

WOMEN'S BODY IMAGE AND SEXUAL PLEASURE: EXAMINING SERIAL
MEDIATION BY APPROACH AND AVOIDANCE SEXUAL MOTIVES AND
DISTRACTION

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By

Kendall Nicole Poovey

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

WOMEN'S BODY IMAGE AND SEXUAL PLEASURE: EXAMINING SERIAL MEDIATION BY APPROACH AND AVOIDANCE SEXUAL MOTIVES AND DISTRACTION

Kendall Nicole Poovey, B.S.

Western Carolina University (March, 2021)

Director: Dr. David C. de Jong

Women with body image concerns are more likely to experience sexual difficulties (e.g., with arousal, lubrication, orgasm). However, the processes by which body image impacts sexual well-being are poorly understood. We theorized that women with negative body image are less likely to view sex in terms of reward, leading them to have weaker approach sexual motives (i.e., to pursue positive experiences such as pleasure). Rather, women with negative body image may have sex to avoid personal insecurities and negative emotions, leading them to have stronger avoidance sexual motives (i.e., to cope with negative affect or to avoid partner conflict). In turn, we theorized that stronger approach sexual motives may allow women to be more focused on erotic cues during sex, thereby enhancing sexual pleasure, whereas avoidance motives may lead to greater distraction, interfering with sexual pleasure. Women ($N = 1619$) were recruited from online venues and reported on their body image and most recent sex. We found that body dissatisfaction was associated with weaker self-focused approach motives and in turn more distraction. Additionally, body dissatisfaction was associated with stronger self- and partner-focused avoidance motives and in turn more distraction. In turn, more distraction was associated

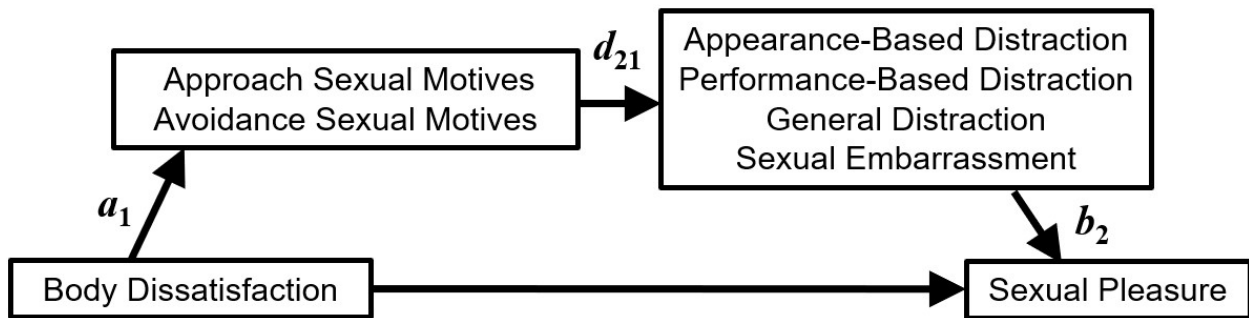
with less pleasure and worse sexual function. To the best of our knowledge, this is the first investigation of whether body image is associated with their sexual motives. Findings highlight the importance of sexual motives in explaining the link between body image and sexual pleasure and function.

CHAPTER ONE: INTRODUCTION

Body image is closely linked to sexual wellbeing, and women with negative body image experience less sexual pleasure (Gillen & Markey, 2019; Sanchez & Kiefer, 2007). However, the processes underlying this association are understudied. We theorize that body image influences motives for engaging in sex, and in turn, motives impact the attentional processes that foster sexual pleasure and arousal (Gable & Impett, 2012; Janssen et al., 2000; de Jong, 2009). In this preregistered study, we hypothesized two serial mediation processes by which body dissatisfaction is associated with less sexual pleasure: 1. weaker approach sexual motives (e.g., to gain pleasure or intimacy) and in turn, greater distraction during sex; 2. stronger avoidance sexual motives (e.g., to avoid feeling lonely or upsetting one's partner) and in turn, greater distraction during sex (see Figure 1).

Figure 1

Theorized Model by which Body Dissatisfaction Impacts Sexual Pleasure via Sexual Motives and Distraction.



Body Image and Sexual Well-Being

Body image is multifaceted and encompasses how individuals experience, evaluate, and invest in their body (Cash, 2004). Most examinations of body image and sex focus on how

negative body image impacts sexual outcomes. For example, women with more body shame experience less pleasure and fewer orgasms (Sanchez & Kiefer, 2007). Additionally, negative evaluations of and attitudes towards one's physical appearance, the focus of the current study, are related to sexual dissatisfaction and worse sexual function among women (e.g., lower desire and arousal, pain, inability to reach orgasm; Carvalheira et al., 2017; Dosch et al., 2016; Gillen & Markey, 2019; Quinn-Nilas et al., 2016). However, why negative body image is associated with sexual problems is poorly understood.

Body Image and Sexual Motives

One potential explanation for the link between women's body image and sexual pleasure may be that negative body image influences whether individuals perceive their body and sexuality in terms of reward or threat. Drawing from Gray's (1987) approach-avoidance motivational framework, the behavioral approach system responds appetitively to signals of reward and motivates pursuit of those rewards. In contrast, the behavioral inhibition system is sensitive to punishment and regulates motivation to avoid threat (Gray, 1987). Our theorizing that body image impacts sexual motives is suggested by Gable's (2006) approach-avoidance model of social motivation, which describes how individual differences in reward and threat sensitivity influences relationship goals. For example, individuals who are approach motivated tend to report socializing to spend time with loved ones whereas individuals who are avoidance motivated socialize to avoid loneliness (Gable, 2006).

Previous work suggests that traits and aspects of self-concept such as body image may influence sexual motives. For example, people who are more extraverted tend to report stronger approach sexual motives such as engaging in sex because it feels good or is exciting (Cooper et al., 2000), and anxious attachment and low self-esteem are associated with avoidance sexual

motives, such as having sex to avoid negative emotions or rejection (Dawson et al., 2008; Impett & Peplau, 2003). Similarly, positive body image may foster approach sexual motives (e.g., experiencing pleasure or intimacy). In support of this, women who are more satisfied with their body experience more orgasms (Ackard et al., 2000) and desire to masturbate (Dosch et al., 2016). Additionally, women who are more satisfied with their body report engaging in sexual behaviors that suggest being approach motivated, such as initiating sex, having sex more often, having sex with the lights on, and trying new sexual activities (Ackard et al., 2000). In contrast, women who experience more body shame and dissatisfaction tend to report less sexual pleasure and orgasms (Sanchez & Kiefer, 2007), less sexual confidence, and less comfort undressing in front of partners (Ackard et al., 2000). Accordingly, we hypothesized that women with negative body image are less likely to engage in sex for approach motives.

Rather than having sex to gain rewards such as pleasure, women with negative body image may be more likely to have avoidance sexual motives (e.g., to avoid feeling unattractive or upsetting one's partner). For example, women who are dissatisfied with their appearance report lower self-esteem, less self-confidence, and more fear of rejection (Bale & Archer, 2013). Additionally, women with negative body image are more likely to report mental health problems such as depression (Ehlinger & Blashill, 2016). Therefore, women with negative body image may be more likely to have sex to cope with negative emotions or to minimize perceived threats to the self or their relationships. Accordingly, we hypothesized that women with negative body image are more likely to engage in sex for avoidance motives.

Motivation and Attentional Focus

Sexual motives may impact attentional focus during sex. In social situations, approach motivation is associated with narrowing of attention towards stimuli relevant to the desired

object or goal of pursuit (Derryberry & Reed, 1994; Gable & Impett, 2012). Similarly, approach sexual motives, which entail pursuit of sexual incentives (e.g., pleasure, intimacy), may lead to narrowed attention toward stimuli relevant to these incentives. For example, during sex, women with vulvodynia, a distressing and chronic vulvovaginal condition characterized by painful penetrative sex, report more attention to positive cues (e.g., attraction to partner) on days when they had stronger approach sexual motives (Rosen et al., 2018). Additionally, sexual motives are related to women's experience of sex. Women with approach sexual motives report greater sexual satisfaction than women with avoidance sexual motives (Jodouin et al., 2019; Muise et al., 2013). Accordingly, we hypothesized that women who are approach sexually motivated would experience less distraction during sex.

We also theorize that avoidance sexual motives foster distraction during sex. This is suggested by findings that, in social situations, avoidance motivation is associated with attentional biases toward threats (Derryberry & Reed, 1994; Gable & Impett, 2012), and avoidance social motives foster negative perceptions of ambiguous facial expressions (Nikitin & Freund, 2015). Therefore, during sex, women who are avoidance motivated may focus on self-critical thoughts about their body. In support of this, women who judge their body as unattractive exhibit attentional biases toward parts of their body which they deem unattractive (Roefs et al., 2008).

Avoidance sexual motives may also foster distraction by thoughts and feelings that are not body-focused (e.g., embarrassment, worries about sexual performance). For example, in the study by Rosen et al. (2018), women reported greater attentional focus toward negative cues (e.g., anxiety-provoking thoughts and feelings) during sex on days they reported more avoidance sexual motives. Finally, drawing from findings that students who have avoidance academic goals

report more task disengagement (Liem et al., 2008), women with avoidance sexual motives may also report an increase in general distraction, reflecting non-specific disengagement from the sexual activity going on in the moment. Accordingly, we hypothesized that women who engage in sex for avoidance motives would experience more distraction during sex.

Distraction and Sexual Response

“Spectatoring,” or self-critical distraction during sex (Masters & Johnson, 1970), interferes with attention to erotic stimuli, and is associated with sexual dysfunction. Janssen et al.’s (2000) information processing model of sexual arousal illustrates how distracting thoughts and feelings impede sexual arousal. During sex, stimuli may be automatically appraised as having positive sexual meanings, automatically leading to genital arousal (Janssen et al., 2000). Attention functions as a “spotlight,” bringing these sexual meanings and genital arousal into conscious awareness (Gopher & Iani, 2003). The conscious experience of sexual arousal may also be appraised as positive and erotic, leading to further enhancement of sexual arousal in a positive feedback loop, possibly leading to orgasm. However, stimuli appraised as threatening, rather than erotic, disrupt the feedback loop and impede sexual arousal (Janssen et al., 2000). Supporting this, among women, body image concerns are associated with more self-conscious distractions during sex, and in turn, sexual dysfunction and less pleasure (Carvalheira et al., 2017; Pascoal et al., 2019; Sanchez & Kiefer, 2007; Silva et al., 2016).

Why Focus on Sexual Pleasure Rather than Sexual Function?

Most investigations of the role of body image in sexual well-being examine sexual function (e.g., arousal, lubrication) as the outcome (e.g., Carvalheira et al., 2017; Quinn-Nilas et al., 2016; Silva et al., 2016). However, this study focuses on sexual pleasure, which we operationalize as conscious, positive appraisals of physical sensations in the genitals and

throughout the body. In contrast to pleasure, sexual function may occur automatically (Levin & van Berlo, 2004), even in the absence of pleasure. For example, women may experience “bad” orgasms that are not pleasurable and may even be painful (Chadwick et al., 2019). Additionally, sexual function may be activated under adverse conditions such as unwanted consensual sex or even sexual assault (Chadwick et al., 2019; Levin & van Berlo, 2004). Because we theorized that body image influences attentional focus during sex, and attention is the “spotlight” that brings sexual meanings into conscious awareness (Gopher & Iani, 2003), our preregistered outcome variable was pleasure rather than sexual function.

The Current Study

This study tested our hypotheses that body dissatisfaction would be associated with 1. weaker approach sexual motives, which in turn would be associated with more distraction during sex, which in turn would be associated with less sexual pleasure, and 2. stronger avoidance motives, which in turn would be associated with more distraction and in turn less pleasure. To the best of our knowledge, this is the first investigation of whether body image is related to sexual motives.

CHAPTER TWO: METHOD

This study was preregistered prior to hypothesis testing (<https://aspredicted.org/blind.php?x=9v3kw4>). We report how we determined sample size, all data exclusions, and all measures in the study; there were no experimental manipulations in this study (Simmons et al., 2012).

Power Analysis

An a priori power analysis indicated that 275 participants would yield greater than 80% power assuming small-medium associations; we recruited a larger sample due to calls for increased power in psychological science (LeBel et al., 2017) and to account for smaller associations.

Participants

Women were recruited from Reddit communities related to sex, health, relationships, and research, Tumblrs related to health and sex, the authors' Facebooks, the Social Psychology Network, and Human Sexuality classes at a midsize public university in the southeastern United States. Recruitment invitations emphasized anonymous participation and the sexual nature of the study.

Preregistered inclusion criteria were that participants had to identify as a woman, be 18 years or older, and have had sex within the past four weeks. For inclusion purposes, we defined sex as stimulation of participants' genitals or anus by a partner via oral sex, manual sex, or by a sex toy, or penile penetration of participants' vagina or anus. As preregistered, participants were excluded if they completed the survey in under six minutes or failed two out of three attention checks; 1619 women met these criteria and were included in analyses, and out of this sample, 1589 women had scores on all key variables.

These 1619 women reported a mean age of 26.13 ($SD = 7.22$) and identified as White (85.6%), Asian (9.4%), Black or African American (3.8%), Native American (1.6%), Pacific Islander (9.4%) or “other” (5.9%); heterosexual (58.4%), bisexual (31.6%), pansexual (5.1%), lesbian or gay (2.2%), or “something else” (2.5%); and dating exclusively (51.4%), married or common-law (23.1%), sexually involved but not dating (12.4%), engaged (4.4%) or dating non-exclusively (5.9%). Participants had completed doctoral (3.3%), masters (12.3%) or bachelors (36.1%) degrees, some college, trade school, or an AA degree (34.7%), high school (12.4%), or no high school diploma (1.2%).

Measures

For all measures, unless otherwise noted, item scores were averaged; higher aggregate scores reflected higher levels of the construct.

Body Dissatisfaction

Negative thoughts, feelings, and behaviors about one’s body were assessed with the four-item Global Body Dissatisfaction Scale from the Body Attitudes Test (Probst et al., 1995), e.g., “I’m inclined to hide my body (for example by loose clothing)” (1 = *Never* to 6 = *Always*). Cronbach’s $\alpha = .88$.

Sexual Motives

Motives for engaging in one’s most recent sex were assessed using 16 items adapted from the Sex Motives Scale (Cooper et al., 1998), the YSEX Scale (Meston & Buss, 2007), or Impett et al.’s (2005) study of sexual motives, and two items written for this study (1 = *Not at all True* to 6 = *Completely True*). Our goal was to create brief measures of approach and avoidance sexual motives by using items that unambiguously reflect approach or avoidance, are suitable for sex with either romantic or casual partners, and capture a broad range of motives. Items were

modified to refer to a person rather than a partner, to be concise, or to have parallel “Because I...” structure. For example, we adapted Impett et al.’s (2005) item “To prevent my partner from becoming upset” to “To prevent this person from becoming upset.”

An exploratory factor analysis (EFA) with an oblique (promax) rotation was conducted to determine the factor structure of the sexual motive items (Sakaluk & Short, 2017). A scree plot (Cattell, 1966) and eigenvalues suggested a four-factor solution (see Table 1 for the pattern matrix). A parallel analysis indicated seven factors had eigenvalues significantly greater than those obtained from randomly generated datasets (O’Connor, 2000), and an EFA requesting two factors yielded a solution that was not theoretically interpretable. We had preregistered expectations of a two-factor solution (approach motives and avoidance motives); however, we retained the four-factor solution that also had fewer cross-loaders. Additionally, this four-factor solution reflected Cooper’s (1998) model of sexual motives which crossed approach/avoidance and self/other domains and has been utilized in previous work (e.g., Jodouin et al., 2019; Stephenson et al., 2011). Moving forward with this four-factor structure, we retained items that loaded greater than 0.40 onto their respective factor. Cross-loading items, as defined by a difference less than 0.20 in loadings on two factors, were excluded individually starting with cross-loaders with the least difference in loadings. The final four subscales follow.

Self-focused approach sexual motives. Self-focused approach motives are appetitive and aimed towards pursuing positive incentives for oneself (3 items, e.g., “To experience physical pleasure”). Cronbach’s $\alpha = .84$.

Partner-focused approach sexual motives. Partner-focused approach motives aim to pursue positive interpersonal experiences (2 items, e.g., “Because I wanted to show my affection for this person”). Cronbach’s $\alpha = .82$.

Self-focused avoidance sexual motives. Self-focused avoidance motives aim toward avoiding negative thoughts or feelings (5 items, e.g., “To cope with negative feeling [e.g., sadness, loneliness]”). Cronbach’s $\alpha = .84$.

Partner-focused avoidance sexual motives. Partner-focused avoidance motives aim to avoid negative interpersonal outcomes (3 items, e.g., “To prevent this person from becoming upset”). Cronbach’s $\alpha = .78$.

Distraction

Distracting thoughts and feelings during most recent sex were assessed with items adapted from the appearance-based and performance-based subscales of the Cognitive Distraction Scale (Dove & Wiederman, 2000), the sexual embarrassment subscale of the Sexual Self-Consciousness Scale (van Lankveld et al., 2008), the Non-Erotic Cognitive Distraction Questionnaire (Lacefield & Negy, 2012), and items written for this study (1 = *Not at all True* to 6 = *Completely True*). Items were adapted to refer to most recent sex. An EFA was conducted to determine the factor structure of the distraction items using a promax (oblique) rotation (Sakaluk & Short, 2017). Both the scree plot (Cattell, 1966) and eigenvalues suggested a four-factor solution (see Table 2 for the pattern matrix) which accorded with the four-factor structure as preregistered. A parallel factor analysis indicated that seven factors had eigenvalues significantly greater than those obtained from randomly generated datasets (O’Connor, 2000); however, due to theoretical interpretability we retained the four-factor solution. Out of 20 items, three were excluded due to loading less than 0.40 onto their factor or due to cross-loading with a difference less than 0.20 between factors. The four subscales follow.

Appearance-based distraction. Appearance-based distraction assesses distraction or worry related to one's physical attractiveness (5 items, e.g., "I worried about how my body looked"). Cronbach's $\alpha = .95$.

Performance-based distraction. Performance-based distraction assesses distraction or worry related to sexual performance or ability to give sexual pleasure (4 items, e.g., "I was concerned that I wasn't very good at sex"). Cronbach's $\alpha = .85$.

General distraction. General distraction assesses unspecified distraction or worry (4 items, e.g., "I had difficulty staying in the moment"). Cronbach's $\alpha = .86$

Sexual embarrassment. Sexual embarrassment assesses feelings of embarrassment or shyness during sex (4 items, e.g., "I quickly felt embarrassed"). Cronbach's $\alpha = .82$.

Sexual Pleasure

Pleasure during most recent sex was assessed with six items written for this study, e.g., "The sex felt very pleasurable," "I experienced very pleasurable orgasmic feelings," "The way my partner stimulated my body felt extremely pleasurable" (1= *Not at all True* to 6 = *Completely True*). An EFA identified a single factor (see Table 3 for the full list of items and factor loadings). Parallel factor analysis indicated two factors rather than the single factor predicted in our preregistration; the one-factor solution was retained due to theoretical interpretability. All items loaded greater than 0.65 and three items loaded greater than 0.90. The single factor solution accounted for 74.91% of item variance. Cronbach's $\alpha = .92$.

Sexual Function

Sexual function over the previous four weeks was assessed with the Female Sexual Function Index (FSFI; Rosen et al., 2000) which assesses desire (2 items; $r = .79$), arousal (4 items; $\alpha = .86$), lubrication (4 items; $\alpha = .89$), orgasm (3 items; $\alpha = .92$), satisfaction (3 items; $\alpha =$

.88), and pain (3 items; $\alpha = .88$). Item scores in each domain were added and sums were multiplied by their domain factor (Rosen et al., 2000). Scores of 0 reflect no sex during the previous four weeks and were excluded (Meyer-Bahlburg & Dolezal, 2007).

Procedure

This study was approved by Western Carolina University's Institutional Review Board. No identifying information was collected. Participants provided informed consent (see Appendix B) and demographic information and then completed the Global Body Dissatisfaction Subscale. Next, describing their most recent sex, participants reported on their sex partner, sexual motives, distraction during sex, pleasure, and function, in that order. Other measures not relevant to our hypotheses (anxiousness, social anxiety, genital perceptions, partner responsiveness) were included in the survey and will not be discussed further (see Appendix C for full survey). Participants were invited to email the study coordinator to enter a raffle for one of five \$20 Amazon gift cards, allowing for anonymity of responses.

Analytic Strategy

To test our confirmatory hypotheses that the association between body dissatisfaction and sexual pleasure would be mediated by motives and in turn distraction (see Figure 1), we conducted serial mediation analyses using PROCESS v3.0 (model 6) and SPSS v25.0. We had preregistered eight runs of the model: two motive subscales \times four distraction subscales, each combination tested separately, with the motive subscale entered as the first mediator and the distraction subscale as the second. Because our EFA indicated four motive factors (rather than two, as preregistered), we deviated from the preregistration by conducting 16 separate runs of the model (four motive subscales \times four distraction subscales).

In exploratory analyses (i.e., post hoc, not preregistered), we tested whether the indirect effects described above were moderated by whether participants' sex was with a romantic versus casual partner (using PROCESS model 92). We coded women whose sex was with a romantic partner as 0 ($n = 1276$) and women whose sex was casual (e.g., someone they were casually dating or just met, a friend) as 1 ($n = 310$). We excluded participants whose partner did not clearly fit in the romantic or casual category (e.g., ex-partner, $n = 27$). To explore whether confirmatory results replicated when predicting a well-established, multidimensional measure of sexual function, we retested the sixteen mediation models with FSFI total scores as the outcome.

Mediation and moderated mediation were tested using 5,000 resampled bootstrap confidence intervals (CIs; Hayes, 2017). Mediation is significant if the 95% bootstrap CI for the indirect effect excludes zero; significant moderated mediation exists if the 95% bootstrap CI for the index of moderated mediation excludes zero. We report fully standardized coefficients as a measure of effect size (Hayes, 2017). See Tables 4 and 5 for the proportion of variance accounted for (R^2) by the full regression models corresponding to each of the serial mediation models described below.

CHAPTER THREE: RESULTS

Descriptive Statistics

Means, standard deviations, and correlations are presented in Table 6. Supporting its validity, the pleasure measure had significant positive correlations with all FSFI subscales (on which higher scores indicate better sexual function). Specifically, pleasure had large correlations with arousal, orgasm, and FSFI total scores, moderate correlations with lubrication, satisfaction, and pain, and a small correlation with desire.

Confirmatory Analyses

Serial Indirect Effects of Body Image on Sexual Pleasure Via Motives and Distraction

Self-focused approach motives. As hypothesized, significant serial indirect effects were found for all models with self-focused approach motives as the first mediator (Table 7). Body dissatisfaction was associated with weaker self-focused approach motives, which in turn was associated with higher levels of all four types of distraction (appearance-based, performance-based, general, and embarrassment). In turn, higher levels of all four types of distraction were associated with less pleasure. In other words, women who were more dissatisfied with their body were less likely to have sex for their own pleasure or excitement, and in turn were more likely to be distracted, and in turn, experienced less pleasure.

Self-focused avoidance motives. As hypothesized, all models with self-focused avoidance motives as the first mediator had significant serial indirect effects (Table 8). Body dissatisfaction was associated with stronger self-focused avoidance motives, which in turn was associated with higher levels of all four types of distraction. In turn, higher levels of distraction were associated with less pleasure. In other words, women who were more dissatisfied with their body were more likely to have sex to avoid threats to their self-esteem and negative emotions

(e.g., feeling unattractive, sad) and in turn, were more likely to be distracted, and in turn, experienced less pleasure.

Partner-focused avoidance motives. As hypothesized, significant indirect effects were found for all models with partner-focused avoidance motives as the first mediator (Table 9). Greater body dissatisfaction was associated with stronger partner-focused avoidance motives, which in turn was associated with higher levels of all four types of distraction. In turn, more distraction was associated with less pleasure. In other words, women who were more dissatisfied with their body were more likely to have sex to avoid negative interpersonal experiences (e.g., to avoid partner upset), and in turn were more likely to be distracted, and in turn, experienced less pleasure.

Partner-focused approach motives. There were no significant indirect effects for the models with partner-focused approach motives as the first mediator (Table 10). In other words, results did not support our hypothesis that body dissatisfaction would be associated with weaker partner-focused approach motives (e.g., to pursue intimacy), and in turn, more distraction, and less pleasure.

Examination of individual model paths

Body dissatisfaction → motives. Examining the first path in each model showed that body dissatisfaction was associated with weaker self-focused approach motives and stronger self- and partner-focused avoidance motives (Tables 7 through 9). Body dissatisfaction was not associated with partner-focused approach motives (Table 10).

Motives → distraction. Self- and partner-focused approach motives were associated with lower levels of all four types of distraction while controlling for body dissatisfaction

(Tables 7 and 10). Avoidance motives were associated with higher levels of all four types of distraction (Tables 8 and 9).

Distraction → pleasure. All four types of distraction were associated with less pleasure when controlling for body dissatisfaction and motives (Tables 7 through 10).

Exploratory Analyses

Moderation of the Serial Indirect Effects by Type of Sex Partner

We examined whether type of sex partner (i.e., romantic vs. casual partner) moderated the indirect effects by which body dissatisfaction was associated with less pleasure. Out of the sixteen mediation models, only the model mediated by self-focused avoidance motives and embarrassment was significantly moderated by partner type (Table 11). For this model, the positive association between body dissatisfaction and self-focused avoidance motives was stronger if the sex was with a casual partner compared to a romantic partner. In other words, if the sex was casual, body dissatisfaction was more strongly associated with self-focused avoidance motives, and in turn, more embarrassment and less pleasure.

Serial Indirect Effects of Body Image on Sexual Function Via Motives and Distraction.

Rerunning the mediation models with the FSFI total score as the outcome fully replicated the patterns of results found in the confirmatory analyses (Table 12). In other words, body dissatisfaction was associated with not only less pleasure but also worse sexual function over the past four weeks via the serially mediating processes of: (a) weaker self-focused approach motives and more distraction (all four types), (b) stronger self-focused avoidance motives and more distraction, and (c) stronger partner-focused avoidance motives and more distraction. As was the case with sexual pleasure, body dissatisfaction was not associated with sexual function via partner-focused approach motives and distraction.

CHAPTER 4: DISCUSSION

This preregistered study found that women's body dissatisfaction was associated with weaker self-focused approach sexual motives (e.g., to pursue pleasure or excitement), and in turn, more distraction during sex, less pleasure, and worse sexual function. Women's body dissatisfaction was also associated with stronger avoidance sexual motives (e.g., to avoid feeling sad or partner conflict), and in turn, more distraction, less pleasure, and worse sexual function. Body image affects many aspects of women's sexual experience (Gillen & Markey, 2019), and several studies suggest that distraction during sex is a key process by which negative body image impacts sexual pleasure and function (e.g., Carvalheira et al., 2017). To the best of our knowledge, this is the first empirical evidence that body image is related to sexual motives and that sexual motives may be intervening processes by which body image impacts distraction during sex. We speculate that women who are more dissatisfied with their body have weaker approach sexual motives because they tend not to associate their body and sexuality with reward and pleasure, a notion which is suggested by previous findings that women with negative body image are less likely to masturbate (Dosch et al., 2016) or feel entitled to sexual pleasure (Grower & Ward, 2018).

Positive body image is a multifaceted construct distinct from negative body image and comprises appreciation of, acceptance of, and confidence in one's body as well as focusing on the body's assets and functions (Tylka & Wood-Barlow, 2015). Accordingly, we speculate that women with positive body image are more likely to explore their sexuality and sexual responses, thereby learning to associate their body and sexuality with pleasure, excitement, and fulfillment. For example, women who feel positively about their body exhibit more sexual agency and are

more likely to explore new sexual positions and techniques (Grower & Ward, 2018). Women who masturbate more often tend to experience better sexual function (Herbenick et al., 2009), and women with positive body image may begin exploration of their sexual responses at a younger age. Supporting this, young women who explore masturbation are more likely to report a positive and comfortable relationship with their body and sexuality, feeling entitled to pleasure during partnered sex, and confidence in their ability to achieve sexual pleasure (Hogarth & Ingham, 2009; Horne & Zimmer-Gembeck, 2005). This possibility also accords with research that women who view their body positively are more likely to engage in sex-related self-care behaviors (e.g., getting breast exams or pap smears, engaging in safer sex; Winter, 2017). These speculations would be valuable topics for future investigation.

We also found that women with negative body image reported stronger avoidance sexual motives, e.g., having sex to avoid partner upset, feeling insecure, or negative emotions, which supports our theorizing that these women are more likely to have sex to avoid adverse experiences or cope with perceived threats associated with their body image. Indeed, previous findings indicate that women who are dissatisfied with their body tend to have lower self-esteem, perceived mate value, and romantic self-confidence (Bale & Archer, 2013), and experience more depression (Ehlinger & Blashill, 2016). These findings should be followed up by investigations of how the correlates of negative body image (e.g., low perceived mate value, depression) are associated with specific avoidance sexual motives (e.g., having sex to avoid rejection, to cope with depression).

Approach sexual motives were associated with less distraction during sex and avoidance sexual motives were associated with more distraction. This supports our theorizing that during sex, approach motives bias attention toward signals of reward and avoidance biases attention

toward threats. These findings, in line with findings that motives influence thoughts and goals regarding interpersonal relationships (Derryberry & Reed, 1994; Gable & Impett, 2012), suggest that, during sex, biases toward reward may guide attention towards stimuli with positive meanings and therefore less distraction. In contrast, biases toward threat may guide attention toward negative stimuli (e.g., body image concerns, embarrassment), thereby increasing distraction and impeding sexual pleasure and function. Future research should examine whether consideration of sexual motives also informs how body image impacts sex among men. For example, Wyatt et al. (2019, 2020) found that men with negative genital self-image were more distracted during sex and experienced difficulties with arousal and orgasm. These men may be more distracted because they are more avoidance, rather than approach, sexually motivated.

To the best of our knowledge, only one previous study has examined how motives may impact attention during sex. In that study, Rosen et al. (2018) found that on days when women with vulvodynia reported stronger approach sexual motives, they were more focused on positive cues during sex (e.g., attraction to partner) and experienced better sexual function, and when they were more avoidance motivated, they focused more on negative cues (e.g., worries about disappointing their partner) and experienced worse sexual function. When considered together, the findings by Rosen et al. (2018) and our study suggest that approach sexual motives enables staying “in the moment” during sex and focusing on positive erotic cues, while avoidance motives leads to distraction that interferes with sexual pleasure.

Overall, our findings support our suggestion that the approach-avoidance framework (Gable & Impett, 2012; Gray, 1987) provides an important lens for examining how body image affects sexual well-being. Approach-avoidance motivational processes may also underlie other associations between body image and various aspects of sex (e.g., frequency of engaging in sex,

age of first sex, engagement in masturbation, sexual anxiety, sexual health behaviors).

Additionally, these findings suggest that sex education that addresses positive aspects of sexuality (e.g., body appreciation, pleasure) may help foster sexual motives oriented toward achieving positive outcomes rather than avoiding negative outcomes, and in turn, enhancing sexual well-being.

Analyses comparing results across women whose recent sex was with a romantic partner versus a casual partner revealed few differences, suggesting that our theorized links between body image, sexual motives, and sexual pleasure and function may be largely generalizable across these contexts. However, we found that the serial indirect effect of body image via self-focused avoidance motives and embarrassment on pleasure was stronger if the sex was with a casual partner. Closer examination indicated that this stronger effect via self-focused avoidance motives and embarrassment was because body dissatisfaction was more strongly associated with self-focused avoidance motives among women whose last sex was casual. This may be because without the support and validation of a romantic partner (Collins et al., 2014; Reis et al., 2004), single women are more motivated to have sex to gain affirmation and relief from personal insecurities.

We had theorized that body image, motives, and distraction would be more closely associated with sexual pleasure than sexual function because pleasure is more reliant on attentional rather than automatic processes (Levin & van Berlo, 2004). On the one hand, the lack of difference in results predicting pleasure and function might suggest that sexual pleasure is not a valid construct or unique from sexual function. However, the possibility that pleasure diverges from function remains an interesting and understudied question. For example, pleasure may diverge from function among individuals with underlying conditions or who take medications

that impact function (e.g., lubrication, orgasm) but not pleasure, a topic worthy of future research.

Limitations

Although preregistration of hypotheses minimized risk of Type 1 errors, use of cross-sectional data precludes stronger conclusions about casual directions. For example, experimental manipulation of the antecedent variable would be needed to confirm that body image affects motives, that motives affect distraction, and that distraction affects sexual pleasure and function. However, the sequencing of variables in this study makes sense theoretically and temporally. Prior research suggests that distal traits (i.e., body image) impact motivation and that motivation impacts attention during sex and other social encounters (Rosen et al., 2018). In turn, distraction during sex is well-documented as impacting sexual outcomes (e.g., Carvalheira et al., 2017).

Our study did not use previously validated measures of sexual motives or distraction; future validation of the measures we developed for this study would provide stronger support for our theorizing. Additionally, measuring constructs with only two or three items is suboptimal; future research should strive to assess key constructs with at least five items per factor (Costello & Osborne, 2005). Information regarding how many participants were recruited through each venue was not collected but would have provided richer information in describing the study population.

The measure of body dissatisfaction used in this study targeted negative rather than positive body image. In line with recent calls for greater focus on positive body image (e.g., Gillen & Markey, 2019), replication of our findings using a measure of positive body image, such as the Body Appreciation Scale (Avalos et al., 2005), may provide more insight to how body image impacts sexual motives. Additionally, while our study examined many aspects of

approach and avoidance sexual motives, there may be other sexual motives (e.g., to remedy uncertainty regarding one's value as a relationship partner, to forget about one's problems) that would be valuable to consider in future investigations.

Clinical Implications

Our findings suggest that when clinicians work with women struggling with body image and sexuality, fostering approach sex motives may improve sexual outcomes. Psychoeducation and sex therapies encouraging exploring and mindfully attending to one's sexual responses may foster approach sexual motives by helping women learn to associate their body and sexuality with pleasure and fulfillment. Such interventions might include sensate focus, mindfulness, and exploration of masturbation or erotica, all of which have shown efficacy enhancing women's sexual well-being (e.g., Brotto et al., 2020; Velten et al., 2020). Additionally, cognitive behavioral therapies, which include identifying and restructuring automatic negative thoughts, may enable management of self-critical thoughts during sex (Stephenson et al., 2013; Trudel et al., 2001).

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APPENDIX A: TABLES

Table 1

Pattern Matrix from Factor Analysis of Sexual Motive Items

Motive item	Factor loading			
	1	2	3	4
Factor 1: Self-Focused Avoidance Motives				
1. Because I wanted to feel more attractive. ^a	0.81			
2. Because I wanted to feel better about myself. ^{ab}	0.81			
3. Because I wanted to feel more self-confident. ^a	0.80			
4. Because I wanted to feel more interesting. ^b	0.61			
5. To cope with negative feelings (e.g., sadness, loneliness). ^c	0.54			
Factor 2: Self-Focused Approach Motives				
6. To experience physical pleasure. ^a		0.75		
7. Because sex feels good. ^{ab}		0.71		
8. Because I was horny. ^{ab}		0.71		
9. For the thrill of it. ^b	0.28	0.57		
10. Because I wanted the adventure. ^a	0.36	0.47		
11. Because this person made me feel sexy. ^a		0.44		0.39
Factor 3: Partner-Focused Avoidance Motives				
12. To prevent this person from becoming upset. ^d			0.78	
13. Because I felt obligated to. ^a			0.76	
14. Because I did not know how to say “no.” ^a			0.64	
15. To prevent this person from losing interest in me. ^d	0.34		0.46	
Factor 4: Partner-Focused Approach Motives				
16. Because I wanted to show my affection to this person. ^a				0.88
17. Because I wanted to share a deeper emotional connection with this person. ^e				0.79
18. Because I was sexually attracted to this person. ^a		0.40		0.44

Note. $N = 1609$. Factor loadings of retained items are bold. Factor loadings < 0.20 are suppressed. ^a Items adapted from Meston & Buss, 2007. ^b Items adapted from Cooper et al., 1998. ^c Item written for the current study aimed to capture the meaning of several of Cooper et al.’s (1998) items, e.g., “Cope with upset,” “Feel better when lonely,” “Feel better when low.” ^d Items adapted from Impett et al., 2005. ^e Item written for this study to concisely combine Meston & Buss’ (2007) items “I wanted to feel more connected to that person” and “I wanted to increase the emotional bond by having sex,” and Cooper et al.’s (1998) item “Make emotional connection.”

Table 2*Pattern Matrix from Factor Analysis of Distraction Items*

Distraction item	Factor loading			
	1	2	3	4
Factor 1: Appearance-Based Distraction				
1. I worried about how a particular part of my body (e.g., stomach, genitals, thighs/legs, breasts/chest) looked. ^a	0.99			
2. I worried about how my body looked. ^b	0.99			
3. I was concerned about whether my body was sexually appealing to my partner. ^b	0.92			
4. I was distracted by thoughts of how I looked to my partner. ^b	0.84			
5. I found myself thinking about how unattractive my body is. ^b	0.84			
Factor 2: General Distraction				
6. I was distracted by thoughts and feelings that were not related to sex. ^a		0.90		
7. I had difficulty staying “in the moment.” ^a		0.86		
8. I was distracted by “day-to-day” concerns (e.g., work, school, family, money). ^a		0.81		
9. I was distracted by negative thoughts and feelings. ^a		0.63		
10. I worried about my level of arousal during sex (e.g., lubrication/wetness or erection). ^a		0.42	0.22	
11. 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		0.24		
Factor 3: Performance-Based Distraction				
12. I was concerned that I wouldn’t be able to give my partner enough sexual pleasure. ^a			1.03	
13. I worried that my partner would not have an orgasm. ^c			0.85	
14. I worried whether the things I did during sex satisfied my partner. ^b			0.61	
15. I was concerned that I wasn’t very good at sex. ^a	0.21		0.55	
16. I was distracted by thoughts about my sexual performance. ^b		0.28	0.39	
Factor 4: Sexual Embarrassment				
17. I quickly felt embarrassed. ^d				0.85
18. It took some time for me to overcome my shyness. ^d				0.83
19. I found it difficult to sexually let myself go in front of the other person. ^d				0.82
20. I felt uncomfortable. ^d				0.61

Note. $N = 1589$. Factor loadings of retained items are bold. Factor loadings below 0.20 are suppressed. ^a Items written for this study. ^b Items adapted from Dove & Wiederman, 2000. ^c Item adapted from Lacefield & Negy, 2012. ^d Items adapted from Van Lankveld et al., 2008.

Table 3*Exploratory Factor Analysis of Pleasure Items*

Pleasure Item	Factor loading
I felt intense pleasure in my genitals.	0.92
The sex felt very pleasurable.	0.91
The way my partner stimulated my body felt extremely pleasurable.	0.91
The sexual arousal in my genitals and/or body felt very pleasurable.	0.84
I experienced very pleasurable orgasmic feelings.	0.75
During sex, the feeling of my partner's body against mine felt very pleasurable.	0.67

Note. $N = 1585$. All items were retained in the measure of sexual pleasure.

Table 4*Variance in Sexual Pleasure Accounted for by Full Regression Models*

Regression Model Predictors	R^2
Body dissatisfaction, self-approach, and appearance distraction ^a	0.43
Body dissatisfaction, self-approach, and performance distraction ^a	0.43
Body dissatisfaction, self-approach, and general distraction ^a	0.46
Body dissatisfaction, self-approach, and sexual embarrassment ^a	0.47
Body dissatisfaction, self-avoidance, and appearance distraction ^b	0.05
Body dissatisfaction, self-avoidance, and performance distraction ^b	0.08
Body dissatisfaction, self-avoidance, and general distraction ^b	0.20
Body dissatisfaction, self-avoidance, and sexual embarrassment ^b	0.19
Body dissatisfaction, partner-avoidance, and appearance distraction ^c	0.20
Body dissatisfaction, partner-avoidance, and performance distraction ^c	0.22
Body dissatisfaction, partner-avoidance, and general distraction ^c	0.28
Body dissatisfaction, partner-avoidance, and sexual embarrassment ^c	0.28
Body dissatisfaction, partner-approach, and appearance distraction ^d	0.13
Body dissatisfaction, partner-approach, and performance distraction ^d	0.16
Body dissatisfaction, partner-approach, and general distraction ^d	0.26
Body dissatisfaction, partner-approach, and sexual embarrassment ^d	0.24

Note. $N = 1589-1664$. For the total effect of body dissatisfaction on sexual pleasure, $R^2 = 0.02$.

^a Corresponds to serial mediation models in Table 1 of the article. ^b Corresponds to serial mediation models in Table 2 of the article. ^c Corresponds to serial mediation models in Table 3 of the article. ^d Corresponds to serial mediation models in Table 4 of the article.

Table 5*Variance in Sexual Function Accounted for by Full Regression Models*

Regression Model Predictors	R^2
Body dissatisfaction, self-approach, and appearance distraction	0.40
Body dissatisfaction, self-approach, and performance distraction	0.39
Body dissatisfaction, self-approach, and general distraction	0.45
Body dissatisfaction, self-approach, and sexual embarrassment	0.43
Body dissatisfaction, self-avoidance, and appearance distraction	0.09
Body dissatisfaction, self-avoidance, and performance distraction	0.12
Body dissatisfaction, self-avoidance, and general distraction	0.27
Body dissatisfaction, self-avoidance, and sexual embarrassment	0.21
Body dissatisfaction, partner-avoidance, and appearance distraction	0.23
Body dissatisfaction, partner-avoidance, and performance distraction	0.25
Body dissatisfaction, partner-avoidance, and general distraction	0.34
Body dissatisfaction, partner-avoidance, and sexual embarrassment	0.31
Body dissatisfaction, partner-approach, and appearance distraction	0.12
Body dissatisfaction, partner-approach, and performance distraction	0.15
Body dissatisfaction, partner-approach, and general distraction	0.29
Body dissatisfaction, partner-approach, and sexual embarrassment	0.23

Note. $N = 1515-1516$. For the total effect of body dissatisfaction on sexual function, $R^2 = 0.04$. Regression models correspond with serial mediation models in Table 6 of the article.

Table 6*Pearson Correlations, Means, and Standard Deviations for Key Variables*

	<i>M</i>	<i>SD</i>	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. Body dissatisfaction	4.00	1.15	-.11**	-.01	.20***	.10***	.56***	.26***	.28***	.30***	-.12***	-.12***	-.18***	-.08**	-.13***	-.17***	-.08**	-.19***
2. Self-approach motives	5.14	1.09		.20***	-.01	-.48***	-.18***	-.20***	-.37***	-.32***	.64***	.46***	.60***	.35***	.34***	.34***	.27***	.59***
3. Partner-approach motives	4.69	1.46			-.05*	-.16***	-.09***	-.09***	-.12***	-.18***	.30***	.00	.18***	.09***	.13***	.37***	.04	.21***
4. Self-avoidance motives	2.02	1.07				.17***	.33***	.27***	.20***	.28***	-.11***	-.11***	-.10***	-.11***	-.12***	-.21***	-.09***	-.13***
5. Partner-avoidance motives	1.33	0.69					.21***	.19***	.37***	.29***	-.42***	-.27***	-.42***	-.23***	-.21***	-.35***	-.24**	-.43***
6. Appearance distraction	2.38	1.45						.55***	.47***	.53***	-.24***	-.07*	-.26***	-.12***	-.26***	-.24***	-.16***	-.29***
7. Performance distraction	2.15	1.22							.38***	.50***	-.27***	-.04	-.27***	-.21***	-.25***	-.25***	-.24***	-.32***
8. General distraction	1.98	1.08								.45***	-.44***	-.31***	-.50***	-.33***	-.33***	-.37***	-.22***	-.52***
9. Sexual embarrassment	1.85	0.92									-.44***	-.13***	-.39***	-.22***	-.38***	-.36***	-.28***	-.46***
10. Sexual pleasure	5.03	1.20										.28***	.66***	.40***	.61***	.53***	.31***	.71***
11. Desire	4.31	1.20											.52***	.30***	.12***	.22***	.20***	.57***
12. Arousal	5.02	1.03												.57***	.45***	.52***	.36***	.84***
13. Lubrication	5.19	1.06													.26***	.30***	.39***	.68***
14. Orgasm	4.26	1.61														.34***	.22***	.66***
15. Satisfaction	4.81	1.25															.15***	.64***
16. Pain	5.07	1.16																.57***
17. FSFI total	28.66	4.79																

Note. $N = 1490-1619$. * $p < .05$. ** $p < .01$ *** $p < .001$

Table 7

Tests of the Serial Indirect Effects of Body Dissatisfaction on Sexual Pleasure via Self-Focused Approach Motives as the First Mediator and One of Four Distraction Subscales as the Second Mediator

	<i>b</i>	β	<i>SE</i>	95% CI for <i>b</i>	
				Lower	Upper
Mediation by self-focused approach motives and appearance-based distraction					
Serial indirect effect*	-0.002*	-0.002	0.001	-0.003	-0.001
<i>a</i> ₁ path (dissatisfaction to motive)	-0.113	-0.108	0.023	-0.158	-0.067
<i>d</i> ₂₁ path (motive to distraction)	-0.131	-0.125	0.028	-0.185	-0.076
<i>b</i> ₂ path (distraction to pleasure)	-0.114	-0.109	0.019	-0.151	-0.077
Mediation by self-focused approach motives and performance-based distraction					
Serial indirect effect*	-0.003*	-0.003	0.006	-0.005	-0.001
<i>a</i> ₁ path (dissatisfaction to motive)	-0.113	-0.108	0.023	-0.158	-0.067
<i>d</i> ₂₁ path (motive to distraction)	-0.190	-0.182	0.027	-0.244	-0.137
<i>b</i> ₂ path (distraction to pleasure)	-0.139	-0.133	0.019	-0.177	-0.101
Mediation by self-focused approach motives and general distraction					
Serial indirect effect*	-0.010*	-0.010	0.003	-0.016	-0.005
<i>a</i> ₁ path (dissatisfaction to motive)	-0.113	-0.108	0.023	-0.158	-0.067
<i>d</i> ₂₁ path (motive to distraction)	-0.346	-0.331	0.023	-0.390	-0.301
<i>b</i> ₂ path (distraction to pleasure)	-0.259	-0.248	0.023	-0.303	-0.215
Mediation by self-focused approach motives and sexual embarrassment					
Serial indirect effect*	-0.009*	-0.009	0.002	-0.014	-0.005
<i>a</i> ₁ path (dissatisfaction to motive)	-0.113	-0.108	0.023	-0.158	-0.067
<i>d</i> ₂₁ path (motive to distraction)	-0.242	-0.231	0.020	-0.281	-0.203
<i>b</i> ₂ path (distraction to pleasure)	-0.332	-0.317	0.026	-0.382	-0.281

Note. *N* = 1590. Serial indirect effects represent effects of body dissatisfaction on sexual pleasure through the two mediating variables arranged serially. 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 CIs. *Indicates significant serial indirect effect (i.e., CI excludes zero).

Table 8

Tests of the Serial Indirect Effects of Body Dissatisfaction on Sexual Pleasure via Self-Focused Avoidance Motives as the First Mediator and One of Four Distraction Subscales as the Second Mediator

	<i>b</i>	β	<i>SE</i>	95% CI for <i>b</i>	
				Lower	Upper
Serial mediation by self-focused avoidance motives and appearance-based distraction					
Serial indirect effect*	-0.010*	-0.010	0.002	-0.015	-0.006
<i>a</i> ₁ path (dissatisfaction to motive)	0.188	0.180	0.023	0.143	0.233
<i>d</i> ₂₁ path (motive to distraction)	0.307	0.293	0.028	0.253	0.361
<i>b</i> ₂ path (distraction to pleasure)	-0.177	-0.169	0.025	-0.227	-0.128
Serial mediation by self-focused avoidance motives and performance-based distraction					
Serial indirect effect*	-0.011*	-0.011	0.002	-0.017	-0.007
<i>a</i> ₁ path (dissatisfaction to motive)	0.188	0.180	0.023	0.143	0.233
<i>d</i> ₂₁ path (motive to distraction)	0.251	0.240	0.028	0.197	0.305
<i>b</i> ₂ path (distraction to pleasure)	-0.240	-0.229	0.025	-0.289	-0.191
Serial mediation by self-focused avoidance motives and general distraction					
Serial indirect effect*	-0.013*	-0.012	0.003	-0.019	-0.008
<i>a</i> ₁ path (dissatisfaction to motive)	0.188	0.180	0.023	0.143	0.233
<i>d</i> ₂₁ path (motive to distraction)	0.141	0.135	0.025	0.093	0.189
<i>b</i> ₂ path (distraction to pleasure)	-0.480	-0.459	0.026	-0.531	-0.429
Serial mediation by self-focused avoidance motives and sexual embarrassment					
Serial indirect effect*	-0.021*	-0.020	0.004	-0.029	-0.014
<i>a</i> ₁ path (dissatisfaction to motive)	0.188	0.180	0.023	0.143	0.233
<i>d</i> ₂₁ path (motive to distraction)	0.196	0.187	0.021	0.156	0.236
<i>b</i> ₂ path (distraction to pleasure)	-0.558	-0.533	0.031	-0.619	-0.496

Note. *N* = 1589. Serial indirect effects represent effects of body dissatisfaction on sexual pleasure through the two mediating variables arranged serially. 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 CIs. *Indicates significant serial indirect effect (i.e., CI excludes zero).

Table 9

Tests of the Serial Indirect Effects of Body Dissatisfaction on Sexual Pleasure via Partner-Focused Avoidance Motives as the First Mediator and One of Four Distraction Subscales as the Second Mediator

	<i>b</i>	β	<i>SE</i>	95% CI for <i>b</i>	
				Lower	Upper
Serial mediation by partner-focused avoidance motives and appearance-based distraction					
Serial indirect effect*	-0.003*	-0.003	0.001	-0.005	-0.001
<i>a</i> ₁ path (dissatisfaction to motive)	0.067	0.064	0.015	0.038	0.096
<i>d</i> ₂₁ path (motive to distraction)	0.306	0.292	0.044	0.221	0.392
<i>b</i> ₂ path (distraction to pleasure)	-0.120	-0.115	0.023	-0.164	-0.075
Serial mediation by partner-focused avoidance motives and performance-based distraction					
Serial indirect effect*	-0.004*	-0.004	0.001	-0.006	-0.002
<i>a</i> ₁ path (dissatisfaction to motive)	0.067	0.064	0.015	0.038	0.096
<i>d</i> ₂₁ path (motive to distraction)	0.289	0.276	0.043	0.205	0.373
<i>b</i> ₂ path (distraction to pleasure)	-0.183	-0.175	0.023	-0.228	-0.138
Serial mediation by partner-focused avoidance motives and general distraction					
Serial indirect effect*	-0.013*	-0.012	0.003	-0.020	-0.007
<i>a</i> ₁ path (dissatisfaction to motive)	0.067	0.064	0.015	0.038	0.096
<i>d</i> ₂₁ path (motive to distraction)	0.536	0.512	0.036	0.466	0.607
<i>b</i> ₂ path (distraction to pleasure)	-0.367	-0.351	0.026	-0.418	-0.316
Serial mediation by partner-focused avoidance motives and sexual embarrassment					
Serial indirect effect*	-0.010*	-0.010	0.003	-0.015	-0.005
<i>a</i> ₁ path (dissatisfaction to motive)	0.067	0.064	0.015	0.038	0.096
<i>d</i> ₂₁ path (motive to distraction)	0.337	0.322	0.032	0.275	0.399
<i>b</i> ₂ path (distraction to pleasure)	-0.442	-0.422	0.030	-0.500	-0.383

Note. *N* = 1589. Serial indirect effects represent effects of body dissatisfaction on sexual pleasure through the two mediating variables arranged serially. 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 CIs. *Indicates significant serial indirect effect (i.e., CI excludes zero).

Table 10

Tests of the Serial Indirect Effects of Body Dissatisfaction on Sexual Pleasure via Partner-Focused Avoidance Motives as the First Mediator and One of Four Distraction Subscales as the Second Mediator

	<i>b</i>	β	<i>SE</i>	95% CI for <i>b</i>	
				Lower	Upper
Serial mediation by partner-focused approach motives and appearance-based distraction					
Serial indirect effect	-0.000	-0.000	0.000	-0.001	0.000
<i>a</i> ₁ path (dissatisfaction to motive)	-0.029	-0.028	0.032	-0.092	0.033
<i>d</i> ₂₁ path (motive to distraction)	-0.070	-0.067	0.021	-0.120	-0.029
<i>b</i> ₂ path (distraction to pleasure)	-0.162	-0.155	0.023	-0.208	-0.116
Serial mediation by partner-focused approach motives and performance-based distraction					
Serial indirect effect	-0.000	-0.000	0.001	-0.002	0.001
<i>a</i> ₁ path (dissatisfaction to motive)	-0.029	-0.028	0.032	-0.092	0.033
<i>d</i> ₂₁ path (motive to distraction)	-0.066	-0.063	0.020	-0.106	-0.027
<i>b</i> ₂ path (distraction to pleasure)	-0.223	-0.213	0.023	-0.269	-0.177
Serial mediation by partner-focused approach motives and general distraction					
Serial indirect effect	-0.001	-0.001	0.001	-0.004	0.002
<i>a</i> ₁ path (dissatisfaction to motive)	-0.029	-0.028	0.032	-0.092	0.033
<i>d</i> ₂₁ path (motive to distraction)	-0.090	-0.086	0.018	-0.125	-0.055
<i>b</i> ₂ path (distraction to pleasure)	-0.448	-0.428	0.025	-0.497	-0.399
Serial mediation by partner-focused approach motives and sexual embarrassment					
Serial indirect effect	-0.002	-0.002	0.002	-0.005	0.002
<i>a</i> ₁ path (dissatisfaction to motive)	-0.029	-0.028	0.032	-0.092	0.033
<i>d</i> ₂₁ path (motive to distraction)	-0.106	-0.101	0.015	-0.136	-0.077
<i>b</i> ₂ path (distraction to pleasure)	-0.498	-0.476	0.015	-0.556	-0.439

Note. *N* = 1590. Serial indirect effects represent effects of body dissatisfaction on sexual pleasure through the two mediating variables arranged serially. 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 CIs. *Indicates significant serial indirect effect (i.e., CI excludes zero).

Table 11

Tests of Moderation of the Serial Indirect Effects of Body Dissatisfaction on Sexual Pleasure via Self-Focused Avoidance Motives and Sexual Embarrassment by Type of Sex Partner (Romantic vs. Casual)

	<i>b</i>	β	<i>SE</i>	95% CI for <i>b</i>		<i>N</i>
				Lower	Upper	
Index of moderated mediation	-0.024*	-0.023	0.013	-0.052	-0.002	
Conditional Serial Indirect Effects						
Romantic partner	-0.012	-0.011	0.003	-0.019	-0.007	1556
Casual partner	-0.036	-0.034	0.012	-0.062	-0.015	

Note. 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 bootstrapped CIs. *Indicates significant moderated mediation (i.e., CI for the index of moderated mediation excludes zero).

Table 12

Tests of the Serial Indirect Effects of Body Dissatisfaction on Sexual Function via the Mediators (One of Four Motives as the First Mediator and One of Four Distraction Subscales as the Second Mediator)

Model	<i>b</i>	β	<i>SE</i>	95% CI for <i>b</i>	
				Lower	Upper
Self-approach and appearance distraction	-0.009*	-0.002	0.003	-0.017	-0.004
Self-approach and performance distraction	-0.016*	-0.004	0.005	-0.026	-0.007
Self-approach and general distraction	-0.057*	-0.014	0.014	-0.087	-0.030
Self-approach and sexual embarrassment	-0.039*	-0.009	0.010	-0.060	-0.021
Partner-approach and appearance distraction	-0.002	-0.000	0.002	-0.006	0.003
Partner-approach and performance distraction	-0.002	-0.000	0.003	-0.008	0.003
Partner-approach and general distraction	-0.005	-0.001	0.007	-0.019	0.008
Partner-approach and sexual embarrassment	-0.006	-0.001	0.008	-0.022	0.010
Self-avoidance and appearance distraction	-0.048*	-0.011	0.010	-0.070	-0.030
Self-avoidance and performance distraction	-0.054*	-0.013	0.011	-0.078	-0.035
Self-avoidance and general distraction	-0.062*	-0.015	0.015	-0.092	-0.035
Self-avoidance and sexual embarrassment	-0.084*	-0.020	0.015	-0.116	-0.057
Partner-avoidance and appearance distraction	-0.012*	-0.003	0.004	-0.021	-0.005
Partner-avoidance and performance distraction	-0.016*	-0.004	0.005	-0.027	-0.007
Partner-avoidance and general distraction	-0.062*	-0.015	0.016	-0.095	-0.031
Partner-avoidance and sexual embarrassment	-0.039*	-0.009	0.010	-0.060	-0.020

Note. *N* = 1514-1515. Serial indirect effects (*b*) represent effects of body dissatisfaction on sexual function through the two mediating variables arranged serially. β s are fully standardized regression coefficients.

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 withdrawal, 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 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 & Weideman, 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

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 intercourse*
- 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 intercourse*

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 intercourse*

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