Published in final edited form as:

Arch Sex Behav. 2016 July ; 45(5): 1241–1247. doi:10.1007/s10508-015-0683-1.

Body Dissatisfaction Among Sexual Minority Men: Psychological and Sexual Health Outcomes

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Abstract

Body dissatisfaction is common among sexual minority (i.e., gay and bisexual) men; however, few studies have investigated the relationship between body dissatisfaction and psychosexual health variables among this population. The data that do exist are exclusively cross-sectional, casting uncertainty regarding temporal associations. Thus, the aims of the current study were to assess the prospective relationship between body dissatisfaction and psychological and sexual health outcomes. Participants were 131 gay and bisexual men who completed a battery of self-report measures across two time points (baseline and 3-month follow-up), including assessment of body dissatisfaction, depressive symptoms, and sexual health variables (sexual self-efficacy and sexual anxiety). Generalized linear modeling was employed to assess the prospective relationship between body dissatisfaction and outcomes variables, accounting for non-normal distributions. Body dissatisfaction significantly predicted elevated depressive symptoms ($B = .21, p = .01$), lower sexual self-efficacy ($B = -.22, p = .04$), and elevated sexual anxiety ($B = .05, p = .03$). Elevated body dissatisfaction is prospectively associated with negative psychological and sexual health outcomes. Given the high prevalence of body image concerns in sexual minority men, depression and/or HIV/STI prevention programs may benefit from routinely assessing for body dissatisfaction among this population, and addressing those who report concerns.

Keywords

Body dissatisfaction; Sexual minority men; Depression; Sexual health

Introduction

Sexual minority (i.e., gay and bisexual) men experience elevated body dissatisfaction compared to heterosexual men, with up to 32 % of sexual minority men reporting negative body image (Peplau et al., 2008). Objectification theory may aid in explaining this disparity (Fredrickson & Roberts, 1997; Wiseman & Moradi, 2010). This theory posits that sexual minority men are under increased pressure to achieve an idealized (i.e., lean and muscular) body, as they, similar to heterosexual women, are attempting to attract men as sexual partners, and men, regardless of sexual orientation, place a stronger emphasis on physical appearance compared to women (e.g., Feingold, 1990). This self-objectification leads to constant monitoring of one's body, assessing how it looks, rather than attending to how it feels or functions. Subsequently, this surveillance may lead to body dissatisfaction when the body is contrasted against the typically unattainable idealized image.

Not only is body dissatisfaction common among sexual minority men, but it is also associated with a host of negative outcomes. Among heterosexual males, for example, elevated body dissatisfaction is associated with increased depressive symptoms (e.g., Bergeron & Tylka, 2007; Paxton, Eisenberg, & Neumark-Sztainer, 2006). There has been much less research conducted on body image and depression among sexual minority men. However, limited cross-sectional data have revealed that elevated body dissatisfaction is significantly associated with increased depressive symptoms among HIV-uninfected (e.g., Brennan, Craig, & Thompson, 2012) and HIV-infected sexual minority men (Blashill, Goshe, Robbins, Mayer, & Safren, 2014; Blashill & Vander Wal, 2010). For instance, Blashill (2010) found significant moderate-sized bivariate associations between higher body fat dissatisfaction/muscle dissatisfaction and elevated depressive symptoms among an Internet-based sample of gay and bisexual men, providing preliminary evidence that body dissatisfaction may serve as a risk factor for increased depression among sexual minority men.

Body dissatisfaction is also intimately tied with sexual health—constructs that both center on the body. Individuals who are dissatisfied with their appearance may find sex challenging and anxiety provoking, as attention is focused on their body/body parts (Cash, Maikkula, & Yamamiya, 2004; Sanchez & Kiefer, 2007). However, only one known study has examined the impact of body dissatisfaction on sexual quality of life among sexual minority men. In this study, Peplau et al. (2008) found that among gay men, lesbians, and heterosexual men and women, gay men reported the worst sex quality of life as a function of their body image, with 42 % of gay men stating their body image negatively impacted the quality of their sex life. Thus, preliminary data suggest that body dissatisfaction may disproportionately negatively influence sexual quality of life among sexual minority men.

Self-efficacy, with respect to one's sexual health, is defined as confidence in one's ability to assert their needs and desires in sexual situations, which may also include the ability to

successfully negotiate condom use. In many social-cognitive models of HIV sexual risk reduction, self-efficacy serves as an important mechanism between cognitive processes (e.g., social norms of condom use, knowledge about HIV, and expectancies regarding condom use) and intentions to use/actual condom use behaviors (Bandura, 1994). Self-efficacy has routinely been found to predict actual condom use (e.g., Baele, Dusseldorp, & Maes, 2001). Body dissatisfaction has also recently been found to negatively impact self-efficacy. In a sample of HIV-infected sexual minority men, Blashill et al. (2014) found that elevated body disturbance significantly predicted poorer self-efficacy, which subsequently predicted condomless sex with serodiscordant male partners. Further, a recent meta-analysis found a significant, moderate, inverse relationship between body dissatisfaction and condom use self-efficacy (Blashill & Safren, 2015). Given these findings, body dissatisfaction may also serve as a distal risk factor for HIV transmission through poor sexual self-efficacy, and subsequently, condomless sex.

Although there have been several studies that have assessed the relationship between body dissatisfaction, depression, and sexual health among sexual minority men, these studies have exclusively consisted of cross-sectional designs. Cross-sectional designs offer a first step in highlighting covariance between a set of variables, but are unable to address temporality in the ordering of constructs, which provides a stronger basis for identifying risk factors for a given outcome. The current study seeks to address gaps and limitations of this prior work, and aims to assess the prospective relationship between body dissatisfaction and depressive symptoms and sexual health measures among a sample of sexual minority men assessed across two time points. It is hypothesized that elevated body dissatisfaction will prospectively predict elevated depressive symptoms, sexual anxiety, and poorer sexual self-efficacy.

Method

Participants and Procedure

Participants were 131 sexual minority men, enrolled in a parent study at a community health center in New England aimed at identifying acute HIV infection using home rapid HIV testing. Inclusion criteria included: age 18 or older, HIV-uninfected, and sexual risk behaviors (i.e., four or more male anal sex partners in past 6 months, or condomless anal sex with a HIV-positive or status unknown male partner in past 6 months, or exchange of money, gifts, shelter, or drugs for sex with a male partner in past 6 months). Participants who reported current use of pre-exposure prophylaxis (PrEP) at screening were not enrolled. See Table 1 for sample characteristics.

Enrolled participants attended a baseline office visit and attended follow-up visits for a 6–9 month period. At office visits, participants received HIV testing and counseling, and completed computer-assisted questionnaires assessing demographics, psychosocial measures, and sexual practices. Data for these analyses were taken from the computer-assisted questionnaire at Wave 1 (baseline) and Wave 2 (3-month follow-up). Initially, at Wave 1, 199 participants were enrolled with a 66 % retention rate between Wave 1 and Wave 2. There were no significant differences noted between completers and those who dropped

out on any study-related variables. All procedures were approved by the IRB at Fenway Health.

Measures

Body Dissatisfaction—Participants completed the Appearance Evaluation (AE) subscale from the Multidimensional Body-Self Relations Questionnaire (MBSRQ; Brown, Cash, & Mikulka, 1990). It consists of 7 items, responded to on a 5-point Likert scale ranging from 1 “Definitely disagree” to 5 “Definitely agree.” Sample items include “My body is sexually appealing” and “I like my looks just the way they are.” Items were reverse coded to aid in interpretation, so that higher scores denote elevated body dissatisfaction. For the current sample, $\alpha = .87$.

Depressive Symptoms—Symptoms of depression were measured using the continuous total score from the 9-item Depression Severity Scale of the Patient Health Questionnaire (PHQ; Spitzer, Kroenke, Williams, & the Patient Health Questionnaire Primary Care Study Group, 1999), a self-report instrument designed to detect symptoms of major depressive disorder in primary care settings. Participants reported the frequency in which they experienced each symptom with response options ranging from 0 “*Not at all*” to 3 “*Nearly every day*.” Sample items include “feeling down, depressed, or hopeless” and “thoughts that you would be better off dead or of hurting yourself in some way.” Due to gamma regression requiring data to exclusively consist of positive integers (see Statistical Analyses section), the responses were re-scaled to range from 1 to 4. For the current sample, internal consistency at baseline was $\alpha = .91$.

Sexual Self-Efficacy—Participants also completed the sexual self-efficacy subscale of the Multidimensional Sexual Self-Concept Questionnaire (MSSCQ; Snell, 1998). The Sexual Self-Efficacy scale measures the belief an individual has regarding their ability to effectively negotiate sexual decision-making. The scale includes 5 items that are responded to via a 5-point Likert scale, ranging from 0 “Not at all characteristic of me” to 4 “Very characteristic of me” with higher scores denoting increased sexual self-efficacy. Sample items include “I have the ability to take care of any sexual needs and desires that I may have” and “I am competent enough to make sure that my sexual needs are fulfilled.” For the current sample, internal consistency at baseline was $\alpha = .89$.

Sexual Anxiety—Sexual anxiety was assessed via the Sexual Anxiety subscale of the Multidimensional Sexual Self-Concept Questionnaire (MSSCQ; Snell, 1998). The Sexual Anxiety scale measures the tendency to feel tension, discomfort, and anxiety in regards to an individual’s sexual life. The scale includes 4 items that are responded to via a 5-point Likert scale, ranging from 0 “Not at all characteristic of me” to 4 “Very characteristic of me” with higher scores denoting increased sexual anxiety. Sample items include “I worry about the sexual aspect of my life” and “I feel anxious when I think about the sexual aspects of my life.” The responses were re-scaled to range from 1 to 5. For the current sample, internal consistency at baseline was $\alpha = .77$.

Demographics—Age, ethnicity (Hispanic vs. non-Hispanic), race (White vs. non-White), relationship status (Do you have a primary partner, e.g., boyfriend, partner, and spouse?), and sexual orientation (gay, bisexual, straight) were assessed.

Statistical Analyses

Data were modeled within generalized linear models (SPSS version 22). Three independent models were analyzed, corresponding to each of the dependent variables (i.e., depressive symptoms, sexual anxiety, and sexual self-efficacy). Distributions of the dependent variables were examined, and gamma regressions were selected for variables with positive skew (i.e., depressive symptoms and sexual anxiety), whereas a linear regression was selected for sexual self-efficacy given that the normality assumptions were not violated. Further, robust estimation was used for calculating standard errors. In each model, the Wave 2 variable was entered as the dependent variable, with its corresponding Wave 1 variable entered as a control variable, along with age, relationship status, race, and ethnicity. Control variables were selected given past studies noting body image to vary as a function of age, race/ethnicity, and relationship status (Giles & Close, 2008; McCabe & Ricciardelli, 2004; Ricciardelli, McCabe, Williams, & Thompson, 2007). Finally, the primary predictor variable—Wave 1 body dissatisfaction—was also entered into the model. By controlling for demographics and the dependent variables at Wave 1, one is able to parcel out the variance in Wave 2-dependent variables that is accounted for by their corresponding Wave 1 variables and demographics at Wave 1. An overall model is determined to be significant if the Likelihood ratio χ^2 test is $p < .05$.

Results

The overall model testing depressive symptoms was significant, Likelihood ratio $\chi^2(5) = 95$, $p < .001$. Body dissatisfaction at Wave 1 significantly predicted elevated depressive symptoms at Wave 2, $B = .21$, $SE = .08$, 95 % CI (.05, .37), Wald $\chi^2 = 6.2$, $p = .01$. This finding indicates that a 1-unit increase in body dissatisfaction at Wave 1 was predictive of a .21 increase in depressive symptoms at Wave 2. The overall model testing sexual anxiety was also significant, $\chi^2(5) = 60$, $p < .001$. Body dissatisfaction at Wave 1 significantly predicted elevated sexual anxiety at Wave 2, $B = .05$, $SE = .02$, 95 % CI (.004, .09), Wald $\chi^2 = 4.7$, $p = .03$. This finding indicates that a 1-unit increase in body dissatisfaction at Wave 1 was predictive of a .05 increase in sexual anxiety at Wave 2. The overall model testing sexual self-efficacy was also significant, $\chi^2(5) = 104$, $p < .001$. Body dissatisfaction at Wave 1 significantly predicted lower sexual self-efficacy at Wave 2, $B = -.22$, $SE = .10$, 95 % CI (–.42, –.01), Wald $\chi^2 = 4.3$, $p = .04$. This finding indicates that a 1-unit increase in body dissatisfaction at Wave 1 was predictive of a .22 decrease in sexual self-efficacy at Wave 2. See Table 2 for intercorrelations among study variables, and Table 3 for the full regression models.

Discussion

The current study was the first to examine the prospective relationship between body dissatisfaction and psychosexual outcomes among sexual minority men. Results indicated that higher levels of body dissatisfaction are prospectively associated with increased

depressive symptoms, sexual anxiety, and poorer sexual self-efficacy. Thus, given its common prevalence, and association with numerous negative outcomes, body dissatisfaction represents a serious risk factor to the psychological well-being, sexual well-being, and potentially, the sexual health of sexual minority men. Further, this study builds upon previous cross-sectional studies, and highlights the temporal ordering of body dissatisfaction as a prospective risk factor for depression and psychosexual health.

The current study was not without limitations. Although the two-panel design is an improvement over cross-sectional studies, three or more waves of data are required to assess non-linear prospective relationships and it cannot demonstrate causality. We were also unable to assess bidirectional relationships between body dissatisfaction and the outcome variables, as body dissatisfaction was only measured at Wave 1. However, past studies among adolescents boys and girls suggest that body dissatisfaction prospectively predicts depression, but the inverse was not supported (e.g., Holsen, Kraft, & Roysamb, 2001). Further, assessments were based on self-reports. Future studies may benefit from clinician-based markers of body dissatisfaction and depression, such as the Yale Brown Obsessive Compulsive Scale modified for Body Dysmorphic Disorder (BDD-YBOCS; Phillips et al., 1997), the Body Dysmorphic Disorder Examination (BDDE; Rosen & Reiter, 1996), and the Montgomery Asberg Depression Rating Scale (MADRS; Montgomery & Asberg, 1979); however, sexual health variables may be more validly assessed via self-report, as participants may engage in less social desirable responding. The sample was drawn from sexual minority men living in the greater Boston area, and thus, the results may not generalize to international samples of sexual minority men. However, some data indicate that body image concerns do not significantly differ between men from Western countries (e.g., Pope et al., 2000), where as more recent data have noted differences between countries (e.g., Holmqvist Gattario et al., 2015). Future studies, both within and between cultures, are needed to determine if the relationships found in the current study apply to non-U.S. samples. Additionally, the findings from the current study may not generalize to sexual minority men who are not engaging in sexual risk behaviors. Future research would benefit from exploring the associations found in the current study as a function of various sexual risk groups. For instance, sexual minority men who are abstinent and/or sexually active, but not engaged in risk, may reveal different relationships between body dissatisfaction and psychological/sexual health outcomes.

Not only do the results from the current study have implications for prevention of depression and sexual anxiety, but also for HIV prevention. Body dissatisfaction prospectively predicted poorer sexual self-efficacy, and self-efficacy is a robust predictor of condomless sex (Sheeran, Abraham, & Orbell, 1999). Additionally, previous research has identified depression (e.g., Koblin et al., 2006) and met amphetamine use (Shoptaw & Repack, 2006) as predictors of condomless sex among sexual minority men, and body dissatisfaction is predictive of both (e.g., Blashill, 2010; Ample, Safren, & Blashill, 2015). Given the relationship between body dissatisfaction and these two HIV risk factors, it seems plausible that body dissatisfaction is an important distal risk factor for HIV transmission. Some researchers may argue that prevention efforts should be focused on the most proximal risk factors; however, even if a risk factor demonstrates a distal effect on an outcome variable, if it is common in a population, then it may well represent a salient target for prevention (for

review see population attributable risk; Buzz, Green, Boyar, Briton, & Schairer, 1985). As mentioned above, body dissatisfaction is common among sexual minority men, with roughly one-third of the population reporting a negative body image. Thus, the possible reductions in condomless sex as a function of reducing body dissatisfaction at the population level for sexual minority men could be significant.

Clinically, behavioral interventions have shown promise in reducing body dissatisfaction. Specifically, meta-analytic data have revealed that cognitive-behavioral interventions for body dissatisfaction demonstrate on average a Cohen's d of 1.0 compared to control conditions (Jarry & Ip, 2005). Although scant research exists on other forms of therapy for body dissatisfaction, preliminary work suggests acceptance and commitment-based programs may also be promising (e.g., Linde et al., 2015; Pearson, Follette, & Hayes, 2012). To our knowledge, no known body dissatisfaction interventions have been tested specifically for sexual minority men. Such programs could directly address body dissatisfaction, which may have indirect effects on HIV sexual transmission risk behaviors, perhaps through the mechanisms of reductions in depression and/or improvements in condom use self-efficacy (Blashill et al., 2014). Alternatively, integrated interventions could be tested that simultaneously address body dissatisfaction in the context of sexual health. These integrative approaches have been suggested as a way to enhance the efficacy of traditional information-motivation-behavioral skills HIV prevention programs (e.g., Mustanski, 2015; Safren, Blashill, & O'Leirigh, 2011).

Acknowledgments

Author time was supported by Grant K23MH096 647 (Blashill), K24MH094214 (Safren). This study was supported by NIH grant P01 AI074415, an unrestricted research grant from the Harvard University Center for AIDS Research.

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Table 1

Sample characteristics

Variable	<i>M (SD)</i>
Body dissatisfaction	2.6 (.75)
Depressive symptoms 1	0.5 (.48)
Depressive symptoms 2	0.4 (.38)
Self-efficacy 1	2.5 (1.1)
Self-efficacy 2	2.5 (1.1)
Sexual anxiety 1	4.0 (.87)
Sexual anxiety 2	4.2 (.82)
Age (in years)	37 (11.6)
Ethnicity/race	<i>N</i>
Hispanic/Latino	21 (15 %)
White	99 (70 %)

1 Wave 1, 2 Wave 2. *M* mean, *SD* standard deviation

1–5 Body dissatisfaction, 1–4 Depressive symptoms, 0–4 Sexual self-efficacy, 1–5 Sexual anxiety

Table 2

Intercorrelations among study variables

	Dep 1	Dep 2	SE 1	SE 2	SA 1	SA 2	BD	Age	White	Hispanic
Dep 1	–	.67**	-.19**	-.12	.40**	.41**	.22**	-.01	-.05	.06
Dep 2		–	-.05	-.19*	.34**	.38**	.30**	.01	.02	-.06
SE 1			–		-.19**	-.25**	-.32**	-.20*	.19*	.02
SE 2				–	-.27**	-.30**	-.40**	-.23*	.25*	.12
SA 1					–	.61**	.20**	-.04	-.02	.09
SA 2						–	.31**	-.02	-.14	.02
BD							–	-.15*	-.01	.14
Age								–	-.08	-.09
White									–	-.07
Hispanic										–

/ Wave 1, 2 Wave 2, Dep depressive symptoms, SE self-efficacy, SA sexual anxiety, BD body dissatisfaction, White white versus non-white status, Hispanic Hispanic versus non-Hispanic status

* $p < .05$,** $p < .01$

Table 3

Regression models

Variable	<i>B</i>	<i>SE</i>	95 % CI	<i>p</i>
Sexual anxiety wave 2				
BD	.05	.02	.004, .09	.03
SA 1	.15	.004	.10, .20	.001
Non-Hispanic	-.03	.03	-.10, .04	.37
Non-White	-.05	.04	-.12, .02	.17
Age	.000	.001	-.003, .002	.78
Single	.01	.03	-.04, .07	.64
Depression wave 2				
BD	-.21	.08	-.37, -.05	.01
Depression 1	.15	.02	.11, .19	.001
Non-Hispanic	.07	.14	-.21, .35	.64
Non-White	-.16	.14	-.43, .12	.26
Age	-.01	.006	-.02, .01	.44
Single	.07	.12	-.17, .31	.55
Sexual self-efficacy wave 2				
BD	.22	.10	.01, .42	.04
SE 1	.61	.09	.44, .79	.001
Non-Hispanic	-.22	.16	-.55, .10	.17
Non-White	-.30	.16	-.62, .01	.06
Age	-.01	.006	-.02, .01	.27
Single	-.02	.14	-.29, .26	.90

I Wave 1, *SE* self-efficacy, *SA* sexual anxiety, *BD* body dissatisfaction, *Non-White* white versus non-white status, *Non-Hispanic* Hispanic versus non-Hispanic status, *single* single versus primary partner