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Associations Between Positive Body Image, Sexual Liberalism, and Unconventional Sexual
Practices in U.S. Adults

Viren Swami¹⁻², Laura Weis³, David Barron⁴, & Adrian Furnham³

¹ Department of Psychology, Anglia Ruskin University, Cambridge, UK

² Department of Psychology, HELP University College, London, UK

³ Department of Clinical, Educational, and Health Psychology, University College London,
London, UK

⁴ Department of Psychology, University of Westminster, London, UK

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Address correspondence to: Prof. Viren Swami, Department of Psychology, Anglia Ruskin
University, Cambridge, Cambridgeshire CB1 1PT, UK. Email: viren.swami@anglia.ac.uk.

ABSTRACT

While studies have documented robust relationships between body image and sexual health outcomes, few studies have looked beyond sexual functioning in women. Here, we hypothesized that more positive body image would be associated with greater sexual liberalism and more positive attitudes toward unconventional sexual practices. An online sample of 151 women and 164 men from the U.S. completed measures of sexual liberalism, attitudes toward unconventional sexual practices, and indices of positive body image (i.e., body appreciation, body acceptance by others, body image flexibility, and body pride), and provided their demographic details. Regression analyses indicated that, once the effects of sexual orientation, relationship status, age, and body mass index had been accounted for, higher body appreciation was significantly associated with greater sexual liberalism in women and men. Furthermore, higher body appreciation and body image flexibility were significantly associated with more positive attitudes toward unconventional sexual practices in women and men. These results may have implications for scholars working from a sex-positive perspective, particularly in terms of understanding the role body image plays in sexual attitudes and behaviors.

Keywords: Positive body image; Body appreciation; Erotophilia; Sexual liberalism; Unconventional sex

INTRODUCTION

There is a large body of literature examining associations between body image and sexual health outcomes, particularly in women (for reviews, see Wiederman, 2012; Woertman & van den Brink, 2012). For example, studies of young women have reported significant associations between negative body image and risky sexual behaviors, including lower probability of using contraceptives and earlier age of first intercourse (Eisenberg, Neumark-Sztainer, & Lust, 2005; Gillen, Lefkowitz, & Shearer, 2006; Piquart, 2010). In addition, negative body image is associated with women's sexual functioning: women who experience greater anxiety and shame about their bodies have lower levels of sexual desire and arousability (Koch, Mansfield, Thureau, & Carey, 2005; Sanchez & Kiefer, 2007; Seal, Bradford, & Meston, 2009) and report decreased sexual satisfaction (Weaver & Byers, 2006; Yamamiya, Cash, & Thompson, 2006).

To date, however, few studies have examined associations between body image and sexual outcomes beyond health outcomes and sexual functioning. For example, given the centrality of the body to sexual experiences and sexual stimulation (Cash, Maikkula, & Yamamiya, 2004; Wiederman, 2012), it is likely that body image will be associated with avoidant or approach responses to sex. More specifically, it is plausible that positive body image—characterized by favorable attitudes toward one's body, body acceptance, respect for the body, and protection of the body from negative influences (Tylka & Wood-Barcalow, 2015a)—will be associated with positive sexual schemas that allow for more liberal or unconventional sexual expression (Wiederman & Hurst, 1997). Positive body image may buffer against spectating—a cognitive self-absorption wherein individuals fixate and monitor their body parts (Masters & Johnson, 1970)—or anxious self-focus and self-scrutiny (Barlow, 1986) during sexual activities, which in turn may promote more varied sexual experiences. In this perspective, body image can be viewed as a platform that allows for

greater sexual exploration and more positive responses to a range of sexual stimuli and activities (Daniluk, 1993).

There is some evidence to support this broad perspective. For instance, early studies reported that negative body image (Faith & Schare, 1993) and lower self-rated attractiveness (Wiederman & Hurst, 1998) were significantly associated with more conservative sexual behaviors in adult women and men. More recent research has confirmed that lower incidence of negative body image is significantly associated with more liberal sexual attitudes (Lemer, Blodgett Salafia, & Benson, 2013) and behaviors in women (e.g., masturbation frequency; Shulman & Horne, 2003). Other work has indicated that women who are less dissatisfied with their bodies reported more frequent sexual activity and were more likely to initiate sex and try new sexual behaviors than those who were less satisfied (Ackard, Kearney-Cooke, & Peterson, 2000; Schooler, Merriwether, & Caruthers, 2005; Trapnell, Meston, & Gorzalka, 1997). Women with lower body dissatisfaction are also more likely to report greater sexual confidence (La Rocque & Cioe, 2011; Weaver & Byers, 2006) and greater sexual esteem (Calogero & Thompson, 2009; see also Dove & Wiederman, 2000).

Although these studies point to an association between body image and sexual liberalism, a number of limitations currently affect this literature. First, these studies have tended to operationalize body image satisfaction as the absence of negative body image, rather than directly through the use of measures of positive body image. This is notable because scholars have suggested that negative and positive body image should not be considered merely as polar opposites (for a review, see Tylka & Wood-Barcalow, 2015a). Instead, there is growing recognition that positive body image may have unique predictive effects, once the influence of negative body image has been accounted for, in relation to a range of psychological and behavioral outcomes, which may extend to sexual outcomes. For example, dimensions of positive body image have been found to be significantly associated

with greater arousal and sexual functioning (e.g., Ackard et al., 2000; Gillen et al., 2006; Satinsky, Reece, Dennis, Sanders, & Bardzell, 2012) and less risky sexual behaviors (Winter & Satinsky, 2014). To date, however, studies have not specifically examined associations between positive body image and sexual outcomes beyond functioning.

Second, there is wide variation in the operationalization of sexual liberalism (or erotophilia), with most studies relying on the Sexual Opinion Survey (SOS; Fisher, Byrne, White, & Kelley, 1988), a dispositional measure of affective and evaluative responses to sexual stimuli. There is some concern, however, that the SOS may represent a limited measure of sexual liberalism that is now dated or anachronistic (Rye, Serafini, & Bramberger, 2015). That is, the SOS may not capture recent developments in sexual repertoires (e.g., cybersex), which in turn provides a limited picture of contemporary sexual liberalism. In addition, very little is known about associations between body image and sexual outcomes beyond liberalism, such as attitudes toward unconventional sexual practices. Third, the majority of studies have focused on adult women and it is unclear to what extent these findings are generalizable to men. For instance, there is some evidence from college-aged men that body image may not be significantly associated with sexual functioning (Daniel & Bridges, 2013). Finally, previous studies have tended to rely on small samples of college-aged individuals, whose sexual experiences may not generalize to wider populations.

The Present Study

The present study was designed to address some of these limitations in the literature. First, our specific focus in the present work was on positive body image, which we operationalized along four dimensions. More specifically, we included measures of body appreciation (body acceptance, respect for the body, and resistance to unrealistic standards of beauty; Avalos, Tylka, & Wood-Barcalow, 2005; Tylka & Wood-Barcalow, 2015b), authentic body pride (a strong, positive, and self-conscious emotion towards the body and a

sense of personal appearance-related achievement; Castonguay, Sabiston, Crocker, & Mack, 2014), body acceptance by others (the degree to which individuals perceive that their bodies are accepted by important others and by society; Avalos & Tylka, 2006), and body image flexibility (a compassionate response to embrace—rather than avoid, escape, or alter—the content of aversive body-related thoughts and feelings; Sandoz, Wilson, Merwin, & Kellum, 2013). Although there is likely some conceptual overlap between these constructs, their concurrent inclusion allows for one of the most comprehensive accounts of associations between positive body image and sexual outcomes (for a review, see Webb, Wood-Barcalow, & Tylka, 2015).

Second, we included three outcome measures, namely two indices of sexual liberalism and a measure of unconventional sexual practices. In the first instance, we used the SOS, as well as a new measure of erotophilia (i.e., a tendency to respond to sexual stimuli with positive affect and evaluation) that provides a more direct measure of sexual liberalism in a contemporary context (Rye et al., 2015). In addition, we also measured participants' general disposition to engage in, and preference for, unconventional sex (Fincham & Bradbury, 1987). Although there is some debate as to the extent to which these measures provide full coverage of sexual liberalism and/or unconventional sexual practices (Rye et al., 2015), they nevertheless are the primary (and most reliable) way in which these constructs are currently operationalized in the literature. Beyond these measurement issues, we sampled both women and men to examine the extent to which uncovered associations were true of both genders. We also avoided a reliance on college students by recruiting an online sample of U.S. adults. Finally, because factors like sexual orientation and relationship status are known to be associated with both positive body image and sexual outcomes (Satinsky et al., 2012), we controlled for these variables in our analyses. Overall, we expected that positive

body image would be positively associated with both sexual liberalism and greater disposition to engage in unconventional sex.

METHOD

Procedure and Participants

The study was approved by the University of Westminster departmental ethics committee. All data were collected via the Prolific Academic website (<https://prolific.ac>), a crowdsourcing Internet marketplace that allows individuals to complete academic surveys for monetary compensation. Like other crowdsourcing sites (e.g., Amazon's Mechanical Turk), researchers are able to post studies on the Prolific Academic website and advertise these studies to eligible, pre-screened participants. The study was advertised as a project on body image and health. Its estimated duration and compensation were posted on the Prolific Academic website in March 2016. We limited participation to participants from the U.S. because not all our measures have been validated for use outside this national and linguistic context. After providing informed consent, participants were directed to the measures described below, which were presented in an anonymous form and in random order via the randomization function with Qualtrics, which hosted the survey. In exchange for completing the survey, participants were paid \$2.00, with all micro-payments handled by the website directly. All participants received debriefing information at the end of the survey.

The final sample consisted of 151 women and 164 men who ranged in age from 18 to 67 years ($M = 32.55$, $SD = 10.78$) and in self-reported body mass index (BMI) from 17.30 to 45.96 kg/m² ($M = 25.85$, $SD = 5.59$). The majority of the sample were White (88.9%), while 5.4% were Asian, 3.2% African American, and 2.5% of some other racial background. In terms of sexual orientation, 84.4% reported that they were heterosexual, 8.9% as bisexual, 4.5% as gay or lesbian, 0.6% as pansexual or queer, and 1.6% as asexual. Of the total sample, 33.1% were single, 3.8% were dating, 11.1% were partnered but not cohabiting, 19.4% were

cohabiting, 28.3% were married, 2.5% were divorced, 1.0% were in a polyamorous relationship, and 0.6% were in an open relationship. Finally, in terms of educational qualifications, 29.3% had completed high school, 44.9% had an undergraduate degree, 18.2% had a postgraduate degree, 5.1% were in full-time education, and 2.5% had some other qualification.

Measures

Body Appreciation

Participants completed the 10-item Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015b), which assesses acceptance of one's body, respect and care for one's body, and protection of one's body from unrealistic beauty standards (sample item: "I respect my body"). All items were rated on a 5-point scale, ranging from 1 (*Never*) to 5 (*Always*), and an overall score was computed as the mean of all items, such that higher scores reflect greater body appreciation. The psychometric properties of the BAS-2, including its one-dimensional factor structure, internal consistency, test-retest reliability after 3 weeks, and validity, have been upheld in college and community samples of U.S. women and men (Tylka & Wood-Barcalow, 2015b). In the present study, Cronbach's α for this scale was .95 in women and .96 in men.

Body Pride

To measure body pride, we used the Authentic Pride subscale of the Body and Appearance Self-Conscious Emotions Scale (BASES-AP; Castonguay et al., 2014). This is a 6-item measure that reflects body pride as a sense of personal appearance-related achievement (sample item: "I am proud of my appearance efforts"). Items were rated on a 5-point scale, ranging from 1 (*Never*) to 5 (*Always*), and scores were averaged so that higher scores reflect greater authentic body pride. Data drawn from North American adults support the factor structure of the BASES, and estimates supported the internal consistency, test-

retest reliability after 2 weeks, and validity of the BASES subscales (Castonguay et al., 2014). In the present study, Cronbach's α for this subscale was .95 in women and .97 in men.

Body Acceptance

Participants completed the 10-item Body Acceptance by Others Scale (BAOS; Avalos & Tylka, 2006), a measure of an individual's perceptions of feeling acceptance for, and receiving messages reflecting acceptance of, their body shape and weight from five external sources (friends, family, dating partners, society, and the media; sample item: "I've felt acceptance from my friends regarding my body shape and/or weight"). Participants rated the frequency of these experiences using a 5-point scale, ranging from 1 (*Never*) to 5 (*Always*). An overall score was computed as the mean of all items, so that higher scores reflect greater perceptions of body acceptance from others. Among U.S. adults, BAOS scores have been found to have a one-dimensional factor structure, good test-retest reliability after 3 weeks, and good patterns of construct validity (Avalos & Tylka, 2006). Here, Cronbach's α for this scale was .90 in women and .92 in men.

Body Image Flexibility

The 12-item Body Image-Acceptance and Action Questionnaire (BI-AAQ; Sandoz et al., 2013) measures the degree of negative-body related thoughts, behaviors, and affect that stifle growth when experiencing aversive body-related thoughts and feelings (sample item: "To control my life, I need to control my weight"). Items on this scale were rated on a 7-point scale, ranging from 1 (*Never true*) to 7 (*Always true*). Webb et al. (2015) suggested that the scale provides a useful, albeit preliminary, measure of body image flexibility. An overall score for the BI-AAQ was computed as the mean of all reverse-coded items, so that higher scores reflect greater body image flexibility. In U.S. adults, the BI-AAQ has a one-dimensional factor structure, good internal consistency, good test-retest reliability up to 3

weeks, and good patterns of construct validity (Sandoz et al., 2013). In the present study, Cronbach's α for this scale was .97 in women and .96 in men.

Erotophilia

The widely-used Sexual Opinion Survey (SOS; Fisher et al., 1988) was included as a measure of erotophilia-erotophobia, a disposition to respond to sexual stimuli with negative-to-positive affect and evaluation (sample item: "I think it would be very entertaining to look at hardcore sexually explicit material"). In its original formulation, the SOS consists of 21 items intended to measure responses to sexual stimuli (autosexual, homosexual, heterosexual behavior; sexual fantasy; visual sexual stimuli). More recently, Rye et al. (2015) split one item of the SOS to improve clarity and reduce participant frustration ("The thought of having long-term sexual relations with more than one sex partner is not disgusting to me" was split into "The thought of having long-term sexual relations with more than one sex partner over the course of my life-time is not disgusting to me" and "The thought of having long-term sexual relations with more than one sex partner at the same time is not disgusting to me"). We used this 22-item version of the SOS in the present study, with items rated on a 7-point scale, ranging from 1 (*Strongly disagree*) to (*Strongly agree*). Although Fisher (1998) recommended a complex scoring system for the SOS, in practice most scholars take the sum or mean of items (following reverse-coding of relevant items), which is permissible (Rye, Meaney, & Fisher, 2011). In the present study, then, we computed the mean of all items, such that higher scores reflect greater erotophilia or sexual liberalism. The SOS and its 22-item adaptation have very good indices of internal consistency and construct validity (Rye et al., 2011, 2015). In the present study, Cronbach's α for the SOS was .93 in women and .87 in men.

Sexual Liberalism

Rye et al. (2015) developed the Sexual Liberalism Scale (SLS) as a more contemporary measure of erotophilia or sexual liberalism, with items being more expansive in topic area relative to the SOS (all items listed in Table 1). The SLS consists of 29 items, with one item repeated in a negatively-worded format (B. J. Rye, personal communication, 16 February 2016). Items on the SLS were rated on a 7-point scale, ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Rye et al. reported that mean SLS scores had good construct validity, insofar as they were positively related to attitudes toward bondage and discipline, dominance and submission, and sadism and masochism (BDSM), and good internal consistency. However, Rye et al. did not report on the factorial validity of the SLS; for this reason, we elected to examine the factor structure and internal consistency of the SLS here (see Results).

Unconventional Sexual Practices

Participants completed the 5-item Attitudes Toward Unconventional Sex Scale (ATUSS; Fincham & Bradbury, 1987), which measures a general disposition to engage in, and show a preference for, unconventional sexual practices (sample item: “I like sex most when it is out of the ordinary”). Items were rated on a 7-point scale, ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*), and an overall score was computed as the mean of all items. Higher scores on this scale reflect a greater tendency to engage in and prefer unconventional sexual practices. Fincham and Bradbury (1987) reported that the ATUSS has good internal consistency and good patterns of construct validity in U.S. adults. In the present study, Cronbach’s α for this scale was .91 for both women and men.

Demographics

Participants were asked to provide their demographic details consisting of sex, age, ethnicity, relationship status, and highest educational qualifications. Participants also indicated their sexual orientation using a drop-down menu. Finally, participants also provided

their height and weight measurements using an open-ended format. We recoded these data as meters and kilograms, respectively, so as to calculate self-reported BMI as kg/m².

RESULTS

Sexual Liberalism Scale Factor Structure

We first conducted a principal-axis exploratory factor analysis (EFA) of the SLS with the total sample using a quartimax rotation because of the expectation of a single general factor (Tabachnick & Fidell, 2013). We determined the final number of factors to be extracted based on parallel analysis, which reduces the likelihood of factor over-retention compared to alternative methods, such as the EGV1 criterion and inspection of scree-plots (Patil, McPherson, & Friesner, 2010). Bartlett's test of sphericity, $\chi^2(406) = 4882.33, p < .001$, indicated that the correlation matrix was factorable, whereas the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, $KMO = .90$, indicated that the SLS items had adequate common variance for EFA. The results of the EFA revealed seven factors with $\lambda > 1.0$. However, inspection of the scree-plot suggested two primary factors and a steep cut-off to the tertiary factor. The results of parallel analysis also showed that the first two λ for the random data were smaller than the real data counterpart, whereas the third λ for the random data was larger than the third λ for the real data. These findings suggest that two factors should be extracted, explaining 27.4% of the total item variance. Item-loadings are reported in Table 1. Of the 29 items of the SLS, 19 loaded onto the primary factor, which—given the breadth of item-topics—we called General Sexual Liberalism. Seven items loaded onto the secondary factor; these mainly reflected technology-related issues (webcam, sex toys, and cybersex), so we called this factor Technology Liberalism. Three items failed to load onto either factor.

Based on the results of this EFA, we first reverse-coded negatively-loading items and then computed factor scores as the mean of items associated with each subscale. Internal

consistency coefficients (Cronbach's α) for the General Sexual Liberalism subscale were acceptable for women (.89) and men (.87). Likewise, Cronbach's α for the Technology Liberalism subscale was acceptable, although it was higher for women (.82) than it was for men (.71). In women, the two subscales were strongly and positively correlated ($r = .72$, $df = 149$, $p < .001$), whereas in men the subscales were moderately and positively correlated ($r = .52$, $df = 161$, $p < .001$). Estimates of convergent validity of these subscales was obtained through bivariate correlations with scores on the SOS and ATUSS. As can be seen in Table 3, correlations between the SLS subscales, SOS, and ATUSS scores were significantly and positively correlated in both women and men.

Bivariate Correlations and Regressions

Bivariate correlations were computed between all variables for women and men separately, as sex differences were found on some measures (see Table 2). As can be seen in Table 3, SOS-measured erotophilia, general sexual liberalism, and attitudes toward unconventional sex were significantly and positively correlated with body appreciation and authentic body pride, respectively, in women. In women, attitudes toward unconventional sex were also significantly and positively correlated with body image flexibility. In men, on the other hand, all four sexual behavior measures were significantly and positively correlated with body appreciation and body pride, respectively. Attitudes toward unconventional sex were also significantly correlated with body image flexibility in men. Next, we computed multiple hierarchical regressions with each of the four sexual behavior measures entered as criterion variables for women and men separately. Following Satinsky et al. (2012), participant sexual orientation, relationship status, age, and BMI were entered in a first step on the regression. Body appreciation, body acceptance from others, body pride, and body image flexibility were entered simultaneously in a second step. Multicollinearity was not a limiting factor in any of the regressions (all variance inflation factors ≤ 2.07).

Erotophilia

In women, the first step of the regression with erotophilia was significant, $F(4, 146) = 4.03, p = .004, \text{Adj. } R^2 = .08$, with only sexual orientation emerging as a significant predictor ($B = .21, SE = .06, \beta = .26, t = 3.25, p = .001$). The second step of the regression was also significant, $F(8, 142) = 4.93, p < .001, \Delta R^2 = .10$, with body appreciation ($B = .30, SE = .09, \beta = .38, t = 3.13, p = .002$) and sexual orientation ($B = .21, SE = .06, \beta = .27, t = 3.48, p = .001$) being the only significant predictors. In men, the first step of the regression was not significant, $F(4, 158) < 1, \text{Adj. } R^2 < .01$, whereas the second step was significant, $F(8, 154) = 2.24, p = .027, \Delta R^2 = .06$, with body appreciation emerging as the only significant predictor ($B = .18, SE = .06, \beta = .32, t = 2.95, p = .004$).

General Sexual Liberalism

When general sexual liberalism was entered as the criterion variable, the first step of the regression was significant in women, $F(4, 146) = 3.17, p = .016, \text{Adj. } R^2 = .06$, with sexual orientation being the only significant predictor ($B = .27, SE = .10, \beta = .22, t = 2.68, p = .008$). The second step of the regression was also significant, $F(8, 142) = 5.25, p < .001, \Delta R^2 = .13$, with body appreciation ($B = .35, SE = .15, \beta = .29, t = 2.39, p = .018$), sexual orientation ($B = .27, SE = .09, \beta = .22, t = 2.90, p = .004$), and BMI ($B = .03, SE = .01, \beta = .20, t = 2.41, p = .017$) emerging as significant predictors. In men, the first step of the regression did not reach significance, $F(4, 158) < 1, \text{Adj. } R^2 < .01$, whereas the second step did, $F(8, 152) = 3.21, p = .001, \Delta R^2 = .10$. Of the variables entered into the second step, the only significant predictor was body appreciation ($B = .25, SE = .11, \beta = .24, t = 2.25, p = .026$).

Technology Liberalism

In women, the first step of the regression was significant, $F(4, 146) = 4.19, p = .003, \text{Adj. } R^2 = .08$, with sexual orientation ($B = .30, SE = .12, \beta = .21, t = 2.61, p = .010$) and BMI

($B = .05$, $SE = .02$, $\beta = .23$, $t = 2.86$, $p = .005$) significantly predicting technology liberalism. The second step of the regression was also significant, $F(8, 142) = 3.08$, $p = .003$, $\Delta R^2 = .02$, with sexual orientation ($B = .30$, $SE = .12$, $\beta = .21$, $t = 2.59$, $p = .011$) and BMI ($B = .05$, $SE = .02$, $\beta = .23$, $t = 2.77$, $p = .006$) emerging as the only significant predictors. For men, on the other hand, the first step of the regression was not significant, $F(4, 158) = 1.02$, $p = .398$, $\text{Adj. } R^2 < .01$, whereas the second step of the regression was significant, $F(8, 152) = 2.72$, $p = .008$, $\Delta R^2 = .08$, with body appreciation being the only significant predictor ($B = .38$, $SE = .12$, $\beta = .33$, $t = 3.08$, $p = .002$).

Attitudes toward Unconventional Sex

For the final regression in women, the first step of the regression was significant, $F(4, 146) = 8.69$, $p < .001$, $\text{Adj. } R^2 = .17$, with sexual orientation ($B = .68$, $SE = .16$, $\beta = .33$, $t = 4.36$, $p < .001$) and BMI ($B = .06$, $SE = .02$, $\beta = .20$, $t = 2.65$, $p = .009$) emerging as significant predictors. The second step was also significant, $F(8, 142) = 8.07$, $p < .001$, $\Delta R^2 = .10$, with sexual orientation ($B = .66$, $SE = .15$, $\beta = .32$, $t = 4.51$, $p < .001$), body appreciation ($B = .52$, $SE = .23$, $\beta = .26$, $t = 2.29$, $p = .024$), body image flexibility ($B = .34$, $SE = .11$, $\beta = .29$, $t = 3.03$, $p = .003$), and BMI ($B = .06$, $SE = .02$, $\beta = .21$, $t = 2.73$, $p = .007$) emerging as significant predictors. In men, the first step of the regression was not significant, $F(4, 158) = 1.64$, $p = .167$, $\text{Adj. } R^2 = .01$, whereas the second step was significant, $F(8, 152) = 4.15$, $p < .001$, $\Delta R^2 = .12$, with body appreciation ($B = .35$, $SE = .11$, $\beta = .30$, $t = 3.52$, $p = .001$) and body image flexibility ($B = .34$, $SE = .17$, $\beta = .20$, $t = 1.99$, $p = .048$) being the only significant predictors.

DISCUSSION

The results of the present study provide some support for our hypothesis that positive body image would be significantly associated with sexual liberalism and unconventional sexual practices, at least in an online sample of U.S. adults. More specifically, we found that—

once the effects of sexual orientation, relationship status, age, and, BMI had been accounted for—body appreciation was significantly associated with traditional and contemporary measures of sexual liberalism in both women and men. In addition, body appreciation was significantly associated with technology liberalism in men, although the association in women did not reach significance. Finally, both body appreciation and body image flexibility were significantly associated with attitudes toward unconventional sexual practices in women and men.

Previous studies have indicated that the relative absence of negative body image is associated with more liberal sexual behaviors (Ackard et al., 2000; Lemer et al., 2013; Schooler et al., 2005; Shulman & Horne, 2003; Wiederman & Hurst, 1998). The present findings contribute to this body of work by highlighting the unique associations between dimensions of positive body image and liberal sexual behaviors. This may have implications for how the association between body image and sexual liberalism is understood. For example, previous studies have tended to argue that it is the absence of negative behaviors, such as spectating (Masters & Johnson, 1970) or anxious self-scrutiny (Barlow, 1986), during sexual encounters that may lead to greater sexual liberalism. While we do not dispute this perspective, it is also possible that positive body image plays a more direct role in engendering greater sexual liberalism. For example, more positive body image may provide a basis for sex-positive behaviors (e.g., greater sexual openness with a partner, sexual experimentation, sexual sensation seeking) that lead to sexual liberalism and a preference for more unconventional sexual practices.

Of course, our results also suggest that it is body appreciation specifically that is associated with sexual liberalism, although body image flexibility also appears to be associated with attitudes toward unconventional sex. Body appreciation refers to a multi-faceted tendency to accept, respect, and take care of one's body and to filter information in a

body-positive manner (Webb et al., 2015). These attitudinal repertoires may promote approach-seeking, rather than avoidant dispositions, toward sexual stimuli and sexual stimulation. That is, the combination of body acceptance and rejection of narrow definitions of beauty may allow both women and men to seek out a wider range of sexually stimulating experiences and thereby develop more sexually liberal attitudes. In this view, individuals with greater body appreciation may develop tools and skills (e.g., a focus on what the body can do rather than what it looks like) that promote sex-positive repertoires (e.g., greater sensitivity to bodily feelings during sexual activity; Satinsky et al., 2012). Likewise, body image flexibility may allow individuals to utilize acceptance skills to pursue desired sexual experiences, even if those activities are perceived as unconventional.

Beyond these broad-stroke arguments, we note that body appreciation was significantly associated with sexual liberalism as measured using the more traditional SOS, as well as a more contemporary measure. This is important because it suggests that body appreciation is not only associated with sexual liberalism as it was traditionally defined by Fisher et al. (1988), but also encompasses more contemporary sexual diets. However, it is important to note that, while body appreciation was associated with technology liberalism in men, the association was not significant in women. It is possible that gendered scripts complicate the association between body image and the acceptance of technology as part of sexuality. For example, insofar as traditional gendered scripts establish technology as a masculine domain (Helsper, 2010), it may leave women holding more ambivalent attitudes toward the use of technology (e.g., sex toys, cyber-sex, webcams) *vis-à-vis* their body image.

Beyond body image, we also found that sexual minority status was significantly associated with greater sexual liberalism and more positive attitudes toward unconventional sex in women, but not in men. It is possible that sexual orientation may be a more salient aspect of women's sexual identity compared to men's, which helps to explain the present

results. However, given the small sample sizes of sexual minority participants in the present work, this finding and its explanation should be treated with caution. In addition, we also found that BMI was significantly associated with greater general sexual liberalism and technology liberalism in women, but not in men. It should be noted, however, that the unique effects of BMI were generally weaker than that of body image, at least in relation to general sexual liberalism. In terms of technology liberalism, it is possible that technology allows women of larger body sizes to enjoy and explore their sexuality in contexts where they are less likely to be stigmatized for deviating from traditional and prescriptive body standards.

One final aspect of our findings is worth commenting on. While we agree with Rye et al. (2015) that the SLS represents a potentially important advancement on, and addition to, the earlier SOS, the results of our factor analysis suggest that the SLS should not be considered one-dimensional. Rather, it appears that the SLS may tap separate constructs related to general sexual liberalism and liberalism association with sexual use of technology. It was also interesting to note that, while men had higher scores on general sexual liberalism, women had significantly higher scores on technology liberalism. These aspects of our work would benefit from greater scrutiny. Specifically, further examinations of the factor structure of the SLS and the reliability of our uncovered sex differences in other samples are to be welcomed. Such future work would also do well to investigate conceptual space shared between the SOS and SLS, which in turn may help to reduce item redundancy.

Limitations

The main limitation of the present work concerns its cross-sectional nature. While we have interpreted our data in terms of relevant previous work and theorizing, our data cannot speak to the direction of causation. It is possible, for example, that more sexually liberal attitudes lead to more positive body image, rather than vice versa. Prospective and longitudinal studies would help to better understand issues of causation (e.g., Blashill et al.,

2016). Our method of recruitment may have also introduced unintentional biases. Although crowdsourcing marketplace samples are known to be more demographically-diverse than standard Internet samples (Buhrmester, Kwang, & Gosling, 2011), they are also known to have particular personality constellations (e.g., lower Extraversion and self-esteem) compared to traditional, offline samples (Goodman, Cyrder, & Cheema, 2013). In a similar vein, we caution that our data should not be considered representative of the wider U.S. population and it is possible that our findings are culturally circumscribed. In particular, it should be noted that the mean BMI of our sample fell in the overweight category and it may be useful to re-examine the present issues within a group of individuals within the normal BMI weight category.

In addition, we caution that the measures of sexual liberalism used in the present study—while consistent with contemporary operationalizations—may not provide full coverage of the construct. As a simple example, the measure of technology liberalism used in the present study may be anachronistic, as it does not cover the breadth of possible use of technology for sexual purposes in contemporary cultures (e.g., sexting, online hookups, etc.). Likewise, some of the items in our measures may not seem “unconventional” by contemporary standards, particularly as sexual behaviors evolve. Although beyond the scope of the present study, there is a clear need to develop more valid measures of sexual liberalism and/or attitudes toward unconventional sex. The availability of such scales may help scholars to better understand the relationships between body image and sexual outcomes.

Additionally, although we followed best practice in terms of scale selection vis-à-vis body image (Webb et al., 2015), it should be noted that measurement issues might have affected our findings. For example, because the measure of body image flexibility that we used here (i.e., the BI-AAQ) only includes negatively-worded items, there has been some debate as to whether it truly reflects mindful acceptance, flexibility, and compassion that

promotes growth (Tylka & Wood-Barcalow, 2015a). Rather, it is possible that the BI-AAQ measures what some scholars have called “body image experiential avoidance” (Timko, Juarascio, Martin, Faherty, & Kalodner, 2014), that is, an unwillingness to experience negative thoughts and affect, rather than body image flexibility. Likewise, there is debate as to how far the measure of body image pride that we used (i.e., BASES-AP) actually aligns with current conceptualizations of body pride (Tylka & Wood-Barcalow, 2015a). Clearly, our measurement of positive body image may have been hampered by broader measurement limitations in this emerging field.

Finally, we should note the relatively small amount of variance accounted for by positive body image in our regression analyses. Across our analyses, our measures of positive body image explained $\leq 13\%$ of the variance in sexual liberalism and attitudes toward unconventional sex. Future studies could improve on our design by including additional variables, such as indices of sexual functioning (Satinsky et al., 2012) and sexual sensation seeking (Kalichman, 2011). In addition, it may be useful to concurrently examine associations between sexual outcome measures and both positive and negative body image. This would help to provide a clearer picture of the antecedents of sexual outcomes in terms of body image and may also help scholar develops an improved theoretical framework with which to develop hypothesis-led research.

Conclusion

The present results suggest that positive body image, and particularly body appreciation, may be associated with greater sexual liberalism and more positive attitudes toward unconventional sex. If these results can be replicated and extended, they may have implications for practitioners who work with individuals around body image and sexuality, particularly those immersed in the sex-positive tradition. A sex-positive approach means being open, communicative, and accepting of sexual variety and difference (Diamond &

Huebner, 2012; Savin-Williams & Diamond, 2004). Central to this perspective is the notion that allowing for a wide variety of sexual expression can promote improved sexual and psychological well-being. The present results suggest that developing and promoting more positive body image may be one route to assisting both women and men adopt greater sex-positivity.

Compliance with Ethical Standards

This study did not receive any funding. All procedures performed were in accordance with the ethical standards of the University of Westminster and with the 1964 Helsinki declaration and its later amendment or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

REFERENCES

- Ackard, D. M., Kearney-Cooke, A., & Peterson, C. B. (2000). Effects of body image and self-image on women's sexual behaviors. *International Journal of Eating Disorders*, 28, 422-429. doi:10.1002/1098-108X(200012)28:43.3.CO;2-T
- Avalos, L. C., & Tylka, T. L. (2006). Exploring a model of intuitive eating with college women. *Journal of Counseling Psychology*, 53, 486-497. doi:10.1037/0022-1067.53.4.486
- Avalos, L. C., Tylka, T. L., & Wood-Barcalow, N. (2005). The Body Appreciation Scale: Development and psychometric evaluation. *Body Image*, 2, 285-297. doi:10.1016/j.bodyim.2005.06.002
- Barlow, D. H. (1986). Causes of sexual dysfunction: The role of anxiety and cognitive interference. *Journal of Consulting and Clinical Psychology*, 54, 140-148. doi:10.1037/0022-006X.54.2.140
- Blashill, A. J., Tomassilli, J., Biello, K., O'Cleirigh, C., Safren, S. A., & Mayer, K. H. (2016). Body dissatisfaction among sexual minority men: Psychological and sexual health outcomes. *Archives of Sexual Behavior*, 45, 1241-1247. doi:10.1007/s10508-015-0683-1
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2013). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6, 3-5. doi:10.1177/1745691610393980
- Calogero, R. M., & Thompson, J. K. (2009). Sexual self-esteem in American and British college women: Relations with self-objectification and eating problems. *Sex Roles*, 60, 160-173. doi:10.1007/s11199-008-9517-0
- Cash, T. F., Maikkula, C. L., & Yamamiya, Y. (2004, June 29). "Baring the body in the bedroom": Body image, sexual self-schemas, and sexual functioning among college

- women and men. *Electronic Journal of Human Sexuality*. Retrieved from:
<http://mail.ejhs.org/volume7/bodyimage.html>
- Castonguay, A. L., Sabiston, C. M., Crocker, P. R. E., & Mack, D. E. (2014). Development and validation of the Body and Appearance Self-Conscious Emotions Scale (BASES). *Body Image, 11*, 126-136. doi:10.1016/j.bodyim.2013.12.006
- Daniel, S., & Bridges, S. K. (2013). The relationships among body image, masculinity, and sexual satisfaction in men. *Psychology of Men and Masculinity, 14*, 345-351.
doi:10.1037/a0029154
- Daniluk, J. C. (1993). The meaning and experience of female sexuality: A phenomenological analysis. *Psychology of Women Quarterly, 17*, 53-69. doi:10.1111/j.1471-6402.1993.tb00676.x
- Diamond, L. M., & Huebner, D. M. (2012). Is sex good for you? Rethinking sexuality and health. *Social and Personality Psychology Compass, 6*, 54-69. doi:10.1111/j.1751-9004.2011.00408.x
- Dove, N., & Wiederman, M. W. (2000). Cognitive distraction and women's sexual functioning. *Journal of Sex and Marital Therapy, 26*, 67-78.
doi:10.1080/009262300278650
- Eisenberg, M. E., Neumark-Sztainer, D., & Lust, K. D. (2005). Weight-related issues and high-risk sexual behaviors among college students. *Journal of American College Health, 54*, 95-101. doi:10.3200/JACH.54.2.95-101
- Faith, M. S., & Share, M. L. (1993). The role of body image in sexually avoidant behavior. *Archives of Sexual Behavior, 22*, 345-356. doi:10.1007/BF01542123
- Fincham, F. D., & Bradbury, T. N. (1987). The assessment of marital quality: A reevaluation. *Journal of Marriage and the Family, 49*, 797-807.

- Fisher, W. A. (1998). The Sexual Opinion Survey. In C. M. Davis, W. I. Yarber, R. Bauserman, G. Schreer, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 218-221). Thousand Oaks, CA: Sage.
- Fisher, W. A., Byrne, D., White, L. A., & Kelley, K. (1988). Erotophobia-erotophilia as a dimension of personality. *Journal of Sex Research, 25*, 123-151.
doi:10.1080/00224498809551448
- Gillen, M. M., Lefkowitz, E. S., & Shearer, C. L. (2006). Does body image play a role in risky sexual behavior and attitudes? *Journal of Youth and Adolescence, 35*, 243-255.
doi:10.1007/s10964-005-9005-6
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making, 26*, 213-224. doi:10.1002/bdm.1753
- Helsper, E. J. (2010). Gendered Internet use across generations and life stages. *Communication Research, 37*, 352-374. doi:10.1177/0093 650209356439.
- Kalichman, S. C. (2011). Sexual Sensation Seeking Scale. In T. D. Fisher, C. M. Davis, W. L. Yarber, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (3rd ed., pp. 564-565). Thousand Oaks, CA: Sage.
- Koch, P. B., Mansfield, P. K., Thureau, D., & Carey, M. (2005). "Feeling frumpy?" The relationships between body image and sexual response changes in midlife women. *Journal of Sex Research, 42*, 215-223. doi:10.1080/00224490509552276
- La Rocque, C. I., & Cioe, J. (2011). An evaluation of the relationship between body image and sexual avoidance. *Journal of Sex Research, 48*, 397-408.
doi:10.1080/00224499.2010.499522
- Lemer, J. L., Blodgett Salafia, E. H., & Benson, K. E. (2013). The relationship between college women's sexual attitudes and sexual activity: The mediating role of body

image. *International Journal of Sexual Health*, 25, 104-114.

doi:10.1080/19317611.2012.722593

Masters, W. H., & Johnson, V. E. (1970). *Human sexual inadequacy*. Boston, MA: Little, Brown.

Patil, V. H., McPherson, M. Q., & Friesner, D. (2010). The use of exploratory factor analysis in public health: A note on parallel analysis as a factor retention criterion. *American Journal of Health Promotion*, 24, 178-181. doi:10.4278/ajhp.08033131

Pinquart, M. (2010). Ambivalence in adolescents' decision making about having their first sexual intercourse. *Journal of Sex Research*, 47, 440-450.

doi:10.1080/00224490903161639

Rye, B. J., Meaney, G. J., & Fisher, W. A. (2011). Sexual Opinion Survey. In T. D. Fisher, C. M. Davis, W. L. Yarber, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (3rd ed., pp. 231-236). Thousand Oaks, CA: Sage.

Rye, B. J., Serafini, T., & Bramberger, T. (2015). Erotophobic or erotophilic: What are young women's attitudes towards BDSM? *Psychology and Sexuality*, 6, 340-356.

doi:10.1080/19419899.2015.1012108

Sanchez, D. T., & Kiefer, A. K. (2007). Body concerns in and out of the bedroom:

Implications for sexual pleasure and problems. *Archives of Sexual Behavior*, 36, 808-820. doi:10.1007/s10508-007-9205-0

Sandoz, E. K., Wilson, K. G., Merwin, R. M., & Kellum, K. K. (2013). Assessment of body image flexibility: The Body Image-Acceptance and Action Questionnaire. *Journal of Contextual and Behavioral Science*, 2, 39-48. doi:10.1016/j.jcbs.2013.03.002

Satinsky, S., Reece, M., Dennis, B., Sanders, S., & Bardzell, S. (2012). An assessment of body appreciation and its relationship to sexual function in women. *Body Image*, 9,

137-144. doi:10.1016/j.bodyim.2011.09.007

- Savin-Williams, R. C., & Diamond, L. M. (2004). Sex. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 189-232). Hoboken, NJ: Wiley.
- Schooler, D., Ward, L. M., Merriwether, A., & Caruthers, A. (2005). Cycles of shame: Menstrual shame, body shame, and sexual decision-making. *Journal of Sex Research*, *42*, 324-334. doi:10.1080/00224490509552288
- Seal, B. N., Bradford, A., & Meston, C. M. (2009). The association between body esteem and sexual desire among college women. *Archives of Sexual Behavior*, *38*, 866-872. doi:10.1007/s10508-008-9467-1
- Shulman, J. L., & Horne, S. G. (2003). The use of self-pleasure: Masturbation and body image among African American and European American women. *Psychology of Women Quarterly*, *27*, 262-269. doi:10.1111/1471-6402.00106
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). New York, NY: Pearson.
- Timko, C. A., Juarascio, A. S., Martin, L. M., Faherty, A., & Kalodner, C. (2014). Body image avoidance: An under-explored yet important factor in the relationship between body image dissatisfaction and disordered eating. *Journal of Contextual Behavioral Science*, *3*, 203-211. doi:10.1016/j.jcbs.2014.01.002
- Trapnell, P. D., Meston, C. M., & Gorzalka, B. B. (1997). Spectatoring and the relationship between body image and sexual experience: Self-focus or self-valence? *Journal of Sex Research*, *34*, 267-278. doi:10.1080/00224499709551893
- Tylka, T. L., & Wood-Barcalow, N. L. (2015a). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*, *14*, 118-129. doi:10.1016/j.bodyim.2015.04.001

- Tylka, T. L., & Wood-Barcalow, N. L. (2015b). The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image, 12*, 53-67.
doi:10.1016/j.bodyim.2014.09.006
- Weaver, A. D., & Byers, E. S. (2006). The relationships among body image, body mass index, exercise, and sexual functioning in heterosexual women. *Psychology of Women Quarterly, 30*, 333-339. doi:10.1111/j.1471-6402.2006.00308.x
- Webb, J. B., Wood-Barcalow, N. L., & Tylka, T. L. (2015). Assessing positive body image: Contemporary approaches and future directions. *Body Image, 14*, 130-145.
doi:10.1016/j.bodyim.2015.03.010
- Wiederman, M. W. (2012). Body image and sexual functioning. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (Vol. 1, pp. 148-152). San Diego, CA: Academic Press.
- Wiederman, M. W., & Hurst, S. R. (1997). Physical attractiveness, body image, and women's sexual self-schema. *Psychology of Women Quarterly, 21*, 567-580. doi:10.1111/j.1471-6402.1997.tb00131.x
- Wiederman, M. W., & Hurst, S. R. (1998). Body size, physical attractiveness, and body image among young adult women: Relationships to sexual experience and sexual esteem. *Journal of Sex Research, 35*, 272-281. doi:10.1080/00224499809551943
- Winter, V. R., & Satinsky, S. (2014). Body appreciation, sexual relationship status, and protective sexual behaviors in women. *Body Image, 11*, 36-42.
doi:10.1016/j.bodyim.2013.08.004
- Woertman, L., & van den Brink, F. (2012). Body image and female sexual functioning and behavior: A review. *Journal of Sex Research, 49*, 184-211. doi:10.1080/00224499.2012.658586.

Yamamiya, Y., Cash, T. F., & Thompson, J. K. (2006). Sexual experiences among college women: The differential effects of general versus contextual body image on sexuality. *Sex Roles, 55*, 421-427. doi:10.1007/s11199-006-9096-x

Table 1

Sexual Liberalism Scale (SLS; Rye et al., 2015): Standardized Item-Factor Loadings

| SLS Items | Factor 1 | Factor 2 |
|---|-------------|----------|
| 22. The thought of having a “threesome” (sex with two other people) interests me. | .76 | -.13 |
| 29. Picking someone up and having casual sex with them would be enjoyable for me. | .76 | -.31 |
| 2. I like the idea of meeting someone on vacation and having casual sex with them. | .74 | -.26 |
| 23. The thought of having an orgy is terrifying to me. | -.66 | .02 |
| 14. The idea of engaging sexually with someone who is also a sex worker (i.e., prostitute) is arousing to me. | .65 | -.15 |
| 17. If I knew others were watching me have sex, I would become excited. | .64 | -.03 |
| 7. “Dirty talk” (such as, “you make me so wet”) is sexually exciting to me. | .62 | .13 |
| 3. Hiring a sex worker (i.e., prostitute) while on a business trip or weekend getaway is exciting to me. | .62 | .17 |
| 1. Picking someone up and having casual sex with them would not be enjoyable for me. | -.61 | .19 |
| 13. The idea of hiring a sex worker (i.e., prostitute) is arousing to me. | .60 | -.15 |
| 25. I would enjoy giving oral sex (mouth-to-genital stimulation). | .59 | .25 |
| 15. I would be disgusted if I saw two people having sex on their balcony. | -.52 | .27 |
| 24. I would enjoy receiving oral sex (mouth-to-genital stimulation). | .50 | .06 |
| 28. Seeing a partner in a “sexy” outfit does not interest me. | -.50 | .04 |
| 8. Terms such as “eating out” or “blowjob” disgust me. | -.50 | .27 |
| 16. The idea of having sex in a public place (e.g., the beach) makes me anxious. | -.50 | .21 |
| 10. The idea than an object(s) such as leather, shoes, feet, etc. could be sexually enjoyed interests me. | .47 | .04 |
| 9. If a sexual partner asked me to urinate on them, I would find this | .46 | -.07 |

arousing.

| | | |
|--|------------|-------------|
| 27. Wearing “sexy” underwear makes me feel aroused. | .40 | .29 |
| 20. I would use a vibrator (a vibrating mechanical device) while masturbating. | .22 | .69 |
| 21. I would be offended if my partner asked to use a vibrator (a vibrating mechanical device) on me during sex. | .15 | -.68 |
| 6. Using a webcam with someone in a sexy way is fun. | .05 | .65 |
| 19. The thought of using a vibrator (a vibrating mechanical device) with my partner is exciting to me. | .12 | .62 |
| 18. I would be interested in using a dildo (a sex toy shaped like a penis) during a sexual encounter with someone. | .11 | .60 |
| 5. I would pay to have cyber-sex with someone on the Internet. | .28 | .41 |
| 4. Cyber-sex (engaging in sexual activities with someone via the internet in a chat room or chatting programme) is a form of perversion to me. | .19 | -.40 |
| 11. The idea that an object (e.g., feet) could arouse me makes me feel very uncomfortable. | .24 | .26 |
| 12. I would suppress my urge to be sexual with a non-human object (e.g., underwear). | .27 | .21 |
| 26. The thought of a pregnant woman having sex is disgusting. | .09 | .26 |

Note. Values in bold reflect items that loaded onto a particular factor. Response scale: 1 = *Strongly disagree*, 7 = *Strongly agree*.

Table 2

Descriptive Statistics and the Results of Bonferroni-Corrected T-Tests Examining Sex Differences

| | Women | | Men | | <i>t</i> | <i>p</i> | <i>d</i> |
|-------------------------------------|----------|-----------|----------|-----------|----------|----------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | |
| Age (years) | 34.26 | 11.59 | 30.97 | 9.75 | 2.73 | .007 | 0.31 |
| Body mass index | 25.88 | 5.21 | 25.82 | 5.99 | 0.10 | .924 | 0.01 |
| Erotophilia | 3.54 | 0.67 | 3.74 | 0.56 | 2.80 | .005* | 0.32 |
| General Sexual Liberalism | 3.41 | 1.03 | 4.37 | 1.03 | 8.25 | < .001* | 0.93 |
| Technology Liberalism | 4.35 | 1.22 | 3.90 | 1.11 | 3.40 | .001* | 0.38 |
| Attitudes toward unconventional sex | 3.79 | 1.72 | 4.44 | 1.83 | 3.24 | .001* | 0.37 |
| Body appreciation | 3.28 | 0.85 | 3.55 | 0.97 | 2.67 | .008 | 0.30 |
| Authentic body pride | 3.02 | 0.87 | 2.78 | 0.90 | 1.29 | .198 | 0.14 |
| Body acceptance from others | 3.19 | 1.08 | 3.22 | 0.92 | 2.10 | .037 | 0.24 |
| Body image flexibility | 3.66 | 1.48 | 3.10 | 1.52 | 3.33 | .001* | 0.38 |

Note. ^a Bonferroni-corrected *p* = .005.

Table 3

Bivariate Correlations between Variables

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---|-------|-------|-------|-------|--------|-------|-------|--------|-------|--------|
| (1) Erotophilia (SOS) | | .79** | .79** | .61** | .26* | .18* | .12 | .03 | -.07 | .16* |
| (2) General sexual liberalism | .71** | | .72** | .67** | .26* | .27* | .09 | .06 | -.10 | .15 |
| (3) Technology liberalism | .55** | .52** | | .53** | .11 | .08 | .03 | .11 | -.08 | .23** |
| (4) Attitudes toward unconventional sex | .43** | .56** | .45** | | .16* | .18* | .07 | .18* | -.21* | .20* |
| (5) Body appreciation | .28** | .28** | .27** | .19* | | .70** | .49** | .55** | .13 | -.17* |
| (6) Authentic body pride | .19* | .27* | .20* | .23* | .66** | | .39** | .37** | .07 | -.20* |
| (7) Body acceptance from others | .11 | .11 | .03 | .02 | .45** | .46** | | .53** | .03 | -.26* |
| (8) Body image flexibility | .02 | .10 | .02 | .24* | .32** | .20* | .34** | | .25* | -.29** |
| (9) Age | .09 | .08 | .07 | -.11 | .09 | -.01 | .02 | .19* | | .05 |
| (10) Body mass index | .07 | .05 | .09 | .05 | -.22** | -.14* | -.17* | -.27** | .18* | |

Note. Results for women are presented in the top diagonal and men in the bottom diagonal. Women $n = 151$, men $n = 163$; SOS = Sexual Opinion Survey. * $p < .05$, ** $p < .001$.