

Does This Friend Make Me Look Fat? Appearance-Related Comparisons Within Women's Close Friendships

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The present research investigated the effects of close friends on women's body image and the moderating role of comfort with intimacy. Female participants wrote about a thin or heavy close friend prior to completing implicit (Study 1) and explicit (Study 2) body image measures. Results revealed that participants who avoided intimacy experienced contrast effects, feeling worse about their bodies following exposure to thin friends. However, these effects were attenuated, and sometimes reversed, among participants comfortable with intimacy. Thus, close friends—and the comfort with intimacy within those friendships—have important implications for women's body image.

In Western society, body dissatisfaction is so pervasive among women that it is often described by researchers as a normative discontent (Rodin, Silberstein, & Striegel-Moore, 1984). Because body dissatisfaction is associated with a wide array of negative outcomes for women and girls, including low self-esteem (Tiggemann, 1992, 2005; van den Berg, Mond, Eisenberg, Ackard, & Neumark-Sztainer, 2010), depression (Gavin, Simon, & Ludman, 2010; Joiner, Wonderlich, Metalsky, & Schmidt, 1995), and disordered eating behaviors (Phelps, Johnston, & Augustyniak, 1999; Polivy & Herman, 2002; Stice, 2002), it is important to examine the factors that influence body image. One factor that negatively impacts women's body image is appearance-related social comparison. Indeed, an abundance of research, both correlational and experimental, demonstrates that comparing one's body with others leads women to experience body dissatisfaction (see Myers & Crowther, 2009, for a meta-analytic review).

The vast majority of studies on appearance-related comparison and body image focus on comparisons with media figures. However, women are more likely to make social comparisons with peers than media

figures (Jones, 2001; Wheeler & Miyake, 1992) and rate friends as being the most important comparison group when it comes to their appearance (Heinberg & Thompson, 1992). Thus, it may be especially worthwhile to examine the consequences of appearance-related comparisons with friends. Although a handful of studies have investigated peer-based comparisons (e.g., Krones, Stice, Batres, & Orjada, 2005; Leahey & Crowther, 2008), to our knowledge, no research to date has experimentally examined the consequences comparing one's body with those of *friends*. Thus, the purpose of the present research was to examine the effects of appearance-related social comparisons with same-sex close friends on women's body image. Past research on non-appearance-related social comparisons within friendship suggests that comfort with intimacy moderates the effects of friends on the self. Therefore, we hypothesized that friends would affect women's body satisfaction and that the effects would be moderated by comfort with intimacy.

APPEARANCE-RELATED SOCIAL COMPARISONS

According to social comparison theory (Festinger, 1954), people look to others to inform how they feel

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about their own attributes, including their physical appearance. Typically, these comparisons lead to contrast effects, such that one comes to see oneself as being less like the target. For example, women may feel bad following exposure to thin media figures, because by comparison their own bodies seem heavier. Indeed, the dominant narrative on the effects of appearance-related comparisons on body image is that women engage in contrastive processes (usually with thin targets), leading them to feel worse about their bodies (Myers & Crowther, 2009). Moreover, research shows that comparisons with both media figures (see Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002, for meta-analytic reviews) and peers (Jones, 2001; Krones et al., 2005; Lin & Kulik, 2002; Ridolfi, Myers, Crowther, & Ciesla, 2011; Trottier, Polivy, & Herman, 2007; Wasilenko, Kulik, & Wanic, 2007) alike tend to have unfavorable consequences for women's body image. In summary, the overwhelming majority of research on the effects of thin targets—either media figures or peers—on body image suggests that women contrast themselves with these thin targets and feel worse about their own bodies after exposure.

However, not all comparisons inevitably lead to contrast effects. Rather, in some cases, comparing oneself to others may lead to assimilation effects, such that one comes to see oneself as being more like the target. Research has found that when women perceive similarity or feel close to a target, they assimilate the physical appearance traits of that target (J. D. Brown, Novick, Lord, & Richards, 1992; Häfner, 2004; Leahey & Crowther, 2008; Papies & Nicolaije, 2012; Young, Gabriel, & Sechrist, 2012; see also Mussweiler, 2003). For example, J. D. Brown et al. (1992) found that perceived similarity in the form of sharing a birthday led women to feel more attractive after viewing a picture of an attractive woman. More recently, Young et al. (2012) found that perceptions of similarity and feelings of closeness with a thin media figure (i.e., a parasocial relationship) made women feel better about their own bodies following exposure to that media figure. Furthermore, women felt better specifically because they saw their own bodies as being thinner, indicating that assimilation was at work. In short, although the vast majority of research examining the effects of thin targets on body image suggests contrast effects (i.e., exposure to thin targets make women feel worse about their own bodies), some research suggests that assimilation effects can occur when the target is close or perceived as similar to the self.

Although no research has examined appearance-related comparisons specifically within close friendships, because people generally perceive friends as similar (Linden-Andersen, Markiewicz, & Doyle, 2009; Morry, 2005; Selfhout, Denissen, Branje, & Meeus, 2009),

it could be assumed that women would also assimilate the physical traits of their close friends. One study found that comparisons with peers (i.e., friends, sisters, roommates, and acquaintances), some of whom might be considered close relationships, were associated with higher appearance esteem than comparisons with media figures (Leahey & Crowther, 2008). Although that study did not differentiate friends from mere acquaintances and did not have appropriate controls to directly examine the effects of peers on body image (other than relative to media figures), the results are consistent with our hypotheses. Another study that did differentiate between types of peers found that adolescent girls were just as likely to report dieting after comparing their bodies to friends versus other girls versus media figures (Schutz, Paxton, & Wertheim, 2002). Unlike the previous study, there did not appear to be any assimilative benefits associated with friendship status; instead, these girls demonstrated the typical contrast effects that are predominant in the body image literature. It should be noted that both of these studies employed a correlational design, limiting their ability to make causal inferences. Thus, the correlational and conflicting nature of the existing studies—one study suggesting assimilation and the other suggesting contrast—do little to inform our predictions on the causal effects of appearance-related comparisons with close friends on women's body image.

However, previous research on non-appearance-related social comparisons within close friendship may prove useful in hypothesis formation. This research suggests that close friends can have a profound effect on the self but that the direction of that effect depends on one's comfort with intimacy (Gabriel, Carvallo, Dean, Tippin, & Renaud, 2005; Gabriel, Carvallo, Jaremka, & Tippin, 2008).

COMFORT WITH INTIMACY AND SOCIAL COMPARISONS

Although all individuals form close relationships with others (Baumeister & Leary, 1995), people differ in their comfort with intimacy within those relationships. According to attachment theory (Bartholomew, 1990; Bowlby, 1969, 1973), people hold certain beliefs and expectations about the self and others that guide their thoughts, feelings, and behavior during interactions with close others. Bartholomew and Horowitz (1991) developed a four-category model to explain adult attachment on two dimensions. Particularly relevant to the current work, the avoidance of intimacy construct considers the degree to which individuals are comfortable with closeness within their relationships. Individuals who are low in avoidance (hereinafter

referred to as nonavoidants) are comfortable with closeness and seek intimacy within their relationships. Conversely, those who are high in avoidance (herein after referred to as avoidants) are uncomfortable with closeness and will distance themselves—psychologically and physically—from close others (Brennan, Wu, & Loev, 1998; Edelman & Shaver, 2004; Guerrero, 1998).

Recall that other research has found that perceived similarity and closeness with targets shifts social comparisons from contrastive to assimilative. Based on that logic, Gabriel and colleagues (Gabriel et al., 2005; Gabriel et al., 2008) hypothesized and found that comfort with intimacy moderates the effects of social comparison within close friendships. One series of studies (Gabriel et al., 2005) found that avoidants (i.e., individuals who are uncomfortable with intimacy) contrasted themselves with close friends, such that they shifted their self-perceptions and behavior to be less similar to their friend. Conversely, nonavoidants (i.e., individuals who are comfortable with intimacy) assimilated the traits of close friends, such that their self-perceptions and behavior became more similar to their friend. For example, exposure to an intelligent friend led avoidants to perform worse on an intelligence test but led nonavoidants to perform better, compared to exposure to an average intelligence friend. In addition to changes in self-perceptions and behavior, the interaction of comfort with intimacy and social comparison with close friends has consequences for people's self-evaluations. Another series of studies (Gabriel et al., 2008) found that avoidants liked themselves more after thinking about the negative, as compared to positive, traits of a close friend, whereas nonavoidants liked themselves more after thinking about the positive, as compared to negative, traits of a close friend. In sum, within close relationships, avoidants and nonavoidants show opposite responses to social comparisons. Although one might expect assimilation effects across the board with close others, only nonavoidants—who are comfortable with intimacy in relationships—show this tendency. Instead, avoidants experience contrast effects in response to relationship partners.

Synthesizing the findings on comfort with intimacy, social comparison, and appearance-related comparisons led us to hypothesize that (a) appearance-related comparisons with same-sex close friends would influence women's body image, and (b) comfort with intimacy would moderate those effects. Specifically, because of their discomfort with intimacy and tendency to distance themselves from others, we predicted that avoidants would contrast their physical appearance traits (e.g., body size) with those of their close friends. This prediction is consistent with the overwhelming majority of studies that show contrast effects as a result of appearance-related comparisons (Myers & Crowther,

2009). On the other hand, we predicted that nonavoidants' pursuit of intimacy would lead to an attenuation of the commonly found contrast effects, and might even lead to assimilation of the physical appearance traits of their close friends. Thus, we predicted that a comfort with closeness, which is characteristic of nonavoidants, may protect women against the typically harmful effects of comparisons with thin targets.

OVERVIEW OF THE PRESENT RESEARCH

The current research aimed to examine the effects of appearance-related social comparisons with same-sex close friends on women's body image, as well as the moderating role of comfort with intimacy within those relationships. In conducting this research, we hoped to provide a better understanding of the conditions under which women feel better or worse about their bodies. In two studies, female participants wrote about a thin or heavy same-sex close friend prior to completing implicit (Study 1) or explicit (Study 2) measures of body satisfaction. We predicted that avoidants would experience typical contrast effects, such that they would feel worse about their own bodies following exposure to a thin friend. On the other hand, these effects were expected to be attenuated, and perhaps even reversed, among nonavoidants.

STUDY 1

The goal of Study 1 was to examine the effects of appearance-related comparisons with close friends on women's body image, as well as the moderating role of comfort with intimacy in these comparisons. We predicted that avoidants would contrast themselves with the body size of close friends. Conversely, we expected that nonavoidants would not engage in these contrastive processes but instead might assimilate their close friend's body size. To test our predictions, we randomly assigned participants to write an essay about a close female friend who was thin or heavy. Following, we assessed participants' implicit body satisfaction. Because participants could possibly be reluctant to report engaging in appearance-related comparisons, especially with their close friends (e.g., feeling better about oneself in response to thinking about a heavy friend), we utilized an implicit measure of body image for an initial investigation of our hypotheses.

Method

Participants

Sixty-five female undergraduates (65% White; $M_{age} = 18.85$ years) at the University at Buffalo participated in exchange for credit in an introductory psychology course.

Procedure and Materials

During a mass testing session at the beginning of the semester, participants indicated their comfort with intimacy among several unrelated questionnaires. A few weeks later, participants came to the lab for the “Study of Friends and the Self.” They were seated at private cubicles and completed the study on desktop computers. Participants were told the study examined people’s relationships with different kinds of close friends. They were first asked to provide the names of close female friends who possessed various traits (e.g., “above-average intelligence,” “disorganized,” “shy,” “tall,” “younger than you,” etc.). They were told they could use a particular friend’s name more than once if applicable. Embedded within this list of traits, participants were asked to give the name of a close female friend who was “on the thinner side” and a close female friend who was “on the heavier side.” After identifying a friend for each trait, participants were randomly assigned to write about their thin or heavy friend. We followed the same procedures and used the same instructions for this writing task as Gabriel and colleagues (Gabriel et al., 2005; Gabriel et al., 2008). Specifically, to re-create the experience of being in the presence of their friend, participants were instructed to think about a recent time they spent with that friend and recall as many details from the experience as possible. To reduce suspicion about the purpose of the study and not blatantly draw attention to the friend’s body size, only the friend’s name (and not the body size status) was indicated in the instructions. Participants were given 5 min to write their essay and were encouraged to write for the entire duration of time. Following the writing task, they reported their current mood and then completed a body image Implicit Associations Test (IAT). Finally, participants completed a manipulation check and demographic questionnaire and then were debriefed, thanked, and dismissed.

Comfort with intimacy. We assessed participants’ comfort with intimacy in the same way as previous work examining the effects of comfort with intimacy on comparisons within close friendships (Gabriel et al., 2005). Specifically, participants completed the four-item Relationship Questionnaire (Bartholomew & Horowitz, 1991) by indicating on a 1 (*not at all*) to 5 (*extremely*) scale the extent to which each of four paragraphs described their general relationship style and then picked which of the four styles most accurately described them. The four paragraphs corresponded to the relationship styles of secure, dismissive, preoccupied, and fearful. Participants who indicated that the dismissive or fearful paragraph best described them were categorized as avoidant, whereas those who selected the secure or preoccupied paragraph were categorized as nonavoidant.

Mood. Participants completed the Positive and Negative Affective Schedule (Watson, Clark, & Tellegen, 1988) to determine their current positive (10 items; $\alpha = .91$) and negative (10 items; $\alpha = .90$) mood. Participants responded to items such as “proud,” “excited,” “irritable,” and “upset” on a 1 (*not at all*) to 7 (*extremely*) scale.

Body image IAT. We assessed participants’ current implicit satisfaction with their body using a self-developed body image IAT. This response latency task measured how fast participants associated the self with physical attractiveness and unattractiveness. Stimuli for this task consisted of attractive-words (*muscle, smooth skin, flat abs, beauty mark, silky hair, smile, long legs, six pack, cheekbones, manicure*) and unattractive-words (*flab, wrinkles, gut, wart, split ends, frown, double chin, stretch marks, cellulite, blemish*), as well as self-words (*me, myself*) and other-words (*it, that*). Participants completed two critical blocks, each consisting of 40 trials. In one critical block, they were instructed to categorize self-words and attractive-words using the same response key and to categorize other-words and unattractive-words using another response key. In another critical block, these pairings were reversed. Participants were instructed to respond as quickly and accurately as possible.

Manipulation checks. To make sure they actually wrote about a thin or heavy friend, participants indicated their friend’s body size and shape using the Female Body Size Scale (Young et al., 2012). This scale consisted of five female images on a continuum ranging from *very thin* to *overweight*, and participants picked the image that best represented their friend’s body. In addition, to assess the relative difference between the friend’s body and their own, participants responded to the item “How does your body compare to [friend name]’s body?” by selecting one of the following options: “She is thinner than me,” “She is about the same as me,” and “She is heavier than me.”

Results and Discussion

Body image IAT scores were calculated by subtracting the mean response latencies for trials that paired self-words with attractive-words and other-words with unattractive-words from the mean response latencies for trials that paired self-words with unattractive-words and other-words with attractive-words. In addition, scores were standardized for ease of interpretation across studies. Thus, higher (positive) IAT scores indicate stronger associations between the self and physical attractiveness, whereas lower (negative) IAT scores reflect stronger associations between the self

and physical unattractiveness. Four participants were excluded from the analyses because more than 10% of their response latencies were less than 300 ms, yielding a final sample of 61 participants (64% White; $M_{age} = 18.89$ years).

Our manipulation check revealed that the thin friend ($M = 1.41$, $SD = .50$) was rated as having a smaller body size and shape than the heavy friend ($M = 4.52$, $SD = .63$), $t(59) = -21.41$, $p < .001$. In addition, among participants in the thin friend condition, 29 indicated their friend was thinner than them and three indicated their friend was about the same; among participants in the heavy friend condition, 28 indicated their friend was heavier than them and one indicated their friend was about the same. Thus, participants were indeed exposed to a thin versus heavy friend in their respective conditions, and in most cases (93.4% of the time), that friend was perceived as being even thinner or heavier than themselves.

We hypothesized that comparing one's own body with a close friend's body would influence women's body image and that this effect would be moderated by comfort with intimacy. Specifically, we predicted that avoidants would experience contrast effects after exposure to a close friend; however, we expected these effects to be attenuated, or possibly reversed, among nonavoidants. To test our predictions, we examined body image IAT scores in a 2 (comfort with intimacy: avoidant, nonavoidant) \times 2 (friend's body size: thin, heavy) analysis of covariance with positive and negative affect included as covariates. Because thinking about close friends might be a less pleasant experience for avoidants (due to their discomfort with intimacy), we wanted to control for the effects of participants' mood on our dependent variable.¹

As predicted, the analysis revealed a significant Comfort with Closeness \times Friend's Body Size interaction, $F(1, 55) = 4.70$, $p = .035$, $\eta_p^2 = .08$ (see Figure 1). Simple effects tests showed that avoidants experienced lower implicit body satisfaction after writing about a thin friend and higher implicit body satisfaction after writing about a heavy friend, $F(1, 21) = 7.20$, $p = .014$, $\eta_p^2 = .26$. This effect did not emerge among nonavoidants, $F(1, 32) = .02$, $p = .883$, $\eta_p^2 = .001$. Furthermore, writing about a heavy friend led avoidants to experience higher implicit body satisfaction than nonavoidants, $F(1, 25) = 7.02$, $p = .014$, $\eta_p^2 = .22$.

¹The same, albeit weaker, pattern of results emerged when the covariates were not included in the analyses. Specifically, the overall Comfort with Closeness \times Friend's Body Size interaction became marginal ($p = .110$). In addition, one of the two reported significant simple effects became marginal (i.e., the effect of comfort with closeness on implicit body image following exposure to a heavy friend; $p = .069$).

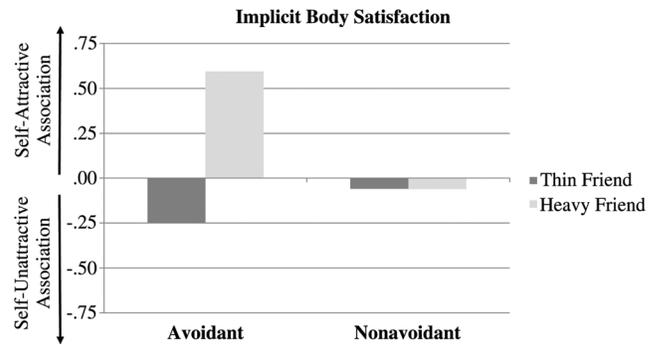


FIGURE 1 Implicit body satisfaction as a function of the participant's comfort with intimacy and friend's body size (Study 1).

In summary, Study 1 provides initial support for our argument that appearance-related comparisons with close friends influence women's body image and that the way in which body image is affected is determined by comfort with intimacy. We found that avoidants contrasted themselves with their close friends, leading them to implicitly feel better about their own body in response to a heavy friend and worse in response to a thin friend. Notably, nonavoidants did not suffer any negative effects in response to a thin friend. Thus, a comfort with closeness prevented nonavoidants from contrasting themselves with their thin friends, protecting them against the typically harmful consequences of exposure to thin targets.

Although the results were consistent with our hypotheses, Study 1 was limited by its use of only one dependent variable. To ensure that the effects are not limited to only implicit attitudes about the body, a second study was run to provide convergent support for our hypotheses with other types of body image measures.

STUDY 2

The goal of Study 2 was to provide additional evidence that comparisons with close friends influence women's body image and that comfort with intimacy moderates these effects. In addition to conceptually replicating the results of Study 1, we aimed to extend our findings from implicit body satisfaction to explicit, self-reported measures of body satisfaction. Further, we wanted to explore the possibility that the effects might even extend to participants' behavioral intentions to lose weight (i.e., diet and exercise intentions). In this study, participants were randomly assigned to write about a thin or heavy close female friend prior to completing multiple measures of body satisfaction. Participants also completed, for exploratory purposes, measures of diet and exercise intentions. With respect to body satisfaction,

we predicted that avoidants would contrast themselves with the body size of a close friend. Conversely, we expected that nonavoidants would not engage in these contrastive processes and instead demonstrate assimilation effects following exposure to a close friend. Finally, we were interested in whether or not these effects would generalize to diet and exercise intentions.

Method

Participants

Sixty-one female undergraduates (74% White; $M_{age} = 19.48$ years) at the University at Buffalo participated in exchange for credit in an introductory psychology course.

Procedure and Materials

This study followed the exact same procedure as Study 1, with two notable exceptions. First, rather than writing about a recent experience with their close female friend, participants instead wrote about the personality traits of their friend. Specifically, participants were instructed to think about and write an essay on their close friend's various personality traits. We changed the essay instructions for this study because we wanted to specify a topic and standardize the essay content to reduce the chance that avoidants and nonavoidants might strategically focus on different aspects of their friendship (see Gabriel et al., 2008). Second, instead of a body image IAT following the Positive and Negative Affective Schedule ($\alpha_{pos} = .93$; $\alpha_{neg} = .87$), participants completed three explicit, self-reported measures of body satisfaction (our main dependent variables), as well as two measures of diet and exercise intentions (our exploratory dependent variables).

Appearance evaluation. Participants indicated their feelings of physical attractiveness on the Appearance Evaluation subscale of the Multidimensional Body-Self Relations Questionnaire (T. A. Brown, Cash, & Mikulka, 1990). Participants responded to seven items ($\alpha = .95$), including "My body is sexually appealing" and "I like my looks just the way they are," on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale.

Body areas satisfaction. Participants also completed the Body Areas Satisfaction subscale of the Multidimensional Body-Self Relations Questionnaire (T. A. Brown et al., 1990) to determine their overall body satisfaction. This nine-item scale ($\alpha = .83$) consisted of physical features such as "muscle tone," "face," and "weight," in which participants rated how satisfied they were

with each attribute on a 1 (*very dissatisfied*) to 7 (*very satisfied*) scale.

Actual-ideal body overlap. We assessed participants' degree of overlap between their actual and ideal body using a single-item measure developed by Young et al. (2012). Specifically, participants saw a modified version of the Inclusion of Other in the Self scale (Aron, Aron, & Smollan, 1992), such that the labels of the circles were changed to "actual" and "ideal." The circles ranged from barely touching (low overlap between actual and ideal body) to almost completely overlapping (high overlap between actual and ideal body). Participants selected the set of circles that best represented the overlap between their actual and ideal body size and shape. Perceptions of higher overlap between the actual and ideal body reflect greater body satisfaction.

Diet intentions. Participants indicated their intentions to diet on the Restrained Eating subscale of the Dutch Eating Behavior Questionnaire (van Strien, Frijters, Bergers, & Defares, 1986). We slightly altered the wording of the items to reflect participants' current dieting intentions. Participants responded to 10 items ($\alpha = .95$) such as "Over the next few weeks, I plan to eat less than I usually do" and "Over the next few weeks, I plan to deliberately eat foods that are slimming," on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale.

Exercise intentions. Based on the recommendations of Ajzen (2002) and Courneya (1994), we assessed participants' intentions to exercise with the following items: "I intend to exercise regularly over the next few weeks," "I plan to exercise to lose weight," and "I plan to exercise ___ times per week over the next few weeks." The first two items had 1 (*strongly disagree*) to 7 (*strongly agree*) response scales; the third item was open-ended. Responses to these three items were standardized and then averaged ($\alpha = .83$).

Results and Discussion

Because the appearance evaluation, body areas satisfaction, and actual-ideal body overlap measures were highly correlated, $r(59) \geq .75$, $p < .001$, we created a composite measure of body satisfaction by standardizing and then averaging the individual measures. The diet and exercise intentions measures were also highly correlated, $r(59) = .62$, $p < .001$, so we created a composite measure following the same procedures. As a result, we wound up with two composite measures: body satisfaction and diet/exercise intentions.

Our manipulation check revealed that the thin friend ($M = 1.39$, $SD = .69$) was rated as having a smaller body size and shape than the heavy friend ($M = 4.70$, $SD = .47$), $t(59) = -22.28$, $p < .001$. In addition, among participants in the thin friend condition, 27 indicated their friend was thinner than them and one indicated their friend was about the same; among participants in the heavy friend condition, 30 indicated their friend was heavier than them and three indicated that their friend was about the same. Thus, participants were indeed exposed to a thin versus heavy friend in their respective conditions, and in most cases (93.4% of the time), that friend was perceived as being even thinner or heavier than themselves.

We hypothesized that appearance-related comparisons with close friends would influence women's body image as a function of their comfort with intimacy. Specifically, we predicted that avoidants would experience contrast effects after exposure to a close friend, but that these effects would be attenuated or reversed among nonavoidants. To test our predictions, we conducted a 2 (comfort with intimacy: avoidant, nonavoidant) \times 2 (friend's body size: thin, heavy) analysis of covariance on (a) our primary composite measure of body satisfaction and (b) our exploratory composite measure of diet/exercise intentions. As in the previous study, we included positive and negative affect as covariates in the analyses.²

As predicted, analyses revealed a significant Comfort with Intimacy \times Friend's Body Size interaction for the composite measure of body satisfaction, $F(1, 55) = 6.67$, $p = .013$, $\eta_p^2 = .11$ (see Figure 2). Simple effects tests showed that avoidants experienced lower body satisfaction after writing about a thin friend and higher body satisfaction after writing about a heavy friend, $F(1, 27) = 5.50$, $p = .027$, $\eta_p^2 = .17$. Conversely, nonavoidants demonstrated a tendency, albeit nonsignificant, to experience higher body satisfaction after writing about a thin friend than a heavy friend, $F(1, 26) = 2.41$, $p = .133$, $\eta_p^2 = .09$. Furthermore, writing about a thin friend led avoidants to experience lower body satisfaction, but nonavoidants to experience higher body satisfaction, $F(1, 24) = 9.50$, $p = .005$, $\eta_p^2 = .28$.

We also conducted exploratory analyses on participants' intentions to diet and exercise. These analyses

²A highly similar pattern of results emerged when the covariates were not included in the analyses. In fact, the results looked even better without the covariates. For body satisfaction, the overall Comfort with Closeness \times Friend's Body Size interaction and all reported significant simple effects remained significant. Notably, for diet and exercise intentions, the overall interaction p -value dropped ($p = .055$). The one significant simple effect remained significant and one of the two trending simple effects became marginal (i.e., the effect of friend's body size on diet and exercise intentions among avoidants; $p = .106$).

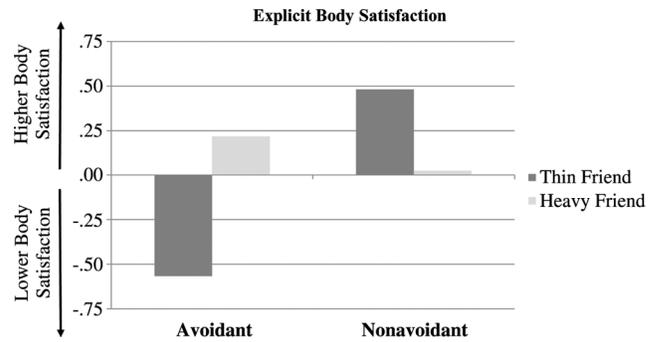


FIGURE 2 Explicit body satisfaction as a function of the participant's comfort with intimacy and friend's body size (Study 2).

revealed a marginally significant Comfort with Intimacy \times Friend's Body Size interaction for the composite measure of diet and exercise intentions, $F(1, 55) = 2.94$, $p = .092$, $\eta_p^2 = .05$ (see Figure 3). Although the simple effects for avoidants and nonavoidants did not reach significance ($ps = .231$), the means did trend in a manner consistent with the body satisfaction dependent variable. In addition, writing about a thin friend led avoidants to report higher intentions to diet and exercise, but nonavoidants to report lower intentions to diet and exercise, $F(1, 24) = 5.68$, $p = .025$, $\eta_p^2 = .19$. We should note that on this measure, higher intentions to diet and exercise (i.e., greater intentions to lose weight) imply lower body satisfaction. Thus, even though the means appear flipped on Figure 3, they are consistent with the body satisfaction findings.

In summary, Study 2 provides support for our hypothesis that appearance-related comparisons with close friends influence women's body image as a function of one's comfort with intimacy within those relationships. Results demonstrated that avoidants engaged in contrastive processes, whereas that tendency was attenuated for nonavoidants. Although not significant, there was a consistent trend for nonavoidants to instead engage in assimilative processes following

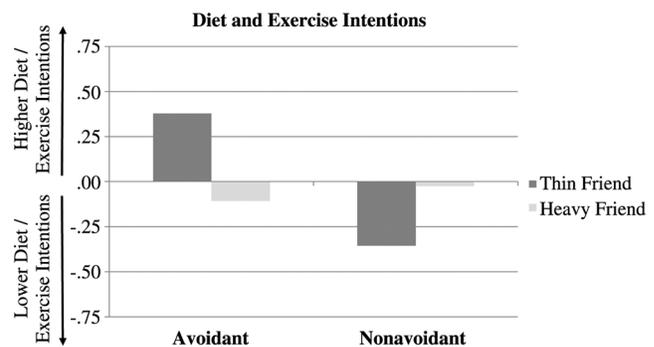


FIGURE 3 Diet and exercise intentions as a function of the participant's comfort with intimacy and friend's body size (Study 2).

exposure to close friends. It appears that nonavoidants' comfort with intimacy protected them from the typically negative effects of thin targets and even allowed them to benefit from their friend's thin body size.

DISCUSSION

The present research demonstrates that appearance-related comparisons with same-sex close friends influence women's body image and that comfort with intimacy moderates those effects. Consistent with the overwhelming majority of research on appearance-related comparisons (Myers & Crowther, 2009), we found that avoidants experienced contrast effects in response to their close friends. On the other hand, nonavoidants did *not* experience these typical contrast effects and even seemed to sometimes experience assimilation effects following exposure to a same-sex close friend. Specifically, avoidants felt worse (better) about their bodies after exposure to a thin (heavy) close female friend, but nonavoidants displayed an attenuation of these effects. Impressively, we found support for our hypotheses using both implicit and explicit measures of body image, as well as on behavioral intention measures, demonstrating the robustness of the effects. Thus, the present work provides compelling evidence that comparisons with close friends change women's body image and that the direction of that change depends on one's comfort with intimacy within those relationships.

Although we did not find consistent, significant assimilation effects for nonavoidants, we did find trends in that direction for both dependent variables in Study 2. From the two studies we can only confidently conclude that comfort with intimacy moderates the effects of friends on women's body image, that women who avoid intimacy contrast the physical appearance traits of their friends, and that those effects are attenuated for women who are comfortable with intimacy. Although we believe that these are novel and important contributions to the literature, we had hoped to also find significant assimilation effects for those comfortable with intimacy. Nonetheless, the trends in that direction for two different dependent variables increase our confidence that assimilation of physical appearance traits does, at least sometimes, occur among nonavoidants. We find this possibility intriguing and important, and think this is a ripe area for future research.

The present research also makes an important contribution as the first to experimentally examine the impact of social comparisons with friends on women's body image. Research has only recently started to focus on comparisons with peers (in addition to media figures), but these studies have generally examined the effects of unfamiliar peers (e.g., Krones et al., 2005; Lin & Kulik,

2002; Strahan, Wilson, Cressman, & Buote, 2006; Trotter et al., 2007; Wasilenko et al., 2007). Although some researchers have examined the effects of known peers, these studies have been correlational in nature and typically do not differentiate between friends, acquaintances, and other women in the environment in analysis (e.g., Jones, 2001; Leahey & Crowther, 2008; Ridolfi et al., 2011; see Schutz et al., 2002, for exception). Although these studies are tremendously helpful in understanding the effects of comparisons with peers on women's body image, they may not capture the unique processes that occur within close relationships. The present research expands what is known about appearance-related comparisons with peers and sheds light on the effects of same-sex close friends, a type of peer with whom women likely spend a considerable portion of their daily lives.

The current work is also the first to propose and test comfort with intimacy as a moderator of appearance-related social comparison effects. Although previous research has demonstrated that perceived similarity and closeness with a target determines whether contrast or assimilation will occur (J. D. Brown et al., 1992; Häfner, 2004; Mussweiler, 2003; Young et al., 2012), it has not examined moderators specifically among close others. The present research finds that, even within close friendships (where assimilation might be assumed), avoidants engage in contrastive processes. It warrants mention, however, that the pattern of results observed in the present work would most likely only occur within close relationships. Previous research demonstrates that comfort with intimacy only moderates comparison effects of relationship partners with whom there is at least a minimal level of intimacy (Gabriel et al., 2005). Thus, we should be careful not to overextend these results or assume that comfort with intimacy would moderate appearance-related comparisons with all types of peers.

We also acknowledge the limitation that the present studies only used participants' friends as comparison targets. Perhaps a stronger case could have been made for the unique role of close friends on women's body image had we included targets who were not close to the self (e.g., unfamiliar peers, acquaintances). As previously mentioned, we would not expect the same pattern of results to emerge among non-close others (Gabriel et al., 2005). Rather, we would expect comparisons with individuals who are not close to elicit contrast effects (Myers & Crowther, 2009), regardless of one's comfort with intimacy. Overall, we hope the present studies will serve as a jumping-off point for future research examining the influence of close friends on body image and how effects may or may not differ from other types of comparison targets.

Indeed, additional research should be conducted to better understand the impact of friends and comfort

with intimacy on women's body image. For instance, it would be worthwhile to examine the effects of appearance-related comparisons and the moderating role of comfort with intimacy with close friends in the real world. Also, it would be interesting to investigate the long-term consequences of repeated comparisons with close friends. Future work should also examine avoidants' and nonavoidants' tendencies to make comparisons with their close friends. It might be the case that avoidants are especially motivated to make comparisons with close friends who possess socially undesirable physical traits (to experience contrast effects), whereas nonavoidants are motivated to make comparisons with those who have desirable physical traits (to experience assimilation effects). This might even have implications for who avoidants and nonavoidants turn to when they are experiencing body dissatisfaction, or even with whom they form friendships in the first place.

CONCLUSION

Women count their close friendships among the relationships that matter the most to them and spend considerable amounts of time with these individuals. The present research combines this important area of women's lives with another impactful and psychologically meaningful area—body image. A plethora of research has identified how women's body image impacts their physical and psychological well-being in significant and often heartbreaking ways. This research suggests that close friends may also affect how women feel about their bodies and that a comfort with intimacy with one's close relationships can not only enrich relationships but also have important protective benefits for body image. This work is an important first step in understanding how two important areas of women's lives interact and coalesce.

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