Breast Size Dissatisfaction, but Not Body Dissatisfaction, is Associated with Breast Self-

Examination Frequency and Breast Change Detection in British Women

Viren Swami[1-2] & Adrian Furnham[3-4]

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

[2]Centre for Psychological Medicine, Perdana University, Serdang, Malaysia

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

London, UK

[4] Department of Leadership and Organizational Behaviour, Norwegian Business School,

Oslo, Norway

Address for correspondence: Prof. Viren Swami, Department of Psychology, Anglia Ruskin

University, East Road, Cambridge, Cambridgeshire CB1 1PT, UK. Email:

viren.swami@anglia.ac.uk.

Abstract

Studies examining associations between body image and breast self-examination (BSE) have returned mixed findings, but this may be a function of focusing on global body image. Here, we examined the impact of breast size dissatisfaction specifically on BSE and behaviours in relation to breast change detection. A total of 384 British women completed measures of breast size dissatisfaction, body dissatisfaction, BSE frequency, confidence in detecting breast change, and delay in contacting their doctor upon detecting a breast change. Regression analyses indicated that greater breast size dissatisfaction, but not body dissatisfaction, was significantly associated with less frequent BSE and lower confidence in detecting breast change. Both breast size and body dissatisfaction were significantly associated with greater delay in consulting a doctor following breast change, but the former was the stronger predictor. These findings suggest that improving breast size satisfaction may be a useful means of promoting improved breast awareness and self-examination.

Keywords: Breast size dissatisfaction; Breast self-examination; Breast change detection; Body dissatisfaction

Introduction

Breast cancer is the most common cancer in women in the United Kingdom (UK) and the second most common cause of cancer death after lung cancer (Office of National Statistics, 2017). Moreover, women with breast cancer in the UK tend to present with more advanced disease and have poorer survival rates than women in other parts of Europe (Berrino et al., 2007). It has been suggested that delays in diagnosis, which is associated with poorer survival rates in breast cancer (Richards, Westcombe, Love, Littlejohns, & Ramirez, 1999), may be responsible for these figures in women in the UK compared with other parts of Europe (Sant et al., 2003). Conversely, regular attendance at mammography screening is one of the most effective ways of detecting breast cancer and reducing the mortality rate from breast cancer (e.g., National Health Service Breast Screening Programme, 2006, 2010). Nevertheless, Greenwald (2001) suggested that most breast cancers are detected by women through breast self-examination (BSE), which involves regular, mechanistic palpation of the breasts.

A wide range of individual difference factors have been associated with BSE frequency (e.g., perceived self-efficacy; Luszczynska & Schwarzer, 2003), but little research has focused on the role of body image (for a review, see Ridolfi & Crowther, 2013). This is surprising given that BSE requires physical examination and awareness of one's own body and should, therefore, be a *prima facie* candidate for shaping BSE engagement. That is, to the extent that BSE represents a threat to body image (Chait, Thompson, & Jacobsen, 2009), women with more negative body image may avoid performing BSE to reduce that threat. Moreover, BSE could activate negative thoughts about the body, particularly if women are too anxious to feel their breasts in case they should discover an abnormality (Burton, 1995; Kearney, 2006). As Baines (1983, p. 256) wrote, it requires that a woman treat her body with

distrust: "These breasts of mine cannot be trusted; I must monitor them constantly to discover if they have betrayed me by becoming cancerous".

The little research that has examined associations between BSE and body image appears to have reached mixed findings. Thus, more negative body image has been associated with lower frequency of BSE in North American community women (Clark et al., 2009), Turkish community women (Cam & Gümüs, 2009), and Malaysian university students (Abu Samah & Ahmadian, 2014). On the other hand, two studies have reported no significant associations between negative body image and BSE frequency in community women from the United States (Chait et al., 2009) and Malaysian university women (Ahmadian, Carmack, Abu Samah, Kreps, & Saidu, 2016). There is also limited qualitative data on this topic. One study of British lesbians inferred that body discomfort is an important reason for not practising BSE (Fish & Wilkinson, 2003). In short, the relationship between body image and BSE appears to be equivocal at best, although – as Ridolfi and Crowther (2013) caution – research on this topic remains piecemeal.

In addition to the lack of sustained scholarly attention, previous studies are also hampered by a number of additional limitations. First, as noted by Ridolfi and Crowther (2013), some studies have relied on non-psychometrically sound measures of body image (e.g., the use of single-item measures of uncertain validity). Second, some studies have relied on relatively small samples and/or have recruited college-aged women. Third, all previous studies have focused on indices of global negative body image. However, it stands to reason that breast dissatisfaction may be a more direct predictor of BSE engagement. Indeed, based on interviews with women, Thomas and Usher (2009) inferred that negative feelings about the appearance of one's breasts contributed to "breast conflict" (i.e., a discord between women's feelings about their breasts and how women define themselves in relation to their breasts), which in turn impacted on decision-making *vis-à-vis* mammography screening.

Thus, a focus on breast dissatisfaction may help resolve the conflicting findings in previous studies.

A fourth issue worth considering is that, done on its own and without proper training, BSE may not provide any clear benefit for early breast cancer detection and mortality reduction (for a review, see Kösters & Gøtzsche, 2003). In fact, BSE may increase the number of benign lesions identified and lead to increased number of biopsies performed (Nelson et al., 2009). In the UK, healthcare policy no longer advocates systematic BSE and instead promotes "breast awareness", which can aid early breast cancer detection (Mant, 1991; National Health Service, 2015; Royal College of Nursing, 2002). There remains some confusion about how precisely breast awareness should be defined, but in general it involves familiarity with one's breasts and the way the breasts change throughout a woman's life (McCready, Littlewood, & Jenkinson, 2005; Thornton & Pillarisetti, 2008). It involves women gaining an awareness of how their breasts look and feel normally, as well as developing the confidence to notice any change (e.g., changes in size, swelling, pain, lumps or thickening) that might help detect breast cancer early. Given these issues, it is important to focus on the possible associations between body image and broader aspects of breast awareness, as opposed to BSE alone.

Here, we examined the association between breast size dissatisfaction and frequency of BSE, as well as confidence in detecting breast change and delay in seeing a doctor following breast change detection, in British women. Although size represents only one dimension in which women may experience dissatisfaction with their breasts, it is perhaps the most important of these dimensions in terms of women's corporeal experiences (see Swami, Cavelti, Taylor, & Tovée, 2014). To our knowledge, this is the first study to directly examine the association between breast size dissatisfaction and frequency of BSE using a quantitative design. In addition, we also included a measure of body dissatisfaction to examine its

predictive utility relative to breast size dissatisfaction. Given evidence of a linear relationship between body mass index (BMI) and less frequent mammogram screening (e.g., Cohen et al., 2008), we also measured participants' self-reported BMI. As a preliminary hypothesis, we expected that greater breast size dissatisfaction, but not body dissatisfaction or BMI, would be significantly associated with lower frequency of BSE, lower confidence detecting breast change, and greater delay in seeing a doctor following detection of breast change.

Method

Participants

The sample for this study consisted of 384 women, all of whom were UK citizens. Participants ranged in age from 18 to 76 years ($M = 38.10$, $SD = 11.64$) and in self-reported BMI from 14.70 to 46.99 kg/m^2 ($M = 27.01$, $SD = 5.96$). Most participants self-reported their ethnicity as being British White (91.4%), while 2.9% were British Asian, and the remainder were of other ancestry. The majority of participants self-reported their sexual orientation as heterosexual (92.4%), while 5.2% said they were bisexual, 2.1% were lesbians, and 0.3% were unsure. In terms of educational qualifications, 26.5% had completed their General Certificate of Secondary Education (GCSEs), 26.0% had obtained an Advanced-Level (A-Level) certificate, 30.2% had an undergraduate degree, 15.4% had a postgraduate degree, 2.3% were in full-time higher education, and the remainder had some other qualification.

Measures

Breast size dissatisfaction. To measure breast size dissatisfaction, we used the Breast Size Dissatisfaction Scale (BSRS; Swami et al., 2014). This is a figural rating scale consisting of 14 computer-generated images of women with increasing breast size. All images were presented in greyscale and without the appearance of facial features. Participants were asked to rate the image that most closely matched their current breast size and the image they would most like to possess, with responses made on a 14-point scale (1 = Figure with

the smallest breast size, 14 = Figure with the largest breast size). A measure of breast size

dissatisfaction was computed as the absolute difference between current and ideal breast size

ratings, such that higher scores reflect greater breast size dissatisfaction. Scores derived from

the BSRS have been shown to have good construct validity, acceptable test-retest reliability

up to 3 months, and adequate patterns of convergent validity in British women (Swami et al.,

2014).

Body dissatisfaction. We included the 9-item Body Dissatisfaction subscale of the

Eating Disorders Inventory-3 (EDI-3-BD; Garner, 2004), which measures dissatisfaction with

various body parts (sample item: "I think that my stomach is too big"). Items were rated on a

5-point Likert-type scale, ranging from 1 (*Never*) to 5 (*Always*), and an overall score was

computed as the mean of all items. Higher scores indicate greater body dissatisfaction. Scores

on this subscale of the EDI-3 have good psychometric properties, including adequate internal

consistency and indices of validity, in adult women (Garner, 2004). In this study, Cronbach's

α for the EDI-3-BD was .76.

Breast self-examination frequency. We used the BSE frequency item from the

Breast Module of the Cancer Awareness Measure (BCAM; Linsell et al., 2009), a validated,

self-reported measure of multiple domains of breast cancer awareness with adequate

construct validity and test-retest reliability up to two weeks. The item was: "How often do

you check your breast?" with responses made on a 4-point scale (1 = *Rarely or never*, 2 = *At

least once every six months*, 3 = *At least once a month*, 4 = *At least once a week*). Although

the National Health Service (2015) does not provide firm recommendations on the frequency

with which women should self-examine their breasts, Linsell et al. (2009) suggested that

women were more likely to be breast cancer-aware if they engaged in BSE at least once a

week or once a month.

Confidence and response to breast change detection. Two items were taken from the BCAM (Linsell et al., 2009). The first asked about participants' confidence in noticing a change in their breasts, with responses made on a 4-point scale (1 = *Not at all confident*, 2 = *Slightly confident*, 3 = *Fairly confident*, 4 = *Very confident*). The second asked how soon participants would contact their doctor if they noticed a change in their breasts. The response was open-ended, with participants asked to type in their answers. Because the BCAM does not provide specific guidelines for scoring these data, we developed a scoring scheme through comparison of participant responses to categories. The first author began by reviewing the responses several times and generated scoring codes in consultation with the second author. New codes were generated when any text did not fit with existing categories and analysis proceeded until all responses had been analysed. Scoring codes were only included based on manifest content (i.e., based on what participants wrote and not on what could be inferred). Finally, an independent coder (a postgraduate student in psychology) analysed the responses and labelled each response according to the identified codes. Inter-rater agreement between the authors and the independent coder was measured using Cohen's Kappa (κ), with κ = .95, indicating substantial agreement (Krippendorf, 1980). The final scoring scheme used a 7-point scale (1 = *Immediately or as soon as possible*, 2 = *Within a few days*, 3 = *Within a week*, 4 = *Within a month*, 5 = *Within three months*, 6 = *Delay as long as possible*, 7 = *Would not see doctor*). In the UK, the National Health Service (2015) recommendation is that a woman should contact their doctor's surgery as soon as possible upon discovering a change in their breasts, as early detection increases the likelihood of positive outcomes.

Body mass index. Participants self-reported their height and weight on open-ended items. We standardised this data so as to present height in metres and weight in kilogrammes, and self-reported BMI was subsequently computed as kg/m^2. Self-reported height and weight

data are strongly correlated with measured data and can be reliably used in population studies (Spencer, Appleby, Davey, & Key, 2002).

Demographics. Participants provided their demographics, consisting of age, sexual orientation, highest educational qualification, and ethnicity. In addition, we asked whether participants ever had breast cancer (1 = *Yes*, 2 = *No*) and whether they had ever been to see a doctor about a change in one of their breasts (1 = *Yes*, 2 = *No*, 3 = *Never noticed a change in one of my breasts*). The latter two items were taken from the BCAM (Linsell et al., 2009).

Procedure

The project was approved by the relevant university ethics committee. Data were collected via the Prolific Academic website, a crowdsourcing Internet marketplace that allows individuals to complete academic surveys for monetary compensation, between November 26th and 27th, 2017. The project was advertised as a study on "women's health and well-being" and included an estimated duration. Participation was limited to UK citizens of adult age, so as to achieve a relatively homogeneous sample in terms of national identity. After providing informed consent, participants were directed to the measures described above, which were presented in an anonymous form. The order of presentation of the individual scales described above was counterbalanced for each participant. The order of presentation of the items within scales was not counterbalanced, with the exception of the BSRS (where the order of presentation of items was counterbalanced for each participant). In exchange for completing the survey, participants were paid £1.00 and all participants received debriefing information at the end of the survey.

Results

Descriptive Statistics

Of the total sample, 97.1% did not have a history of breast cancer and 30.0% had seen their doctor because they had noticed a change in one of their breasts (32.0% had not visited

their doctor for this reason and 38.0% had not noticed a change in one of their breasts). Based

on BSRS scores, 24.5% of the total sample reported no breast size dissatisfaction, 31.3%

wanted smaller breasts than they currently had, and 44.2% wanted larger breasts than they

currently had. These percentages are broadly consistent with that reported by Swami et al.

(2014, Studies 3-4). In terms of BSE frequency, 33.3% rarely or never engaged in BSE,

21.4% engaged in BSE at least once every six months, 24.5% at least once a month, and

20.8% at least once a week. Linsell et al. (2009) reported slightly more frequent BSE in their

study of British women (15.0% rarely or never, 36.0% at least once every six months, 23.0%

at least once a month, 26.0% at least once a week), although their sample was older in age

(range = 43-82 years). In terms of confidence in detecting a change in their breasts, 26.3%

were not at all confident, 31.3% were slightly confident, 27.3% were fairly confident, and

15.1% were very confident. If they were to detect a change in their breasts, the majority of

participants indicated they would see their doctor immediately or as soon as possible

(54.7%), 3.4% within a few days, 8.3% within a week, 12.5% within a month, and 11.2%

within three months, whereas 7.6% would delay for as long as possible, and 2.3% would not

see their doctor.

Correlations and Multiple Regressions

We computed bivariate correlations between absolute breast size dissatisfaction, body

dissatisfaction, BSE frequency, behaviours in relation to breast change detection, and

participant BMI. As reported in Table 1, greater breast size dissatisfaction was significantly

associated with less frequent BSE, lower confidence detecting a change in one's breasts, and

greater delay in seeing a doctor if a change in one's breast was detected. Greater breast size

dissatisfaction was also significantly associated with greater body dissatisfaction and higher

BMIs. Conversely, greater body dissatisfaction and BMI, respectively, were not significantly

associated with BSE frequency or behaviours in response to breast change detection,

although body dissatisfaction and BMI were significantly and positively correlated. More frequent BSE was significantly associated with greater confidence detecting a change and shorter delay in consulting a doctor in the event of detecting a breast change. Finally, greater confidence in detecting a change was also significantly associated with a shorter delay in consulting a doctor in the event of discovering a breast change.

Next, we conducted three hierarchical regressions with BSE frequency, confidence detecting a change, and delay in consulting a doctor, respectively, as the criterion variables. Although body dissatisfaction and BMI did not reach significance in the correlation analysis, we nevertheless included these variables in a first step of the regression. The second step of the regression included breast size dissatisfaction as the predictor variable. For the first regression with BSE frequency, the first step of the regression was not significant, $F(2, 381) = 0.29$, $p = .750$, Adj. $R^2 < .01$, whereas the second step was significant, $F(3, 380) = 54.29$, $p < .001$, Adj. $R^2 = .30$. Of the variables included in the second step, only breast size dissatisfaction emerged as a significant predictor (see Table 2). The first step of the second regression with confidence detecting a breast change was also not significant, $F(2, 381) = 0.65$, $p = .525$, Adj. $R^2 < .01$, whereas the second step was significant, $F(3, 380) = 48.02$, $p < .001$, Adj. $R^2 = .27$. Breast size dissatisfaction was again the only significant predictor in the second step (see Table 2). The final regression with delay consulting a doctor was not significant in the first step, $F(2, 381) = 1.55$, $p = .213$, Adj. $R^2 < .01$. The second step, however, was significant, $F(3, 380) = 42.67$, $p < .001$, Adj. $R^2 = .25$, with both breast size dissatisfaction and body dissatisfaction associated with greater delay (see Table 2). Multicollinearity diagnostics indicated that multicollinearity was not a limiting factor in any of the regressions (all variance inflation factors < 1.02).

Further Analyses

To further elucidate underlying relationships, we examined relationships between breast size dissatisfaction and outcome variables in two participant subcategories, namely those who desired smaller breasts than they currently had ($n = 120$) and those who wanted larger breasts than they currently had ($n = 170$). Based on a Fisher's r to z test, the strength of the relationship with BSE was not significantly stronger in women who desired smaller breasts ($r = .36$, $p < .001$) compared to those who desired larger breasts ($r = .44$, $p < .001$), $z = 0.79$, $p = .430$. Likewise, the strength of the relationship with confidence in detecting a breast change was not significantly stronger in women who desired smaller breasts ($r = .47$, $p < .001$) compared to those who desired larger breasts ($r = .50$, $p < .001$), $z = 0.33$, $p = .741$. Conversely, the strength of the relationship between breast size dissatisfaction and delay in seeing a doctor once a breast change had been detected was significantly stronger in women who desired larger breasts than they currently had ($r = .62$, $p < .001$) compared to women who desired smaller breasts than they currently had ($r = .39$, $p < .001$), $z = 2.60$, $p = .009$.

Discussion

Previous studies examining associations between BSE frequency and indices of body image have returned equivocal findings (Abu Samah & Ahmadian, 2014; Ahmadian et al., 2016; Chait et al., 2009; Clark et al., 2009). We suggested that one reason for this may be because these studies have used measures of body image of uncertain validity and, importantly, have focused on indices of global body image. We further suggested that focusing on breast size dissatisfaction specifically may help resolve these conflicting findings. As we hypothesised, our results indicated that breast size dissatisfaction, but not body dissatisfaction or BMI, was significantly associated with lower frequency of self-reported BSE. Furthermore, the strength of this relationship was not significantly different in women who desired smaller or larger breasts than they currently had. To our knowledge, this is the first study to specifically examine the relationship between breast size dissatisfaction

and BSE frequency and our results suggest that it is dissatisfaction with one's breasts, rather than one's body as a whole, that may impact upon BSE engagement.

To perform BSE, the National Health Service (2015) recommends that women visually inspect each breast (e.g., in front of a mirror) and feel each breast and armpit to detect changes. For women who are dissatisfied with their breast size, having to visually and manually inspect their breasts may be experienced as a threat to body image (Chait et al., 2009). As a means of coping with such threat to one's body image, some women may engage in avoidance behaviours that reduce the likelihood of practising BSE. That is, women who experience breast size dissatisfaction may avoid performing BSE because doing so draws attention to the site of their dissatisfaction. In addition, breast size dissatisfaction may also activate negative self-conscious emotions, such as shame and embarrassment, that result in avoiding BSE. In a similar vein, Baines (1983, p. 256) has suggested that women who experience breast size dissatisfaction may avoid BSE precisely because BSE "neither makes one feel better for having done it nor makes one more attractive". Instead, BSE – which asks women to ritually seek evidence that they have been "betrayed" by their breasts may serve to heighten breast size dissatisfaction because it forces women to self-objectify and treat their breasts with "hostility, suspicion, and distrust" (Baines, 1983, p. 256; see also Baines, 1988).

However, given evidence that BSE on its own may not provide any clear benefit in terms of breast cancer detection (Kösters & Gøtzsche, 2003), we also focused on confidence in detecting breast change. Our findings indicated that greater breast size dissatisfaction was associated with lower confidence in detecting changes in one's breasts. Moreover, the strength of the relationship was not significantly stronger in women who desired smaller or larger breasts than they currently had. These findings are consistent with the preceding arguments. For example, confidence in detecting changes to one's breasts requires that women understand how their breasts look and feel normally and monitor their breasts for any

changes, but this may be experienced as a threat to body image. Thus, women who

experience greater breast size dissatisfaction may be less breast aware and may be less likely

to seek or receive instruction on how to be breast aware, particularly if such instruction takes

place in the presence of other people (e.g., a doctor or nurse; Martin, Leary, & Rajeski,

2000).

In addition, our results indicated that women with greater breast size dissatisfaction

were more likely to delay consulting their doctor were they to detect a change in their breasts.

Broadly speaking, this result is consistent with a growing body of evidence suggests that

some individuals cope with uncomfortable body-related situations involving others through

avoidance and disengagement (e.g., Bailey, Lamarche, & Gammage, 2014; Lamarche, Kerr,

Faulkner, Gammage, & Klentrou, 2012). That is, women who experience breast size

dissatisfaction may be more likely to delay seeing a doctor following detection of breast

change because it involves exposing one's physical and emotional self to others. It should be

noted, however, that the strength of the relationship between breast size dissatisfaction and

delay in seeing a doctor was stronger in women who desired larger breasts than they currently

had compared to women who desired smaller breasts. This aspect of our findings is difficult

to explain in the absence of further study, but may be linked to sociocultural pressure

emphasising large-breastedness in constructions of womanhood (Swami et al., 2014).

Interestingly, general body dissatisfaction also emerged as a significant predictor of delay

decision-making, although breast size dissatisfaction was still the stronger predictor.

Strengths of the present study include the use of validated measures of breast size and

body dissatisfaction, as well as validated measures of BSE frequency and behaviours in

response to detecting a breast change. Nevertheless, there are a number of ways in which the

present findings could be extended and built upon. First, the present study was focused on

breast size dissatisfaction and, although size may be the most important component of breast

dissatisfaction (Swami et al., 2014), future studies should seek to include other measures of dissatisfaction with one's breasts (e.g., breast symmetry, firmness, "droopiness"; Frederick, Peplau, & Lever, 2008). Likewise, the present work was focused on self-reported BSE frequency, but future work could extend this to examine BSE intentions. Qualitative research may also be useful in helping scholars to better understand the role of breast size dissatisfaction in the initiation and maintenance of BSE and behaviours in response to breast change. In addition, it would also be useful to extend the present work to examine the impact of breast size dissatisfaction on decision-making *vis-à-vis* mammogram screening. Although both BSE and mammogram screening relate to early detection of breast cancer, they are different behaviours (Savage & Clark, 1996). A mammogram could be viewed as the more "public" behaviour, requiring presentation of the self to others, which in turn suggests that it may be more strongly influenced by breast size dissatisfaction.

Additional issues to consider when interpreting the present findings include the possibility of sampling biases. For example, given that our sample was self-recruiting, we cannot rule out the possibility that the recruitment method inadvertently introduced biases in the participant pool. Likewise, the use of an online recruitment method means that our sample is unlikely to be representative of the wider population of women in the UK, let alone women in other countries. Generalising our findings should, therefore, be done with caution. Nevertheless, it is worth highlighting that crowdsourcing Internet marketplaces are increasingly used in body image research and have been shown to produce reliable data as compared with offline samples (Gardner, Brown, & Boice, 2012). Finally, future work could extend the present findings by including additional body image variables that may impact on BSE and behaviours in response to breast change. For example, there may be utility in examining the concurrent influence of both negative and positive body image in relation to BSE. In particular, it would be useful to examine the predictive power of constructs such as

body appreciation, positive rational acceptance coping, body image flexibility, and body functionality (see London & Flannery, 2004).

In conclusion, the present study suggests that previous equivocal findings in relation to studies of the impact of body image on BSE may have been a result of the focus on global body image. In contrast, our findings suggest that greater breast size dissatisfaction specifically, but not body dissatisfaction in general or BMI, is significantly associated with less frequent BSE, lower confidence in detecting breast change, and greater delay in seeing a doctor following breast change. These findings point to the possibility that interventions promoting greater breast size satisfaction may be a means of empowering women to develop the will and freedom from barriers to incorporate BSE and breast awareness into their health practice (cf. Gasalberti, 2002). Indeed, promoting greater breast awareness may be a useful means of helping women view their breasts in more functional (rather than purely aesthetic) terms, which in turn may empower them to take an active role in BSE (Anastasi & Lusher, 2018; McCready et al., 2005; see also Wilkinson & Kitzinger, 1994). In conjunction with such interventions, it will be important for healthcare practitioners to be mindful of the impact that dissatisfaction with one's breasts may have on self-examination behaviours and outcomes (McWilliam, Brown, & Stewart, 2000).

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Table 1. *Bivariate Correlations between Breast Size Dissatisfaction, Body Dissatisfaction, Breast Self-Examination Frequency, Behaviours in Response to Breast Change Detection, and Participant Body Mass Index.*

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Breast size dissatisfaction		.12*	-.55**	-.52**	.49**	.12*
(2) Body dissatisfaction			.03	.05	.09	.11*
(3) Breast self-examination frequency				.43**	-.37**	-.02
(4) Confidence noticing a change in breasts					-.37**	-.04
(5) How soon contact with doctor						.02
(6) Body mass index						
M	3.05	2.68	2.33	2.31	2.54	27.01
SD	2.64	0.31	1.14	1.02	1.91	5.96

*Note. *p < .05, **p < .001.*

Table 2. *Results of the Regression Analyses Predicting Breast Self-Examination Frequency and Behaviours in Response to Breast Change Detection.*

		Breast self-examination frequency					Confidence detecting change					Delay seeing doctor following change				
		B	*SE*	β	*t*	*p*	*B*	*SE*	β	*t*	*p*	*B*	*SE*	β	*t*	*p*
Step 1	BD	-.11	.19	-.03	-0.59	.553	-.14	.17	-.04	-0.86	.389	.54	.31	.09	1.74	.083
	BMI	-.01	.01	-.02	-0.45	.656	-.01	.01	-.04	-0.70	.482	.01	.02	.02	0.36	.723
Step 2	BD	-.08	.16	-.02	-0.51	.611	-.12	.14	-.04	-0.82	.411	.59	.27	.10	2.17	.030
	BMI	-.01	.01	-.04	-0.99	.324	-.01	.01	-.03	-0.60	.552	.01	.01	.04	0.91	.362
	BSD	-.24	.02	-.55	-12.81	< .001	-.20	.02	-.53	-11.93	< .001	.36	.03	.50	11.13	< .001

Note. BD = Body dissatisfaction; BMI = Body mass index; BSD = Breast size dissatisfaction