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Abstract

Given the heightened attention to visual impression management on social media websites, previous research has demonstrated an association between Facebook use and objectified body consciousness among adolescent girls and young women in various Western countries, including the U.S. (e.g., Meier & Gray, 2013). The current study aimed to test whether both young women and men using social networking sites are vulnerable to objectified body consciousness, and to extend this line of research to sexual health outcomes. We tested a path model of Facebook involvement, objectified body consciousness, body shame, and sexual assertiveness and examined whether the negative health consequences of objectified body consciousness were greater in magnitude for women than men. Participants in this study were U.S. college students in the Midwest, 467 women and 348 men, who on average reported using social networking sites for 6 years. They completed survey measures assessing their involvement in Facebook, body surveillance, appearance self-worth, and enjoyment of sexualization. They also reported on feelings of body shame and sexual assertiveness. For both women and men, Facebook involvement predicted objectified body consciousness, which in turn predicted greater body shame and decreased sexual assertiveness. The link between objectified body consciousness and body shame was greater in magnitude for women, but no gender difference was found in the association between body shame and sexual assertiveness. We suggest that social media foster a heightened experience of the self from

an observer's point of view, which has consequences for body image and

sexual agency among women as well as men.

Keywords: objectified body consciousness, social networking sites,

body image, enjoyment of sexualization, sexual assertiveness, gender

differences

Introduction

Over the last decade or so, the Internet has grown as a source of sexual socialization in the U.S. (Subrahmanyam & Smahel, 2011). Young people in the U.S. search for commercially produced sexual content online (Ybarra & Mitchell, 2005) and also use social media to express their own sexuality among peers (Manago, Graham, Greenfield, & Salimkhan, 2008). Studies in the U.S. (Zhao, Grasmuck, & Martin, 2008), and also in the U.K. (Ringrose, 2011), and the Netherlands (Peter & Valkenburg, 2011) have demonstrated that social networking sites are popular venues for adolescents and young adults to curate flattering images of themselves and post sexually provocative photographs to garner attention and validation. Social networking sites also provide users with opportunities to observe friends' photographs, gauge social norms, and evaluate one's standing relative to peers (Livingstone, 2008). In short, with the advent of social media, young people can craft visual self-portrayals and observe peers on the same screens as commercially produced images to learn what is considered sexy and attractive.

Perhaps because of a heightened attention to visual impression management on social networking sites, studies have found associations between Facebook use and indices of objectified body consciousness among adolescent girls and young women in the U.S. (Meier & Gray, 2013), Australia (Tiggemann & Miller, 2010), and Belgium (Vandenbosch & Eggermont, 2012). Objectified body consciousness is a preoccupation with how one's body

appears to others (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). According to *Objectification Theory*, women living in sociocultural environments that persistently and pervasively value the female body as an object for others' use or entertainment are socialized to experience themselves from an observer's point of view, and thus engage in habitual body monitoring to appraise their worth in society. The potential psychological consequences of objectified body consciousness include shame and anxiety about the body, decreased awareness of internal bodily needs, and sexual dysfunction (Moradi & Huang, 2008). Media use and peer interactions are two primary vehicles by which the socialization of objectified body consciousness is thought to occur in the U.S. (Keery, van den Berg, & Thompson, 2004; Ridolfi, Myers, Crowther, & Ciesla, 2011), and they coalesce on social networking sites.

When social interactions move into disembodied multi-media environments, women, and also men, may experience themselves from the observer point of view. In fact, two studies, one in the U.S. (Manago, 2013) and the other in Estonia (Siibak, 2010), have demonstrated that young men are drawn to posting sexually alluring photographs of themselves on social networking sites and show concern about how attractive they appear to others. This trend is happening in concert with the increasing representation of men as sex objects in U.S. commercial media (Rohlinger, 2002). There is also evidence that boys and men in the U.S. (Michaels, Parent, & Moradi, 2013), Switzerland (e.g. Knauss, Paxton, & Alsaker, 2008), and Belgium

(Vandenbosch & Eggermont, 2013) internalize an objectified body consciousness from exposure to commercially produced media such as television programs, magazines, and pornographic websites. It stands to reason that men's use of social media might also elevate their susceptibility to objectified body consciousness.

The purpose of the current study is to examine associations between Facebook involvement and objectified body consciousness among both young women and men in the U.S. and to extend previous research on this topic to sexual health. In the highly contested debates over the sexualization of culture and sexual health, scholars in the North America, Australia, and Europe have tended to focus on the influence of media on young people as consumers (Gill, 2012). Yet, interactive media that feature young people themselves as objects of consumption may also be influential in sexual health. Crafting online portrayals likely increase a preoccupation with one's appearance, which could then lead to decreased attunement with internal desires during sexual activity. Thus, we explore whether objectified body consciousness and body shame arising from social media use predicts lower levels of sexual assertiveness, which includes comfort with, and confidence to communicate clearly about, sexual desires.

Furthermore, as more men become invested in crafting attractive personas on social media platforms, their behaviors may resemble those associated with femininity ideology in U.S. society, in particular, prioritizing one's appearance for the sake of others' pleasure and for the validation of

one's self-worth (Tolman, Impett, Tracy, & Michael, 2006). The social

changes happening in the U.S. with the proliferation of social media can offer

insights into how cultural patterns of gendered performances may shift with

the penetration of interactive media in everyday life, and the potential

implications for sexual health. We suspect that both women and men in the

U.S. are vulnerable to internalizing an objectified body consciousness from

social media use; however, from a gender role perspective, we must consider

how that experience may also be influenced by differences in agency and

power that are associated with female versus male bodies in the U.S. (Bordo,

1999; Parent & Moradi, 2011), and the way that heterosexual cultural scripts

in U.S. society ascribe active sexual roles to men and passive, gatekeeping

sexual roles to women (Kim, Sorsoli, Collins, Zybergold, Schooler, & Tolman,

2007). For these reasons, we suspected that the psychological health

consequences deriving from objectified body consciousness and social media

use would be greater for women than men in our sample.

Facebook Involvement and Objectified Body Consciousness

Social networking sites stand out among various Internet sites as a

socialization medium for three main features of objectified body

consciousness: internalization of culturally dominant ideals of attractiveness,

body surveillance, and valuations of the self based on appearance. In one of

the first studies connecting objectified body consciousness to social media,

Tiggemann and Miller (2010) found that time spent on MySpace and

Facebook, but not Google nor YouTube, was associated with endorsement of

the thin ideal and appearance comparison among adolescent girls in Australia. A follow-up study with another adolescent Australian sample found that frequency of general Internet use correlated with thin ideals and body surveillance, but girls using Facebook specifically scored significantly higher on these measures, and the number of Facebook friends was linked to body surveillance (Tiggemann & Slater, 2013).

Research delving deeper into Facebook use has found support for specific peer practices that could evoke objectified body consciousness. One such practice is viewing peers' photos on the newsfeed and on profile pages. Vandenbosch and Eggermont (2012) found that the more adolescent girls in Belgium reported observing sexually objectifying content on their Facebook newsfeed, the more they endorsed Western beauty ideals, prioritized appearance in their self-worth, and reported engaging in body surveillance. The photos circulating in one's network likely reflect broader cultural ideals for gender and physical allure, and peer images may be perceived as more relevant than celebrity images in determining the standards to which one should aspire (Manago et al., 2008). At the same time, Facebook users in the U.S. tend to underestimate the extent to which peers are selectively advertising flattering aspects of themselves, and may therefore engage in upward social comparisons that can lower their self-regard (Chou & Edge, 2012). Indeed, experimental work has shown that U.S. college women and men report lower levels of satisfaction with how they look after viewing attractive social networking site profiles (Haferkamp & Kramer, 2011). Peer

images on Facebook represent a powerful yardstick for social comparison, yet they are not necessarily more realistic than images disseminated in commercial media.

Another social practice likely to foster objectification is posting photographs of oneself. Stefanone, Lackaff, and Rosen (2011) found that photo sharing on Facebook was correlated with U.S. college women's and men's increased emphasis on appearance in their self-worth. It is not surprising that those who direct time and attention to posting photos of themselves on Facebook prioritize external appearances in their sense of self. It is also conceivable that public validation on social networking sites further reinforces and socializes ongoing appearance self-worth. Physically attractive, often sexualized, images on social networking sites attract attention and social approbation in the form of public comments, such as the proverbial "hot" posted under the photo (boyd, 2008; Manago et al., 2008). When young women and men broadcast attractive images of themselves to large networks of peers, they may be seeking and receiving validation of their value vis-à-vis cultural standards of physical appeal. Indeed, Meier and Gray (2013) found that, among adolescent girls in the U.S., higher levels of photo sharing predicted not only higher levels of appearance self-worth, but also endorsement of the thin ideal. In the Netherlands, women who observed sexually objectifying material on Facebook rewarded with appreciative comments were more likely to incorporate sexually objectifying material into their own profiles (de Vries & Peter, 2013). As they observe and post photos

on social media, young people are forging a sense of self through social constructions of visual standards of self-worth.

Along this vein, we propose that overall *involvement* in the online cultural context of Facebook, rather than one isolated activity, is key to understanding how social media socializes an objectified body consciousness. According to the *Uses and Gratifications* approach to media socialization (Rubin, 1994), Facebook would be a powerful socializing agent when it is significant and meaningful in one's daily life. Those who are heavily involved in Facebook will consistently view *and* contribute to content, but also, they will rely on the technology to coordinate their social lives and cultivate social relationships, invest more significance in the online feedback they receive, and devote more time, energy, and meaning into the maintenance of their online image. Facebook involvement signifies investment in a cultural milieu where social interactions mediated by images on a screen promote a disembodied experience of the self. To engage in social networking sites is to engage in a visual construction of the self on a digital screen (Salimkhan, Manago, & Greenfield, 2010; Zhao et al., 2008). The participatory nature of social media, not only Facebook but now also Instagram and Twitter, may foster an external perspective of the self to an even greater extent than "old" media. In fact, Vandenbosch and Eggemont (2012) found that, among Belgian girls, only Facebook use, not commercial media such as music videos and magazines, was directly associated with body surveillance.

Objectified Body Consciousness, Body Shame, and Sexual Assertiveness

Constructing and viewing oneself as a sexual object may have many adverse consequences for mental and sexual health. One such consequence, according to objectification theories, is body shame (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Numerous correlational and experimental studies in the U.S. demonstrate an association between objectified body consciousness and body shame in adolescent girls and young women (e.g., Grabe, Hyde, & Lindberg, 2007; Quinn, Kallen, Twenge, & Fredrickson, 2006). For example, in one experiment, young women who were instructed to try on a swimsuit had higher levels of objectification and body shame than women who were instructed to try on a sweater (Quinn et al., 2006). A longitudinal study showed that 11 year-old girls reporting higher levels of body surveillance had greater body shame at 13 (Grabe et al., 2007). Body surveillance also predicted shame for boys, but the strength of the association was greater for girls.

In general, the consequences of objectified body consciousness tend to be more severe for women than men in the U.S. (Gervais, Vescio, & Allen, 2011; Moradi & Huang, 2008). In fact, research on objectification theory and men's body dissatisfaction has been equivocal. Some researchers have found associations between self-objectification, body surveillance, body shame, and negative self-esteem in U.S. men (Cole, Davidson, & Gervais, 2013; Grabe et al., 2007; Lindberg, Hyde, & McKinley, 2006), whereas others

working with samples in the U.S. (McKinley, 2006) and in Australia (Strelan &

Hargreaves, 2005) have not. One explanation for the weaker link between

body surveillance and shame among men is that women's appearances are

more persistently scrutinized than men's appearances in the U.S. Another

explanation is that in contrast to the passivity implicit in the idealized thin

female body, power is implicit in the idealized muscular male body (Parent &

Moradi, 2011). Indeed, Bernard, Gervais, Campomizzi, and Klein (2012) found

in a U.S. sample that sexualized female bodies are more likely to be

perceived as inanimate objects, whereas sexualized male bodies are more

likely to be perceived as human beings. The negative mental health

consequences of objectified body consciousness are thought to hinge

precisely on this feeling of dehumanization and absence of power

(Fredrickson & Roberts, 1997). Thus, in contrast to men, women are seeking

to live up to not only unrealistic standards, but beauty ideals that may be

ultimately lacking in agency.

For this reason, women with objectified body consciousness and body

shame may also be more likely than men to suffer from sexual dysfunction

rooted in a lack of sexual agency. Objectified body consciousness has been

found to be associated with self-consciousness during sexual activity among

women in the U.S. (Claudat, Warren, & Durette, 2012) and in Australia

(Tiggemann & Williams, 2012), lower levels of desire and arousal among

women in Australia (Steer & Tiggemann, 2008), and lower levels of sexual

esteem and sexual satisfaction among women in the U.K. (Calogero &

Thompson, 2009). Fredrickson and Roberts (1997) theorized that

experiencing the body from the outside distracts women from engaging in

the flow of present moment activities and thus interferes with women's

awareness of their internal bodily states. Instead of being attuned to their

desires and communicating their preferences and boundaries, women with

objectified body consciousness and body shame may be more preoccupied

with how their bodies are being evaluated or how their bodies are serving as

instruments for their partners' pleasure (Liss, Erchull, & Ramsey, 2011).

Evidence in the U.S. suggests that objectification works in concert with

traditional femininity ideologies that exalt female purity and sexual

innocence to inhibit women from asserting themselves in sexual encounters,

which then leads to a cascade of negative outcomes such as unprotected sex

or lack of sexual satisfaction (Curtin, Ward, Merriwether, & Caruthers, 2011).

      Fewer studies have examined objectified body consciousness, body

shame, and men's sexual functioning; yet, there is evidence that poor body

image is also detrimental to men's psychological sexual health. Schooler and

Ward (2006) found associations between discomfort with one's appearance

and decreased sexual assertiveness in surveys with U.S. college men,

suggesting that young men who feel body shame may experience insecurity

negotiating sexual encounters. Among U.S. adolescent boys, body

dissatisfaction is associated with less positive first coital experiences (Smiler,

Ward, Caruthers, & Merriwether, 2005) and in one rare longitudinal study,

Vandenbosch and Eggermont (2014) found that Belgian adolescent boys

(and girls) who reported higher levels of body surveillance and appearance self-worth reported higher levels of body self-consciousness during sexual encounters 6 months later. We speculate that regardless of gender, those with a sense of inadequacy about their body feel self-consciousness during sexual activities. However, boys and men in the U.S. may also internalize cultural expectations that they initiate and pursue sexual intercourse, in contrast to women who are expected to use their bodies to entice, but resist, men's longings (Crawford & Popp, 2003; Impett, Schooler, & Tolman, 2006). In other words, men may derive a sense of sexual agency from gender role norms that grant men greater freedom and privilege to satisfy their sexual needs and thus, their sexual agency may not be as wholly dependent on having an alluring physique. For this reason we expected that objectified body consciousness and body shame would predict greater decrements in sexual assertiveness among women compared to men.

Current Study

This study compares women and men in a test of a model of Facebook involvement, objectified body consciousness, body shame, and sexual assertiveness. We assessed Facebook involvement in terms of time spent on the website, the importance of the website to one's social life, and level of active (posting content) and passive (observing others) engagement. Objectified body consciousness was conceptualized in terms of body surveillance, appearance self-worth, and enjoyment of sexualization. Enjoyment of sexualization has been identified as a distinct dimension of

objectified body consciousness that denotes deriving pleasure and satisfaction from being viewed as a sexual object (Liss et al., 2011). We maintain that some young men in the millennial generation also enjoy being seen as sex objects, given the implicit value of sexualized men's bodies in U.S. media (Frederick, Fessler, & Hasleton, 2005) and social media (Manago, 2013), and the ways in which young people in the U.S. (Manago et al., 2008) and the U.K (Ringrose, 2011) perceive sexually provocative photos to be a surefire way to attract attention, and thus build popularity and social capital online. Based on studies in the U.S. suggesting that young men are also becoming increasingly invested in their appearances with the proliferation of social network site use (Manago, 2013; Stefanone et al., 2011), we hypothesized that both women and men would be susceptible to greater objectified body consciousness with more Facebook involvement. However, in light of heterosexual cultural scripts in U.S. society and past literature showing more robust effects of objectified body consciousness on women's body image and sexual health, we predicted that the consequences of objectified body consciousness for body shame and decreased sexual assertiveness would be greater in magnitude for women than men.

We hypothesized a path model for women and men (see Figure 1) in which objectified body consciousness and body shame mediate the relationship between Facebook involvement and sexual assertiveness, with specific hypotheses as follows:

1) Facebook involvement will predict greater objectified body consciousness.

2) Greater objectified body consciousness will predict greater body shame.

3) Higher levels of body shame will predict lower levels of sexual assertiveness.

We also hypothesized gender differences in the model as follows:

4) The positive association between objectified body consciousness and body shame will be stronger among women compared to men.

5) The negative association between body shame and sexual assertiveness will be stronger among women compared to men.

Method

Participants

Participants were 1191 undergraduates attending a large Midwestern University. Because sexual assertiveness is a primary outcome variable for this study, only participants who completed at least half of the items on this scale were included in the final sample. Our initial analyses indicated that many participants did not fully complete this measure, either because they were embarrassed to answer, were fatigued, or, most likely, they did not have enough sexual experience. Indeed, of the participants who did *not* complete this measure, 84.7% indicated that they were virgins, suggesting that they did not have enough sexual experience to answer the questions. The final sample included 467 women and 348 men. Table 1 lists the sociodemographic characteristics of women and men in the sample, including age, years of social networking site use, ethnicity, parent education, sorority/fraternity membership, sexual orientation, and virginity

status. The majority of participants were European-American, heterosexual, from well-educated family backgrounds, and most reported that they began using a social networking site in their early teens so have been using them for about six years.

Procedure

Participants were recruited from the Introductory Psychology Subject Pool. All students enrolled in the introductory psychology classes are required to either participate in research or complete a related assignment. Students signed up for time-slots for studies on a webpage listing all potential research participation opportunities. All studies were identified by a number, only. Participants arrived at an on-campus lab at their designated time, along with a small number of other students (usually 4-5). At the start of the sessions, participants were told that the survey was part of a study on media use and social relationships in the new millennium. Participants then completed the study via a pen-and-paper survey. The full survey packet also included measures, in a randomized order, assessing students' gender ideologies, sexual attitudes, parental socialization experiences, and several personality instruments that were not analyzed here. Administration of the full survey took approximately 45-60 minutes. After turning in their completed research packet, participants were debriefed as to the purpose of the study. Institutional review board approval and written consent were obtained for all participants.

Measures of Facebook Involvement

Facebook Time Per day. The survey asked students, "In the past week, on average, approximately how many minutes per day have you spent on this social networking site?" Students circled their responses on a scale of 1-6: (1) "less than 10 minutes per day" (2) "10-30 minutes per day" (3) 31-60 minutes per day" (4) "1-2 hours per day" (5) "2-3 hours per day" (6) "more than 3 hours per day."

Facebook Investment. Six items were adapted from the Facebook Intensity Scale (Ellison, Steinfield, & Lampe, 2007), which indexes the importance of Facebook to one's social life. An example item is, "*Facebook has become part of my daily routine*." Two items ("*I'm proud to tell people I am on Facebook*" and "*I feel that I am part of the Facebook community*") were replaced with two new items, "*I feel like my social life would suffer if I were unable to use Facebook*" and "*Most of my friends have a profile on Facebook*." Participants indicated their response on a three-point Likert scale, from disagree to agree and items were averaged for a total final score. Cronbach's alpha on this scale was .76.

Facebook Passive Use. A measure of the extent to which participants are consuming content on Facebook was created for this study. Participants were first asked to indicate the social networking site they use the most and then to answer the following questions based on that social networking site (the majority of the sample, 95%, reported that Facebook was the social networking site they used the most). The prompt on the survey read, "*On an average visit to this social networking site*:" which was

followed by a series of six questions about how much content participants

consume. Sample items included, "*How many distinct stories/status updates*

in your feed do you read?" and "*How many times do you "like" what*

someone has posted?" Possible responses ranged from (0) "none" (1) "1-2"

(2) "3-6" (3) "7-10" (4) "11-15" (5) "15+." Responses were averaged for a

final score and Cronbach's alpha on this scale was .84.

Facebook Active Use. A measure of the extent to which participants

are posting and uploading information on Facebook was also created for this

study. Following the passive use scale, participants were asked a series of

questions about the frequency with which they post content on their social

networking site of choice. The prompt read, "*How frequently do you*:"

followed by eight items such as, "*post pictures? "update your status?*"

"*change your profile picture?*" Possible responses ranged from (0) "Never"

(1) "Rarely" (2) "Sometimes" (3) "Frequently" (4) "Every day" (5) "Several

times a day." Responses to the eight items were averaged for a final score.

Cronbach's alpha on this scale was .86.

Measures of Objectified Body Consciousness

Appearance Self-Worth. To assess the degree to which participants

base their self-worth on their physical appearances, we used items from the

Gordon and Ward Self-Worth Measure (2000). For this scale, participants are

given the following prompt: "*How would you feel about yourself if*," and are

asked to indicate the extent to which they would feel better or worse about

themselves in each of 23 hypothetical incidents. Nine of these items

reflected their external appearances. Sample items include, "*you were wearing an outfit you know looks good on you*" and "*you gained 10 pounds*." Responses are indicated using a 7-point scale anchored by "*Ugh, I would feel worthless*" at -3, and "*Wow! I would feel really great about myself*" at +3. Higher scores, based on mean absolute values across the 9 items, reflect the extent to which external appearance affects one's self-worth. Cronbach's alpha on this scale was .70 for women and .74 for men.

Body Surveillance. The Surveillance sub-scale of the Objectified Body Consciousness Scales – Youth (OBC-Y) (Lindberg et al., 2006) was used to index the extent to which participants habitually monitor their appearances. Participants indicated their level of agreement with each of four items on a 6-point scale from (1) "strongly disagree" to (6) "strongly agree." A sample item reads: "*During the day, I think about how I look many times*." Mean scores were computed such that higher scores indicate greater self-surveillance. Cronbach's alpha on this scale was .88 for women and .88 for men.

Enjoyment of sexualization. The Enjoyment of Sexualization Scale (Liss et al., 2011) was used to capture the extent to which participants seek and enjoy experiencing themselves as a sexual object for the pleasure of others. Participants noted their level of agreement with each of eight items using a 6-point scale anchored by (1) "strongly disagree" and (6) "strongly agree." Sample items included, "*I feel empowered when I look hot*" and "*I like showing off my body*." Some scale items were adjusted so that they

would be applicable to both men and women; for example, "*I feel complimented when men/women whistle at me*." Mean scores were computed across the eight items such that higher scores indicted a greater enjoyment of sexualization (ES). Initial internal reliabilities reported by the authors (alphas of .85 and .86) were comparable to the reliability we obtained among our sample of men (.89) and women (.88). Visser, Sultani, Choma, and Pozzebon (2014) also found good internal reliability using the ES with a college male sample (.85).

Measures of Body Shame and Sexual Assertiveness

Body Shame. Body shame was measured via the 5-item Shame subscale of the OBC-Y (Lindberg et al., 2006). Respondents indicated their level of agreement with each of the five items using a 6-point scale, from (1) "strongly disagree" to (6) "strongly agree." An example item includes, "*I feel like I must be a bad person when I don't look as good as I could*." Responses were averaged for a final score and higher scores indicate greater body shame. Cronbach's alpha for women was .82, and for men it was .81. Although the measure of body shame from this scale is often used hand-in-hand with the body surveillance sub-scale, we chose to conceptually separate out the behavior of body surveillance from negative feelings about one's body (shame). In other words, we conceptualized body surveillance as one component of an overall consciousness of the self from the outside, and sought to examine the various mental health outcomes of this externalized consciousness, one of them being body shame. In fact, Moradi and Huang

(2008) have written that collapsing shame into a measure of objectified body consciousness can obfuscate the distinction between the mental state of objectification and the negative psychological outcome. This separation has also been employed in some instances by the scale's creator (e.g., Grabe et al., 2007).

Sexual Assertiveness. Sexual assertiveness was assessed using the Hurlbert Index of Sexual Assertiveness (Hurlbert, 1991), which measures the levels of assertiveness experienced in the sexual context with a typical partner. Participants indicated their level of agreement with each of 25 items using a 5-point scale anchored by "rarely" at 0 and "all of the time" at 5. The option was also given to respond N/A, if it was felt that an item or experience was not applicable. Example items included, "*I speak up for my sexual feelings*" and "*I feel comfortable initiating sex with my partner*." Negatively worded items were reverse-coded, and scores were averaged to create a sexual assertiveness index for each student; higher scores indicated higher levels of sexual assertiveness with a typical partner. Our sample included only participants who answered more than half of the questions (at least 13 items). Cronbach's alpha reliability for women was .89 and for men was .85.

Results

Descriptive statistics for all variables in the model are presented in Table 2. A one-way MANOVA indicated significant gender differences in the omnibus test, Wilks's $\Lambda = .81$, $F(9, 786) = 21.03$, $p < .001$. Inspection of

individual variables indicated that men and women differed significantly on most of the variables but the effect sizes were very small. Women reported significantly greater Facebook involvement across all four measures, with the largest difference in Facebook active use. On measures of objectified body consciousness, women reported significantly higher levels of body surveillance and appearance self-worth, but women and men did not differ in enjoyment of sexualization. Women reported significantly higher levels of body shame. Men's scores were slightly higher on sexual assertiveness, but this difference was not significant. Zero-order correlations among variables are shown in Table 3.

Testing the Model

Analyses were conducted using EQS 6.2. Reported fit statistics use a robust adjustment to account for violations of multivariate normality (Chou, Bentler, & Satorra, 1991). Model fit is reported with Satorra-Bentler scaled chi-square (S-B χ^2); adequacy of fit was assessed using standardized root mean square residual (SRMR), Comparative Fit Index (CFI) and Root Mean Square of Approximation (RMSEA). Fit was considered to be good if CFI values were equal to or higher than .95 and SRMR and RMSEA values were close to or smaller than .05 (Hu & Bentler, 1999; Savalei & Bentler, 2006).

Measurement of Predictor and Outcome Variables

Sexual assertiveness and body shame were each assessed with one measure, so they were modeled as measured variables rather than latent constructs. Facebook involvement and objectified body consciousness were

assessed with multiple measures and were thus modeled as latent factors.

The adequacy of the measurement model for these constructs was tested

separately in women and men. Confirmatory factor analysis (CFA) was used

to fit a model with four measures of Facebook involvement and three

measures of objectified body consciousness. Latent factors were fixed to 1.0

and allowed to correlate; all paths to measured variables were freely

estimated.

Among women, the fit of the measurement model for the two latent

factors was excellent, S-B χ^2= 25.93, df = 13, p = .02; CFI = .985, SRMR

= .027, RMSEA = .038 (90% CI = .016, .060). Among men, the fit of the

measurement model was also good, S-B χ^2= 35.54, df = 13, p = .003; CFI

= .976, SRMR = .035, RMSEA = .055 (90% CI = .031, .080). All factor

loadings were statistically significant in both samples (ps < .001).

Testing the Hypothesized Model in Women and Men

The model in which objectified body consciousness and body shame

mediate the relationship between Facebook involvement and sexual

assertiveness was fit separately in the female and male samples. Factor

loadings and structural path weights for women and men are shown in Figure

2. The fit of the model was just slightly short of ideal standards in the

sample of women, S-B χ^2= 69.22, df = 26, p < .001; CFI = .94, SRMR = .05,

RMSEA = .06 (90% CI = .04, .08) and also in the sample of men S-B χ^2=

56.47, df = 26, p < .001; CFI = .95, SRMR = .06, RMSEA = .06 (90% CI = .04,

.08).

Supporting Hypothesis 1, the path predicting objectified body consciousness from Facebook involvement was positive and significant in women, $z = 6.01$, $p < .001$, and men, $z = 5.86$, $p < .001$, indicating that women and men with a higher degree of Facebook involvement tend to report a higher degree of objectified body consciousness. Supporting Hypothesis 2, objectified body consciousness predicted significantly higher levels of body shame in both women, $z = 11.48$, $p < .001$, and men, $z = 7.78$, $p < .001$. Supporting Hypothesis 3, both women, $z = -5.25$, $p < .001$, and men, $z = -2.96$, $p < .01$, showed lower levels of sexual assertiveness with increasing body shame.

To fully test the significance of the mediated path from Facebook involvement to sexual assertiveness, we re-fitted the model, adding a direct path from Facebook involvement to sexual assertiveness and including a test of the significance of all direct and indirect paths in the model. Among women, the model fit similarly to the original, S-B $\chi^2 = 68.97$, df $= 25$, $p < .001$; CFI $= .94$, SRMR $= .05$, RMSEA $= .06$ (90% CI $= .04$, .08).   The direct path from Facebook involvement to sexual assertiveness was significant, $\beta = -.12$, $z = -2.28$, $p < .05$. When the mediators were partialled, the relationship between Facebook involvement and sexual assertiveness was reduced to non-significance, $\beta = .04$, $z = -0.79$, ns. In addition, the indirect path from Facebook involvement to sexual assertiveness through the two mediators was significant, $z = -3.77$, $p < .05$. These results provide strong evidence that objectified body consciousness and body shame mediate the

relationship between Facebook involvement and sexual assertiveness for women. Among men, the model with the direct path from Facebook involvement to sexual assertiveness also had a similar fit to the original model, S-B χ^2= 56.81, df = 25, p < .001; CFI = .95, SRMR = .03, RMSEA = .06 (90% CI = .04, .08). However, in contrast to women, for men the direct path from Facebook involvement to sexual assertiveness was not significant, β = .07, z = 1.08, ns. Taylor, MacKinnon, and Tein (2008) note that it is possible to demonstrate mediation in the absence of a significant direct effect, provided that each of the paths in the mediated effect is significantly different from zero. As noted above, each of the paths was significant in the sample of men; in addition the compound indirect path from Facebook involvement to sexual assertiveness through the two mediators was significant, z = -2.84, p < .05. Thus, there is evidence that objectified body consciousness and body shame mediate the relationship between Facebook involvement and body shame for men, although the evidence for mediation is clearer among women than it is among men.

Gender Differences in the Hypothesized Model

Comparisons between women and men in the hypothesized mediated model were tested following guidelines described by Byrne (2006). To provide a baseline, the hypothesized model was fit simultaneously across women and men, with all paths freely estimated within each sample. This unconstrained model fit well, S-B χ^2= 126.34, df = 52, p < .001; CFI = .95, SRMR = .05, RMSEA = .06 (90% CI = .05, .07). To test whether

measurement loadings are significantly different for women and men, an additional model was fit with all measurement paths constrained to be equal across samples; structural paths were freely estimated. The constrained model did not fit significantly worse compared to the unconstrained model, S-Bχ^2 = 129.01, df = 58 p < .001; CFI = .95, SRMR = .06, RMSEA = .06 (90% CI = .04, .07); ΔS-Bχ^2 = 2.80, Δdf = 6, p = .83. This indicates that women and men did not differ in the way that the Facebook involvement and objectified body consciousness variables measured their respective constructs.

To test for predicted gender differences in the hypothesized model, (Hypotheses 4 and 5), the full model was again fit across both women and men, with all structural paths additionally constrained to be equal across both samples. The final model, with all structural paths constrained to be equal was a significantly poorer fit compared to the baseline, unconstrained model, S-Bχ^2 = 146.43, df = 61 p < .001; CFI = .94, SRMR = .07, RMSEA = .06 (90% CI = .05, .01); ΔS-Bχ^2 = 20.09, Δdf = 9, p = .02, indicating the presence of gender differences in the model. Multivariate Lagrange Multiplier (LM) tests were used to test for significance of each constrained path. LM tests to release individual constraints indicated that model fit would be significantly improved if the constraint on the structural path predicting body shame from objectified body consciousness was released, $\Delta \chi^2$ = 15.44, Δdf = 1, p < .001.   The significance of the released constraint indicates that women and men differed in the extent to which objectified body consciousness predicted body shame, providing support for Hypothesis

4. Specifically, the path for both women and men is strong and positive, but it is significantly stronger for women than for men. No additional constraints were significant, indicating that women and men did not differ in the extent to which body shame predicts sexual assertiveness. Thus, Hypothesis 5 was not supported by the data.

Discussion

In the early years of the Internet, some feminist scholars put forth the possibility that the disembodied nature of computer-mediated communication would enable fluid gender enactments online and present new possibilities for a breakdown in gender role binaries (O'Brien, 1999; Rodino, 1997). In this study, we found evidence for a different kind of disembodiment fostered in the online environments of social networking sites, one in which the body is experienced from the outside looking in. This kind of disembodiment transcends gender binaries and is not limited to only those who are posting sexy pictures of themselves online. Rather, our results showed that overall involvement in the cultural milieu of Facebook is associated with higher objectified body consciousness among both women and men. That is, regardless of gender, the more young people are active and engaged in Facebook as part of their social lives, the more frequently they engage in body surveillance, the greater their self-worth fluctuates as a function of their physical appearance, and the greater their enjoyment of being perceived as a sex object. The more they experience these components of objectified body consciousness, the more susceptible they

are to feelings of body shame, which was then associated with lower levels of sexual assertiveness.

Our results highlight potential changes in gender roles as social interactions move into online multi-media environments. Participation in social media that entails high levels of visual impression management may tip the playing field, so to speak, increasing young men's risk for objectified body consciousness, subsequent body shame, and decreased sexual agency, detriments to well-being that have long been considered a women's issue in many Western cultures. Objectification may be evoked with the one-to-many style of communication on social networking sites, such that users become vigilant about how they will appear to others as they reflect, edit, and manicure self-portrayals for an audience of followers (Manago, 2014). Moreover, there is a tendency for young people to compare themselves to peers in their networks, who are also strategically portraying themselves in a positive light. Chou and Edge (2012) found that the more acquaintances U.S. college students have in their networks (that is, the less they know about the "real" offline lives of peers in their network), the more likely they are to believe that others have better lives than they do. Social comparison plus tools to manicure an online self could foster social media users' sense of control over the regulation of appearances to adhere to mainstream aesthetics; at the same time, this sense of control could lead to a sense of inadequacy when failing to live up to idealized online personas. Perceived control over one's appearance is thought to play a key role in the connection

between body surveillance and body shame, according to objectification theory (McKinley & Hyde, 1996).

We had hypothesized that the consequences of objectified body consciousness from social media use would be more severe for women than men. We reasoned that the intense scrutiny of women's bodies combined with the heterosexual script in the U.S. (Kim et al., 2007) would perpetuate greater susceptibility for body shame and sexual dysfunction among women using social media. We found that the connection between objectified body consciousness and body shame was indeed greater in magnitude for women, but there was not a statistically significant gender difference in the strength of the association between body shame and sexual assertiveness. Thus, while new media create socialization contexts in which both men and women are vigilant about their physical appearance and enjoy being perceived as sex objects, more acute and persistent pressures on women to embody dominant standards of beauty may result in higher levels of body shame for women in the U.S. However, body shame may undermine feelings of comfort with one's sexuality and confidence in sexual communications similarly for women and men. Our data suggest that body shame is detrimental to sexual assertiveness regardless of one's gender role expectations. Alternatively, perhaps we are seeing subtle shifts in expectations and norms in the heterosexual script such that it exerts a less powerful influence on differences in sexual agency accorded to women and men. More research is needed to understand contemporary gender role scripts and how they

intersect with feelings of body dissatisfaction within sexual encounters.

The current study not only adds a gender role dynamic to the accumulation of research on social media and young women's self-objectification in Australia (Tiggemann & Miller, 2010) and Belgium (Vandenbosch & Eggermont, 2012), but further points to the implications of new media practices for sexual self-efficacy. In this sense, our study has implications for the sexualization of culture and sexual empowerment debates (Gill, 2012). A dilemma among feminist scholars has been how to identify agency and power in young women's sexual expression in the context of a "porno-aesthetic" in mainstream Western cultures whereby women's bodies are commodified and used to sell products (Attwood, 2009; Gill, 2012). When girls and women express their sexuality online through photos and other kinds of imagery, are they feeling a greater sense of sexual self-determination in challenging society's limitations of their sexuality, or are they experiencing a false consciousness as a result of growing up in a culture that equates constricted forms of physical beauty and sexual allure with the worth and significance of an individual in her society? We found that enjoyment of sexualization, when conceptualized as a component of a broader construct of objectified body consciousness, could have negative consequences for sexual health, for both women's and men's sexual agency. Our results contest the notion that enjoyment of sexualization is empowering for women or men because it predicts increased body shame, and subsequently, decreased confidence in asserting personal desires, needs,

and boundaries. However, it is also important to remember that concerns about the sexualization of girls and women can rob adolescent girls and women of their agency in contesting dominant discourses regarding gender and sex (Lerum & Dworkin, 2009). Other studies in the U.K. have found that the Internet can be a place for young women and men to transgress restricted notions of gender and sexuality (Attwood, 2011; Van Doorn, 2010). It remains to be seen whether young women and men who are expressing themselves in sexualized ways to challenge dominant discourses and aesthetics, in perhaps less mainstream online spaces than Facebook, Twitter, or Instagram, might show less body shame and more sexual assertiveness than what was found in this study.

In addition, posting sexy photos online may not have negative sexual health consequences on its own, especially if those posting feel they live up to culturally normative standards of attractiveness. In contrast to our study, Visser and colleagues (2014) conceptualized the enjoyment of sexualization separately from objectified body consciousness and found that, among Canadian college women and men who rated themselves high in physical attractiveness, higher levels of sexualization predicted higher levels of self-esteem, extraversion, and greater numbers of sexual partners. Like Visser and colleagues, we found no gender differences in the Enjoyment of Sexualization scale, although they removed the item referring to whistling as they found it worked differently for female and male participants. Their study suggests that enjoyment of sexualization could also be distinctive from

objectified body consciousness and perhaps not as detrimental to mental health. Although enjoyment of sexualization may be a more positively valenced aspect of objectified body consciousness, especially for those who feel they are measuring up to idealized standards, it is still indicative of an externalized experience of one's sexuality, and therefore may direct focus toward how one's body is pleasing to others and away from one's internal desires and pleasures. More work needs to be done to understand how engaging in online presentations of the self and anticipating the gaze and approval of an audience translate and become integrated into offline experiences of sexual activity.

Limitations

Although we used structural equation modeling to estimate predictive effects of variables, it is important to remember that our data were collected at one point in time and are correlational; therefore our findings do not necessarily indicate causation. Facebook involvement could also be a proxy for general engagement with U.S. media or a proxy for appearance investment; thus it may not be Facebook use per se that predicts greater levels of objectified body consciousness but rather, overall involvement in entertainment media or a focus on physical appearances. We also want to acknowledge a weakness in the study in that there were a high number of participants who were dropped from the final analyses because they did not complete the sexual assertiveness measure. A high proportion of these drop-outs were virgins and thus might be considered an inappropriate target

sample for our research questions; however, Facebook involvement may influence sexual agency among these individuals in ways that we were not able to measure or consider. In addition, we did not collect measures of BMI nor self-ratings of attractiveness to understand how Facebook involvement and objectified body consciousness may lead to differing outcomes for those who perceive their bodies conform more or less to idealized cultural standards.

Another limitation in this study is a lack of cultural and sexual heterogeneity in the sample. Our sample was primarily European-American, heterosexual, and from middle to upper socioeconomic status families. We may not have captured the more diverse set of experiences with social media that likely exist among various populations. The lack of diversity also prevents us from exploring how different cultural values and meanings influence how young people participate in Facebook, which may lead to differing sexual health outcomes. Moreover, there may be important differences in how sexual minority youth experience online sexual expressions. On the one hand, sexual minority youth may feel a greater sense of empowerment in feeling free to express their sexuality online; on the other hand, they may also be vulnerable to internalizing external forms of self-worth into their feelings about themselves. Martins, Tiggemann, and Kirkbride (2007) found that gay men in the U.S. report higher levels of self-objectification, body shame, body dissatisfaction, and drive for thinness compared to heterosexual men, and a recent experimental study in the U.S.

found that exposure to media images of muscular men resulted in negative body image only among sexual minority, not heterosexual, men (Michaels et al., 2013). These findings suggest that the heightened appearance culture among sexual minority men may amplify the risk factors for objectified body consciousness, shame, and sexual assertiveness compared to heterosexual men in our study.

Another limitation in this study is the potential weakness of Hurlbert's (1991) scale of sexual assertiveness to measure sexual health equivalently in women in men. The scale was originally developed for use with women and has been used most often with U.S. women in research (e.g., Curtin et al., 2011), although it has also been used with U.S. men (e.g., Schooler & Ward, 2006). In the current study, reliability of the 25-item scale was similarly high for women and men, and it seemed reasonable to use the full scale for both groups. However, in preliminary analyses, we found that the underlying factor structure of the scale is different for women and men. In particular, among women but not men, a factor emerged that was best characterized by acceding to unwanted sex. Among men but not women, a factor emerged that was best defined by ability to speak openly about sexual issues. Full description of this factor analysis is beyond the scope of this paper, but it is clear that more research should be done to understand how this scale operates with men and women. In addition, other forms of sexual health should be measured outside of sexual assertiveness to better understand the various dimensions in sexual well-being related to social

media use. Risky sexual behaviors, such as unprotected casual sex and engaging in sexual activities under the influence of alcohol, are additional aspects of sexual health that should be investigated. For men's sexual health, inability to connect and communicate intimately with a sexual partner could be a more relevant element of sexual health. The experiences of self-objectification may have differential ramifications for sexual health according to the heterosexual script where men may feel that their bodies are *inadequate* whereas women may feel that their bodies are *undesirable*.

Despite these limitations, this study is an important first step in understanding changing media and peer socialization contexts for sexual development among both young women and men in the new millennium. Notably, our sample of college students represents the first cohort of young people to experience their entire adolescence after the advent of social networking sites. This cohort of young people may be a harbinger of continued shifts in gender and sexuality with social interactions increasingly taking place through disembodied, technology-mediated communications where the subject becomes the object.

References

Attwood, F. (2009). *Mainstreaming sex: The sexualization of Western culture.*

London: I.B. Tauris.

Attwood, F. (2011). Through the looking glass? Sexual agency and

subjectification online. In R. Gill and C. Scharff (Eds), *New femininities,*

post-feminism, neoliberalism and identity (pp. 203-214). London:

Palgrave. doi:10.1057/9780230294523.

Bernard, P., Gervais, S.J., Allen, J., Campomizzi, S., & Klein, O. (2012).

Integrating sexual objectification with object versus person recognition:

The sexualized-body-inversion hypothesis. *Psychological Science, 23*, 469-

471. doi:10.1177/0956797611434748.

Bordo, S. (1999). *The male body: A new look at men in public and in private*.

New York, NY: Farrar, Straus and Giroux.

boyd, d.m. (2008). Why youth heart social network sites: The role of

networked publics in teenage social life. In D. Buckingham (Ed.), *Youth,*

identity, and digital media, (pp.119-142). Cambridge, MA: MIT Press.

Byrne, B. M. (2006). *Structural equation modeling with EQS: Basic concepts,*

applications and programming (2nd edition). Mahwah, NJ: Erlbaum.

Calogero, R.M., & Thompson, J.K. (2009). Potential implications of the

objectification of women's bodies for women's sexual satisfaction. *Body*

Image, *6*, 145-148. doi:10.1016/j.bodyim.2009.01.001.

Chou, C.-P., Bentler, P. M., & Satorra, A. (1991) Scaled test statistics and

   robust standard errors for non-normal data in covariance structure

   analysis: A Monte Carlo study. *British Journal of Mathematical and*

   Statistical Psychology, 44, 347-357. doi:10.1111/j.2044-

   8317.1991.tb00966.x.

Chou, H., & Edge, N. (2012). They are happier and having better lives than I

   am: The impact of using Facebook on perceptions of others' lives.

   Cyberpsychology, Behavior, and Social Networking, 15, 117-121.

   doi:10.1089/cyber.2011.0324.

Claudat, K., Warren, C.S., & Durette, R.T. (2012). The relationships between

   body surveillance, body shame, and contextualized body concern during

   sexual activities in ethnically diverse female college students. *Body*

   Image, 9, 448-454. doi:10.1016/j.bodyim.2012.05.007.

Cole, B., Davidson, M.M., & Gervais, S.J. (2013). Body surveillance and body

   shame in college men: Are men who self-objectify less hopeful? *Sex Roles*,

   69, 29-41. doi:10.1007/s11199-013-0282-3.

Crawford, M., & Popp, D. (2003). Sexual double standards: A review and

   methodological critique of two decades of research. *Journal of Sex*

   Research, *40*, 13-26. doi:10.1080/00224490309552163.

Curtin, N., Ward, L.M., Merriwether, A., Caruthers, A. (2011). Femininity

   ideology and sexual health in young women: A focus on sexual

   knowledge, embodiment, and agency. *International Journal of Sexual*

   Health, 23, 48-62. doi:10.1080/19317611.2010.524694.

de Vries, D.A., & Peter, J. (2013). Women on display: The effect of portraying

the self online on women's self-objectification. *Computers in Human*

Behavior, 29, 1483-1489. doi:10.1016/j.chb.2013.01.015.

Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook

"friends:" Social capital and college students' use of online social network

sites. *Journal of Computer Mediated Communication, 12*, 1143-1168.

doi:10.1111/j.1083-6101.2007.00367.x.

Frederick, D. A., Fessler, D.T., & Haselton, M.G. (2005). Do representations of

male muscularity differ in men's and women's magazines? *Body Image*, *2*,

81-86. doi:10.1016/j.bodyim.2004.12.002.

Fredrickson, B.L., & Roberts, T.A. (1997). Objectification Theory: Toward

understanding women's lived experiences and mental health risks.

Psychology of Women Quarterly, 21, 173-206. doi:10.1111/j.1471-

6402.1997.tb00108.x.

Gervais, S.J., Vescio, T.K., & Allen, J. (2011). When what you see is what you

get: The consequences of the objectifying gaze for women and men.

Psychology of Women Quarterly, 35, 5-17.

doi:10.1177/0361684310386121.

Gill, R. (2012). Media, empowerment and the 'sexualization of culture'

debates. *Sex Roles*, *66*, 736-745. doi:10.1007/s11199-011-0107-1.

Gordon, M.K., & Ward, L.M. (2000). *I'm beautiful, therefore I'm worthy:*

Assessing associations between media use and adolescents' self-worth.

Paper presented at the biennial meeting of the Society for Research on

Adolescence, Chicago.

Grabe, S., Hyde, J.S., Lindberg, S. (2007). Body objectification and depression

in adolescents: The role of gender, shame, and rumination. *Psychology of

Women Quarterly, 31*, 164-175. doi:10.1111/j.1471-6402.2007.00350.x.

Haferkamp, N., & Kramer, N. (2011). Social comparison 2.0: Examining the

effects of online profiles on social networking sites. *Cyberpsychology,

Behavior, and Social Networking, 14,* 309-314.

doi:10.1089/cyber.2010.0120.

Hu, L. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance

structure analysis: Conventional criteria versus new alternatives.

Structural Equation Modeling, 6, 1-55. doi:10.1080/10705519909540118.

Hurlbert, D. F. (1991). The role of assertiveness in female sexuality: A

comparative study between sexually assertive and sexually nonassertive

women. *Journal of Sex and Marital Therapy*, *17*, 183-190.

doi:10.1080/00926239108404342.

Impett, E.A., Schooler, D., & Tolman, D.L. (2006). To be seen and not heard:

Femininity ideology and adolescent girls' sexual health. *Archives of

Sexual Behavior, 35*, 131-144. doi:10.1007/s10508-005-9016-0.

Keery, H., van den Berg, P., & Thompson, J.K. (2004). An evaluation of the

Tripartite Influence Model of body dissatisfaction and eating disturbance

with adolescent girls. *Body Image, 3,* 237-251.

doi:10.1016/j.bodyim.2004.03.001.

Kim, J.L., Sorsoli, C.L., Collins, K., Zylbergold, B.A., Schooler, D., & Tolman,

    D.L. (2007). From sex to sexuality: Exposing the heterosexual script on

    primetime network television. *The Journal of Sex Research, 44*, 145-157.

    doi:10.1080/00224490701263660.

Knauss, C., Paxton, S.J., & Alsaker, F.D. (2008). Body dissatisfaction in

    adolescent boys and girls: Objectified body consciousness, internalization

    of media body ideal, and perceived pressure from media. *Sex Roles, 59*,

    633-643. doi:10.1007/s11199-008-9474-7.

Lerum, K., & Dworkin, S.L. (2009). "Bad girls rule": An interdisciplinary

    feminist commentary on the report of the APA task force on the

    sexualization of girls. *Journal of Sex Research*, *46*, 250-263.

    doi:10.1080/00224490903079542.

Lindberg, S. M., Hyde, J.S., & McKinley, N.M. (2006). A measure of objectified

    body consciousness for preadolescent and adolescent youth. *Psychology

    of Women Quarterly*, *30*, 65-76. doi:10.1111/j.1471-6402.2006.00263.x.

Liss, M., Erchull, M.J., Ramsey, L.R. (2011). Empowering or oppressing?

    Development and exploration of the enjoyment of sexualization scale.

    Personality and Social Psychology Bulletin, 37, 55-68.

    doi:10.1177/0146167210386119.

Livingstone, S. (2008). Taking risky opportunities in youthful content

    creation: teenagers' use of social networking sites for intimacy, privacy,

    and self-expression. *New Media Society, 10*, 393-411.

    doi:10.1177/1461444808089415.

Manago, A.M. (2013). Negotiating a sexy masculinity on MySpace. *Feminism & Psychology*, *23*, 478-497. doi:10.1177/0959353513487549.

Manago, A.M. (2014). Identity development in the digital age: The case of social networking sites. In K.C. McLean and M. Syed (Eds.), *The Oxford handbook of identity development* (pp. 508-524). New York: Oxford University Press. doi:10.1093/oxfordhb/9780199936564.013.031.

Manago, A.M., Graham, M.B., Greenfield, P.M., & Salimkhan, G. (2008). Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology, 29*, 446-458. doi:10.1016/j.appdev.2008.07.001.

Martins, Y., Tiggemann, M., & Kirkbride, A. (2007). Those speedos become them: The role of self-objectification in gay and heterosexual men's body image. *Personality and Social Psychology Bulletin*, *33*, 634-647. doi:10.1177/0146167206297403.

McKinley, N.M. (2006). Longitudinal gender differences in objectified body consciousness and weight-related attitudes and behaviors: Cultural and developmental contexts in the transition from college. *Sex Roles*, *54*, 159-173. doi:10.1007/s11199-006-9335-1.

McKinley, N.M., & Hyde, J.S. (1996). The objectified body consciousness scale: Development and validation. *Psychology of Women Quarterly, 20*, 181-215. doi:10.1111/j.1471-6402.1996.tb00467.x.

Meier, E.P., & Gray, J. (2013). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior and Social Networking, 17*, 199-206. doi:10.1089/cyber.2013.0305.

Michaels, M.S., Parent, M.C., & Moradi, B. (2013). Does exposure to

    muscularity-idealizing images have self-objectification consequences for

    heterosexual and sexual minority men? *Psychology of Men & Masculinity,*

    14, 175-183. doi:10.1037/a0027259.

Moradi, B., & Huang, Y. (2008). Objectification theory and psychology of

    women: A decade of advances and future directions. *Psychology of*

    Women Quarterly, 32, 377-398. doi:10.1111/j.1471-6402.2008.00452.x.

O'Brien, J. (1999). Writing in the body: Gender (Re)production in online

    interaction. In P. Kollock and M. Smith (Eds), *Communities in Cyberspace*

    (pp. 76-104). London: Routledge.

Parent, M.C., & Moradi, B. (2011). His biceps become him: A test of

    objectification theory's application to drive for muscularity and propensity

    for steroid use in college men. *Journal of Counseling Psychology, 58*, 246-

    256. doi:10.1037/a0021398.

Peter, J. & Valkenburg, P. M. (2011). The influence of sexually explicit

    internet material on sexual risk behavior: A comparison of adolescents

    and adults. *Journal of Health Communication*, *16*, 750-765.

    doi:10.1080/10810730.2011.551996.

Quinn, D. M., Kallen, R. W., Twenge, J. M., & Fredrickson, B. L. (2006). The

    disruptive effect of self-objectification on performance. *Psychology of*

    Women Quarterly, *30*, 59–64. doi:10.1111/j.1471-6402.2006.00262.x.

Ridolfi, D.R., Myers, T.A., Crowther, J.H., & Ciesla, J.A. (2011). Do appearance

    focused cognitive distortions moderate the relationship between social

comparisons to peers and media images and body image disturbance?

Sex Roles, 65, 491-505. doi:10.1007/s11199-011-9961-0.

Ringrose, J. (2011). Are you sexy, flirty, or a slut? Exploring 'sexualization'

and how teen girls perform/ negotiate digital sexual identity on social

networking sites. In R. Gill and C. Scharff (Eds), *New femininities, post-*

feminism, neoliberalism and identity (pp. 99-116). London: Palgrave.

Rohlinger, D. (2002). Eroticizing men: Cultural influences on advertising and

male objectification. *Sex Roles*, *46,* 61-74. doi:10.1023/A:1016575909173.

Rodino, M. (1997). Breaking out of binaries: Reconceptualizing gender and its
relationship to

language in computer mediated communication. *Journal of Computer
Mediated*

Communication 3: 0. doi:10.1111/j.1083-6101.1997.tb00074.x.

Rubin, A. (1994). Media uses and effects: A uses-and-gratifications

perspective. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in*

theory and research (pp. 417-436). Hillsdale, NJ: Erlbaum.

Salimkhan, G., Manago, A. M., & Greenfield, P. M. (2010). The construction of

the virtual self on MySpace. *CyberPsychology: Journal of Psychosocial*

Research on Cyberspace, *4*, art 1.

Savalei, V., & Bentler, P. (2006). Structural equation modeling. In R. Grover

& M. Vriens (Eds.), *The handbook of marketing research: Uses, misuses*,

and future advances (pp. 330-365). Thousand Oaks, CA: Sage

Publications.

Schooler, D., & Ward, L.M. (2006). Average Joes: Men's relationships with

   media, real bodies, and sexuality. *Psychology of Men & Masculinity, 7*, 27-

   41. doi:10.1037/1524-9220.7.1.27.

Siibak, A. (2010). Constructing masculinity on a social network site. *Young:*

   Nordic Journal of Youth Research, 18, 403-425.

   doi:10.1177/110330881001800403.

Smiler, A.P, Ward, L.M., Caruthers, A., & Merriwether, A. (2005). Pleasure,

   empowerment, and love: Factors associated with positive first coitus.

   Sexuality Research and Social Policy, *2*, 41-55.

   doi:10.1525/srsp.2005.2.3.41.

Steer, A., & Tiggemann, M. (2008). The role of self-objectification in women's

   sexual functioning. *Journal of Social and Clinical Psychology, 27*, 205-225.

   doi:10.1521/jscp.2008.27.3.205.

Stefanone, M.A., Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth

   and social networking site behavior. *Cyberpsychology, Behavior, and*

   Social Networking, 14, 41-49. doi:10.1089/cyber.2010.0049.

Strelan, P., & Hargreaves, D. (2005). Women who objectify other women: The

   vicious circle of objectification? *Sex Roles, 52*, 707-712.

   doi:10.1007/s11199-005-3737-3.

Subrahmanyam, K. & Smahel, D. (2011). *Digital youth: The role of media in*

   development. New York: Springer.

Taylor, A.B., MacKinnon, D.P., & Tein, J.Y. (2008). Tests of the three-path

   mediated effect. *Organizational Research Methods, 11*, 241–269.

   doi:10.1177/1094428107300344.

Tiggemann, M., & Miller, J. (2010). The Internet and adolescent girls' weight

   satisfaction and drive for thinness. *Sex Roles, 63*, 79-90.

   doi:10.1007/s11199-010-9789-z.

Tiggemann, M., & Slater, A. (2013). NetGirls: The Internet, Facebook, and

   body image concern in adolescent girls. *International Journal of Eating

   Disorders, 46,* 630-633. doi:10.1002/eat.22141.

Tiggemann, M., & Williams, E. (2012). The role of self-objectification in

   disordered eating, depressed mood, and sexual functioning among

   women: A comprehensive test of objectification theory. *Psychology of

   Women Quarterly, 36*, 66-75. doi:10.1177/0361684311420250.

Tolman, D.L., Impett, E.A., Tracy, A.J., & Michael, A. (2006). Looking good,

   sounding good: Femininity ideology and adolescent girls' mental health.

   Psychology of Women Quarterly, *30*, 85-95. doi:10.1111/j.1471-

   6402.2006.00265.x.

Van Doorn, N (2010). The ties that bind: The networked performance of

   gender, sexuality and friendship on MySpace. *New Media Society, 12,*

   583-602. doi:10.1177/1461444809342766.

Vandenbosch, L., & Eggermont, S. (2012). Understanding sexual

   objectification: A comprehensive approach toward media exposure and

   girls' internalization of beauty ideals, self-objectification, and body

surveillance. *Journal of Communication, 62*, 869-887. doi:10.1111/j.1460-

2466.2012.01667.x.

Vandenbosch, L., & Eggermont, S. (2013). Sexualization of adolescent boys:

Media exposure and boys' internalization of appearance ideals, self-

objectification, and body surveillance. *Men & Masculinities, 16*, 283-306.

doi:10.1177/1097184X13477866.

Vandenbosch, L., & Eggermont, S. (2014). The three step process of self-

objectification: Potential implications for adolescents' body consciousness

during sexual activity. *Body Image, 11*, 77-80.

doi:10.1016/j.bodyim.2013.10.005.

Visser, B.A., Sultani, F., Choma, B.L., & Pozzebon, J.A. (2014). Enjoyment of

sexualization: Is it different for men. *Journal of Applied Social Psychology*.

doi:10.1111/jasp.12241

Ybarra, M. & Mitchell, K.J. (2005). Exposure to Internet pornography among

children and adolescents: A national survey. *CyberPsychology & Behavior*,

8, 473-486. doi:10.1089/cpb.2005.8.473.

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on

Facebook: Digital empowerment in anchored relationships. *Computers in

Human Behavior*, *24*, 1816-1836. doi:10.1016/j.chb.2008.02.012.