

The Barbie Mystique: Satisfaction with Breast Size and Shape across the Lifespan

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ABSTRACT. The prevalence of breast augmentation and breast lift surgery suggests that many women are dissatisfied with their breasts. This study analyzed women's and men's views about breast size and shape among 52,227 heterosexual adults, ages 18–65, who responded to an online survey. Although most women (70%) were dissatisfied with the size or shape of their breasts, most men (56%) were satisfied with their partner's breasts. Younger and thinner women worried that their breasts were too small; older and heavier women were more concerned with breast droopiness. Women who were dissatisfied with their breasts were more likely to report lower body satisfaction and to express concern about wearing a bathing suit in public. Further, dissatisfied women were also less willing to undress in front of their partner and were more likely to conceal their breasts from their partner during sex. These findings suggest that dissatisfaction with breasts is widespread among adult women.

KEYWORDS. Body image, breasts, men, women, physical attractiveness

Tremendous pressure is placed on women to attain the ideal body. The popular Barbie doll, with her slender body, narrow hips, and large breasts, epitomizes this ideal. The proportions represented by Barbie are, however, so extreme that only one of every 100,000 women possesses Barbie's body type (Norton, Olds, Olive, & Dank, 1996). The pervasiveness of the busty ideal has led some researchers to posit that women's concerns about their breast size and shape can affect their self-esteem, feelings of attractiveness, and sense of femininity. For example, Millsted and Frith (2003, p. 455) claimed that "Women's breasts are invested with social, cultural, and political meanings. . . . Breasts are seen simultaneously as a marker of womanhood, as a visual signifier of female sexualisa-

tion, [and] as synonymous with femininity." Despite the assumed importance of breast size and shape to women's views of their bodies, surprisingly little research has systematically examined how women's breast satisfaction might influence women's overall body satisfaction in populations beyond college students and breast augmentation patients. Further, information about men's actual satisfaction with their real-life partner's breasts is largely absent from research conducted to date.

Women's Attitudes Toward Their Own Breasts

Feminists and others have frequently claimed that the media and many men treat women as

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International Journal of Sexual Health, Vol. 20(3), 2008

Available online at <http://www.haworthpress.com>

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doi: 10.1080/19317610802240170

if they exist simply to provide sexual gratification for men (Bordo, 1993; Fredrickson & Roberts, 1997). Fredrickson and Roberts (1997) formalized this idea in Objectification Theory, which proposes that women's bodies are frequently scrutinized and evaluated by men. One consequence of these evaluations is that women internalize an observer's perspective on their bodies and assess their own value as a function of how they believe others view their bodies.

Women's breasts, perhaps more than any other aspect of women's bodies, are widely presented for evaluation in television, movies, and popular magazines (e.g., Seifert, 2005). The media are often criticized for contributing to women's dissatisfaction with their breasts, and there is some empirical evidence that women who are more regular consumers of media that present idealized female bodies are more concerned about their own breasts (e.g., Harrison, 2003). A further contributor to women's attitudes about their breasts may be the concern that their romantic partner would prefer a woman with larger or "more shapely" breasts.

Consistent with the idea that women feel pressure to possess large breasts, several studies have found that many college women would like to have larger breasts (e.g., Arkoff & Weaver, 1966; Forbes & Frederick, 2008; Harrison, 2003; Jacobi & Cash, 1994; Jourard & Secord, 1955; Tantleff-Dunn & Thompson, 2000; Thompson & Tantleff, 1992). In an illustrative study of 123 college women, 46% of the participants reported that they desired larger breasts (Forbes, Jobe, & Revak, 2006). Similarly, in a study of 587 college women (Forbes & Frederick, in press), most women desired larger breasts (61%) while a minority desired smaller breasts (14%) or no change in their breast size (25%). Overall, 25% of the women reported being often to always dissatisfied with their breast size, and women who reported an "A" cup size were most likely to feel this way (50%) and to desire larger breasts (90%). Research also shows that women who are dissatisfied with their breasts reported greater general body dissatisfaction (Forbes & Frederick, in press; Jourard & Secord, 1955; Koff & Benavage, 1998). This appears to be true not

only for women who would like larger breasts, but also for the minority of women who desire smaller breasts (e.g., Koff & Benavage, 1998).

One clear indication of women's dissatisfaction with their breasts is the growing number of women seeking to change their breasts with surgical interventions. By one estimate, as many as 2 million women in the United States had obtained breast implants in the years prior to 2000 (Sarwer, Nordmann, & Herbert, 2000), and over 1 million (1,782,041) received breast implants between 2000 and 2006 (American Society of Plastic Surgeons, 2007). In 2006, 329,000 women had breast augmentation surgery, making it the most popular cosmetic surgery for the first time (American Society of Plastic Surgeons, 2007). Breast augmentation is most often pursued by women in their 20s or early 30s (Rohrich, Adams, & Potter, 2007). Further, not all women wish to have larger breasts. For both cosmetic and health reasons, some women elect to have breast reduction surgery. In 2006, 103,990 breast reduction surgeries were performed, making this the fourth most popular reconstructive surgery that year (American Society of Plastic Surgeons, 2007).

In addition to concerns about the size of their breasts, women may also worry about the shape of their breasts. The cultural icon Barbie's breasts are not only large, but also firm and perky. Breasts that sag or droop (i.e., "breast ptosis") deviate from prevailing ideals of beauty. As a consequence, some women now pursue breast lifts (mastopexy) in order to make their breasts appear less droopy. In 2006, at least 101,122 women had a breast lift surgery in the U.S. (American Society of Plastic Surgeons, 2007). Although it is likely that breasts become droopier with age, breast lifts were performed on women of all ages. To our knowledge, little research has systematically examined satisfaction with this aspect of breast shape among a cross-section of women.

Men's Attitudes Toward Women's Breasts

In several studies, many men report a preference for women with larger rather than smaller

breasts (e.g., Harrison, 2003; Thompson & Tantleff, 1992), although not all research finds this pattern of results (e.g., Furnham, Swami, & Shah, 2006). One important limitation of these studies is that they asked men to characterize their breast preferences in the abstract, rather than assessing men's beliefs about the breasts of their current or past romantic partners. It is possible, for example, that even if some men prefer women with large breasts, they might also find women with smaller breasts very attractive and be very satisfied with their romantic partner's smaller breast size. Further, some men may prefer women with a smaller breast size. Finally, although some research has examined men's attitudes towards breast size, researchers have not assessed men's satisfaction with other aspects of their romantic partner's breasts, particularly breast droopiness.

The Present Study

The present study reports findings from a large-scale survey about body image among adults ages 18 to 65. The first goal of this survey was to examine women's overall satisfaction with their breast size and droopiness. Two unusual features of this project are noteworthy. First, because our sample was large and ranged in age across the lifespan, we were able to test whether breast concerns differed by age. Given changes in women's bodies and breasts as they age, we predicted that younger women would be more concerned with size and that older women would be more concerned with droopiness.

Another unusual feature of this data set was the inclusion of a standardized approximation of body fat level, the Body Mass Index (BMI), which enabled us to assess the association between weight and breast concerns. Past research has shown that heavier women tend to have larger breasts as assessed by bra cup size (e.g., $r = .36$, Hall et al., 1999; $r = .46$, Forbes & Frederick, in press). Therefore, we predicted that thinner women, who have smaller breasts, would be more likely than heavier women to desire larger breasts. In contrast, heavier women would be more likely to desire smaller breasts or to report that their breasts were too droopy.

The second goal of this study was to examine whether women who reported dissatisfaction with their breasts were more likely to experience general dissatisfaction with their bodies. In particular, do women who are dissatisfied with their breasts rate themselves as less attractive and feel less comfortable in public venues in which their body might be evaluated by others (e.g., when wearing a swimsuit in public)?

The third goal of this study was to examine whether these concerns regarding body exposure also extend to the bedroom. Are women who are dissatisfied with their breasts less willing to reveal their bodies to their sexual partner? In particular, are they less willing to undress in front of their partner and more likely to try to conceal their breasts from their partner during sex?

Our fourth goal was to investigate men's attitudes towards their partner's breast size and droopiness. Given that one likely cause of women's breast dissatisfaction is a concern that their male dating partners prefer partners with larger breasts, it is important to document whether men actually are dissatisfied with their partner's breasts.

METHOD

A 27-item survey was posted on the *MSNBC.com* and *Elle.com* websites in February of 2003. Participants were visitors who volunteered for a "Sex and Body Image Survey." To prevent individuals from responding to the survey more than once, a computer program prevented multiple responses from any given computer. The present study is based on secondary and more detailed analyses of this large dataset.

Participants and Demographics

Most respondents (98%) were from the *MSNBC.com* website and only 2% were from the *Elle.com* website. The analyzed sample consisted of 25,524 heterosexual men and 26,703 heterosexual women between the ages of 18 to 65, weighing 90 to 295 pounds, with body mass index scores ranging from 14.5 to 40.5, and heights ranging from 5'0" to 6'2" for women and 5'2" to 6'6" for men. Individuals outside of

these age, weight and height ranges were excluded because of small sample sizes. For more details regarding the sample, refer to Frederick, Peplau, and Lever (2006). We were forced to exclude lesbian participants from the analyzed samples because the wording of the breast satisfaction question precluded us from determining whether lesbians were indicating their attitudes about their own breasts or about their female partner's breasts.

Age

The mean age of participants was 33.5 ($SD = 10.9$) for women and 36.9 ($SD = 11.8$) for men. Women and men were fairly well represented across the age spectrum. For some analyses, age groups were created. The percentages of women and men in each category were as follows: 18–25 (30% of men, 20% of women), 26–35 (31%, 29%), 36–45 (22%, 24%), 46–55 (14%, 18%), and 56–65 (3%, 8%).

Height

The mean height was 5'5.1" ($SD = 2.7$ ") for women and 5'10.7" ($SD = 2.8$ ") for men. The men and women in this sample were about an inch taller in height than the national data provided by the National Center for Health Statistics (2004). This may reflect actual differences in height between the samples, or it indicates that the participants in our sample exaggerated slightly when self-reporting their own height.

Body Mass Index (BMI)

BMI is commonly used as an estimate of body fat, although other factors beside body fat level can influence BMI scores (e.g., muscularity). BMI is calculated by dividing a person's weight in kilograms by their squared height in meters. A BMI score was computed for each respondent. The mean BMI of participants was 24.2 ($SD = 4.8$) for women and 26.6 ($SD = 4.0$) for the men. Standard BMI cut-off points described in the National Health and Nutrition Examination Survey (2000) were used to create four categories: Underweight (14.5–18.49), Healthy Weight (18.5–24.99), Overweight (25–29.99), and Obese (30–40.5).

Psychological Measures

Breast satisfaction

Breast satisfaction was assessed with a single item, "Are you satisfied with the size of your own (or your partner's) breasts?" Participants could select one of four response options reflecting either satisfaction with their breasts or dissatisfaction with their breast size or shape: Satisfied ("yes, I like everything about them), Desire Larger ("no, I wish they were bigger"), Desire Smaller ("no, I wish they were smaller"), or Too Droopy ("yes, I'm okay with the size but unhappy they droop"). This variable was treated as a categorical (nominal) variable in all analyses. For some analyses, the Desire Larger, Desire Smaller, and Too Droopy categories were collapsed into one category ("Dissatisfied") to create a dichotomous variable where Dissatisfied = 0 and Satisfied = 1.

Body exposure concerns

Respondents were asked about their possible concerns with showing their body to a romantic partner. Subjects without a current partner were instructed to answer the questions thinking about the last partner they had. One question asked, "Do you undress in front of your partner?" with the response options being yes or no. Most women (82%) reported undressing in front of their partner. For some analyses, undressing in front of one's partner was coded as 1 and not undressing was coded as 0. Another question asked, "Do you ever try to hide a least favorite physical feature during sex? Select all that apply." One of the six response options was "yes, my breasts/chest." This response was selected by 9% of women. For some analyses, revealing one's breasts was coded as 1 and concealing one's breasts was coded as 0.

Body image: Self-rated attractiveness

Satisfaction with one's appearance, or "body image," was assessed with the item, "How do you feel about your body?" Response options were scored on the following Likert scale: 4 = Great ("I have a great body"), 3 = Good ("I have a good body"), 2 = Okay ("My body is just okay"), and 1 = Unattractive ("I find my body

unattractive”). We elected to treat this variable as interval for several reasons. First, we reasoned that participants would view these four response choices as different from each other at roughly equal intervals. Second, responses were normally distributed (skewness < 1.0): The percentage of women responding in each category was Great (5%), Good (38%), Okay (36%), and Unattractive (21%). Third, in a separate sample of 313 college women, responses to this one-item measure of body image were strongly correlated with Cash’s (2000) widely-used seven-item Appearance Evaluation scale (*Pearson’s* $r = .75$, $p < .01$; Frederick, Peplau, & Lever, 2006). This strong correlation provided increased confidence in this item as a measure of body satisfaction.

Body image: Comfort in a swimsuit

Body image satisfaction was also assessed with the item, “How do you think you look in a swimsuit?” Response options were scored on the following Likert scale: 3 = Good (“Good; I’m proud/not at all embarrassed to be seen in a swimsuit”), 2 = Okay (“Okay; I don’t flaunt it but my self-consciousness doesn’t keep me from wearing a swimsuit”), and 1 = Uncomfortable (“So uncomfortable that I avoid wearing one in public”). For the reasons stated above, this variable was also treated as interval. The percentage of women responding in each category was: Good (12%), Okay (57%), and Uncomfortable (31%). This measure was also significantly correlated with the Appearance Evaluation Scale in the aforementioned study of college students ($r = .58$, $p < .01$).

RESULTS

In the following sections, we first examine women’s overall satisfaction with their breast size and droopiness and whether satisfaction is related to age, weight (BMI), body dissatisfaction, and concerns with body exposure during sexual activity. Finally, we report findings about men’s satisfaction with their partner’s breasts. Because of our large sample size, we established $p < .001$ as our criterion for significance, and we report effect sizes (Cohen’s d) where appropriate. By convention, d values of .2, .5, and .8 correspond roughly to small, medium, and large effects (Cohen, 1988). When reporting results in percentages, we do not report the results of all possible Chi Square tests because with our large sample size, even miniscule effects reach statistical significance, limiting their usefulness for identifying important differences. Statistics on specific comparisons are available from the authors.

Women’s Breast Satisfaction: Associations with Age and BMI

Among this large and diverse sample of women, breast dissatisfaction was widespread. As shown in Table 1, fully 70% of women were not satisfied with some aspect of their breasts. Most women who were dissatisfied wanted less droopy breasts (33%) or larger breasts (28%). A small minority (9%) of women desired smaller breasts. Overall, less than one woman in three was satisfied with her breasts.

TABLE 1. Women’s and men’s breast satisfaction across age groups

	Women				Men			
	Satisfied %	Desire Larger %	Desire Smaller %	Too Droopy %	Satisfied %	Desire Larger %	Desire Smaller %	Too Droopy %
Age Group								
18–25	33	38	7	22	63	24	2	11
26–35	29	27	9	35	53	24	3	20
36–45	26	23	9	42	51	21	4	24
46–55	30	18	10	42	58	15	5	22
56–65	31	11	11	47	61	11	7	21
Overall	30	28	9	33	56	20	4	20

Age

As shown in Table 1, the percentage of women satisfied with their breasts was similar across age groups (range = 26%–33%). However, as predicted, age was related to specific breast concerns. Younger women were most likely to express a desire for larger breasts, while older women were most likely to indicate that their breasts were too droopy. To examine the relationship between age and type of breast concern in more detail, the percentage of women desiring breasts that were larger and those wishing for breasts that were less droopy was calculated for each age. As shown in Figure 1, the desire for larger breasts was greatest among young women while concerns about breast droopiness were greatest among successive age groups. Starting at about age 30, concerns with droopiness exceeded concerns with size.

Body fat level (BMI)

We also predicted that thinner women would be more concerned with the size of their breasts

compared to heavier women, while heavier women would be more concerned about their breast droopiness. As shown in Table 2, the percentage of women who were satisfied with their breasts was similar among underweight, healthy, and overweight women (28%–33%), but the percentage who were satisfied was substantially lower among obese women (19%). Women's specific breast concerns also differed by body fat level. More than half of underweight and a third of the healthy weight women desired larger breasts, compared to only 15% of overweight women and 9% of obese women. In contrast, overweight and obese women were considerably more likely to desire smaller breasts or to view their breasts as too droopy.

Women's Breast Satisfaction and Overall Body Image

The second goal of this study was to test the association between breast satisfaction and women's general appraisal of their body. To compare the body image of women differing

FIGURE 1. Percentage of women indicating that they desired larger breasts or thought their breasts were too droopy as a function of age. *Note.* Younger women were more likely to desire larger breasts, while older women were more likely to desire less droopy breasts.

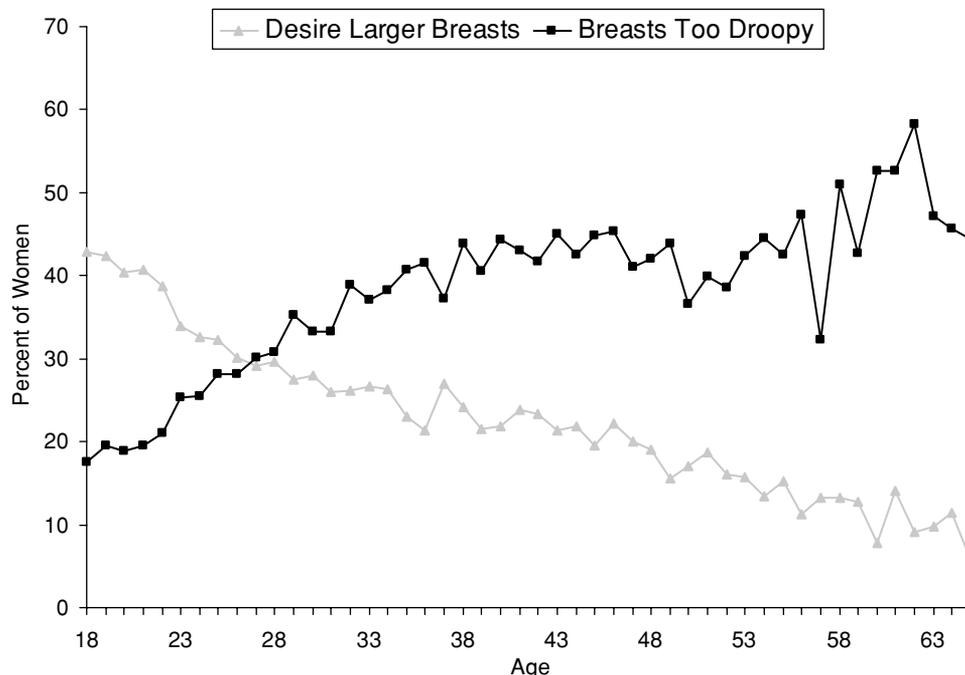


TABLE 2. Percentage of women who chose each breast satisfaction category by weight (BMI) category

BMI Category	Breast Satisfaction			
	Satisfied %	Desire Larger %	Desire Smaller %	Too Droopy %
Underweight	30	53	3	14
Healthy Weight	33	33	6	28
Overweight	28	15	13	44
Obese	19	9	19	53
Overall	30	28	9	33

in breast satisfaction (Satisfied, Desire Bigger, Desire Smaller, and Too Droopy), two one-way ANOVAs were conducted with self-rated attractiveness and comfort in a swimsuit as the dependent variables. There was a significant main effect of breast satisfaction on both self-rated attractiveness, $F(3, 26699) = 900.82, p < .001$, and comfort in a swimsuit, $F(3, 26699) = 506.24, p < .001$.

We then conducted pairwise comparisons (LSD) to determine whether women who were satisfied with their breasts reported better body image than other women. As predicted, these comparisons revealed that women who were satisfied with their breasts rated themselves as significantly more attractive than women who desired smaller ($d = .51$), larger ($d = .29$), or less droopy breasts ($d = .69$; all $ps < .001$). Similarly, comparisons for women's comfort in a swimsuit revealed that women who were satisfied with their breasts felt significantly more comfortable in a bathing suit than women who desired smaller ($d = .66$), larger ($d = .17$), or less droopy breasts ($d = .51$; all $ps < .001$).

These findings may be partially a product of the fact that breast shape and size differ according to age and BMI. However, even when age and BMI were entered as covariates in the ANOVA, women who were satisfied with their breasts still reported higher attractiveness and comfort in a swimsuit, all $ps < .001$. The marginal means are reported in Figure 2. As predicted, these comparisons revealed that women who were satisfied with their breasts rated themselves as significantly more attractive than women who desired smaller ($d = .54$), larger ($d = .50$), or less droopy breasts ($d = .48$; all

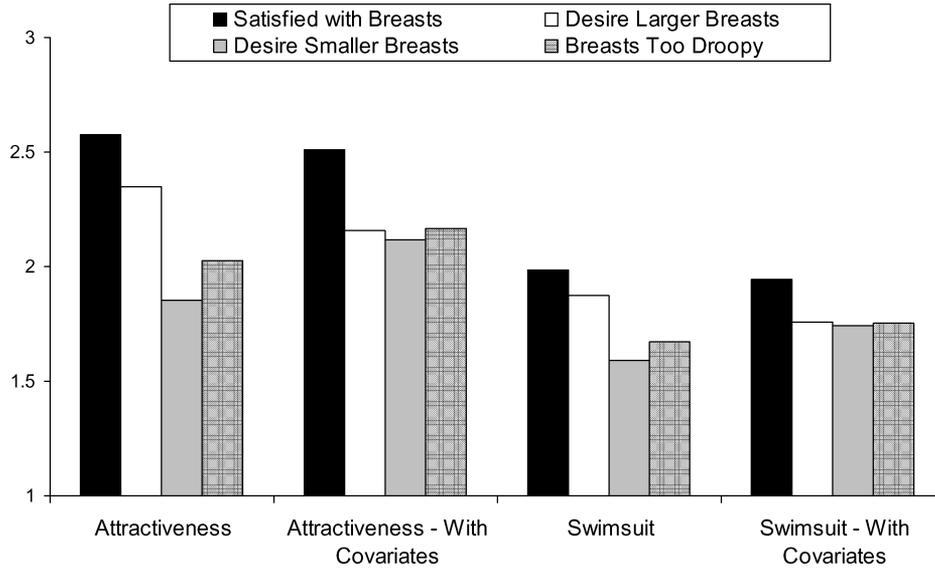
$ps < .001$). Similarly, comparisons for women's comfort in a swimsuit revealed that women who were satisfied with their breasts felt significantly more comfortable in a bathing suit than women who desired smaller ($d = .35$), larger ($d = .32$), or less droopy breasts ($d = .33$; all $ps < .001$).

Women's Breast Satisfaction and Concerns about Body Exposure to their Sexual Partner

A third goal was to examine the association between women's views of their breasts and their attitudes toward revealing their body to their romantic partner. As shown in Table 3, the majority of women reported undressing in front of their partner and revealing their breasts during sex. Women who were dissatisfied with their breasts, however, were more likely than other women to conceal their breasts, either when undressing or during sexual activity. Across all body fat levels, women who were satisfied with their breasts were more likely to report undressing in front of their partner and less likely to report concealing their body during sexual activity. An exception to this pattern, however, was that underweight women who felt that their breasts were too droopy were just as likely to undress in front of their partner as underweight women who were satisfied with their breasts. Interestingly, underweight women who desired larger breasts were most likely conceal their breasts during sex, perhaps reflecting an increased concern with not having large, "feminine" breasts.

These observed associations, however, do not take into account the fact that breast

FIGURE 2. Women’s mean self-ratings of body attractiveness and comfort in a swimsuit as a function of their satisfaction or concern with their breasts. *Note.* Higher mean scores indicate more positive self-ratings. Women who were satisfied with their breasts reported greater self-rated attractiveness and comfort in a swimsuit than other women.



dissatisfaction, overall self-rated attractiveness, BMI, and age are intercorrelated. Is breast size dissatisfaction predictive of concerns with body exposure during sex above and beyond these other factors? To examine this question, we standardized these measures (z-scored) and coded

the breast satisfaction variables as women who were dissatisfied (0) versus satisfied (1). These variables were entered as predictors of willingness to undress in front of one’s partner and to reveal one’s breasts during sexual activity. As shown in Table 4, even when controlling for

TABLE 3. Percentage of women who undress in front of a partner and who hide their breasts during sex by breast satisfaction and weight (BMI) category

	Breast Satisfaction			
	Satisfied	Desire Larger	Desire Smaller	Too Droopy
Undress in Front of Partner? % Yes				
BMI Category				
Underweight	88	84	76	89
Healthy Wt.	90	84	81	84
Overweight	86	75	76	77
Obese	81	65	66	68
Overall	88	82	75	79
Hide Breasts during Sex? % Yes				
BMI Category				
Underweight	2	26	12	18
Healthy Wt.	1	18	11	10
Overweight	1	12	7	6
Obese	1	7	9	5
Overall	1	17	9	8

TABLE 4. Breast satisfaction predicts concerns with body exposure during sex when controlling for other variables

	Undress in Front of Partner?		Hide Breasts During Sex?	
	Odds Ratio	p	Odds Ratio	P
Breast Satisfaction	1.31	.000	9.95	.000
Self-Rated Attractiveness	2.19	.000	1.45	.000
BMI	1.03	.061	1.84	.000
Age	1.03	.137	1.29	.000
Model <i>df</i> , Total <i>N</i>	4,27368		4,27368	.000
Model Chi-Square	2398	.000	1796	.000
Cox & Snell / Nagelkerke R^2	.08/.14	.000	.06/.14	.000

Note. When controlling for other variables, women who were satisfied with their breasts were 1.31 times more likely to report undressing in front of their partner and 9.95 times more likely to reveal their breasts during sexual activity.

other variables, women who were satisfied with their breasts were 1.31 times more likely to report undressing in front of their partner and 9.95 times more likely to reveal their breasts during sexual activity than women who were not satisfied with their breasts.

Men's Satisfaction with the Size and Shape of their Partner's Breasts

A fourth goal was to investigate the extent of men's satisfaction with their partner's breast size and shape. These results are summarized in Table 1. The majority of men (56%) were satisfied with their partner's breasts. Men who were dissatisfied were equally split between those desiring a partner with larger breasts (20%) and those desiring a partner with less droopy breasts (20%). Only 4% of men wished that their partner had smaller breasts. The percentage of men who were satisfied with their partner's breasts was fairly similar across all age groups. Parallel to findings for women, the type of breast dissatisfaction expressed by men differed with age. The percentage of men wishing their partner had larger breasts declined steadily across the age groups. Dissatisfaction with droopiness had a weaker association with age. Few men in the youngest age group (18–25) reported dissatisfaction with the droopiness of their partner's breasts; among men ages 26–65, the degree of dissatisfaction with droopiness was higher (20–24% of men) but fairly similar across all other age groups.

DISCUSSION

Women's Breast Satisfaction: Associations with Age and BMI

In this large and diverse sample, a majority of women (70%) expressed discontent with their breasts, suggesting that this is a pervasive concern for women. A strength of this research was our ability to carefully examine the association of breast satisfaction with both age and body fat level. Age proved to be a significant factor. Although the percentage of women who were dissatisfied was similar across age groups, the primary concerns of these dissatisfied women differed by age. As predicted, younger women were more likely than older women to express dissatisfaction with breast size, while older women were more likely to report concerns with the droopiness of their breasts. This pattern is likely tied to the changes that occur in women's bodies and breasts as they age. Surprisingly, however, breast droopiness was cited as a concern among women in all age groups. In addition to age, body fat level as assessed by BMI was also an important predictor of breast concerns among women. In particular, underweight and healthy weight women were most likely to report concerns about their breasts being too small, while overweight and obese women were most likely to feel that their breasts were too large or too droopy. This is likely reflective of the fact that thinner individuals are more likely to have smaller breasts (Forbes & Frederick, in press; Hall et al., 1999).

Women's Breast Satisfaction: Associations with Body Image and Sexuality

Women who were satisfied with their breasts rated themselves as more attractive and were more comfortable in a swimsuit than women who were unhappy with their breast shape or size, and this was true even when controlling for age and level of body fat. All but one of the 12 effect size calculations showed that the differences between the satisfied women and the dissatisfied women were small to moderate ($d_s = .32-.69$; in the exception, $d = .17$). Many of these comparisons were similar in magnitude to the widely known and notable differences between men and women in overall body dissatisfaction ($d = .52$; Feingold & Mazzella, 1998). This suggests that breast dissatisfaction may be an important factor that contributes to overall body dissatisfaction.

Consistent with past research showing that overall body dissatisfaction is linked to sexual esteem and anxiety (Weaver & Byers, 2006), in this study both body and breast dissatisfaction were related to women's body concerns during sex. Women who were not satisfied with their breasts were more likely to avoid undressing in front of their partner and to hide their breasts during sexual activity. This pattern generally held true regardless of a woman's level of body fat, although underweight women who desired larger breasts were the group most likely to hide their breasts during sexual activity. The overt sexualization of women's breasts and the resulting concerns that women have regarding how their breasts are evaluated may be one reason that women who are dissatisfied with their breasts attempt to conceal them from their partner. It is important to note, however, that the majority of women did undress in front of their partner and reveal their breasts during sex.

Men's Satisfaction with the Size and Shape of their Partner's Breasts

An important contribution of this research was to assess men's satisfaction with their partner's breasts. In contrast to women's overwhelming dissatisfaction, the majority of men (56%) were satisfied with their partner's breasts. Despite pervasive images of large-breasted women

in the media and past research suggesting that most men rate large breasts as ideal (e.g., Tantleff-Dunn & Thompson 2000), only 20% of men in our sample cited bigger breasts as their top concern regarding their partner's breasts. This suggests that regardless of the breast size that men rate as "ideal" in the abstract, the majority of men are satisfied with their actual partner's breast size. When men did express dissatisfaction, they typically reported that they preferred their partner's breasts to be larger or less droopy; fewer than 1 in 20 wished their partner's breasts were smaller. Young men were most likely to wish that their partner's breasts were larger. It is unclear whether this is because young men have grown up in an era where breast augmentation is widely available or because breast droopiness is less common among younger women. Although most men in this sample reported satisfaction with their partner's breasts, a substantial minority reported some level of dissatisfaction. The dissatisfaction reported by these men may be an important factor contributing to the dissatisfaction that many women feel about their breasts.

An intriguing finding from this research was the discrepancy between the frequency of women's and men's breast concerns. Although most women in our sample were dissatisfied with their breasts, a majority of men were satisfied with their partner's breasts. This finding fits a larger pattern of results in the body image literature suggesting that people overestimate the importance of various physical traits to the other sex (e.g., Frederick, Fessler, & Haselton, 2005; Jacobi & Cash, 1994). For example, women overestimate the degree of thinness (e.g., Fallon & Rozin, 1985) and the breast size (Tantleff-Dunn, 2001) preferred by men. In addition, nearly half of men are dissatisfied with their penis size despite the fact that the vast majority of women report being very satisfied with their partner's penis size (Lever, Frederick, & Peplau, 2006). In short, individuals may be much more self-critical of their bodies than they need to be. Thus one source of women's breast dissatisfaction may be an overestimation of the breast size preferred by their romantic partners, or an overestimation of the importance that their partners place on breast size. Further research about systematic discrepancies

between men's and women's beliefs about their bodies is needed. Studies assessing the viewpoints of both partners in couples would be especially informative.

Limitations

Limitations of the study should be mentioned. To increase participation rates, the survey was necessarily short and relied on single-item measures of key variables. However, it is important to note that this limitation is shared by most other research on breast concerns, which has also relied on one-item measures of breast satisfaction (e.g., Forbes, Jobe, & Revak, 2006; Harrison, 2003; Jacobi & Cash, 1994; Koff & Benavage, 1998; Tantleff-Dunn & Thompson, 2000; Thompson & Tantleff, 1992; for an exception, see Forbes & Frederick, in press). Because our project was based on secondary analysis and the items had not been constructed by the authors, several of the items had less than ideal wording and psychometric properties. For example, although we can document the percentage of women who are not satisfied with their current breasts, we cannot draw conclusions about the intensity of their dissatisfaction. Further, women were only given the opportunity to select one of the breast dissatisfaction options (desire smaller, desire larger, or too droopy). Although this had the advantage of isolating women's primary concern, we were unable to examine the percentage of women who were dissatisfied with both the size and droopiness of their breasts.

Concluding Comments

Past research on body image has suggested that the intense sexualization and objectification of women's breasts may result in many women being dissatisfied with their breasts. The present research demonstrated that concerns about breast size and shape are indeed widespread among women, to the point that many women try to conceal their breasts from their sexual partners. Additional research is needed to document the intensity of this dissatisfaction and the degree to which these concerns interfere with women's enjoyment of their sex life and detract from their psychological well-being. It will also be important to identify in-

terventions on both a societal and personal level that may be effective in reducing women's dissatisfaction with their breasts without resorting to elective breast surgery.

ACKNOWLEDGMENTS

For additional papers and information, please contact David Frederick at enderflies1@aol.com or visit his website at <http://dfred.bol.ucla.edu>. We thank *Elle* magazine for access to the data from the *ELLE/MSNBC.com Sex and Body Image Survey*. The authors are grateful to the UCLA Graduate Division, the Center for Culture, Brain, and Development, and the department of Psychology, for providing financial support for the first author. We are also grateful to the National Institute of Health, who supported the first author, Grant # 1F31MH072384-01. Thanks also to Carol Edwards, who helped create the database.

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RECEIVED: 5/14/07
ACCEPTED: 11/14/07