

The Effects of Social and Entertainment Media on Body Dissatisfaction and Social Comparison of Men with Marginalized Identities

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Abstract

A survey of 565 male undergraduates examined the effects of exposure to social networking sites and entertainment media on the body satisfaction of men with marginalized identities. Exposure to social and to entertainment media was found to have negative effects on men's body satisfaction, social comparison, and thin ideal internalization. Findings indicated significant differences in those men who were more exposed to social and to entertainment media than those who were not as exposed. Consistent with past studies, gay men were found to be more dissatisfied with their bodies than straight men. Gay men compared themselves to other better-looking individuals and internalized ideal body types seen in media significantly more than their straight counterparts. Surprisingly, straight men seem to care as much about their physical attractiveness/appearance as gay men do, but only in public settings such as at the beach, at athletic events (including gyms) and social events. Although on average ethnic groups were more similar than different, small but significant differences occurred with Asian men indicating significantly higher body dissatisfaction than White/European men and Middle Eastern/Arab men. This study increases our knowledge about social and entertainment media use and its associated body dissatisfaction and social comparison among sexual and ethnic minority men.

KEYWORDS: BODY DISSATISFACTION, SOCIAL COMPARISON, MARGINALIZED IDENTITIES, GAY MEN, ETHNIC MINORITY MEN, SOCIAL MEDIA, ENTERTAINMENT MEDIA

Introduction

The number of young men suffering from Body Dissatisfaction (BD) has increased over the last several years (Hay et al., 2008; Melki et al., 2015). This increase can be associated in part with social media exposure (Barry & Martin, 2016; Gioia et al., 2020; Fardouly & Vartanian, 2015; Rounsefell et al. 2019, Stronge et al., 2015) to ideal male images (Pope et al., 2005). Social media use is associated with increased BD (De Vries & Kuhne, 2015), which in turn is associated with increased stress, depression, and eating disorders (Rounsefell et al. 2019; Strother et al., 2012). A majority (86%) of college-attending men aged 18-29 use social networking sites (SNSs) (Leslie, 2018; Smith & Anderson, 2018), and media exposure to muscular male images is in part associated with an increasing number of young men suffering from BD over the last several decades (Pope et al., 2005).

The increase in exposure to social and entertainment media and increase in BD among young men necessitates more research on their relationship. Therefore, this study uses a large survey to compare the effects of social media and entertainment media exposure on the BD of straight and gay men from different ethnic backgrounds.

SNSs and Body Image

Little research has been done on the influences of social media on men's BD. However, a growing body of literature suggests that increased SNS usage is related to BD in men (e.g., Griffiths, Murray, Krug, & McLean, 2018). Barry and Martin (2016) explored how men's dress practices and associated SNS use—particularly the posting of selfies—influenced their thoughts and feelings about their bodies,

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which in turn heightened their body consciousness. They concluded that men's body image pressures have reinforced a narrow ideal of masculinity. Men whose bodies deviate from appearance ideals experience daily anxiety because they perceive their bodies as culturally deficient. Similarly, Manago et al. (2015), in a study involving male college students, found Facebook involvement predicted objectified body consciousness, which in turn predicted greater body shame and decreased sexual assertiveness. In addition, Stronge et al. (2015) found that using a Facebook profile is associated with poorer body satisfaction for men across all ages. Conversely, other research suggests that SNS usage does not have an effect on BD in men. For example, Thompson and Loughheed (2012) studied undergraduate college students' involvement with Facebook and found that males strongly disagreed that pictures others post on Facebook produced a negative body image.

In regard to SNS exposure, the most-visited SNSs by youths in the United States are YouTube (94%), Snapchat (78%), and Instagram (71%) (Smith & Anderson, 2018). Although Facebook is the most popular site—used by about 68% of those age 25+ (followed by YouTube and Twitter)—youths (18-24) visit it at lower rates (Smith & Anderson, 2018; Statista, 2020). Our review of the literature revealed that Facebook is the site most studied in research, and other SNSs that are increasingly popular among U.S. youths, such as Instagram, Snapchat, and YouTube (Smith & Anderson, 2018), have been largely overlooked. Different SNSs might have different effects on BD; therefore, this study explored a wide array of popular SNS sites.

Entertainment Media and Body Image

Men's body image concerns also stem from internalizations of body ideals seen in entertainment media (Diedrichs, 2012), and that internalization mediates the relationship between masculine role norms and body image (De Jesus et al., 2015). Thus, masculine images in media may influence men's drive for muscularity and leanness. Recent studies have examined different dimensions of entertainment media images, including race and social comparison. Cheng et al. (2016) found that acculturative and racial experiences play a key role in Asian American men's drive for a Western standard of masculinity. Melki et al. (2015) found that young Arab adults who idealize Western muscularity and who have high exposure to entertainment content that promotes muscularity are more likely to be steroid users. Fashion magazines represent a considerable source of unrealistic body types and body ideals because models and celebrities are depicted as thin, tall, and young, with Caucasian features.

A number of studies on the effects of magazines and TV indicate that pressure from exposure to physically attractive people and idealized images generates negative self-image in young men (Hausenblas et al., 2003; Humphreys & Paxton, 2004). Barlett et al. (2008) conducted two meta-analyses that revealed this pressure is significantly related to men feeling worse about their bodies. Interestingly, Agliata and Tantleff-Dunn (2004) found that males might not go through the same internalization process as females do. They suggested that males are reactive to appearance-related cues and interpret messages at face value without internalizing them. Similarly, Knauss et al. (2007) found that for boys, the stronger predictor of BD was pressure from mass media and not internalization. But, McCabe and Ricciardelli (2003) found that media messages had little impact on the prediction of body image or body-change strategies adopted by young males. These studies looked at only magazines, however, and occurred prior to the proliferation of SNS use among adolescents, and they didn't take into account different sexual identities.

Sexual Identities

A large body of research shows that gay men are more dissatisfied with their bodies than straight men are due to biological, psychological, social and cultural factors (Filice et al., 2020), Kaminski et al., 2005; Morrison et al., 2004; Tiggeman et al., 2007; Yelland & Tiggerman 2003). Gay men are more likely to have false beliefs about the importance of an ideal physique, diet more, are more fearful of becoming fat (Kaiminski et al., 2005), and experience greater desire for leaner (Smith et al., 2011) and more muscular (Yelland & Tiggerman, 2003) bodies. Studies have shown not only higher rates of body image disturbances but also higher rates of eating disorders among gay men compared to straight men (Conner, Johnson, & Grogan, 2004; Neumark-Sztainer et al., 1998).

Studies on gay men, media use, and BD have identified positive associations between exposure to media and negative body image (Duggan & McCreary, 2008; Gill, 2009; Lanzieri & Hildebrandt, 2016), and associations have also been found between greater frequency of social media use and BD

(Griffiths, Murray, Krug, & McLean, 2018). Gay men were most likely to report negative emotional effects from comparisons to media imagery such as dieting, cosmetic surgery and sexual risk-taking (Fawkner, 2004) and images promoting thinness (Stronge et al., 2001).

Many body image studies conducted on gay men used predominantly white men, and did not consider men of other racial groups samples (Kaminski et al., 2005; Wichstron, 2006; Yelland & Tiggeman, 2003). The research presented for the current study is more racially inclusive.

Ethnic minority gay men's body satisfaction is worse than that of straight men. Brennan et al. (2013) found ethnic minority gay men (more specifically, Black, East/Southeast Asian, South Asian, and Latino/Brazilian) had low body satisfaction and referenced the media as the most powerful influence in how they perceive and evaluate their own bodies. These findings are not surprising as many media outlets use males who are predominantly lean and muscular (Diedrichs, 2012), and the media targets gay men as a primary audience to sell fashion products (Gill, 2009), placing additional pressure on them (Carper et al., 2010).

Theoretical Framework

Theories from psychology and communication are useful to examine the effects of media exposure on BD. This study uses social comparison theory and cultivation theory to help explain why and how men are affected by media.

Social Comparison Theory

Social comparison is a fundamental psychological mechanism that influences people's judgments, experiences, and behavior. People constantly compare themselves to others (Corcoran et al., 2011). First developed by Festinger (1954) and revised many times, this theory suggests that individuals compare their physical appearance to that of others they perceive as similar (Wheeler & Miyake, 1992). The consequences of these comparisons are influenced by the direction of the comparison—upward or downward. Upward comparison is when a person compares himself to people better looking than him, whereas downward comparison is to people worse looking than him. Downward comparison is believed to increase an individual's subjective well-being, whereas upward comparison is believed to decrease it (Wheeler & Miyake, 1992).

Fawkner (2004) found that men compare themselves with media imagery and report negative impact and distress (Adams et al. 2005) from them. Social comparison, particularly comparing oneself to more attractive SNS "friends," has been found to be the main culprit in BD for both men and women (Chou & Edge 2012; Manago 2015).

Research Hypotheses

In order to investigate how social comparison and cultivation work together each set of hypotheses represents a step in the process of examining how increased media exposure may lead to BD.

Based on the growing body of literature suggests increased SNS and entertainment exposure is related to BD in men, the first set of hypotheses tests how frequency of media use affects BD.

H1A: men who are frequent users of SNSs will have poorer body satisfaction than those who are non-frequent users.

H1B: Men who are frequent readers of entertainment media (magazines) will have poorer body satisfaction than those who are non-frequent readers.

Building on the first set of hypotheses, the H2 hypotheses were developed to test whether social comparison occurs more often in more frequent users of SNS and entertainment media, and whether ethnic and/or sexual identities affect those comparisons.

H2A: Men who are frequent users of SNSs will compare their bodies to others (social comparison) more than will those who are non-frequent users.

H2B: Men who are frequent readers of entertainment media (magazines) will compare their bodies to others more than will those who are non-frequent readers.

H2C: There is an interaction of ethnicity and sexual identity.

A large body of research shows that gay men are more dissatisfied with their bodies than straight men. Therefore, the H3 hypotheses seek to understand the extent of this effect, and the H4 hypotheses look at the mediating role of ethnicity.

H3A: There are differences in men's body image perceptions based on sexual orientation.

H3B: There are differences in men's social comparisons based on sexual orientation.

H4A: There are differences in men's body image perceptions based on ethnic background.

H4B: There are differences in men's social comparisons based on ethnic background.

Method

In order to test the hypotheses, undergraduate students from a large California State University campus voluntarily completed a survey. California is one of the most linguistically diverse regions in the world, home to more immigrants than any other state and almost one-third of its population is foreign born (Public Policy Institute of California, 2020). The survey included the following measures: Body Attitude Test, physical appearance social comparison scales and SNS and entertainment media consumption questions.

Participants

Male participants (N = 565) were selected from a large sample pool of 1,391 undergraduate student participants in the San Francisco Bay Area ranging in age from 18 to 44, the majority of whom were 20-23 (M = 22.79; SD = 3.47). Most considered themselves to be low income (n = 247, 43%) or middle income (n = 293, 51%). Respondents varied in ethnicity, but almost half were Asian/Pacific Islander (n = 246, 44%), followed by Non-Hispanic/White (n = 106, 19%) and Latino/Hispanic (n = 101, 18%), Middle Eastern/Arab (n = 38, 7%) and African American (n = 16, 3%). Participants varied in academic majors, with the majority in business (n = 218; 37%), marketing (n = 102; 18%), and finance (n = 75; 13%). Approximately 77% (n = 448) were straight and 13% (n = 78) were gay.

Procedure

Study procedures were approved by an Institutional Review Board. Participants were recruited from both online and resident undergraduate courses at a California State University. Online course students were given a Qualtrics software survey link and were offered extra credit for participation. The survey included the informed consent form and the researchers' contact information. Students who completed the paper survey received the consent form as well. Participants voluntarily completed the survey of body image and media exposure, which included the measures of interest as well as a demographic questionnaire. All participants completed the surveys in this order, which took approximately 25 to 35 minutes to complete. Internal consistency reliabilities were checked, and all scales had Cronbach alphas higher than .870.

Body Dissatisfaction

The first measure included questions from the Body Attitude Test (BAT) (e.g., "When I look at myself in the mirror, I am dissatisfied with my own body" or "I am inclined to hide my body (for example by loose clothing).") The instrument consists of 20 validated survey questions (Probst et al., 1995). Five questions that were not suitable for male respondents were omitted from the study. Questions are measured on a scale of 1 to 6 ranging from always to never. Internal consistency reliabilities indicated an adequately strong Cronbach's alpha ($\alpha = .87$).

Social Comparison

The second scale included the upward and downward physical appearance social comparison survey questions (UPACS & DACS) (O'Brien et al., 2009). These 18 items are measured on a 5-point scale ranging from strongly agree to strongly disagree. Upward physical appearance social comparison (e.g., "I compare myself to those who are better looking than me rather than those who are not") 10-item scale Cronbach's alpha was strong ($\alpha = .92$) as was the Cronbach's alpha of the downward

physical appearance social comparison (e.g., “I often compare myself to those who are less physically attractive”) 8-item scale ($\alpha = .92$).

Media Exposure

SNSs

Respondents were asked how many times a day they checked each SNS through open-ended questions. Responses were later recoded into a dichotomous variable—frequent SNS users and infrequent SNS users. The most popular SNS sites are (in order) Instagram, YouTube, Facebook and Twitter (Statista, 2018). However, to be inclusive as possible, the following sites were also included to gauge overall SNS usage: LinkedIn, Snapchat, Pinterest, Tumblr, Flickr and Google+. Exposure was operationalized as usage.

Entertainment media

Entertainment media is defined as magazines for this study, which includes gossip, fashion, popular men’s, sports, and health-related publications. Respondents were asked, through open-ended questions, how often they read these magazines, and responses were later recoded into a dichotomous variable—high entertainment users and low entertainment media users.

Demographic Characteristics

The demographic questionnaire asked respondents for their age, gender, ethnicity, sexual orientation, income level, and academic major at current school. Age, gender, ethnicity, and sexual orientation items were open-ended questions which were then recoded into groups.

Analytic Strategy

The study used quantitative analysis to analyze the results. Effects of media, ethnicity, and sexual orientation were analyzed using independent sample *t*-tests/Cohen’s *d*. Ethnic group comparisons were analyzed through analysis of variance (ANOVA) testing including post hoc Fisher’s least significant different test (LSD). Statistical significance was established at $p < .05$.

Results

Effects of Social and Entertainment Media

Independent sample *t*-tests findings indicated significant differences in men who were more exposed to social and to entertainment media than those who were not as exposed, consequently rejecting the null hypotheses for *BD* (Hypotheses 1A and B), and *social comparison* (hypotheses 2A and B) (see Tables 1 and 2).

BD

On average, frequent SNS users (Mean = 2.80, SD = .81) showed significantly ($t = 3.50, p = .001, d = 0.29$) more dissatisfaction with their bodies than SNS users who did not check sites as frequently (Mean = 2.56, SD = .81). Similarly, men who were more exposed (Mean = 2.85, SD = .89, $p = .00$) to entertainment media (such as fashion magazines, gossip magazines etc.) exhibited significantly ($t = 3.16, p = .002, d = 0.29$) higher dissatisfaction with their bodies than those with low exposure (Mean = 2.61, SD = .78). Cohen’s *d* indicated that exposure to both types of media poses negative effects of similar magnitude (moderate effect size).

Table 1: Independent samples *t*-test for Differences in Men’s Body Dissatisfaction and Social Comparison based on Social Media Usage

	Social Media Use	N	Mean	Std.
	<i>t</i>	<i>p</i>	Cohen’s <i>d</i>	Deviation
Body Dissatisfaction	Frequent	317	2.80	0.81
		3.50	0.0001	0.29
	Infrequent	260	2.56	0.83
Social Comparison	Frequent	317	2.82	0.75
		4.15	0.000	0.35
	Infrequent	260	2.54	0.84
Upward Comparison	Frequent	317	2.96	0.83
		4.49	0.000	0.38
	Infrequent	260	2.63	0.91
Downward Comparison	Frequent	317	2.64	0.87
		2.79	0.005	0.24
	Infrequent	260	2.43	0.95

Body image 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *usually*, 6 = *always*

Social comparison 1 = *strongly disagree*, 5 = *strongly agree*

Significant when $p < .050$

Table 2: Independent samples *t*-test for Differences in Men’s Body Dissatisfaction and Social Comparison based on entertainment Media Usage

	Entertainment Media	N	Mean	Std.
	<i>t</i>	<i>p</i>	Cohen’s <i>d</i>	Deviation
	Exposure			
Body Dissatisfaction	High	194	2.85	0.89
		3.16	0.002	0.29
	Low	381	2.61	0.78
Social Comparison	High	194	2.85	0.76
		3.40	0.001	0.30
	Low	381	2.61	0.81
Upward Comparison	High	194	3.00	0.83
		3.65	0.000	0.32
	Low	381	2.72	0.89
Downward Comparison	High	194	2.67	0.88
		2.33	0.020	0.21
	Low	381	2.48	0.92

Significant when $p < .050$

Social comparison

Men who were frequent SNS users compared themselves (Mean = 2.82, SD = .75) to others significantly ($t = 4.15, p = .00, d = 0.35$) more when viewing SNSs than non-frequent SNS users (Mean = 2.54, SD = .84). This pattern was replicated for both upward and downward comparisons, indicating a smaller effect size for the latter type of comparisons. Frequent SNS users compared themselves (Mean = 2.96, SD = .83, $p = .00$) significantly more ($t = 4.49, p = .000, d = 0.38$) to better-looking individuals than did infrequent SNS users (Mean = 2.63, SD = .91). Interestingly, frequent SNS users (Mean = 2.64, SD = .87) also compared themselves significantly ($t = 2.79, p = .005, d = 0.24$) more to worse-looking individuals than did infrequent SNS users (Mean = 2.43, SD = .95). Men who had higher exposure (Mean = 2.85, SD = 0.76) to entertainment media had a significantly ($t = 3.40, p = .001, d = 0.30$) higher tendency to compare themselves to other individuals than men who were not as exposed (Mean = 2.61, SD = 0.81). Similarly, to the pattern of exposure to SNSs, higher exposure to entertainment

media led men (Mean = 3.00, SD = 0.83) to compare themselves significantly ($t = 3.65, p = .000, d = 0.32$) more to better-looking men (upward comparison) than did men with lower exposure (Mean = 2.72, SD = 0.89). High exposure to entertainment media also led men (Mean = 2.67, SD = 0.88) to compare themselves significantly ($t = 2.33, p = .020, d = 0.21$) more to worse-looking men (downward comparison). In addition, a multiple regression analysis showed no significant $F(1, 557) = 3.476, p = .06$ interaction between ethnicity and sexual identity. Null hypothesis 2C was not rejected.

Effects of Sexual Identity

Exposure to social and entertainment media

T-test results indicated that gay men (Mean = 3.18, SD = 1.03) were significantly ($t = 1.96, p = .05, d = 0.24$) more exposed to SNSs than Straight men were (Mean = 2.94, SD = 0.99). Similar findings occurred for entertainment media. Gay men (Mean = 1.59, SD = 1.02) were significantly ($t = 2.70, p = .00, d = 0.40$) more exposed to entertainment media than Straight men were (Mean = 1.26, SD = 0.53), but with a stronger effect size than when exposed to SNSs.

Effects of men's sexual orientation on their *BD* (Hypothesis 3A) and *social comparison* (Hypothesis 3B) showed notable differences consequently rejecting null hypotheses.

BD Hypothesis 3A

Gay men (Mean = 2.97, SD = 0.89) were significantly more dissatisfied ($t = 2.94, p = .003, d = .35$) with their bodies than their Straight counterparts (Mean = 2.67, SD = 0.80). See Table 3. Independent samples *t*-test revealed gay men (Mean = 4.23, SD = 1.49) observed their appearance in the mirror significantly ($t = 3.41, p = .001, d = 0.41$) more than Straight men (Mean = 3.63, SD = 1.43) and during these observations (Mean = 3.14, SD = 1.22) they were dissatisfied with their own bodies significantly ($t = 3.33, p = .001, d = 0.39$) more than Straight men (Mean = 2.64, SD = 1.29). Gay men (Mean = 2.69, SD = 1.53) were also significantly more inclined ($t = 2.14, p = .033, d = 0.25$) to hide their bodies (for example by loose clothing) than Straight men (Mean = 2.33, SD = 1.33). When gay men (Mean = 2.88, SD = 1.21) compared their bodies to their peers' bodies, they felt significantly more dissatisfied with their own bodies ($t = 2.05, p = .040, d = .024$) than Straight men (Mean = 2.59, SD = 1.16). Moreover, gay men (Mean = 3.23, SD = 1.35) envied others for their physical appearance significantly ($t = 2.77, p = .006, d = 0.33$) more than Straight men (Mean = 2.77, SD = 1.36).

Table 3: Independent samples *t*-test for Differences in Men's Body Dissatisfaction and Social Comparison based on Sexual Orientation

	Sexual Orientation	N	Mean	Std.
	<i>t</i>	<i>p</i>	Cohen's <i>d</i>	Deviation
Body Dissatisfaction	Straight	448	2.677	0.809
	Gay	78	2.974	0.893
Social Comparison	Straight	448	2.694	0.792
	Gay	78	2.941	0.790
Upward Comparison	Straight	448	2.812	0.868
	Gay	78	3.097	0.881
Downward Comparison	Straight	448	2.547	0.901
	Gay	78	2.745	0.926

Significant when $p \leq .050$

Social comparison Hypothesis 3B

T-test findings revealed that gay men (Mean = 3.09, SD = 0.88) tended to engage significantly ($t = 2.67, p = .008, d = 0.32$) more in upward comparison than Straight men (Mean = 2.81, SD = 0.86). When gay men (Mean = 3.23, SD = 1.15) saw a person with a great body they wondered significantly

($t = 2.22, p = .026, d = 0.27$) more how their appearance matched up when compared to Straight men (Mean = 2.92, SD = 1.15). Gay men (Mean = 2.82, SD = 1.20) compared their bodies significantly more ($t = 2.18, p = .030, d = 0.27$) with unattainable ideals such as models and movies stars than did Straight men (Mean = 2.50, SD = 1.16).

Effects of Ethnicity

Exposure to social and entertainment media

Men of various ethnic backgrounds did not differ in exposure to social and entertainment media. Men of all ethnicities were equally exposed to SNSs and entertainment media.

Analysis of ethnic group comparisons of *BD* (Hypothesis 4A), and *social comparisons* (Hypothesis 4B) revealed no differences. ANOVA was conducted to measure these two hypotheses. Small but significant ethnic group differences occurred measuring *BD* (Hypothesis 4A) using several analyses. Three *BD* items differed among ethnic groups. Significant effects emerged for ethnicity in the self-rating of *BD* when compared to peers [$F(2.437) = 3.23, p = .04$]. Follow-up LSD revealed that Asian men ($m = 2.73$) showed more *BD* discrepancy than White men ($m = 2.42, p = .02$) and Middle Eastern/Arab men ($m = 2.37, p = .04$). Significant effects also emerged in the self-rating item for the importance of bodily appearance [$F(2.954) = 6.45, p = .02$]. Follow-up LSD revealed that Asian men placed less importance on bodily appearance than White men ($m = 3.95, p = .02$), Latino/Hispanic men ($m = 4.0, p = .01$) and Middle Eastern/Arab men ($m = 4.11, p = .01$). A final significant effect occurred in the self-rating of observance in the mirror [$F(3.025) = 6.50, p = .01$]. LSD revealed that Asian men ($m = 3.43$) observed themselves significantly less in the mirror than White men ($m = 4.0, p = .00$).

Discussion

BD is a complex phenomenon affected by factors internal and external to the individual. This study found that men in general were sometimes dissatisfied with their bodies and compared themselves to more attractive individuals (vs. unattractive individuals), and that approximately one third of men internalized the ideal bodies they saw in media. This study contributes to the broader body of research into men's body satisfaction that finds high exposure to both SNSs and entertainment media negatively affects young men's body satisfaction. The findings are consistent with the results of Manago et al. (2015), who found that men who were engaged in Facebook as part of their social lives were also more engaged in their body surveillance of objectified body consciousness, and thus were also more susceptible to feelings of body shame. The results are also similar to those of Stronge et al. (2015) who found that Facebook users reported significantly lower body satisfaction than non-users did. The results on the effects of entertainment media exposure are consistent with those of Hausenblas et al. (2003) and Humphreys and Paxton (2004), who found associations between exposure to entertainment media images and *BD*. Those who used SNSs compared themselves slightly more frequently to others than did high users of entertainment media. This is significant because of the constant connectedness of many young people today (Smith & Anderson, 2018; Wallace, 2015). This study reflects youths' growing exposure to SNS platforms. Although not exhaustive, the sites used in the survey reflects both the most popular sites and a broad array of the SNS options available. The participants in our study aligned with cultivation theory, in that high exposure to both social and entertainment media affected *BD* in all the men in the sample.

The findings of this study illustrate that social comparison theory is useful to study SNS interactions. The study found that men do engage in social comparisons, in particular they engage in the more harmful upward comparison, as it had a slightly higher effect for SNSs than for entertainment media. It appears that those who were more exposed to social and entertainment media also engaged in downward comparison, but it had less of an effect than upward comparison did.

Our study corroborated previous research finding gay men to be more dissatisfied with their bodies than straight men. One question asked "When I look at myself in the mirror, I am dissatisfied with my own body". The second question that showed dissatisfaction was "I am inclined to hide my body (for example by loose clothing)". They envied others' physical appearances more and also looked at themselves in the mirror more frequently, compared with straight men. That envy and their own image in the mirror made them more likely to dislike what they saw. This, then, may have had an effect on their choices of clothing, as gay men were more likely to hide their bodies with loose

clothing. Gay men were also more prone to compare themselves to better-looking (upward comparison) men and not compare themselves to worse-looking (downward comparison) men, therefore engaging in the more harmful upward social comparison than did straight men. As stated earlier, downward comparison is believed to increase an individual's subjective wellbeing, whereas upward comparison is believed to decrease it (Wheeler & Miyake, 1992). When gay men saw a person having what they perceived as a great body, they wondered how their own bodies compared. Moreover, they also compared their bodies to those of unattainable models and movie stars, more than straight men did. Surprisingly, straight men seemed to care as much about their physical attractiveness/appearance as gay men did, but only in public settings such as at the beach, athletic events (including gyms), and social events. Additionally, the study found that gay men are more exposed to both SNSs and entertainment media than straight men are. Gay men were also more likely than straight men to read entertainment magazines, and so would have a higher propensity to be affected by them.

Similar to previous studies, this study's ethnic group comparisons revealed no average differences in men's BD (Nishina et al., 2006; Yates et al., 2004) and social comparisons. Although, on average, ethnic groups were more similar than different, small but significant differences occurred, with Asian men indicating higher BD than their counterparts. Even though White men were found to spend more time in front of the mirror than Asian men do, White men were not as dissatisfied as Asian men when they compared their own bodies to those of their peers. In addition, Asian men were more dissatisfied with their bodies than were both White and Middle Eastern/Arab men. While Asian men claimed their body appearance was not important to them, they were the most dissatisfied with their bodies among ethnic groups, which is in part consistent with previous findings (Kowner; 2002; Neumark-Sztainer et al. 2002) that Asian men were less satisfied than their White counterparts. The study results are also in agreement with Fawcner's (2004) findings that many men indicate appearance is important to them, as it was important to Latino, Middle Eastern/Arab, and White men, but not to Asian men.

Although not statistically significant, the means of the body image questions for Middle Eastern/Arab men are noteworthy because very few studies include this group in their samples (Brennan et al., 2013; Sladek et al., 2018). They were the least likely to be dissatisfied with their bodies, to envy others' physical appearance, or to hide their bodies under loose clothing. These findings are very similar to those regarding White men's body image. Some studies found White males to be more satisfied with their bodies (Kowner, 2002; Monocello & Dressler (2020; Neumark-Sztainer et al., 2002) or that they did not engage in "fat" talk (Sladek et al., 2018) as much as their non-White counterparts did.

The upward social comparison findings about gay men are disturbing. This already vulnerable population has distorted ideas about ideal bodies. The unattainable images they are internalizing lead to health risks such as eating disorders. Gay men suffer much more than straight men from eating disorders risk factors (Brown & Keel, 2015; Carper et al., 2010; Laska et al., 2015). This study also found that increased exposure to social and entertainment media affected not only BD but also social comparison, which is a precursor to BD.

BD is often thought of as an issue only women and girls experience. But as this study shows, BD affects men and boys and can lead to serious consequences. The implications for this illustrate the need for early literacy, and possibly early interventions, on the risks of SNS use for boys with marginalized identities. While interventions that address the negative effects of SNS interventions for SNS and adolescents have been developed (e.g., McLean, 2017; Gordon, 2020), none have been developed specifically for gay adolescents or men. Until this occurs, we will likely see the problem grow as SNS use increases.

One recommendation for future research is to obtain a sample with more respondents in each ethnic group to get a better understanding of BD among African American, Middle Eastern, and Hispanic males. Middle Eastern and African American men are currently the least studied groups. We also recommend that new measures are created to address the cultural and sexual identity differences that men may associate with body satisfaction.

Conclusion

The current study increases our knowledge about the connection between social and entertainment media use and how the social comparisons that occur because of them may affect BD. It is important

because it reveals that both sexual identity and ethnicity in men affect the rates of BD. Consistent with past studies, gay men were found to be more dissatisfied with their bodies than straight men as they engaged more in social comparison and internalization of media images. Furthermore, the study found Asian men had higher BD than White/European and Middle Eastern/Arab counterparts. These findings raise the possibility that enhancing social media literacy in young men may assist in the prevention of BD resulting from increasing social media use, particularly for ethnic minority Gay men.

SNS changes quickly. Facebook was the number one SNS site when we collected the data in 2018. Only two years later, it has slipped to third and TikTok is now the fifth most popular, although it wasn't launched until 2017 and not available in the U.S. until 2018. Although sites change, the importance of educating youth, particularly youth of color and gay youth, on the health risks associated with overexposure need to continue. Even Instagram (owned by Facebook) began experimenting with hiding "likes" in 2019 citing the move as beneficial to its users' mental health and as a way to reduce bullying (CBS News). Perhaps other SNS will follow its lead.

Limitations

The present study has several limitations. Young males of African American background could not be included in the ANOVA testing given a lack of power due to sample size requirements. The sample did not have enough of young males of African American background; therefore, they could not be included in the ANOVA testing. Another limitation was that there was no consideration of masculinity differences in men; the study focused only on BD. The variable 'dissatisfaction with masculinity' is an integral part of research on men's body image and should be included in future BD research. Also, consideration of different masculinity norms among different cultures should be included in future studies. Frequency of social and entertainment media use was dichotomized, which is not always desirable. Further, the sexual orientation variable was dichotomized into the two largest groups—straight and gay. Other sexual orientation categories were selected by male participants, but their numbers were too small to be included in the statistical analyses. Also, not all items from the BAT scale were used in this study for male participants. Only questions of a generic nature that could be applied to men were used (for example, the statement "I envy others for their physical appearance" can be generalized to more than one gender).

Author biographies

Dr. Markova is an assistant professor of apparel design and merchandising/textiles at San Francisco State University. Markova earned her doctorate in International and Multicultural Education at University of San Francisco in 2013. She has been teaching research methods, consumer behavior, and textiles for fourteen years at San Francisco State University. Thus, her most recent research explores topics in consumer behavior studies with the focus on media and the effects a variety of media platforms have on individuals' body image and body dissatisfaction. Markova has recently published a book "Textile Fiber Microscopy: A practical approach." Her goal with her new book is to promote continuity of textile science knowledge in a variety of courses in apparel undergraduate programs.

Dr. Cristina Azocar is an associate professor of journalism at San Francisco State University. She is a past chair of journalism department and she is also a past president of the Native American Journalists Association and previously served on the board of the Women's Media Center. Azocar is an editor of American Indian Issues for the Media Diversity Forum. Azocar earned her doctorate in Communication Studies at the University of Michigan in 2001. Her research and teaching focuses on portrayals of people of color in the news. She is a member of the Upper Mattaponi Tribe of the Powhatan Nation. She received her master's degree in Ethnic Studies and her bachelor's degree in Journalism from San Francisco State University. Dr. Azocar's interest in diversity in the news media spans more than 25 years, and began with her concern about negative representations of Native Americans.

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