had never had sex and those who had multiple sexual partners were considered unattractive. Between these more extreme levels of sexual activity, there was an ideal zone of the number of sexual partners, which varied according to the age and gender of the target person (Zava, 2021).

Figure 1

Sexual (Double) Standards: Previous Models (A) and the Novel S&D Model (B)



Note. The *inter*gender and *intra*gender assumptions summarized under the SDS umbrella would cumulate into a strong SDS (Panel A1). Previous research has been more consistent with a weak SDS for some types of sexual behavior (Panel A2) and a sexual single standard for other behaviors (Panel A3), but the results have been heterogeneous. The S&D model presented here posits that male and female sexual norms are defined equally by *inter*gender differences and

*intra*gender similarities (Panel B1). The model may explain some of the heterogeneity in previous research by predicting that *inter*gender effects (Panel B2) and *intra*gender effects (Panel B3) will vary in magnitude and direction depending on the level(s) of sexual activity examined in the study.

Theoretically, the S&D model can be derived from the same theoretical accounts used to explain differences between male and female sexual norms. From an evolutionary perspective, society is likely to reward levels of sexual (in)activity that maximize reproductive success (Zaikman & Marks, 2017). Because unwanted pregnancy is associated with greater risk for women than for men due to women's greater minimum parental investment and lower reproductive capacity (Trivers, 1972), sexually permissive behavior (e.g., having numerous sexual partners) is likely to be more negatively evaluated for women than for men (i.e., *inter*gender difference). However, this does not mean that women who are completely sexually absent (and therefore not considered a suitable mating option) or men who have hundreds of sexual partners (e.g., risk of contracting STDs, impaired long-term mate value; Buss & Schmitt, 1993) have maximum success (and therefore the best evaluations). Instead, for both genders, the most positive evaluations may occur at moderate rather than very low or high levels of sexual activity (i.e., *intra*gender similarity).

Social role theory posits that biological differences between the genders have led to the division of labor, which in turn has led to different gender role expectations for men and women (Eagly & Wood, 2012; Wood & Eagly, 2002). High sexual permissiveness is more consistent with the agentic role assigned to men (e.g., being active and dominant) than with the communal role typically assigned to women (e.g., being passive and caring). Through the mechanisms of direct and indirect learning specified in cognitive social learning theory (Bandura, 1986), people

internalize that role-consistent sexual behaviors are socially rewarded and that role-inconsistent behaviors are socially punished, which explains the differences between male and female sexual norms (Zaikman & Marks, 2017). This does not mean, however, that (people learn that) maximum sexual restraint on the part of women or maximum sexual permissiveness on the part of men is socially expected and rewarded. Stigmas surrounding female virginity (Gesselman et al., 2017) and the predominant use of negative terminology to describe both male and (even more so) female individuals with multiple sexual partners (Milhausen & Herold, 2002) are consistent with the coexistence of similarities (i.e., moderate levels of sexual activity are evaluated most favorably) and differences (e.g., high levels of sexual activity are evaluated more negatively for women) between male and female sexual norms.

The Present Research

In the present research, we empirically tested the coexistence of the (*intra*gender) similarities and (*inter*gender) differences specified in the S&D model proposed here across two samples and seven types of sexual activity. We focused on perceived societal evaluations (i.e., participants' perceptions of how society would view people) rather than actual personal evaluations to maximize the internal validity (e.g., personal evaluations are more likely to be influenced by social desirability bias) and external validity of our research (e.g., people's feelings and behaviors are more likely to be influenced by their perceptions of the world than by the world as it is). Confirmatory *inter*gender predictions were that high sexual activity will be evaluated more favorably for men than for women (*H1*, empirical replication) and that low sexual activity will be evaluated more favorably for women than for men (*H2*, empirical extension). Confirmatory *intra*gender predictions were that within the same gender, nonmonotonic, curvilinear, rather than monotonic, linear trajectories will best describe the data for men (*H3*) and women (*H4*)—a similarity in *intra*gender trajectories across the sexual activity continuum that is

uniquely predicted by the S&D model. We also tested whether the ideal level of sexual activity is higher for men than for women (*H5*). Finally, we examined a potential asymmetry: whether sexual activity above the ILSA is punished more severely for women than for men (*H6a*), and whether sexual activity below the ILSA is punished more severely for men than for women (*H6b*).

Method

Transparency and Openness

All study materials (i.e., online questionnaires, codebooks), scripts, and data are openly available on the Open Science Framework (https://osf.io/wyknx/). We preregistered our research goals, hypotheses, exclusion criteria, and analytic strategies for one sample and applied the preregistered operations to both samples used in the present research. We transparently report non-preregistered analyses and deviations from the preregistered plan. The project was approved by the Institutional Review Board of Saarland University. We used R, version 4.2.1, to analyze the data (R Core Team, 2023).

Samples and Power Considerations

We collected data from young adults who reported how they thought society would view a 25-year-old target person who was roughly their age to ensure that the evolutionary, social role, and cognitive social learning mechanisms that may underlie sexual (double) standards were in place (i.e., target of reproductive age, participants familiar with their social roles and standards). In light of discussions about the advantages and disadvantages of student samples and online crowdsourcing samples (Goodman et al., 2013) and about the replicability of psychological research (Open Science Collaboration, 2015), we tested our hypotheses across two samples.

Sample 1 was a mixed student and community sample recruited through flyers on a medium-sized German university and social media (n = 190; age: M = 22.04, SD = 2.97, range:

19-41; 37.9% male, 61.6% female, 0.5% nonbinary). Participants were rewarded with partial course credit or entry into a €50 gift card lottery. Sample 2 was a crowdsourcing sample of German residents recruited through the platform Clickworker (n = 170; age: M = 30.34, SD = 5.81, range: 19-40; 51.8% male, 48.2% female). Participants were paid €4.40 (i.e., €10.55/hr, equivalent to U.S. $5.20 and $12.50/hr at the time the study was launched). We excluded 14 participants from Sample 1 and four participants from Sample 2 because they failed an attention check or because they indicated that the quality of their data was comprised after completing the survey (preregistered exclusion criteria).

All data were collected online using SoSci survey (Leiner, 2022). A priori power analyses suggested that when assuming a correlation of r = .5 between evaluations of male and female targets, a sample size of N = 101 (139) participants would be required to replicate the meta-analytic *inter*gender effect (d = 0.25; Endendijk et al., 2020) with 80% (90%) power. Following recent recommendations, we report effect-size sensitivity analyses for all confirmatory analyses (i.e., H1-H4) in the Results section (Giner-Sorolla et al., 2019).

Design, Procedure, and Measures

Participants read scenarios of fictional male and female targets who exhibited one of seven different levels of low to high sexual activity across seven different sexual outcomes (presented in a fixed order, see Table 1). The sexual outcomes were sexual behaviors used in previous SDS research, plus sexual cognition and sexual affect. To denote the low and high ends of the sexual activity continuum, we used natural null points (e.g., 0 sexual partners), operationalizations used in previous research (e.g., 12 sexual partners; Zaikman et al., 2016), and evidence-based ranges of typical event frequencies (e.g., 6 desires/day; Weber et al., 2024).

Table 1

Sexual Outcomes and Levels of Sexual Activity

Sexual outcomes	Metric	Level1	Level2	Level3	Level4	Level5	Level6	Level7
Sex partners	Absolute number in life	0 (0)	1 (2)	2 (4)	3 (6)	4 (8)	5 (10)	6 (12)
Casual sex partners	Absolute number in life	0	1	2	3	4	5	6
Sexual debut	Age in years	24	22	20	18	16	14	12
Sexual intercourse	Frequency in a typical week	0	1	2	3	4	5	6
Masturbation	Frequency in a typical week	0	1	2	3	4	5	6
Sexual desire	Frequency on a typical day	0	1	2	3	4	5	6
Sexual fantasies	Frequency on a typical day	0	1	2	3	4	5	6

Note. During data collection in the community sample, some participants indicated that they felt that six sexual partners was too low of an upper limit. Therefore, we increased the range in the crowdsourcing sample (in parentheses).

In this within-participant experimental design, participants indicated how society would view the target on a 13-point rating scale ("How do you think society would view a young man/woman [25 years old] who..."; -6 = *very negatively* to 6 = *very positively*) for each of these 98 scenarios (i.e., 2 [target genders] x 7 [activity levels] x 7 [sexual outcomes]). For simplicity, we refer to these perceived societal evaluations as "evaluations" below. Participants provided all 14 evaluations (2 target genders and 7 activity levels) per sexual outcome in the same visual display. The slider bars were preset to the center of the scale (i.e., value 0) and could be adjusted by dragging or clicking on the marker for the respective gender. To distinguish between intended and unintended neutral responses, participants received a warning message if they did not move the sliders. Figure 2 illustrates this procedure for the sexual outcome "casual sex partners".

In the final part of the survey, we collected demographic information (e.g., gender: "What is your gender?", 1 = female, 2 = male, 3 = other; age: "How old are you?") and self-reported data quality ("Data quality can be compromised for a variety of reasons (e.g., rushed, distracted, not focused, not honest). Please indicate your self-perceived data quality," 1 = my data is okay, 2 = I am not sure if my data is okay, 3 = I am sure that my data is not okay).

Figure 2

Perceived Societal Evaluations of Sexual Outcomes: Response Format

Note. Participants evaluated male and female targets for seven levels of sexual activity in the same visual display. This example for "casual sex partners" shows selected values for the first two levels of sexual activity.

Data-Analytic Strategy and Presentation of Results

To test H1 and H2, we computed a 2 (target gender: male vs. female) x 2 (activity level: lowest vs. highest) within-subjects ANOVA on the evaluations for each of the seven outcomes. We were primarily interested in the interaction and the simple contrasts between target genders for low (H1) and high (H2) sexual activity, respectively. These analyses encompass those used in previous research comparing evaluations of male and female targets with high levels of sexual activity were compared (Endendijk et al., 2020).

The within-gender hypotheses (i.e., different activity levels, same gender; H3, H4) were tested using a multilevel framework (i.e., seven levels of sexual activity nested within participants). We centered the factor level at its grand mean before specifying multilevel orthogonal polynomial contrasts separately for male and female targets. We included linear and quadratic terms and allowed intercepts to vary randomly across participants. Superiority of the S&D model over the SDS was inferred when the quadratic terms were significantly negative and the trajectories were nonmonotonic (i.e., an inverted U-shaped pattern).

To examine whether devaluation sets in earlier for female targets than for male targets, we compared the level(s) of sexual activity most favorably evaluated using paired *t*-tests (H5). Finally, we examined whether devaluation for exceeding the ILSA was more pronounced for women than for men (H6a), whereas devaluation for falling below the ILSA was more pronounced for men than for women (H6b). Using reduced data sets containing only activity levels at and (a) above or (b) below the ILSA, we examined the target gender × level interactions within a multilevel framework (random intercept, fixed slope; person-mean centered to examine pure within-person effects).

All inferential statistics are supplemented with effect size measures; qualitative descriptions of effect sizes (e.g., “small”, “medium”) follow recent suggestions by Field (2013) and Funder and Ozer (2019). Our analyses of Sample 1 and Sample 2 yielded highly comparable results. Including participant gender and its interactions with the focal predictors in our confirmatory analyses did not change any of the conclusions. To improve readability, statistics, tables, and figures are based on the total sample and the set of focal predictors. Only for “sexual partners”, for which the response options differed between the two samples, are the results presented separately for Sample 1 and Sample 2. We refer readers interested in the robustness of

our analyses to the supplementary online materials [SOM], where results are presented separately for both samples (Tables S1-S6) and for models including participant gender (Tables S7-S10).

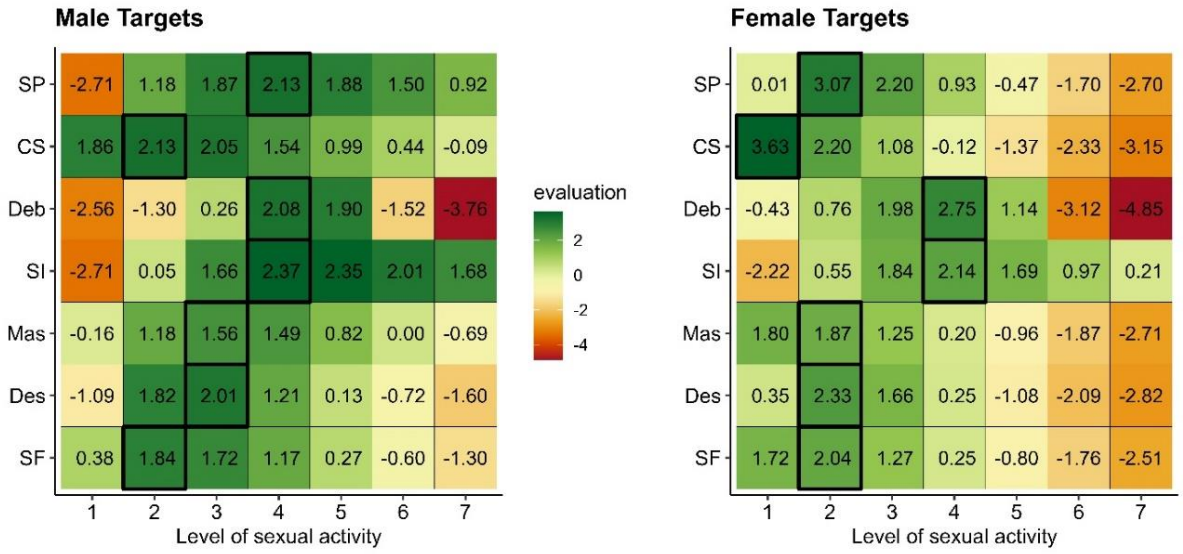
Results

Descriptive Statistics

Figure 3 visualizes the mean estimates of societal evaluations of the seven activity levels for each sexual outcome separately for female and male targets. This plot illustrates some basic findings: First, the most positive estimated societal evaluations tend to occur for low to moderate levels of sexual activity, not for the lowest level or for the highest level. Second, overall, lower levels of sexual activity tend to be evaluated more positively for women than for men, and higher levels of sexual activity tend to be evaluated more positively for men than for women; the ILSA (indicated by black borders across the respective squares) also tends to occur at higher levels of activity for men than for women.

Figure 3

Perceived Societal Evaluations: Mean Estimates Across Outcomes, Targets, and Activity Levels



Note. Perceived societal evaluations were rated on a 13-point scale, ranging from -6 = *very negatively* to 6 = *very positively*. SP = sex partners; CS = casual sex partners; Deb = sexual debut; SI = sexual intercourse; Mas = masturbation; Des = sexual desire; SF = sexual fantasies. Shown in black are the highest rated levels of sexual activity across all participants (ILSA).

Intergender Differences (Preregistered Confirmatory)

Effect-Size Sensitivity Analyses

The S&D model predicts that high sexual activity is evaluated more favorably for men than for women (H1), whereas low sexual activity is evaluated more favorably for women than for men (H2). Effect-size sensitivity analyses indicated 80% (90%) power to detect small to medium *inter*gender differences of d_{rm} = .13 (.16) in the total sample.

Intergender Differences: Male versus Female Targets (H1, H2)

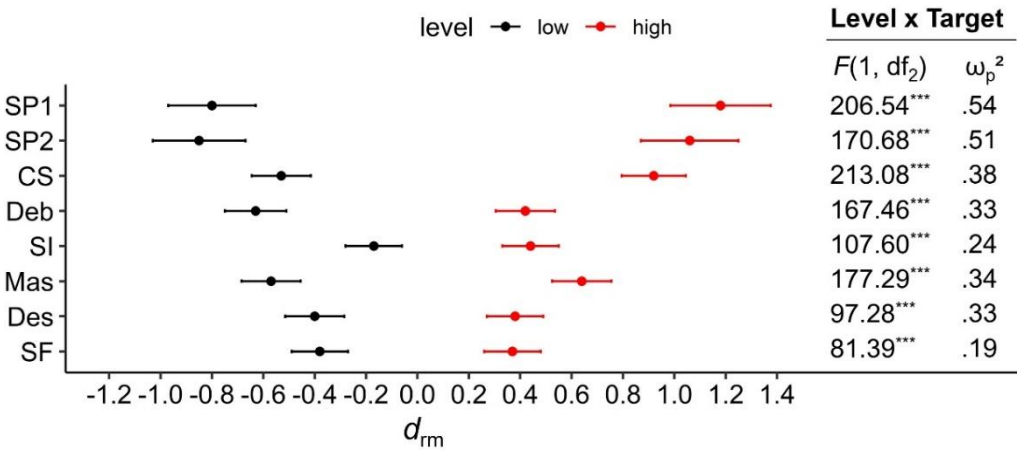
In support of H1 and H2, two-way interactions between target gender and activity level were significant across all seven sexual outcomes, with medium to large effect sizes by convention. Conceptually replicating previous research (Endendijk et al., 2020), high sexual activity was consistently evaluated more positively for men than for women across all outcomes. Extending previous research, low sexual activity was consistently evaluated more positively for women than for men across all outcomes. The results are summarized in Figure 4.

Intergender Differences for All Levels of Sexual Activity (Non-Preregistered)

Exploratory comparisons revealed significant *inter*gender differences for most levels of sexual activity. In general, (very) low levels of sexual activity were evaluated more favorably for women than for men, whereas high(er) levels were evaluated more favorably for men than for women (see Table S3 for an overview).

Figure 4

Intergender Comparisons for Low and High Sexual Activity



Note. Shown are point estimates and 95% noncentral confidence intervals for d_{rm} (i.e., repeated-measures equivalent to Cohen's *d* controlling for the correlation between the evaluations of male and female targets; see Lakens, 2013). Values less than 0 indicate better evaluations of female targets than of male targets; values greater than 0 indicate better evaluations of male targets than of female targets. df_2 = 175 (SP1), 165 (SP2), or 361 (all other outcomes); SP = sex partners; CS = casual sex partners; Deb = sexual debut; SI = sexual intercourse; Mas = masturbation; Des = sexual desire; SF = sexual fantasies. *** $p < .001$.

Intragender Trajectories (Preregistered Confirmatory)

Effect-Size Sensitivity Analyses

The strong SDS predicts that higher levels of sexual activity are increasingly rewarded for men, but increasingly punished for women (i.e., monotonic, linear associations). In contrast, the S&D model predicts that for both men (H3) and women (H4), sexual activity is increasingly rewarded up to the ILSA and increasingly punished when exceeding the ILSA (i.e., curvilinear, quadratic associations). We conducted simulation-based effect-size sensitivity analyses using the *simr* package (Green & MacLeod, 2016) to determine the increment in the within-person

variance explained by the fixed effects of the quadratic over the linear effect of sexual activity level ($\Delta R_w^{2\,(f1)}$; Rights & Sterba, 2019) that can be detected with a power of ≥ 80%. These effects were very small to large for female targets (H3: $.01 \leq \Delta R_w^{2\,(f1)} \leq .12$) and very small to medium for male targets (H4: $.01 \leq \Delta R_w^{2\,(f1)} \leq .07$).

Intragender Trajectories: Monotonic versus Nonmonotonic Associations (H3, H4)

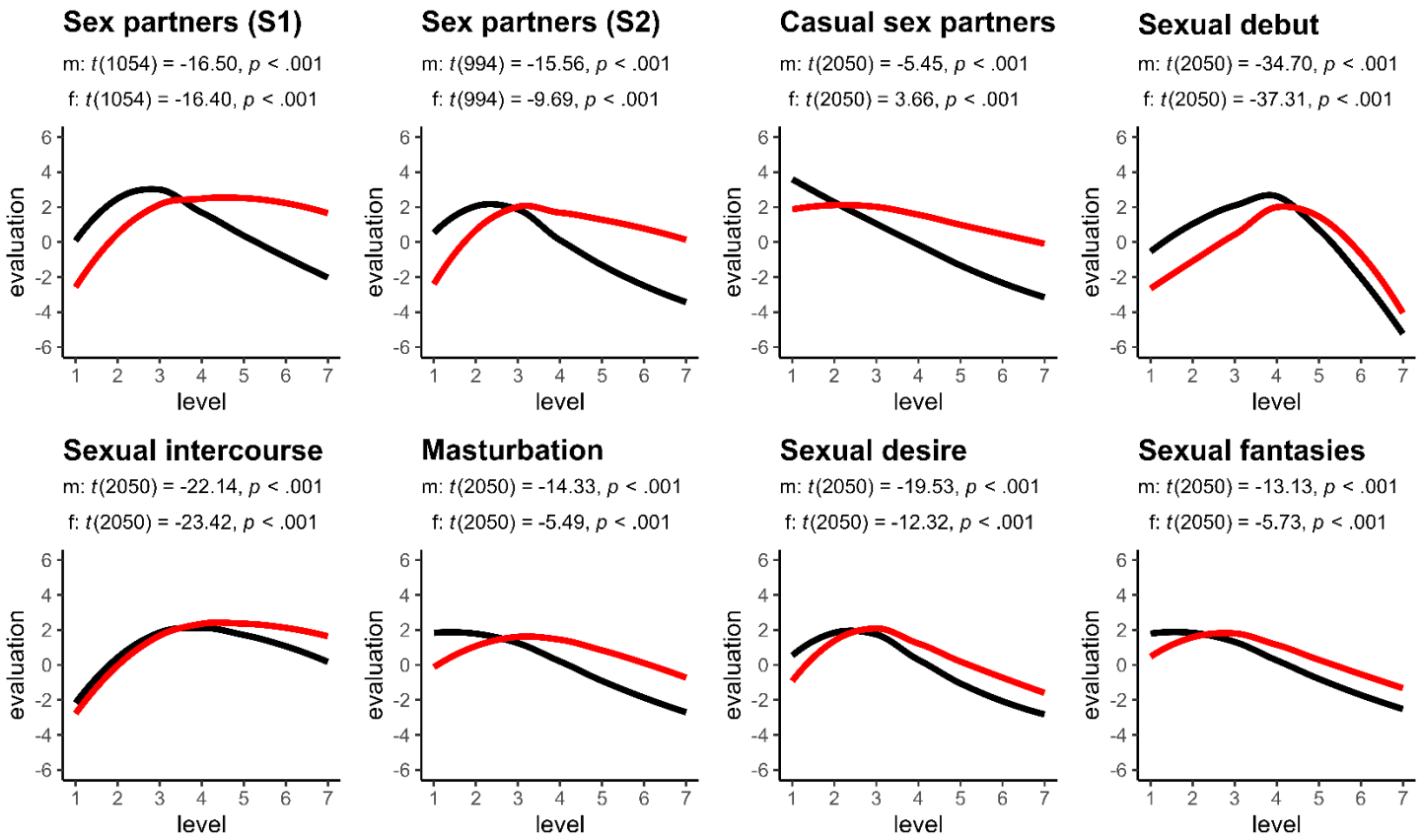
For male targets (H3), *intra*gender trajectories were curvilinear and nonmonotonic across all seven sexual outcomes. Multilevel orthogonal polynomial analyses consistently revealed incremental effects of the quadratic model over the linear model (*p*s < .001, $.01 \leq \Delta R_w^{2\,(f1)} \leq .33$). For female targets (H4), almost all effects were again curvilinear and nonmonotonic, with incremental quadratic effects (*p*s < .001, $.01 \leq \Delta R_w^{2\,(f1)} \leq .32$). Only for casual sex partners did we find monotonically negative trajectories (i.e., more is worse). Figure 5 illustrates estimated societal evaluations for female (black lines) and male (red lines) targets along the continuum of low to high sexual activity. Overall, *intra*gender trajectories were mostly curvilinear and nonmonotonic for both genders, consistent with the S&D model but inconsistent with previous models of sexual (double) standards.

Do Ideal Levels of Sexual Activity Differ Between the Genders? (H5, Non-Preregistered Exploratory)

The aggregated data depicted in Figure 5 reveal striking similarities between the trajectories of evaluations for men and women, but they also suggest that the sexual activity level that is rated highest on average, the ILSA, is higher for men than for women. Paired *t* tests statistically supported this observation for all seven outcomes (*p*s < .001; $0.39 \leq d_{rm} \leq 1.27$). Although very low and very high levels of sexual activity are not particularly valued for either gender, the most positive evaluations are found at higher levels of sexual activity for men than for women (see Table 2).

Figure 5

Perceived Societal Evaluations as a Function of Target Gender and Activity Level



Note. The graphs show average perceived societal evaluations of male (*red*) and female (*black*) targets, except for "sex partners," for which the level operationalizations differed between Sample 1 and Sample 2 (see Method section) and that are therefore presented separately. Statistics refer to the quadratic component for male (m) and female (f) targets.

Table 2

Comparisons of Male and Female ILSAs

Outcome	M_m	SD_m	M_f	SD_f	M_{dif}	t(df)	p	$CI_{95\%}$	d_{rm}
Sex partners (S1)	4.57	1.70	2.71	1.18	1.86	12.65	< .001	[1.57, 2.15]	1.27
Sex partners (S2)	3.83	1.69	2.31	1.13	1.52	10.02	< .001	[1.22, 1.82]	1.05
Casual sex partners	2.95	1.96	1.68	1.15	1.27	11.79	< .001	[1.06, 1.49]	0.77
Sexual debut	3.24	1.09	2.66	1.11	0.58	9.03	< .001	[0.45, 0.71]	0.53
Intercourse	4.54	1.64	4.05	1.58	0.48	6.89	< .001	[0.35, 0.62]	0.30
Masturbation	3.32	1.63	2.34	1.39	0.98	10.97	< .001	[0.80, 1.16]	0.64
Sexual desire	3.08	1.47	2.48	1.25	0.60	7.39	< .001	[0.44, 0.76]	0.44
Sexual fantasies	2.91	1.58	2.32	1.45	0.59	6.37	< .001	[0.41, 0.77]	0.39

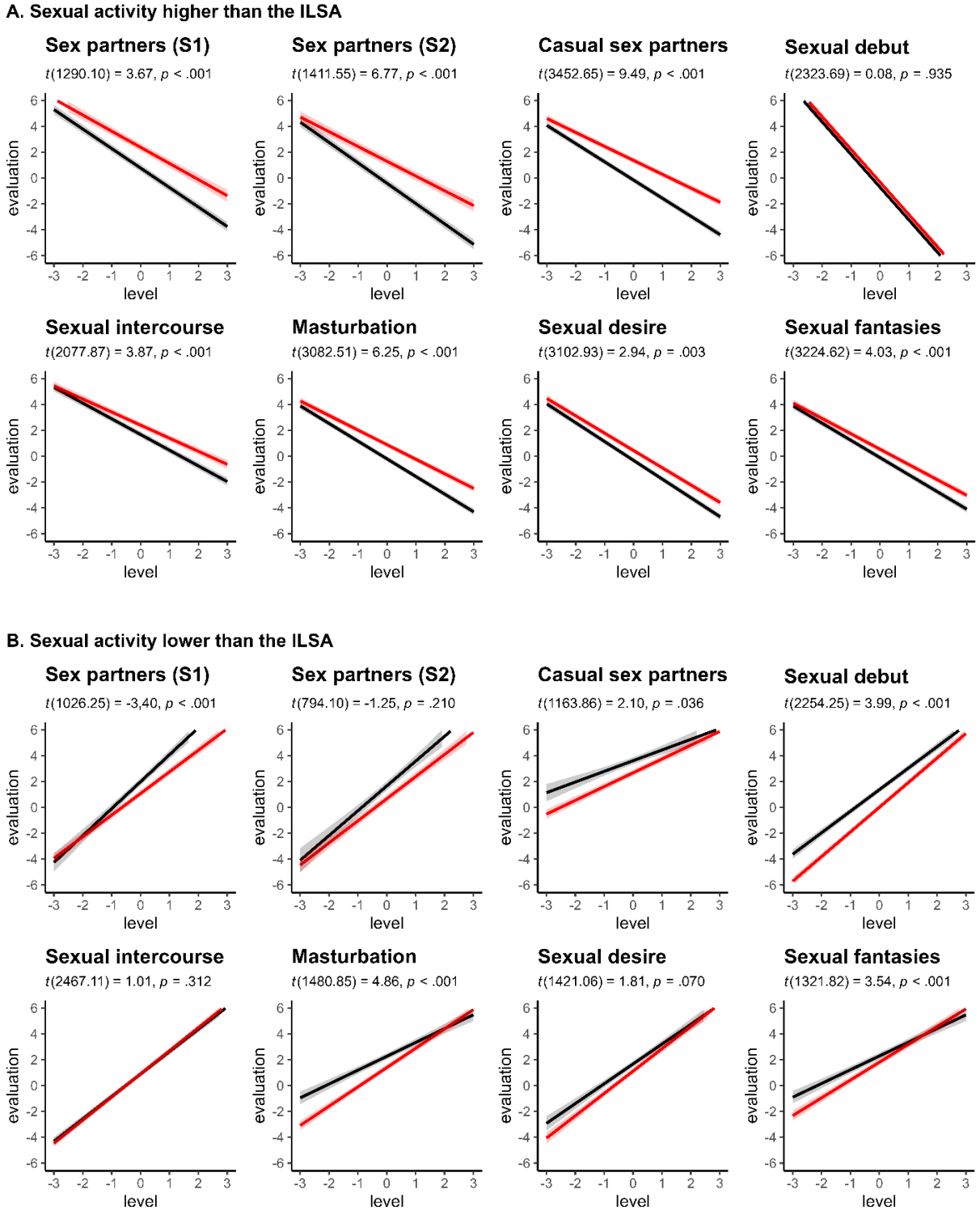
Note. Means (*M*) and standard deviations (*SD*) of the ILSA for male (m) and female (f) targets. df = 361 (total sample), 175 (S1), or 165 (S2). Positive mean differences (M_{dif}) and effect sizes indicate a higher ILSA for male targets than for female targets.

Asymmetry in the Devaluation of Male and Female Targets (H6, Non-Preregistered Exploratory)

Women and men who deviate from their (gender-specific) ILSA to the same extent may not be evaluated similarly. We speculated that the negative effects of exceeding the ILSA would be more pronounced for women than for men, consistent with a particularly negative evaluation of high female sexual activity. Exploratory multilevel analyses including only levels of sexual activity equal to or greater than the ILSA supported this assumption (see Figure 6, Panel A). Parallel analyses including activity levels equal to or below the ILSA inconsistently supported that the devaluation of levels considered “too low” was more pronounced for men than for women (Figure 6, Panel B).

Figure 6

Asymmetry in the Devaluation of Values Deviating from the ILSA



Note. Perceived societal devaluation of male (*red*) and female (*black*) targets for values greater than the ILSA (Panel A) or for values lower than the ILSA (Panel B). We centered level at its person mean, so that 0 denotes the midpoint between the ILSA and the highest or lowest values, respectively (Enders & Tofighi, 2007). The statistics presented refer to the interaction between sexual activity level and target, shaded areas indicate values within the 95% confidence interval.

Discussion

How different or similar are the sexual standards that are applied to men and women? High-powered analyses across seven outcomes consistently showed that participants perceived that society evaluates highly sexually active men and highly sexually inactive women more positively than equally (in)active individuals of the opposite gender. In addition, the "ideal" level of sexual activity (ILSA) was higher for men than for women. People also perceived that some deviations from the ILSA are more consequential than others: activity levels above the ILSA were more devalued for women than for men, while activity levels below the ILSA tended to be more devalued for men than for women. These results support the continued existence of different sexual norms for men and women.

However, this pattern of pronounced gender differences does not imply an absence of similarities, nor does it imply that sexual activity is generally socially denigrated or rewarded in either gender. The associations between sexual activity and perceived societal evaluations were nonmonotonic and curvilinear for both male and female targets. Participants perceived that the most valued levels of sexual activity were neither the lowest for women nor (and especially not) the highest for men. Rather, the most positive evaluations were found for low to moderate levels of sexual activity.

In sum, our findings provide a perspective on sexual norms that differs critically from previously discussed models. We robustly found differences between male and female sexual norms for common sexual event types and frequencies that are prevalent in everyday life. These findings do not support the notion that there is a single standard for most sexual event types and that the SDS today would be limited to a few types of sexual behavior that are uncommon (e.g., threesomes) or extremely different from the median level of sexual activity in these samples (e.g., 50 sexual partners; Jonason, 2008; Jonason & Marks, 2009). In addition, curvilinear *intra*gender associations significantly qualify the assumption that higher sexual activity is generally socially rewarded or socially punished for either gender, as expressed in existing models of strong and weak double standards. Instead, male and female sexual norms are equally characterized by similarities and differences, a pattern uniquely predicted by the S&D model. This may further explain some of the heterogeneity of *inter*- and *intra*gender effects in previous research: if male and female sexual norms along the continuum from very low to very high sexual activity are best represented by two intersecting curved lines, then the direction and magnitude of gender differences will depend on which level(s) of sexual activity are examined in the study.

The coexistence of similarities and differences is consistent with theories used to explain the SDS. Evolutionary theories suggest that the ideal level of sexual activity should be higher for men than for women because of women's greater investment in producing and raising offspring (Trivers, 1972), but also emphasize the challenges associated with very low and very high levels of sexual activity (Buss & Schmitt, 1993). A higher male than female ILSA is also consistent with different gender role expectations for men and women (Wood & Eagly, 2002), which are internalized based on personal experience and model learning (Bandura, 1986). However, in modern Western societies, individuals do not learn that behaviors associated with maximum

sexual restraint or with maximum sexual permissiveness are part of the gender roles assigned to men and women.

Implications for Society and Science

For decades, the SDS has shaped researchers' and laypeople's thinking about the standards that society presumably applies to men's and women's sexuality (Crawford & Popp, 2003; Reiss, 1956). The belief that there is a strong SDS may pressure women to be sexually passive and men to be sexually active beyond their natural inclinations (Crawford & Popp, 2003; Wesson, 2022) and may explain the more negative emotional reactions following sexual activity for women than for men (McKeen et al., 2022). Therefore, communicating the similarities between male and female sexual standards alongside the differences may not only contribute to a more accurate understanding of sexual norms, but may also work against the perpetuation of established stereotypes and help to increase sexual well-being more generally.

The observation that, even for men, moderate levels of sexual activity are more positively evaluated than high levels is particularly noteworthy because the event frequencies representing the high end of the sexual activity continuum were rather moderate, not extreme (e.g., masturbating 6 times per week). Thus, the devaluation of higher levels of sexual activity was not due to the presentation of hypothetical, clearly extreme manifestations of sexual activity, but occurred for manifestations that are common in everyday life (Haversath et al., 2017; Weber et al., 2024).

Finally, several statements about the differential nature of male and female sexual norms have been collected under the umbrella of the traditional SDS—most prominently, that (high) sexual activity is evaluated more favorably for men than for women (e.g., Endendijk et al., 2020; Zaikman & Marks, 2017), that men are granted more sexual freedom than women (e.g., Bordini & Sperb, 2013; Milhausen & Herold, 2002), and that sexual activity is socially rewarded for men

but socially punished for women (e.g., Marks et al., 2019; Marks & Fraley, 2005). In the present research, we found robust evidence for *inter*gender differences (i.e., different evaluations of the same level of sexual activity depending on gender), but little evidence that very high or very low sexual activity is particularly rewarded for either gender. We believe that future research would benefit from carefully distinguishing between assumptions that have received substantial empirical support and those that do not. In addition, the extent to which men subjectively perceive a higher ILSA as more sexual freedom rather than as pressure to be sexually active is an interesting question to explore in future research.

Limitations

All participants were German residents. As sexual (double) standards differ across countries (Endendijk et al., 2020; Sprecher & Hatfield, 1996), our findings may not generalize to other societies. Based on the S&D model, we speculate that cultural differences may be reflected in the exact shapes of the predicted curves. For example, in liberal countries with high levels of gender equality, female and male ILSAs may be close at higher levels, and societal devaluation for exceeding the ILSA may be less pronounced.

In addition, we focused on global societal evaluations ("How would society view…?"). These represent holistic perceptions of societal pressures that people face in their daily lives. Other researchers have examined specific dimensions on which people may be judged (e.g., intelligence, power, or popularity; Marks et al., 2019; Marks & Fraley, 2005). Examining the extent to which curvilinear associations occur on these specific dimensions is an avenue for future research.

Finally, we focused on participants' perceived societal evaluations because these are likely to be particularly powerful in influencing how people think, feel, and behave in their everyday lives. Preliminary analyses using exploratorily measured personal evaluations ("How

would *you* judge…?") in our own data suggest that the reported coexistence of similarities and differences may in part generalize to personal standards, but that *inter*gender differences may be less consistent and weaker than those found for societal evaluations, underscoring the importance of distinguishing between personal and perceived societal evaluations (Milhausen & Herold, 2002).

Conclusion

There are both similarities and differences in the societal evaluation of male and female sexuality. People perceive that high levels of sexual activity are evaluated more positively for men than for women, while low levels of sexual activity are evaluated more positively for women than for men. However, contrary to common assumptions, moderate rather than extremely low or extremely high levels of sexual activity are most valued for both genders.

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