

ROLES OF GENITAL SELF-IMAGE, DISTRACTION, AND ANXIETY IN WOMEN'S
SEXUAL PLEASURE: A PREREGISTERED STUDY

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Western Carolina University in partial fulfillment of the
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By

Kasey Erinne Morey

Director: Dr. David de Jong
Assistant Professor of Psychology
Psychology Department

Committee Members: Dr. Kia Asberg, Psychology
Dr. David McCord, Psychology

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ABSTRACT

ROLES OF GENITAL SELF-IMAGE, DISTRACTION, AND ANXIETY IN WOMEN'S SEXUAL PLEASURE: A PREREGISTERED STUDY

Kasey Erinne Morey, B.A.

Western Carolina University (March 2021)

Director: Dr. David de Jong

Women with negative genital self-image are more likely to experience sexual dysfunction (Herbenick & Reece, 2010), but the processes underlying this association are unknown. We theorized that this association is mediated by distraction from the arousing sexual cues that foster pleasure and orgasm (Janssen et al., 2000). In a sample of 1,619 women who had sex in the previous four weeks, women with negative genital self-image were more likely to be distracted by self-critical concerns (i.e., appearance- and performance-based distraction and embarrassment) during sex, and in turn, experienced less sexual pleasure and worse sexual function. Additionally, this indirect effect via appearance-based distraction was strongest among women with trait-level anxiousness and social anxiety. We found a similar pattern of results when investigating the indirect effect of genital self-image on sexual function. Implications for understanding sexual function and therapeutic approaches are discussed.

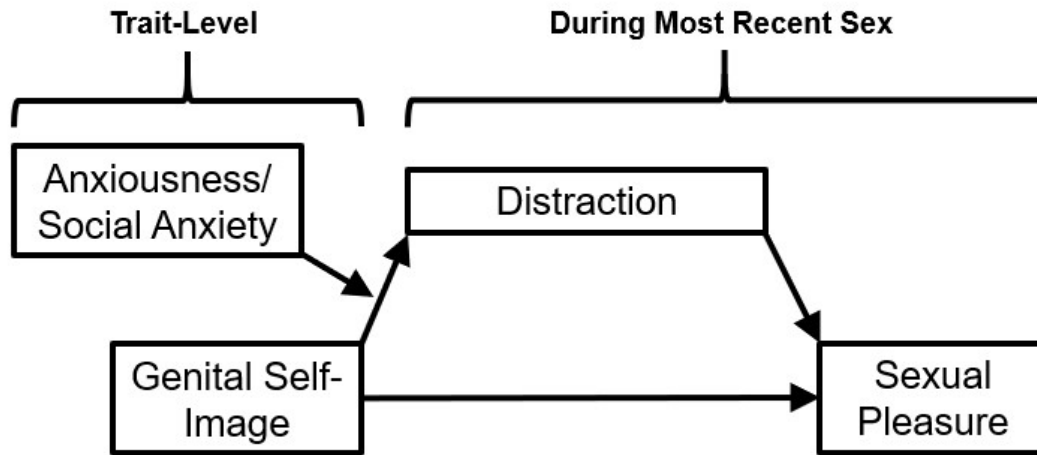
CHAPTER ONE: INTRODUCTION

Genital dissatisfaction is relatively common among women. In a recent study, 18% of women reported being unhappy with their genitals, citing concerns with the appearance, smell, taste, or function of their genitals (Fudge and Byers, 2017). Women may feel negatively about their genitals due to unrealistic depictions of genitals in pornography (Schick et al., 2011) or feelings of shame surrounding menstruation (Fahs, 2014). Various social phenomena likely result from poor genital self-image, such as douching to “improve” genital odor (Ozerdogan et al., 2018), skin tightening and lightening procedures for the labia (Triana, 2020), and the 217% increase in labiaplasty procedures between 2012 and 2017 (American Society for Aesthetic Plastic Surgery, 2017). With some women going to great lengths to physically alter their vulvas, it is likely that strong negative feelings about one’s genitals may impact how sex is experienced.

The purpose of this preregistered, online, cross-sectional, self-report study was to assess the role of women’s genital self-image in sexual pleasure and the possible mediating role of distraction during sex. We hypothesized that negative genital self-image would be associated with greater distraction during sex, and in turn, less sexual pleasure (see Figure 1). Additionally, we hypothesized that trait-level anxiousness and two domains of social anxiety (i.e., social interaction anxiety and social phobia) would strengthen indirect associations between genital self-image and sexual pleasure.

Figure 1

Theorized Moderated-Mediation Model by which Genital Self-Image is Associated with Sexual Pleasure via Distraction, Moderated by Anxiousness and Social Anxiety



Genital Self-Image and Sexual Well-Being

Genital self-image reflects individuals' appraisals of the appearance, smell, and function of their genitals (Herbenick & Reece, 2010). Women may be concerned about different aspects of their genitals, such as the texture and distribution of pubic hair (Morrison et al., 2005), taste and odor (Berman & Windecker, 2008), the tightness of their vagina (Braun & Kitzinger, 2001), the length of their labia minora (Smith et al., 2017), as well as the overall appearance of their genitals (Fudge & Byers, 2017). Genital self-image is associated with various aspects of sexual function and other sexual outcomes among women. For example, women with negative genital self-image are more likely to experience impaired sexual function in terms of orgasm, lubrication and arousal, and pain during sex (Herbenick & Reece, 2010; Herbenick et al., 2011; Komarnicky et al., 2019; Pazmany et al., 2013). In contrast, women with positive genital self-image are more likely to engage in receptive oral sex (Herbenick & Reece, 2010), use vibrators, masturbate more frequently, and engage in reproductive health behaviors such as getting gynecological exams and examining their own genitals (Herbenick et al., 2011).

Body image more generally is also associated with sexual outcomes such as sexual dysfunction (Carvalho et al., 2017; Quinn-Nilas et al., 2016) and sexual dissatisfaction (Pujols

et al., 2010). However, several studies have found that genital self-image is associated with sexual dysfunction, even after controlling for overall body image (Jawed-Wessel et al., 2017; Komarnicky et al., 2019; Pazmany et al., 2013), suggesting that genital self-image may impact sexual outcomes over and above the impact of body satisfaction. Additionally, compared to the many investigations of the role of body image in sexual function, genital self-image remains relatively understudied (Herbenick & Reece, 2010) and warrants closer investigation as a possible contributor to sexual wellbeing.

The Information Processing Model of Sexual Arousal

Women with negative genital self-image are more likely to experience sexual dysfunction (Herbenick & Reece, 2010; Herbenick et al., 2011; Komarnicky et al., 2019; Jawed-Wessel et al., 2017; Pazmany et al., 2013); however, the processes by which this occurs is unknown. The information processing model of sexual arousal (Janssen et al., 2000) highlights the role of attentional focus in sexual function and offers a possible explanation. According to this model, appraisal of a stimulus as an erotic cue may lead to genital arousal (e.g., increased blood flow to and lubrication of the vagina). Attentional focus acts as a “spotlight” (Gopher & Iani, 2003) which fosters conscious awareness of these erotic cues and genital arousal, and in turn, feeling “turned on.” A positive feedback loop may occur in which subjective experiences are appraised as erotic cues, thus maintaining or heightening arousal and possibly leading to orgasm. On the other hand, when attentional focus is distracted by stimuli that are not erotic cues, such as self-critical concerns, this feedback loop may be disrupted, impeding arousal, and may lead to pain during intercourse (Carvalheira et al., 2017).

Spectatoring

Spectatoring, a term introduced by Masters and Johnson (1970), refers to distracting, self-critical concerns during sex. People who engage in spectatoring are more likely to experience sexual dysfunction (Dove & Wiederman, 2000) because their worries impede their ability to attend to erotic cues (Janssen et al., 2000). Several studies indicate that people with negative body image are prone to spectatoring. For example, women with negative body image tend to be distracted by self-critical concerns regarding their appearance and performance during sex (Meana & Nunnink, 2006) and often experience impaired arousal, difficulty reaching orgasm, and less pleasure during sex (Sanchez & Kiefer, 2007). In support of our theorizing that negative genital self-image impacts sexual function due to distraction, Carvalheria and colleagues (2017) found that women who are dissatisfied with their bodies tended to report difficulty reaching orgasm and low sexual desire, and these associations were mediated by distraction by appearance- and performance-related worries during sex. Similarly, Wyatt and colleagues (2019) found that the association between men's genital self-image and erectile function was mediated by spectatoring during sex.

Sexual Pleasure

Due to distraction during sex by self-critical concerns, women may experience impaired pleasure in addition to sexual dysfunction. For the purpose of this study, we operationalized sexual pleasure as conscious, positive evaluations of physical sensations during sex, either localized in the genitals or throughout the body. Sexual pleasure, rather than sexual function, may be more strongly impacted by negative genital self-image when considering Janssen et al.'s (2000) information processing model of sexual arousal.

Many aspects of sexual function, such as lubrication, arousal, and even orgasm, may be triggered automatically in response to a sexual stimulus (Janssen et al., 2000). Levin and van

Berlo (2004) suggest that the increased vaginal blood flow and lubrication associated with arousal is activated at a sub-cortical level allowing for painless penetration of the vagina regardless of subjective arousal and may be heightened by anxiety. For example, physiological genital arousal and orgasm can occur in the absence of subjective arousal (Everaerd et al., 2000) or even during sexual assault (Levin & van Berlo, 2004). Additionally, women may experience “bad” orgasms that are not pleasurable and are perceived negatively (Chadwick et al., 2019). Thus, if sexual pleasure reflects conscious appraisals of physical sensations, pleasure is reliant on the “spotlight” of attentional focus (Gopher & Iani, 2003) and may be more strongly impacted by distraction. Accordingly, we hypothesized that women’s negative genital self-image would be associated with distraction during sex, and in turn, less sexual pleasure.

Does Anxiousness Strengthen the Association Between Negative Genital Self-Image and Distraction During Sex?

Trait-level anxiousness may exacerbate the tendency among women with negative genital self-image to engage in spectating. Anxious individuals have a bias towards interpreting information as threatening (Beck, 1985), and when anxiety is triggered, individuals become hypervigilant for threats, self-conscious, and experience frequent involuntary thoughts of danger (Beck, 1985). In turn, this activates the fight or flight response which further narrows attentional focus on the threat (Beck & Clark, 1997). Thus, during sex, anxiousness may cause women to have a bias toward interpreting stimuli negatively and being distracted from erotic cues.

Barlow (1986) proposed a model of sexual dysfunction in which trait-level anxiousness heightens distraction by non-erotic cues during sex, which in turn impedes sexual arousal. Because anxiety constricts attentional focus, attention to erotic cues is further impeded. In support of this, anxious women are more likely to experience sexual dysfunction (Beaber &

Werner, 2009) and among men, anxiousness has been found to strengthen the association between negative genital self-image and spectating, and in turn, sexual dysfunction (Wyatt & de Jong, 2020). Accordingly, we hypothesized that anxiousness would strengthen the association between negative genital self-image and distraction, and in turn, pleasure.

Does Social Anxiety Strengthen the Association Between Genital Self-Image and Distraction?

Social anxiety, characterized by fear and avoidance of social situations in which an individual may be negatively evaluated (Kashdan, 2007), might also strengthen associations between genital self-image, distraction, and pleasure. While social anxiety and general anxiousness are similar constructs, they differ in focus. Socially anxious individuals are hypervigilant for negative evaluations (Bögels & Mansell, 2004), whereas generally anxious individuals are hypervigilant for threats across a wide range of situations. Social anxiety is associated with the typical symptoms of anxiety (i.e., negative affect, threat sensitivity, withdrawal tendencies; Kashdan, 2007); but unlike general anxiousness, social anxiety is associated with decreased sensitivity to reward cues. Because socially anxious women are less sensitive to reward cues, we theorize that, during sex, the sexual meanings attached to stimuli may not be strong enough to hold attentional focus, and in turn, this may impede sexual pleasure and arousal. This theorizing is in line with previous research indicating that socially anxious individuals experience fewer orgasms (Leary & Dobbins, 1983) and less sexual pleasure (Kashdan et al., 2011).

Sexual situations might trigger symptoms of social anxiety, such as self-focused attention and fear of negative evaluation (Woody & Rodriguez, 2000) because sex is inherently interpersonal and fraught with risk of rejection and exposure of physical flaws. Carver and

Sheier (1981) proposed that in social situations, state anxiety arises when an individual is fearful of negative evaluation and perceives a discrepancy between the current situation and their goal for the situation. Accordingly, among socially anxious women, perceptions of not being attractive enough or not performing adequately may trigger anxiety, and in turn, may narrow attentional focus on perceived threats. Additionally, socially anxious individuals are more likely to inaccurately perceive anger and threat in others' faces (Bell et al., 2011). Accordingly, we hypothesized that two domains of social anxiety (i.e., social interaction anxiety and social phobia) would strengthen the indirect associations between genital self-image and sexual pleasure.

The Current Study

Based on our theorizing above, we investigated whether genital self-image is significantly associated with sexual pleasure among women, and whether this association is mediated by distraction. Based on Wyatt and colleagues' (2019) finding that trait-level anxiousness strengthened this indirect effect among men (Wyatt & de Jong, 2020), we also assessed whether anxiousness or two domains of social anxiety (i.e., social interaction anxiety and social phobia) strengthened these indirect effects.

CHAPTER TWO: METHOD

We report how we determined our sample size, all data exclusions, and all relevant measures used in this study; there were no experimental manipulations in this study (Simmons, Nelson, & Simonsohn, 2012). Hypotheses, methods, and minimum sample size were pre-registered (<https://aspredicted.org/57m2w.pdf>) prior to analyses.

Participants

Participants were recruited from online venues such as Facebook, Reddit, and Tumblr. An a priori power analysis indicated that 275 participants would achieve 80% power assuming small-medium associations. However, we recruited more participants to accommodate for smaller-than-expected effect sizes and due to calls for greater power in psychological science (LeBel et al., 2017). Participants were included in analyses if they were women 18 years or older, had sex in the previous four weeks (defined as penile penetration of the vagina or anus, receptive oral sex, manual stimulation of their genitals, or stimulation of their genitals with a sex toy); 1698 participants met these inclusion criteria. Next, participants were excluded if they failed two out of three attention checks, completed the survey in under six minutes, or if they self-reported giving bogus answers. After these exclusions, 1619 women remained in the final sample.

Mean age was 26.11 ($SD = 7.21$), and participants identified as White (85.4%), Asian (9.5%), Black or African American (3.8%), American Indian or Alaskan Native (1.6%), Native Hawaiian or Pacific Islander (0.7%), or “other” (5.9%); as heterosexual/straight (58.0%), bisexual (31.9%), pansexual (5.1%), lesbian or gay (2.2%), or “something else” (2.5%); as dating exclusively (51.8%), married or common-law (22.9%), sexually involved but not dating (12.3%),

dating unexclusively (5.9%), engaged (4.3%), or single and not dating at all (2.6%); having completed a BA or BS degree (36.2%), some college, trade school, or an AA or AS degree (34.4%), a high school diploma (12.4%), a MA or MS degree (12.2%), a doctoral degree (3.3%), or some high school (1.2%).

Measures

For all measures, item scores were averaged such that higher aggregate scores reflect higher levels of the construct, unless noted otherwise.

Negative Genital Self-Image

The four-item Female Genital Self-Image Scale (FGSIS-4; Herbenick et al., 2011) measured perceptions of the appearance, smell, and function of one's genitals, e.g., "I am satisfied with the appearance of my genitals" (1 = *Strongly Disagree* to 4 = *Strongly Agree*).

Scores were reversed so that higher scores reflect more negative views of one's genitals.

Cronbach's $\alpha = .81$.

Body Dissatisfaction

The four-item Global Body Dissatisfaction Scale of the Body Attitudes Test (Probst et al., 1995) measured negative perceptions of one's body, e.g., "When I look at myself in the mirror, I'm dissatisfied with my own body" (1 = *Never* to 6 = *Always*). Cronbach's $\alpha = .88$.

Distraction

Our goal was to assess three domains of distraction during sex: appearance-based distractions, performance-based distractions, and embarrassment. We gathered items from Dove and Wiederman's (2000) Cognitive Distraction Scales, the Non-Erotic Cognitive Distraction Questionnaire (Lacefield & Negy, 2012), the Sexual Embarrassment subscale of the Sexual Self-Consciousness Scale (van Lankveld et al., 2008), and wrote items for this study. Items were

modified to reflect distraction during one's most recent sex. Items were entered into an exploratory factor analysis (EFA) with a promax (oblique) rotation using SPSS v25. Three factors with eigenvalues greater than 1 were identified; a parallel factor analysis (O'Connor, 2000) identified six factors with eigenvalues significantly greater than those derived from randomly generated datasets. Because of theoretical interpretability, we retained the model with three factors, which we labelled Appearance-Based Distraction, Performance-Based Distraction, and Sexual Embarrassment (see Table 1). We removed three performance-related items that cross-loaded ($>.32$ on a second factor or $<.20$ difference between two factors) and re-ran the EFA. The three factors accounted for 74.69% of item variance. The three subscales follow.

Appearance-based distraction. Concerns about whether one's body or body parts were attractive to one's sexual partner were measured with five items, e.g., "I was concerned about whether my body was sexually appealing to my partner" (1 = *Not at all True* to 6 = *Completely True*). Cronbach's $\alpha = .95$.

Performance-based distraction. Worries about one's sexual abilities or skills were measured with four items, e.g., "I worried whether the things I did during sex satisfied my partner" (1 = *Not at all True* to 6 = *Completely True*). Cronbach's $\alpha = .85$.

Sexual embarrassment. Discomfort and the inability to "let go" during sex were assessed with four items, e.g., "I found it difficult to sexually let myself go in front of the other person" (1 = *Strongly Disagree* to 5 = *Strongly Agree*). Cronbach's $\alpha = .82$.

Sexual Pleasure

Pleasure during most recent sex was measured with six items written for this study, e.g., "I felt intense pleasure in my genitals" (1 = *Not at all True* to 6 = *Completely True*). An EFA (oblique promax rotation; see Table 2) indicated that one factor had an eigenvalue greater than 1.

A parallel factor analysis (O'Connor, 2000) indicated that two factors had eigenvalues significantly higher than those derived from randomly generated datasets. We retained the one-factor solution because of the interpretability of the single factor and few cross-loaders; this factor accounted for 74.91% of item variance. Cronbach's $\alpha = .92$.

Sexual Function

The 19-item Female Sexual Function Index (FSFI; Rosen et al., 2000) assessed six domains of sexual function in the previous four weeks: desire (two items; $r = .79$), arousal (four items; $\alpha = .86$), lubrication (four items; $\alpha = .89$), orgasm (three items; $\alpha = .92$), satisfaction (three items; $\alpha = .88$), and pain (three items; $\alpha = .88$). Higher scores indicate better sexual function. Scores of 0 on arousal, lubrication, orgasm, or pain indicate no sexual activity or vaginal penetration and were excluded (Meyer-Bahlburga & Dolezal, 2007).

Anxiousness

The nine-item Anxiousness facet scale of the Personality Inventory for DSM-5 (Krueger et al., 2012) measured trait-level nervousness, worry, and fear, e.g., "I am a very anxious person" (0 = *False or Often False* to 3 = *Very True or Often True*). Cronbach's $\alpha = .93$.

Social Anxiety

Social interaction anxiety. The six-item Social Interaction Anxiety Scale (SIAS-6; Peters et al., 2012) measured feelings of anxiety surrounding social interactions, e.g., "I have difficulty talking with other people" (0 = *Not at all characteristic or true of me* to 4 = *Extremely characteristic or true of me*). Cronbach's $\alpha = .80$.

Social phobia. The six-item Social Phobia Scale (SPS-6; Peters et al., 2012) assessed fears of scrutinization while performing tasks, e.g., "I worry I might do something to attract the

attention of other people” (0 = *Not at all characteristic or true of me* to 4 = *Extremely characteristic or true of me*). Cronbach’s $\alpha = .86$.

Procedure

Participants provided informed consent and answered demographic questions, and completed measures of social interaction anxiety, social phobia, anxiousness, body dissatisfaction, genital self-image, appearance- and performance-based distractions, embarrassment, pleasure, and sexual function, in that order. Last, participants were invited to enter into a drawing for one of five \$20 Amazon gift cards by emailing the study coordinator, ensuring anonymity. This study included other measures (e.g., general distraction during sex, motives for engaging in sex, etc.) not relevant to our preregistered hypotheses and will not be discussed further.

Analytic Strategy

Confirmatory Analyses

To determine whether distraction mediated the association between genital self-image and pleasure, we conducted three simple mediation analyses with each of the three distraction measures entered as the mediator in separate runs of the model using PROCESS macro v3.0 and SPSS v25 (model 4; Hayes, 2017). Next, nine separate moderated-mediation analyses were conducted using PROCESS (model 7) to investigate if different facets of anxiety (i.e., anxiousness, social interaction anxiety, or social phobia) strengthened associations between genital self-image and distraction (the *a* path), and in turn, the indirect effect on pleasure. Indirect effects are significant if their bootstrap confidence interval does not include zero (Hayes

& Rockwood, 2017).¹ Moderated-mediation is significant if the bootstrap confidence interval for its index does not include zero (Hayes & Rockwood, 2017). Mediation and moderated-mediation were tested with 5,000 resampled bootstrap 95% confidence intervals. Because genital self-image was a continuous variable, we report completely standardized β s as effect sizes (Hayes, 2018). Conditional indirect effects were calculated at 16th and 84th percentiles on the moderators.

Exploratory Analyses

Previous literature has established associations between body dissatisfaction and sexual pleasure (Sanchez & Kiefer, 2007). To assess whether genital self-image has independent associations with distraction, and in turn, pleasure, over and above the predictive ability of body dissatisfaction, we reran our primary models controlling for body dissatisfaction. Additionally, because previous literature has found that genital self-image is associated with sexual function, we also explored sexual function (measured by the FSFI) as the outcome variable.

¹ Though a significant decrease from the c to the c' path is not required for evidence of significant mediation (Hayes & Rockwood, 2016), in tables we report these path estimates for informational purposes.

CHAPTER THREE: RESULTS

Descriptive Statistics

Means, standard deviations, and Pearson's r correlations for all key variables are presented in Table 3. To explore the validity of the measure of sexual pleasure developed for this study, we assessed correlations with the FSFI subscales. Overall, pleasure was associated with better sexual function. Noting that higher scores on the FSFI subscales indicate better sexual function, pleasure had a small positive correlation with sexual desire, moderate positive correlations with lubrication and pain, and large positive correlations with arousal, orgasm, and the FSFI total score.

Confirmatory Analyses

Does Distraction Mediate the Association Between Genital Self-Image and Sexual Pleasure?

The indirect effect of genital self-image on pleasure via appearance-based distraction was significant (i.e., the bootstrap confidence interval for the indirect effect did not include zero; see Table 4). The mediation ratio² indicated that the indirect effect via appearance-based distraction accounted for 24.38% of the total effect of genital self-image on pleasure. The indirect effect of genital self-image via performance-based distraction was also significant (mediation ratio = 26.25%), as was the indirect effect via embarrassment (mediation ratio = 61.46%). In other

² To further assess effect sizes for mediation, we calculated mediation ratios of indirect effects compared to total effects with the following equation, $P_M = \frac{ab}{c}$ (Preacher & Kelley, 2011; Hayes, 2018). This measure of effect size for indirect effects is suitable for these analyses because sample sizes exceed the minimum ($N > 500$) required to stabilize this measure. However, due to the instability of this measure across different samples and the fact that this value is not necessarily constrained within the values of 0 and 1, this measure of effect size should be interpreted with caution (Hayes, 2018).

words, during sex, women with negative genital self-image were more distracted by concerns about their appearance or performance and embarrassment; in turn, higher levels of these three forms of distraction were associated with less pleasure.

Does Anxiousness Strengthen the Indirect Effects of Genital Self-Image on Pleasure?

Anxiousness significantly moderated the indirect effect of genital self-image on pleasure via appearance-based distraction (i.e., the bootstrap confidence interval for the index of moderated-mediation did not include zero; see Tables 5 and 6). More specifically, the indirect effect via appearance-based distraction was stronger among women who were high on anxiousness, but this indirect effect was still significant, though weaker, among women with low anxiousness. Anxiousness did not significantly moderate the indirect effects on pleasure via performance-based distraction or embarrassment (see Table 5).

Do Social Interaction Anxiety and Social Phobia Strengthen the Indirect Effects of Genital Self-Image on Pleasure?

Social interaction anxiety significantly moderated the indirect effect of genital self-image on pleasure via appearance-based distraction (see Tables 5 and 6). More specifically, the indirect effect via appearance-based distraction was strongest among women high on social interaction anxiety, but this indirect effect was still significant, though weaker, among women with low social interaction anxiety. Social interaction anxiety did not significantly moderate the indirect effects via performance-based distraction or embarrassment, and social phobia did not significantly moderate the indirect effects via any of the three mediators (see Table 5).

Exploratory Analyses

To assess whether genital self-image had indirect effects on pleasure via distraction over and above the predictive ability of general body dissatisfaction, we entered body dissatisfaction

as a covariate in all models tested above. After controlling for body dissatisfaction, the indirect effects on pleasure via appearance-based distractions (mediation ratio = 17.42%), performance-based distractions (mediation ratio = 22.85%), and embarrassment (mediation ratio = 57.01%) remained significant (see Table 7). In other words, genital self-image was associated with all three forms of distraction, and in turn, less pleasure, over and above the predictive ability of body dissatisfaction.

After controlling for body dissatisfaction, social interaction anxiety and anxiousness remained significant moderators of the indirect effect on pleasure via appearance-based distraction, and social interaction anxiety became a significant moderator of the indirect effect via embarrassment (see Tables 8 and 9). More specifically, after controlling for body dissatisfaction, the indirect effect on pleasure via embarrassment was strongest among women high on social interaction anxiety, but this indirect effect was still significant among women low on social interaction anxiety.

Next, we explored whether our theorized models predicted sexual function. To minimize the number of tests and in order to highlight the independent predictive ability of genital self-image over and above general body concerns, these models controlled for body dissatisfaction. The indirect effects of genital self-image on sexual function were significant via appearance-based distraction (mediation ratio = 18.78%), performance-based distraction (mediation ratio = 22.13%), and embarrassment (mediation ratio = 50.15%; see Table 10). Social interaction anxiety, social phobia, and anxiousness were significant moderators of the indirect effect on sexual function via appearance-based distraction (see Tables 11 and 12). More specifically, the indirect effect on function via appearance-based distraction was strongest among women high on social interaction anxiety, social phobia, or anxiousness, but this indirect effect was still

significant among women low on these moderators. Additionally, social interaction anxiety significantly moderated the indirect effect on function via embarrassment. More specifically, the indirect effect via embarrassment was strongest among women high on social interaction anxiety, but this indirect effect was still significant among women low on social interaction anxiety.

CHAPTER FOUR: DISCUSSION

In this study, we hypothesized that women with negative genital self-image would experience less pleasure during sex via the mediating process of distraction. We also hypothesized that these indirect effects would be strongest among women who experience anxiousness or social anxiety. In general, our findings extend the previous literature regarding associations between genital self-image and sexual outcomes (Herbenick & Reece, 2010; Herbenick et al., 2011; Wyatt et al., 2019; Wyatt & de Jong, 2020).

Indirect Effects

In line with previous findings linking genital self-image to sexual function (Herbenick & Reece, 2010; Herbenick et al., 2011; Wyatt et al., 2019; Wyatt & de Jong, 2020), we found that among women, negative genital self-image was associated with less sexual pleasure and worse sexual function. Importantly, our findings also suggest that attentional focus may be the process by which genital self-image impacts these sexual outcomes. More specifically, we found that women with negative genital self-image were more distracted by appearance concerns, performance concerns, and embarrassment, and in turn, experienced less pleasure and worse sexual function. Although the sizes of these indirect effects were small per Cohen's conventions (Cohen, 1992), mediation ratios suggest that these indirect effects account for substantial proportions of variance (ranging from 17.42-61.46%) in the total effects of genital self-image on sexual pleasure and function. Perhaps more importantly, these indirect effects remained significant while controlling for body dissatisfaction, suggesting that how women feel about their genitals may impact their ability to focus on erotic cues during sex, and in turn, sexual pleasure and function, over and above the impact of concerns about one's body more broadly.

We have several speculations as to why women with negative genital self-image tend to be distracted from erotic cues during sex. First, women who feel negatively about their genitals may be reluctant to ask partners for oral or manual stimulation, both of which are strongly associated with orgasm among women (Kontula et al., 2016; Herbenick et al., 2018). In turn, not receiving the stimulation most likely to elicit orgasm may increase distraction by non-erotic thoughts or feelings. Second, even if these women receive oral or manual stimulation, self-consciousness about their genitals may distract attention away from erotic cues (Reinholtz & Muehlenhard, 1995; Backstrom et al., 2012). In contrast, women who feel positively about their genitals may be more likely to engage in these sex acts (Herbenick & Reece, 2010; DeMaria et al., 2012), and while doing so, may be more likely to believe that their partners share their positive perceptions of their genitals. Receiving the stimulation optimal for pleasure while free from self-critical worries may enable women to stay “in the moment” and in turn, experience pleasure and orgasm (Fudge & Byers, 2016).

Third, we speculate that women with negative genital self-image may be less likely to have discovered their own body’s potential for individual sexual fulfillment. In support of this, women who perceive their genitals negatively are less likely to masturbate, use sex toys (Herbenick et al., 2011), or view their genitals as a source of sexual pleasure (Braun & Wilkinson, 2003). Not seeing one’s own body as a source of sexual fulfillment may contribute to a diminished sense of sexual empowerment and entitlement to sexual pleasure (Bowman, 2014). This lack of sexual agency may lead to doubt over one’s value as a sex partner and viewing sex as an obligation, and in turn, may foster distraction. These speculations warrant further investigation.

Much of our theorizing was based on previous findings that men with negative genital self-image are more likely to engage in spectating, and in turn, experience sexual dysfunction (Wyatt et al., 2019; Wyatt & de Jong, 2020). Our results extend Wyatt and colleagues' findings to women among whom negative genital self-image was associated with distraction, and in turn, less sexual pleasure and worse sexual function. In terms of mediating processes operating between genital perceptions and sexual outcomes, Wyatt and colleagues found indirect effects via embarrassment and self-consciousness, whereas our study found indirect effects via concerns regarding appearance and performance, in addition to embarrassment. Future research should investigate whether appearance and performance concerns play similar roles among men. Taken together, the findings of Wyatt and colleagues (2019; 2020) and the current study suggest that negative genital self-image impacts sex for both men and women.

Initially, we theorized that genital self-image and distraction would primarily impact sexual pleasure rather than sexual function, based on our notion that sexual pleasure reflects subjective experiences whereas genital responses are governed by automatic processes that may be triggered even in the absence of pleasure or subjective arousal (Everaerd et al., 2000). This theorizing was not well supported, in light of the very similar patterns of findings when predicting either pleasure during most recent sex or function over the previous four weeks. Despite these similarities when predicting pleasure vs. function, for several reasons we see value in conceptualizing sexual pleasure and function as being distinct constructs.

First, correlations between pleasure and the sexual function subscales (r s = .27 - .66; see Table 3) were not as high as would be expected between variables that assess the same construct (i.e., $r > .85$; Shaffer et al., 2016). Second, aspects of sexual function such as genital arousal and orgasm may occur without the subjective experience of pleasure, as in the case of “bad” or

unpleasant orgasms (Chadwick et al., 2019) or during sexual assault (Levin & van Berlo, 2004). Additionally, sexual pleasure and function may diverge in other situations. For instance, women with persistent genital arousal disorder experience frequent genital arousal and orgasm which is typically not pleasurable and may even be painful (Carvalho et al., 2013; Facelle et al., 2013). More broadly, women who do not experience orgasm during sex may still feel intense pleasure and satisfaction (Opperman et al., 2014). Thus, distinguishing the two constructs might be useful in certain research contexts.

Conditional Indirect Effects

Based on previous findings that anxiousness predisposes men with negative genital self-image to be distracted during sex, and in turn, experience worse sexual function (Wyatt & de Jong, 2020), we hypothesized that anxiousness would similarly strengthen the indirect effects of genital self-image among women. This hypothesis was partially supported, in that anxiousness strengthened the indirect effect via the mediating process of appearance-based distraction, but not via performance concerns or embarrassment. Anxiousness entails automatic appraisals of neutral, ambiguous, or even positive stimuli as threatening (Beck & Clark, 1996; Beck, 1985) and negatively biased cognitions about the stimulus, the situation, and one's physiological reactions. These negative cognitions lead to fight or flight responses (Beck & Clark, 1996) which further narrows attentional focus on perceived threats. Thus, among women with negative genital self-image, anxiousness may foster hypervigilance for cues that their partner negatively perceives their genitals or that reinforce fear of rejection. In turn, these negative, unerotically charged thoughts and fears may interfere with attentional focus on erotic cues and impede sexual function and pleasure (Janssen et al., 2000; Barlow, 1986).

Further building on Wyatt and de Jong's (2020) findings that anxiousness strengthens the association between negative genital self-image and sexual function among men, we hypothesized that social anxiety would play a similar moderating role among women. We examined two aspects of social anxiety: social interaction anxiety, which refers to anxiety surrounding the initiation and maintenance of interactions with others, and social phobia, which entails fear of negative evaluation while performing tasks. Our hypotheses were partially supported.

Across several of our analyses, both confirmatory and exploratory, social interaction anxiety strengthened indirect effects of genital self-image via appearance-based distraction and embarrassment. Women who are anxious about social interactions may be especially susceptible to the impact of negative genital self-image because they are less sensitive to the rewards of positive social situations and are hypervigilant for threats (Kashdan, 2007). This threat sensitivity and undervaluing of positive experiences may interfere with attending to erotic cues and lead to beliefs that one's partner negatively perceives one's genitals, appearance, and sexual performance. Although previous studies suggest that social anxiety is associated with sexual function (e.g., Kashdan et al., 2011), this is the first study demonstrating that social anxiety may heighten the negative impact of genital self-image on sexual pleasure and function.

Social phobia was a significant moderator in only one model, which was exploratory. In this result, social phobia strengthened the indirect effect of genital self-image on sexual function via the mediating process of appearance-based distraction. This novel finding might suggest that fear of negative evaluation impacts the physiological aspects of sexual function but not subjective appraisals of sexual pleasure. However, this speculation conflicts with our original theorizing that negative genital perceptions would primarily impact sexual pleasure rather than

sexual function. Because this finding was exploratory, it should be interpreted with caution and in need of replication. Overall, our findings did not strongly support our theorizing that social phobia heightens the impact of genital self-image on sexual pleasure or function.

Limitations and Implications

This study has several limitations. We theorized that positive genital self-image causes women to be less distracted during sex, which in turn causes them to experience more sexual pleasure. Although preregistration of hypotheses minimized the possibility of Type 1 errors, the cross-sectional nature of this study precludes being certain of causal directions. Stronger evidence of our theorized causal chain would require experimental manipulation of genital self-image, and then distraction, in order to assess their effects on subsequent variables.

Other limitations arise from the relative homogeneity our sample which limits the generalizability of our findings. Because sex and genitalia are sensitive topics, women who participated might be particularly comfortable with sexual topics. Additionally, most participants were younger ($M = 26$ years old) and White, suggesting that these findings should be replicated in a more diverse sample. We did not control for factors such as menopause status, children birthed or in household, contraception, partner's sexual dysfunction, or medical conditions, all of which might impact women's genital perceptions, pleasure, or sexual function; assessing how these factors might play into how genital self-image is associated with sexual pleasure would be valuable topics for future studies.

Our findings suggest that clinicians should consider assessing genital self-image, anxiousness, and social anxiety among women presenting with difficulties with sexual pleasure or function. Because discussion of the natural variation in female genitals has been found to increase positive attitudes towards one's genitals (Laan et al., 2017; Warshowsky et al., 2019),

psychoeducation regarding genitals and self-image may be valuable components of sex therapy. Evidence suggests that mindfulness-based cognitive therapy enables women to decrease distraction and distress during sex and improve sexual function through nonjudgmental awareness of sensations, thoughts, and emotions during sex (Paterson et al., 2017; Stephenson & Kerth, 2017). Anxious or socially anxious women who are dissatisfied with their genitals may benefit from cognitive-behavioral therapy to address worry and automatic thoughts related to their genitals, partner's perceptions, and their value as a sex partner (ter Kuile et al., 2010).

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APPENDIX A: TABLES

Table 1

Factor Loading for Cognitive Distraction Items

Distraction Item	Appearance	Sexual Embarrassment	Performance
I worried about how a particular part of my body (e.g., stomach, genitals, thighs/legs, breasts/chest) looked. ^a	.99	-.09	-.07
I worried about how my body looked. ^a	.97	-.05	-.05
I was concerned about whether my body was sexually appealing to my partner. ^b	.90	-.02	.03
I found myself thinking about how unattractive my body is. ^b	.85	.04	-.05
I was distracted by thoughts of how I looked to my partner. ^b	.84	.07	-.01
I found it difficult to sexually let myself go in front of the other person. ^c	-.05	.89	-.10
I quickly felt embarrassed. ^c	-.00	.80	-.01
It took some time for me to overcome my shyness. ^c	.01	.72	-.06
I felt uncomfortable. ^c	-.05	.68	-.01
I was concerned that my partner would be unsatisfied with the amount of time I needed for sex (e.g., I'd take too long to orgasm, or I'd orgasm too fast). ^a	.09	.32	.21
I worried about my level of arousal during sex (e.g., lubrication/wetness or erection). ^a	-.02	.29	.26
I was concerned that I wouldn't be able to give my partner enough sexual pleasure. ^a	-.07	-.09	1.00
I worried that my partner would not have an orgasm. ^d	-.15	-.11	.84
I worried whether the things I did during sex satisfied my partner. ^a	.17	.09	.59
I was concerned that I wasn't very good at sex. ^a	.20	.16	.53
I was distracted by thoughts about my sexual performance. ^b	.22	.23	.41

Note. Retained items are bold. ^a Items written for this study. ^b Items modified from Dove & Wiederman, 2000. ^c Items modified from van Lankveld et al., 2008. ^d Item modified from Lacefield & Negy, 2012.

Table 2*Factor Loading for Sexual Pleasure Items*

Pleasure Item	Sexual Pleasure
I felt intense pleasure in my genitals.	.92
The sex felt very pleasurable.	.91
The way my partner stimulated my body felt extremely pleasurable.	.91
The sexual arousal in my genitals and/or body felt pleasurable.	.84
I experienced very pleasurable orgasmic feelings.	.75
During sex, the feeling of my partner's body against mine was very pleasurable.	.67

Note. Retained items are bold.

Table 3*Means, Standard Deviations, and Pearson's r Correlations for Key Variables*

	<i>M</i>	<i>SD</i>	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Negative genital self-image	1.93	0.60	.27**	.36**	.29**	.37**	-.24**	.24**	.28**	.24**	-.12**	-.25**	-.12**	-.24**	-.20**	-.17**	-.28**
2. Body dissatisfaction	3.98	1.16		.56**	.26**	.29**	-.13**	.26**	.33**	.36**	-.12**	-.19**	-.08*	-.14**	-.18**	-.08**	-.20**
3. Appearance-based distraction	2.38	1.45			.54**	.52**	-.23**	.25**	.37**	.34**	-.07*	-.27**	-.12**	-.26**	-.24**	-.16**	-.29**
4. Performance-based distraction	2.17	1.22				.50**	-.27**	.28**	.27**	.28**	-.04	-.27**	-.20**	-.24**	-.25**	-.24**	-.32**
5. Sexual embarrassment	1.86	0.93					-.43**	.30**	.32**	.29**	-.13**	-.39**	-.22**	-.38**	-.36**	-.28**	-.45**
6. Sexual pleasure	5.04	1.19						-.18**	-.12**	-.10**	.27**	.66**	.38**	.61**	.53**	.31**	.71**
7. Social interaction anxiety	1.10	0.76							.58**	.42**	-.11**	-.23**	-.17**	-.15**	-.12**	-.21**	-.25**
8. Social phobia	0.95	0.86								.50**	-.03	-.17**	-.12**	-.11**	-.09*	-.21**	-.18**
9. Anxiousness	1.67	0.79									-.07*	-.14**	-.09**	-.13**	-.11**	-.19**	-.19**
10. Desire	4.30	1.20										.52**	.29**	.11**	.22**	.20**	.57**
11. Arousal	5.02	1.03											.57**	.45**	.52**	.34**	.84**
12. Lubrication	5.19	1.07												.25**	.29**	.39**	.68**
13. Orgasm	4.27	1.61													.35**	.23**	.66**
14. Satisfaction	4.82	1.25														.15**	.65**
15. Pain	5.07	1.16															.56**
16. FSFI total	28.70	4.78															

Note. * $p < .01$. ** $p < .001$. Variables 9-14 (Desire, Arousal, Lubrication, Orgasm, Satisfaction, and Pain) are domains of the Female Sexual Function Index (FSFI). On all FSFI domains, higher scores indicate better sexual function. $N_s = 1473-1619$.

Table 4

Indirect Effects of Negative Genital Self-Image on Sexual Pleasure via Appearance-Based Distraction, Performance-Based Distraction, and Sexual Embarrassment

	<i>B</i>	β	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
				Lower	Upper	
Negative genital self-image→Appearance-based distraction→Sexual pleasure						
Indirect effect	-0.117*	-0.059	0.021	-0.1591	-0.0753	1590
<i>a</i> path	0.877	0.440	0.057	0.7656	0.9876	
<i>b</i> path	-0.133	-0.067	0.021	-0.1750	-0.0916	
<i>c</i> path	-0.480	-0.241	0.049	-0.5751	-0.3846	
<i>c'</i> path	-0.363	-0.182	0.052	-0.4640	-0.2620	
Negative genital self-image→Performance-based distraction→Sexual pleasure						
Indirect effect	-0.126*	-0.063	0.019	-0.1654	-0.0897	1590
<i>a</i> path	0.596	0.596	0.049	0.5000	0.6922	
<i>b</i> path	-0.212	-0.106	0.024	-0.2593	-0.1639	
<i>c</i> path	-0.480	-0.241	0.049	-0.5751	-0.3846	
<i>c'</i> path	-0.354	-0.177	0.050	-0.4510	-0.2564	
Negative genital self-image→Sexual embarrassment→Sexual pleasure						
Indirect effect	-0.295*	-0.148	0.028	-0.3518	-0.2425	1590
<i>a</i> path	0.579	0.290	0.036	0.5086	0.6502	
<i>b</i> path	-0.509	-0.255	0.031	-0.5701	-0.4476	
<i>c</i> path	-0.480	-0.241	0.049	-0.5751	-0.3846	
<i>c'</i> path	-0.185	-0.093	0.049	-0.2801	-0.0900	

Note. Indirect effects represent the effect of *X* on *Y* through the mediating variable. β s are fully standardized regression coefficients. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5000 resampled bootstrap confidence intervals. *Indicates a significant indirect effect (i.e., confidence interval does not include zero).

Table 5

Moderation of the Indirect Effects of Negative Genital Self-Image on Sexual Pleasure by Social Interaction Anxiety, Social Phobia, and Anxiousness

Moderator	Index of Moderated Mediation (<i>B</i>)	β for Index of Moderated Mediation	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
				Lower	Upper	
Mediator: Appearance-based distraction						
Social interaction anxiety	-0.019*	-0.010	0.011	-0.0416	-0.0001	1589
Social phobia	-0.011	-0.011	0.010	-0.0323	0.0071	1589
Anxiousness	-0.029*	-0.015	0.011	-0.0540	-0.0104	1590
Mediator: Performance-based distraction						
Social interaction anxiety	-0.015	-0.008	0.015	-0.0447	0.0131	1589
Social phobia	-0.019	-0.010	0.014	-0.0472	0.0075	1589
Anxiousness	-0.016	-0.008	0.015	-0.0471	0.0125	1590
Mediator: Sexual embarrassment						
Social interaction anxiety	-0.043	-0.022	0.025	-0.0916	0.0058	1589
Social phobia	-0.033	-0.017	0.025	-0.0823	0.0127	1589
Anxiousness	-0.038	-0.019	0.024	-0.0860	0.0105	1590

Note. Index of moderated mediation (*B*) is the regression coefficient for the interaction between genital self-image and the moderator. β s for the index of moderated mediation are fully standardized regression coefficients for the interaction between genital self-image and the moderator. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5,000 resampled bootstrap confidence intervals. *Indicates significant moderated mediation (i.e., confidence interval for the index of moderated mediation does not include zero).

Table 6

Conditional Indirect Effects of Genital Self-Image on Sexual Pleasure via Appearance-Based Distraction

Moderator	Level of Moderator	<i>B</i>	β	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
					Lower	Upper	
Social interaction anxiety	Low	-0.087*	-0.087	0.017	-0.1235	-0.0540	1589
	High	-0.116*	-0.116	0.023	-0.1619	-0.0715	
Anxiousness	Low	-0.068*	-0.034	0.015	-0.0990	-0.0413	1590
	High	-0.120*	-0.060	0.025	-0.1716	-0.0759	

Note. β s are fully standardized regression coefficients for *B*. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5,000 resampled bootstrap confidence intervals. *Indicates a significant conditional indirect effect (i.e., bootstrap confidence interval does not include zero).

Table 7

Indirect Effects of Negative Genital Self-Image on Sexual Pleasure via Appearance-Based Distraction, Performance-Based Distraction, and Sexual Embarrassment with Body Dissatisfaction as a Covariate

	<i>B</i>	β	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
				Lower	Upper	
Negative genital self-image→Appearance-based distraction→Sexual pleasure						
Indirect effect	-0.077*	-0.039	0.016	-0.1115	-0.0463	1590
<i>a</i> path	0.554	0.278	0.050	0.4548	0.6526	
<i>b</i> path	-0.139	-0.070	0.025	-0.1877	-0.0904	
<i>c</i> path	-0.442	-0.222	0.050	-0.5407	-0.3434	
<i>c'</i> path	-0.365	-0.183	0.052	-0.4664	-0.2637	
Negative genital self-image→Performance-based distraction→Sexual pleasure						
Indirect effect	-0.101*	-0.051	0.018	-0.1374	-0.0682	1590
<i>a</i> path	0.490	0.246	0.050	0.3920	0.5878	
<i>b</i> path	-0.206	-0.103	0.025	-0.2545	-0.1573	
<i>c</i> path	-0.442	-0.222	0.050	-0.5407	-0.3434	
<i>c'</i> path	-0.341	-0.171	0.051	-0.4407	-0.2417	
Negative genital self-image→Sexual embarrassment→Sexual pleasure						
Indirect effect	-0.252*	-0.126	0.027	-0.3065	-0.2011	1590
<i>a</i> path	0.492	0.247	0.037	0.4197	0.5633	
<i>b</i> path	-0.513	-0.257	0.032	-0.5756	-0.4500	
<i>c</i> path	-0.442	-0.222	0.050	-0.5407	-0.3434	
<i>c'</i> path	-0.190	-0.093	0.049	-0.2866	-0.0934	

Note. Indirect effects represent the effect of *X* on *Y* through the mediating variable. β s are fully standardized regression coefficients. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5000 resampled bootstrap confidence intervals. *Indicates a significant indirect effect (i.e., confidence interval does not include zero).

Table 8

Moderation of the Indirect Effects of Negative Genital Self-Image on Sexual Pleasure by Social Interaction Anxiety, Social Phobia, and Anxiousness with Body Dissatisfaction as a Covariate

Moderator	Index of Moderated Mediation (<i>B</i>)	β for Index of Moderated Mediation	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
				Lower	Upper	
Mediator: Appearance-based distraction						
Social interaction anxiety	-0.027*	-0.014	0.010	-0.0484	-0.0087	1589
Social phobia	-0.017	-0.009	0.010	-0.0379	0.0005	1589
Anxiousness	-0.028*	-0.014	0.010	-0.0502	-0.0099	1590
Mediator: Performance-based distraction						
Social interaction anxiety	-0.017	-0.009	0.014	-0.0457	0.0107	1589
Social phobia	-0.021	-0.011	0.013	-0.0478	0.0041	1589
Anxiousness	-0.015	-0.008	0.014	-0.0441	0.0124	1590
Mediator: Sexual embarrassment						
Social interaction anxiety	-0.049*	-0.025	0.024	-0.0968	-0.0016	1589
Social phobia	-0.038	-0.019	0.025	-0.0885	0.0113	1589
Anxiousness	-0.037	-0.019	0.024	-0.0818	0.0112	1590

Note. Index of moderated mediation (*B*) is the regression coefficient for the interaction between genital self-image and the moderator. β s for the index of moderated mediation are fully standardized regression coefficients for the interaction between genital self-image and the moderator. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5,000 resampled bootstrap confidence intervals. *Indicates significant moderated mediation (i.e., confidence interval for the index of moderated mediation does not include zero).

Table 9

Conditional Indirect Effect of Genital Self-Image on Sexual Pleasure via Appearance-Based Distraction and Sexual Embarrassment with Body Dissatisfaction as a Covariate

Moderator	Level of Moderator	<i>B</i>	β	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
					Lower	Upper	
Mediator: Appearance-based distraction							
Social interaction anxiety	Low	-0.072*	-0.036	0.017	-0.1084	-0.0405	1589
	High	-0.097*	-0.049	0.021	-0.1369	-0.0588	
Anxiousness	Low	-0.075*	-0.038	0.019	-0.1137	-0.0399	1590
	High	-0.101*	-0.051	0.022	-0.1479	-0.0623	
Mediator: Sexual embarrassment							
Social interaction anxiety	Low	-0.184*	-0.092	0.029	-0.2430	-0.1282	1589
	High	-0.257*	-0.129	0.033	-0.3244	-0.1954	

Note. β s are fully standardized regression coefficients for *B*. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5,000 resampled bootstrap confidence intervals. *Indicates a significant conditional indirect effect (i.e., bootstrap confidence interval does not include zero).

Table 10

Indirect Effects of Negative Genital Self-Image on Sexual Function via Appearance-Based Distraction, Performance-Based Distraction, and Sexual Embarrassment with Body Dissatisfaction as a Covariate

	<i>B</i>	β	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
				Lower	Upper	
Negative genital self-image→Appearance-based distraction→Sexual function						
Indirect effect	-0.364*	-0.045	0.071	-0.5127	-0.2314	1473
<i>a</i> path	0.574	0.072	0.052	0.4724	0.6762	
<i>b</i> path	-0.634	-0.079	0.102	-0.8342	-0.4336	
<i>c</i> path	-1.938	-0.242	0.206	-2.3422	-1.5339	
<i>c'</i> path	-1.574	-0.197	0.212	-1.9893	-1.1586	
Negative genital self-image→Performance-based distraction→Sexual function						
Indirect effect	-0.429*	-0.054	0.071	-0.5770	-0.2949	1473
<i>a</i> path	0.452	0.056	0.051	0.3517	0.5532	
<i>b</i> path	-0.948	-0.118	0.102	-1.1473	-0.7484	
<i>c</i> path	-1.938	-0.242	0.206	-2.3422	-1.5339	
<i>c'</i> path	-1.509	-0.188	0.206	-1.9123	-1.1061	
Negative genital self-image→Sexual embarrassment→Sexual function						
Indirect effect	-0.972*	-0.121	0.108	-1.1811	-0.7688	1473
<i>a</i> path	0.478	0.060	0.038	0.4038	0.5527	
<i>b</i> path	-2.031	-0.254	0.131	-2.2889	-1.7736	
<i>c</i> path	-1.938	-0.242	0.206	-2.3422	-1.5339	
<i>c'</i> path	-0.967	-0.121	0.201	-1.3612	-0.5719	

Note. Indirect effects represent the effect of *X* on *Y* through the mediating variable. β s are fully standardized regression coefficients. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5000 resampled bootstrap confidence intervals. *Indicates a significant indirect effect (i.e., confidence interval does not include zero).

Table 11

Moderation of the Indirect Effects of Negative Genital Self-Image on Sexual Function by Social Interaction Anxiety, Social Phobia and Anxiousness with Body Dissatisfaction as a Covariate

Moderator	Index of Moderated Mediation (<i>B</i>)	β for Index of Moderated Mediation	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
				Lower	Upper	
Mediator: Appearance-based distraction						
Social interaction anxiety	-0.132*	-0.016	0.047	-0.2303	-0.0491	1472
Social phobia	-0.088*	-0.011	0.047	-0.1873	-0.0028	1472
Anxiousness	-0.129*	-0.016	0.046	-0.2273	-0.0461	1473
Mediator: Performance-based distraction						
Social interaction anxiety	-0.067	-0.008	0.067	-0.1953	0.0663	1472
Social phobia	-0.097	-0.012	0.061	-0.2194	0.0249	1472
Anxiousness	-0.049	-0.006	0.067	-0.1838	0.0784	1473
Mediator: Sexual embarrassment						
Social interaction anxiety	-0.200*	-0.025	0.102	-0.4055	-0.0061	1472
Social phobia	-0.147	-0.018	0.103	-0.3533	0.0541	1472
Anxiousness	-0.164	-0.020	0.101	-0.3631	0.0329	1473

Note. Index of moderated mediation (*B*) is the regression coefficient for the interaction between genital self-image and the moderator. β s for the index of moderated mediation are fully standardized regression coefficients for the interaction between genital self-image and the moderator. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5,000 resampled bootstrap confidence intervals. *Indicates significant moderated mediation (i.e., confidence interval for the index of moderated mediation does not include zero).

Table 12

Conditional Indirect Effects of Genital Self-Image on Sexual Function via Appearance-Based Distraction and Sexual Embarrassment with Body Dissatisfaction as a Covariate

Moderator	Level of Moderator	<i>B</i>	β	<i>SE</i>	95% CI for <i>B</i>		<i>N</i>
					Lower	Upper	
Mediator: Appearance-based distraction							
Social interaction anxiety	Low	-0.227*	-0.028	0.060	-0.3534	-0.1224	1472
	High	-0.425*	-0.053	0.086	-0.6022	-0.2672	
Social phobia	Low	-0.241*	-0.030	0.062	-0.3752	-0.1342	1472
	High	-0.388*	-0.048	0.087	-0.5712	-0.2306	
Anxiousness	Low	-0.213*	-0.027	0.060	-0.3400	-0.1048	1473
	High	-0.430*	-0.054	0.089	-0.6155	-0.2655	
Mediator: Sexual embarrassment							
Social interaction anxiety	Low	-0.687*	-0.086	0.119	-0.9257	-0.4684	1472
	High	-0.987*	-0.123	0.134	-1.2577	-0.7315	

Note. β s are fully standardized regression coefficients for *B*. Standard errors (*SE*) and the lower and upper bounds for the 95% confidence interval (CI) reflect 5,000 resampled bootstrap confidence intervals. *Indicates a significant conditional indirect effect (i.e., bootstrap confidence interval does not include zero).

APPENDIX B: CONSENT FORM

Western Carolina University Consent Form to Participate in a Research Study

Project Title: A Study of Women's Sexual Experiences

This study is being conducted by: Dr. David de Jong, Ph.D.

Description and Purpose of the Research: You are invited to participate in a research study about women's sexual experiences. By doing this study we hope to learn how personality traits contribute to women's sexual well-being.

What you will be asked to do: Participants will answer demographic questions, and then questions about personality and sexual experiences.

Risks and Discomforts:

Some people may feel awkward or uncomfortable answering questions of a personal, sexual nature. However, we anticipate that participation in this survey presents no greater risk than experienced in everyday use of the internet. **Participants may exit the survey or skip any question at any point.**

Benefits: There are no direct benefits to you for participating in this research study. The study may help us better understand how personality traits contribute to women's sexual well-being.

Privacy/Confidentiality/Data Security: The data collected in this study are anonymous. This means that not even the research team can match you to your data. The research team will work to protect your data to the extent permitted by technology. It is possible, although unlikely, that an unauthorized individual could gain access to your responses because you are responding online. This risk is similar to your everyday use of the internet.

Voluntary Participation: Participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. If you choose not to participate or decide to withdraw, there will be no impact on your grades/academic standing. If you choose to withdraw, you may simply discontinue answering questions and exit the study browser. For Western Carolina University students participating for course credit, your instructor has provided alternatives to research participation.

Compensation for Participation: To thank study participants, you will be given the option to enter a drawing for one of five Amazon gift cards of \$20. Gift card recipients will be randomly selected. To enter the drawing, participants must email the study coordinator upon completion of the study, which will allow the answers provided during the study to remain completely anonymous. Western Carolina University students participating for course credit will earn .5 credits.

Contact Information: For questions about this study, please contact Dr. David de Jong, the principal investigator and faculty advisor for this project at ddejong@wcu.edu.

This study has been approved by the Western Carolina University Institutional Review Board. If you have questions or concerns about your treatment as a participant in this study, you may contact the Western Carolina University Institutional Review Board through the Office of Research Administration by calling 828-227-7212 or emailing irb@wcu.edu. All reports or correspondence will be kept confidential to the extent possible.

I understand what is expected of me if I participate in this research study. I have been given the opportunity to ask questions and understand that participation is voluntary. By clicking the arrow below, this shows that I agree to participate and am at least 18 years old.

APPENDIX C: SURVEY

A Study of Sexual Function and Pleasure among Women

Thank you for your interest in this study!

To participate, you must be:

- **A woman**
- **18 years or older, and**
- **Have had sex* with another person in the last 4 weeks**

*For the purposes of this study, let's define sex as including only consensual sex that involves penetrative sex or contact between your genitals and another person (e.g., vaginal, anal, or oral sex; or, someone stimulating your genitals with their hands/fingers or a toy). Please exclude phone sex or cybersex from this definition.

The goal of this study is to understand how personality traits relate to how women experience sex. You will be asked very personal questions about your sex life, personality, and body image.

This study will take approximately 15-20 minutes to complete.

Your responses are *completely anonymous*. This study does not collect any identifying information.

Please complete the study in private, and do not consult with anyone when answering.

Try to answer each question, even if you have to take your "best guess." If a question makes you uncomfortable, leave it blank.

This study uses the word "partner" to refer to the person you had sex with in the past 4 weeks. "Partner" doesn't necessarily refer to a romantic partner.

To thank you for participating, you will be invited to enter into a raffle for one of five \$20 electronic gift cards to Amazon.com. Gift card recipients will be randomly selected. To enter the drawing, participants must email the study coordinator upon completion of the study, which will allow the answers provided during the study to remain completely anonymous.

Please read the response options carefully! They may change from page to page.

Click the arrow at the bottom of the page to continue to the consent form.

[Consent form; See Appendix B]

Demographics

The following questions will provide us with some basic background information about you.

How old are you?

[drop down list so that participants can enter 18-100+ years]

What is the highest level of education have you completed?

1 = *No High School Diploma*

2 = *High School Diploma*

3 = *Some College, Trade School, or AA Degree*

4 = *BA or BS degree*

5 = *MA or MS degree*

6 = *PhD, PsyD, DDS, MD, or Law degree*

What is your race? (Check all that apply)

1 = *American Indian or Alaskan Native*

2 = *Asian*

3 = *Native Hawaiian or Pacific Islander*

4 = *Black or African-American*

5 = *White*

6 = *Other*

What is your ethnicity?

1 = *Hispanic or Latino*

2 = *Not Hispanic or Latino*

What is your gender?

1 = *Woman*

2 = *Man**

3 = *Not Listed Above (please describe, if you'd like) [space provided]***

*eject from study - inclusion criteria: must identify as female or something else

**will not receive Female Genital Self-Image or FSFI

What is your sexual orientation?

1 = *Heterosexual/straight*

2 = *Lesbian or Gay*

3 = *Bisexual*

4 = *Pansexual*

5 = *Something Else (please describe, if you'd like) [space provided]*

Which of the following best describes your relationship status?

1 = *Married or Common-Law*

2 = *Engaged*

- 3 = *Dating, Exclusive*
- 4 = *Dating, Not Exclusive*
- 5 = *Sexually Involved, But Not Dating (e.g., friends with benefits, etc.)*
- 6 = *Single, Not Dating at All*

Please answer the following questions only if you are in a romantic relationship:

How long have you been *together as a couple* with your romantic partner? For example, if you have been together for 1 year and 2 months, enter “1” for years and “2” for months.
[drop down lists so that participants can enter 0-60 for years, and 0-11 for months]

Years:

Months:

What is your partner’s gender?

1 = *Man*

2 = *Woman*

3 = *Not Listed Above (please describe, if you’d like) [space provided]*

Please indicate the degree to which you feel the statement is characteristic or true of you.

Short Form Social Interaction Anxiety and Social Phobia Scale (SIAS-6 & SPS-6; Peters, Sunderland, Andrews, Rapee, & Mattick, 2012)

- I have difficulty making eye contact with others.
- I find it difficult mixing comfortably with the people I work with.
- I tense up if I meet an acquaintance on the street.
- I feel tense if I am alone with just one person.
- I have difficulty talking with other people.
- I find it difficult to disagree with another’s point of view.
- I get nervous that people are staring at me as I walk down the street.
- I worry about shaking or trembling when I’m watched by other people.
- I would get tense if I had to sit facing other people on a bus or train.
- I worry I might do something to attract the attention of other people.
- When in an elevator, I am tense if people look at me.
- I can feel conspicuous (very noticeable/visible) standing in a line.

This is an attention check, please select Extremely characteristic or true of me.

- 0 – *Not at all characteristic or true of me*
- 1 – *Slightly characteristic or true of me*
- 2 – *Moderately characteristic or true of me*
- 3 – *Very characteristic or true of me*
- 4 – *Extremely characteristic or true of me*

Please indicate the degree to which you feel the statement is characteristic or true of you.

Personality Inventory for DSM-5, (PID-5; Kreuger, Derringer, Markon, Watson, & Skodol, 2012).

Anxiousness

I worry a lot about terrible things that might happen.

I often worry that something bad will happen due to mistakes I made in the past.

I get very nervous when I think about the future.

I **rarely** worry about things.

I'm always worrying about something

I worry about almost everything.

I am a very anxious person.

I always expect the worst to happen.

I'm always fearful or on edge about bad things that might happen.

0 = *False or Often False*

1 = *Sometimes or Somewhat False*

2 = *Sometimes or Somewhat True*

3 = *Very True or Often True*

The next few questions ask for your thoughts about your physical appearance.

Please indicate how often the following statements occur for you.

Global Body Dissatisfaction Scale (GBD; Probst, Vandereycken, Coppinolle, & Vanderlinden, 1995):

When I compare myself with my peers' bodies, I'm dissatisfied with my own.

I'm inclined to hide my body (for example by loose clothing).

When I look at myself in the mirror, I'm dissatisfied with my own body.

I envy others for their physical appearance.

1 = *Never*

2 = *Very Rarely*

3 = *Rarely*

4 = *Occasionally*

5 = *Very Frequently*

6 = *Always*

The following items are about how you feel about your own genitals (the vulva and the vagina). The word vulva refers to a woman's external genitals (the parts that you can see from the outside such as the clitoris, pubic mound, and vaginal lips). The word vagina refers to the inside part, also sometimes called the "birth canal" (where a tampon is inserted).

Please indicate how strongly you agree or disagree with each statement.

Remember, please read the response options carefully! They may change from page to page.

Female Genital Self-Image Scale (FGSIS-4; Herbenick et al., 2010)*

I am satisfied with the appearance of my genitals.

I would feel comfortable letting a sexual partner look at my genitals.

I think my genitals smell fine.

I am **not** embarrassed about my genitals.

1 – *Strongly Disagree*

2 - *Disagree*

3 - *Agree*

4 – *Strongly Agree*

*Only those who identified their gender as “Woman” will see these items

INTRO TO “DURING SEX” MEASURES

Over the next few pages, we’d like to ask about your most recent sexual encounter.

For the purposes of this study, let’s define sex as including only consensual sex that involves penetrative sex or contact between *your* genitals and another person (e.g., vaginal, anal, or oral sex; or, someone stimulating your genitals with their hands/fingers or a toy). Please exclude phone sex or cybersex from this definition.

When was this recent sexual encounter?

0 = Within the past 24 hours

1 = Within the past week

2 = Within the past 4 weeks

3 = More than 4 weeks ago*

*exclude from analyses - inclusion criteria: sex within the past 4 weeks

What was your relationship to this person at the time of the sex?

0 = Relationship partner*

1 = Friend, but not a relationship partner

2 = Someone I’m casually dating

3 = Someone I just met

4 = Someone who paid me or gave me something for sex

5 = Someone who I paid or gave something for sex

6 = An ex-partner or ex-spouse

*only those who select this will take ppr items

What was this person's gender?

1 = Man

2 = Woman

3 = Not Listed Above (please describe, if you'd like)

How many times had you had sex with this person previously?

0 = I'd never had sex with this person before

1 = I'd had sex with this person once before

2 = I'd had sex with this person twice before

3 = I'd had sex with this person more than twice before

What happened during that most recent sexual encounter? Please select all that apply.

0 = *Sex with penis in my vagina*

1 = *Sex with penis in my anus*

2 = *Manual stimulation of my genitals or anus (i.e., using hand(s) or finger(s))*

3 = *I received oral sex*

4 = *Stimulation of my genitals or anus with toys (e.g., dildo, vibrator, etc.)*

5 = *Cybersex/phone sex**

6 = *No genital contact at all**

*if only these items are selected exclude from analyses – inclusion criteria: direct genital contact

People may engage in sex for a wide variety of reasons.

Please think about your most recent sexual encounter, the one you answered questions about on the previous page.

Please indicate the extent to which you engaged in sex for the following reasons:

Approach Sexual Motives Scale (adapted items from Cooper, Shapiro, and Powers' sex motive measure [1998] and the YSEX scale developed by Meston and Buss [2007]):

To experience physical pleasure (YSEX).

Because sex feels good (Cooper et al. & YSEX).

Because I was horny (Cooper et al. & YSEX).

Because I was sexually attracted to this person (YSEX- the person's physical appearance turned me on?).

Because I wanted the adventure (YSEX).

For the thrill of it (Cooper et al.).

Because I wanted to show my affection to this person (YSEX).

Because I wanted to share a deeper emotional connection with this person (we created – closely based off items from Cooper et al. and YSEX).

Because this person made me feel sexy (YSEX).

1 = *Not At all True*

2 = *A Little True*

- 3 = *Somewhat True*
- 4 = *Mostly True*
- 5 = *Almost Completely True*
- 6 = *Completely True*

Avoidance Sexual Motives Scale (adapted items from Cooper et al.’s sex motive measure [1998], the YSEX scale developed by Meston and Buss [2007], and Impett & Peplau ‘s [2005] sexual avoidance motives):

- To prevent this person from becoming upset (Impett & Peplau, 2005).
- To prevent this person from losing interest in me (Impett & Peplau, 2005).
- Because I did not know how to say “no” (YSEX).
- Because I felt obligated to (YSEX).
- Because I wanted to feel better about myself (Cooper et al.).
- Because I wanted to feel more self-confident (Cooper et al.).
- Because I wanted to feel more attractive (YSEX).
- Because I wanted to feel more interesting (Cooper et al.).
- To cope with negative feelings (e.g., sadness, loneliness) (we created but closest to Cooper et al.).

- 1 = *Not At all True*
- 2 = *A Little True*
- 3 = *Somewhat True*
- 4 = *Mostly True*
- 5 = *Almost Completely True*
- 6 = *Completely True*

Please think about your most recent sexual encounter, the one you answered questions about on the previous page.

Sometimes, people may have negative thoughts and worries that come up during sex or think about things that are not related to sex at all. During your last sexual experience, please indicate the degree to which the following occurred:

During Sex Distraction Measures (Modified from Dove & Weiderman, 2000; Lacefield & Negy, 2012)

Appearance-based Distractions Subscale

- I worried about how my body looked.
- I found myself thinking about how unattractive my body is.
- I was concerned about whether my body was sexually appealing to my partner.
- I was distracted by thoughts of how I looked to my partner.
- I worried about how a particular part of my body (e.g., stomach, genitals, thighs/legs, breasts/chest) looked.

Performance-based Distraction Subscale

I worried whether the things I did during sex satisfied my partner.

I was distracted by thoughts about my sexual performance.*

I worried that my partner would not have an orgasm.**

I was concerned that my partner would be unsatisfied with the amount of time I needed for sex (e.g., I'd take too long to orgasm, or I'd orgasm too fast).

I was concerned that I wouldn't be able to give my partner enough sexual pleasure.

I worried about my level of arousal during sex (e.g., lubrication/wetness or erection).

I was concerned that I wasn't very good at sex.

General Distraction Subscale

I was distracted by negative thoughts and feelings.

I was distracted by "day-to-day" concerns (e.g., work, school, family, money).

I had difficulty staying "in the moment."

I was distracted by thoughts and feelings that were not related to sex.

This is an attention check, please select Completely True.

1 = Not at all True

2 = A little True

3 = Somewhat True

4 = Mostly True

5 = Almost Completely True

6 = Completely True

Please think about your most recent sexual encounter, the one you answered questions about on the previous page.

When thinking about *your experience* of that sex, how true are the following statements?

Sexual Self-Consciousness Scale (van Lankveld, Geijen, & Sykora, 2008):

It took some time for me to overcome my shyness.

I quickly felt embarrassed.

I felt uncomfortable.

I found it difficult to sexually let myself go in front of the other person.

1 = *Strongly Disagree*

2 = *Disagree*

3 = *Neither Agree nor Disagree*

4 = *Agree*

5 = *Strongly Agree*

Please think about your most recent sexual encounter, the one you answered questions about on the previous page.

When thinking about *your experience* of that sex, how true are the following statements?

Sexual Pleasure (written for this study)

The sex felt very pleasurable.

I felt intense pleasure in my genitals.

I experienced very pleasurable orgasmic feelings.

The sexual arousal in my genitals and/or body felt pleasurable.

The way my partner stimulated my body felt extremely pleasurable.

During sex, the feeling of my partner's body against mine was very pleasurable.

This is an attention check, please select Not at all True.

1 = *Not at all True*

2 = *A Little True*

3 = *Somewhat True*

4 = *Mostly True*

5 = *Almost Completely True*

6 = *Completely True*

During this most recent sex, did you have an orgasm?

1 = Yes

2 = No

3 = I don't know/don't remember

During this recent sexual encounter, did you and your partner use a condom?

0 = No

1 = Yes

2 = I don't know or I don't remember

*Only those that indicated that their last sexual partner was a man, reported that the relationship with their last sexual partner was someone they were casually dating or just met, and reported either penetration of the vagina or anus were presented this question

Please answer the following questions about your current romantic partner.

My partner usually:

Perceived Partner Responsiveness Scale. (Reis, 2003):*

Really listens to me.

Is responsive to my needs.

Is an excellent judge of my character.

Sees the "real" me.

Sees the same virtues and faults in me as I see in myself.

"Gets the facts right" about me.

Is aware of what I am thinking and feeling.

Understands me.

Is on "the same wavelength" with me.

Knows me well.

Esteems me, shortcomings and all.

Values and respects the whole package that is the “real” me.

Usually seems to focus on the “best side” of me.

Expresses liking and encouragement for me.

Seems interested in what I am thinking and feeling.

Seems interested in doing things with me.

Values my abilities and opinions.

Respects me.

1 = *Not At all True*

2 = *A Little True*

3 = *Somewhat True*

4 = *Mostly True*

5 = *Very True*

6 = *Completely True*

*only displayed to those who reported relationship status: married or common-law, engaged, dating – exclusive, or dating -not exclusive

-may want to also consider including only those who said they had sex with their relationship partner

These questions ask about your sexual feelings and responses during the past 4 weeks. In answering these questions the following definitions apply:

Sexual activity can include caressing, foreplay, masturbation and vaginal penetration.

Vaginal penetration is defined as penetration (entry) of the vagina with any object (penis, fingers, sex toys, etc.).

Sexual stimulation includes situations like foreplay with a partner, self-stimulation (masturbation), or sexual fantasy.

Sexual desire or interest is a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.

Female Sexual Function Index (FSFI, Rosen et. Al, 2000)

Over the past 4 weeks, how **often** did you feel sexual desire or interest?

5 = *Almost always or always*

4 = *Most times (more than half the time)*

3 = *Sometimes (about half the time)*

2 = *A few times (less than half the time)*

1 = *Almost never or never*

Over the past 4 weeks, how would you rate your **level** (degree) of sexual desire or interest?

5 = *Very high*

4 = *High*

3 = *Moderate*

2 = *Low*

1 = *Very low or none at all*

Sexual arousal is a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings of warmth or tingling in the genitals, lubrication (wetness), or muscle contractions.

Over the past 4 weeks, how **often** did you feel sexually aroused (“turned on”) during sexual activity or intercourse?

0 = *No sexual activity*

5 = *Almost always or always*

4 = *Most times (more than half the time)*

3 = *Sometimes (about half the time)*

2 = *A few times (less than half the time)*

1 = *Almost never or never*

Over the past 4 weeks, how would you rate your **level** of sexual arousal (“turn on”) during sexual activity or intercourse?

0 = *No sexual activity*

5 = *Very high*

4 = *High*

3 = *Moderate*

2 = *Low*

1 = *Very low or none at all*

Over the past 4 weeks, how **confident** were you about becoming sexually aroused during sexual activity or intercourse?

0 = *No sexual activity*

5 = *Very high confidence*

4 = *High confidence*

3 = *Moderate confidence*

2 = *Low confidence*

1 = *Very low or no confidence*

Over the past 4 weeks, how **often** have you been satisfied with your arousal (excitement) during sexual activity or intercourse?

0 = *No sexual activity*

5 = *Almost always or always*

4 = *Most times (more than half the time)*

3 = *Sometimes (about half the time)*

2 = *A few times (less than half the time)*

1 = *Almost never or never*

Over the past 4 weeks, how **often** did you become lubricated (“wet”) during sexual activity or intercourse?

0 = *No sexual activity*

5 = *Almost always or always*

4 = *Most times (more than half the time)*

3 = *Sometimes (about half the time)*

2 = *A few times (less than half the time)*

1 = *Almost never or never*

Over the past 4 weeks, how **difficult** was it to become lubricated (“wet”) during sexual activity or intercourse?

0 = *No sexual activity*

1 = *Extremely difficult or impossible*

2 = *Very difficult*

3 = *Difficult*

4 = *Slightly difficult*

5 = *Not difficult*

Over the past 4 weeks, how often did you **maintain** your lubrication (“wetness”) until completion of sexual activity or intercourse?

0 = *No sexual activity*

5 = *Almost always or always*

4 = *Most times (more than half the time)*

3 = *Sometimes (about half the time)*

2 = *A few times (less than half the time)*

1 = *Almost never or never*

Over the past 4 weeks, how **difficult** was it to maintain your lubrication (“wetness”) until completion of sexual activity or intercourse?

0 = *No sexual activity*

1 = *Extremely difficult or impossible*

2 = *Very difficult*

3 = *Difficult*

4 = *Slightly difficult*

5 = *Not difficult*

Over the past 4 weeks, when you had sexual stimulation or intercourse, how **often** did you reach orgasm (climax)?

0 = *No sexual activity*

5 = *Almost always or always*

4 = *Most times (more than half the time)*

3 = *Sometimes (about half the time)*

2 = *A few times (less than half the time)*

1 = *Almost never or never*

Over the past 4 weeks, when you had sexual stimulation or intercourse, how **difficult** was it for you to reach orgasm (climax)?

0 = *No sexual activity*

1 = *Extremely difficult or impossible*

2 = *Very difficult*

3 = *Difficult*

4 = *Slightly difficult*

5 = *Not difficult*

Over the past 4 weeks, how **satisfied** were you with your ability to reach orgasm (climax) during sexual activity or intercourse?

0 = *No sexual activity*

5 = *Very satisfied*

4 = *Moderately satisfied*

3 = *About equally satisfied and dissatisfied*

2 = *Moderately dissatisfied*

1 = *Very dissatisfied*

Over the past 4 weeks, how **satisfied** have you been with the amount of emotional closeness during sexual activity between you and your partner?

0 = *No sexual activity*

5 = *Very satisfied*

4 = *Moderately satisfied*

3 = *About equally satisfied and dissatisfied*

2 = *Moderately dissatisfied*

1 = *Very dissatisfied*

Over the past 4 weeks, how **satisfied** have you been with your sexual relationship with your partner?

5 = *Very satisfied*

4 = *Moderately satisfied*

3 = *About equally satisfied and dissatisfied*

2 = *Moderately dissatisfied*

1 = *Very dissatisfied*

Over the past 4 weeks, how **satisfied** have you been with your overall sexual life?

5 = *Very satisfied*

4 = *Moderately satisfied*

3 = *About equally satisfied and dissatisfied*

2 = *Moderately dissatisfied*

1 = *Very dissatisfied*

Over the past 4 weeks, how **often** did you experience discomfort or pain during vaginal penetration?

0 = *Did not attempt vaginal penetration*

1 = *Almost always or always*

- 2 = *Most times (more than half the time)*
- 3 = *Sometimes (about half the time)*
- 4 = *A few times (less than half the time)*
- 5 = *Almost never or never*

Over the past 4 weeks, how **often** did you experience discomfort or pain following vaginal penetration?

- 0 = *Did not attempt vaginal penetration*
- 1 = *Almost always or always*
- 2 = *Most times (more than half the time)*
- 3 = *Sometimes (about half the time)*
- 4 = *A few times (less than half the time)*
- 5 = *Almost never or never*

Over the past 4 weeks, how would you rate your **level** (degree) of discomfort or pain during or following vaginal penetration?

- 0 = *Did not attempt vaginal penetration*
- 1 = *Very high*
- 2 = *High*
- 3 = *Moderate*
- 4 = *Low*
- 5 = *Very low or none at all*

Last page:

Thank you for being involved in our research!

Sometimes, people complete surveys out of interest in science or the topic. Other times, people enter bogus answers, maybe to get course credit or gain some incentive, or out of boredom. If you've given any bogus answers in this survey, that's OK, we trust that you have your reasons. However, this is not good for data quality!

- 1 = I answered the questions in this survey honestly, to the best of my ability
- 2 = I entered bogus answers, and you should probably discard my responses. (We promise that this will not influence any incentives to participate that you might otherwise be entitled to (e.g., course credit, etc.)).

If you would like to be entered into the raffle for one of five \$20 electronic gift cards to Amazon.com, please email the study coordinator at experienceofsexstudy@email.wcu.edu. By entering the raffle via email, we can ensure that the answers provided during the study remain completely anonymous.

If you are a WCU PSY150 student completing this survey through SONA, after completing this survey you should receive your credit automatically. If you do not receive your credit within 24 hours please email knpoovey1@catamount.wcu.edu.

Do you have any comments about this study?
[textbox for response]

Thank you for supporting our research!

David de Jong, PhD, Principal Investigator
Western Carolina University
ddejong@wcu.edu