



Do These Norms Make Me Look Fat? The Effect of Exposure to Others' Body Preferences on Personal Body Ideals[☆]



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ABSTRACT

In this study we examined the influence of normative body ideals in the form of perceived peer preferences on personal body ideals and body dissatisfaction. Participants ($N = 146$ female college students) were exposed to the purported preferences of peers representing either relatively thin or heavy body ideals. Along with the normative body ideal manipulation, the gender of the purported peers was manipulated. Participants then selected their ideal for their own body and body dissatisfaction was measured. Women selected a thinner personal body ideal in the thin norm condition than in the heavy norm condition. This effect was seen irrespective of the gender of the purported peers. Body dissatisfaction was not influenced by the manipulation. The malleability of body image and the influence of social factors on ideal body size are discussed.

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Introduction

In many cultures worldwide the drive for thinness is a norm that guides women's attitudes toward their bodies (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). According to the socio-cultural theory of body image (Strahan, Wilson, Cressman, & Buote, 2006; Sypeck, Gray, Etu, Ahrens, Mosiman, & Wiseman, 2006) "normative body ideals" (i.e., what other people think is most attractive or desirable) are communicated through the mass media (Grabe, Ward, & Hyde, 2008; Owen & Laurel-Seller, 2000) and are frequently reinforced by peers and family (Thompson et al., 1999) along with the implicit message that meeting these standards will lead to acceptance and success (Heinberg, 1996). The ideal female body represented in the media, while generally unattainable for most women (Wiseman, Gray, Mosiman, & Ahrens, 1992), can become internalized (Yamamiya, Cash, Melnyk, Posovac, & Posovac, 2005), leading women to aspire to body ideals that are unrealistic, and ultimately contributing to women's body dissatisfaction (Durkin & Paxton, 2002; Strahan et al., 2006). Indeed, research has

shown that North American women's ideal body weight is, on average, between thirteen and nineteen percent below their "normal" or medically ideal weight, suggesting that women's body ideals do not seem to be determined by medical recommendations for maximizing health (Owen & Laurel-Seller, 2000) as much as by perceptions of what is socially desirable.

The discrepancy between the body ideal to which women aspire and their actual body is a source of emotional and physical distress for many women and this body dissatisfaction can lead to attitudes and behaviors which diminish women's health and quality of life (Mills, McCabe, & Polivy, 1999; Stice & Shaw, 2002). It is important therefore that we seek methods to reduce this discrepancy. One such method is to change body ideals. If external socio-cultural influences guide body ideals, then changing social factors could lead to healthier body ideals (Jones, 2004; Stice & Whitenton, 2002). On the other hand, body ideals may have an evolutionary origin along with a biological function and therefore be resistant to change (Singh, Dixson, Jessop, Morgan, & Dixson, 2010).

Are Body Ideals Malleable?

There is evidence to suggest that body image is malleable rather than static (Mills, Roosen, & Vella-Zarb, 2011; Mussap & Salton, 2006). For instance, short term exposure to an image of a thin body (versus a heavy body) resulted in women selecting a thinner personal body ideal (Glauert, Rhodes, Byrne, Fink, & Grammer,

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2009) and personal body ideals also shifted toward a thinner ideal in the context of thin (versus heavy) body cues (Wedell, Santoyo, & Pettibone, 2005). Owen and Spencer (2013) similarly found that participants chose a larger female body ideal after viewing average weight versus thin models. More recently, the influence of social context on body ideals has begun to be examined. Mills, Jadd, and Key (2012) found that when personal body ideals were influenced in the direction of a manipulated (thin versus heavy) “population average”; women wanted to be thinner when they believed that most other women were thinner.

In sum, evidence supports the socio-cultural theory of body image and demonstrates that exposure to very thin female body images in the media may influence women’s personal body ideals either through perceptual exposure, contextual cues, implicit endorsement of a thin ideal, or perceptions of normative body size averages. These shifts in body ideals, rather than being a perceptual phenomenon (see Mills, Polivy, Herman, & Tiggemann, 2002), may be due to the role of body image in our social context and the implicit social message that a thin body is attractive to other people. The current study addresses this possibility directly by examining the effect of peers’ purported normative body ideals on women’s self-reported ideals for their own bodies.

The Influence of Peers on Body Image and Body Dissatisfaction

Along with media exposure, the influence of family and peers has also been implicated in the development of body dissatisfaction (Jones, 2004; Stice & Whitenton, 2002). Past research has demonstrated that the attitudes of peers toward appearance and weight influence body dissatisfaction and weight related behaviors (Gerner & Wilson, 2005; Hildebrandt, Shiovitz, Alfano, & Greif, 2008; Jones, 2004; Paxton, Schutz, Wertheim, & Muir, 1999; Paxton, Eisenberg, & Neumark-Sztainer, 2006; Stice, Maxfield, & Wells, 2003). Interpersonal relationships experienced during adolescence and early adulthood, are important in the development of body dissatisfaction (Holson, Jones, & Birkel, 2012) with internalization of thin ideals and social comparison acting as the mechanisms through which this influence occurs (Matera, Nerini, & Stefanile, 2013). Taken together, these findings provide strong evidence that peer groups act as enforcers of body ideals, focusing women on their bodies and the extent to which they deviate from group norms. In spite of this apparent link between peer influence and body ideals, no research to date has directly examined whether perceived peer preferences influence women’s body ideals. The current research attempts to fill this gap.

Normative Social Influence and Body Ideals

Although the effect of normative body ideals on personal body ideals has not been previously experimentally manipulated, research has examined whether women’s ideals for their own bodies are a reflection of the body ideals of others. In the case of same-sex preferences, women’s personal body ideals have been found to diverge somewhat from other women’s actual preferences and converge instead with what they perceived to be preferred by other women, suggesting that women’s body ideals may represent an attempt to conform to the perceived preference of other women (Cohn & Adler, 1992; Jacobi & Cash, 1994). In the case of opposite-sex peers a similar pattern emerged (Cohn & Adler, 1992; Fallon & Rozin, 1985; Jacobi & Cash, 1994). Women’s personal body ideals converged with their perception of the female body men would prefer, suggesting that women may also adjust their body ideals to conform to the perceived preference of the opposite-sex (Cohn & Adler, 1992; Fallon & Rozin, 1985; Jacobi & Cash, 1994).

Cohn and Adler (1992) also found that women regarded thin figures as ideal almost unanimously and concluded that women perceived the female body ideal to be shared by both same- and opposite-sex peers. In support of this conclusion, Crossley, Cornelissen, and Tovee (2012), found that women and men’s ideal female body preferences converged, with both preferring a low BMI and a relatively curvy shape. These findings raise the question of whether female or male peer preferences have a greater impact on women’s body ideals.

There is indirect evidence that perceived opposite-sex preferences are an important source of influence on women’s personal body ideals (Molloy & Herzberger, 1998; Parker, Nichter, Nichter, Vukovic, Sims, & Ritenbaugh). Research has shown that Black men’s ideal female body is larger and more curvaceous than that of White men (Glasser, Robnett, & Feliciano, 2009; Jackson & McGill, 1996; Overstreet, Quinn, & Agocha, 2010; Thompson, Sargent, & Kemper, 1996), and this difference is reflected in Black and White women’s ideals for their own bodies and their differing levels of body satisfaction (Overstreet et al., 2010; Roberts, Cash, Feingold, & Johnson, 2006). Similarly, Franko et al. (2012) reported that Latino men have a larger female body ideal than White men and that Latino women felt their own bodies were more appreciated by Latino men. Based on these findings, the current study examined the influence of the purported preferences of both sexes on women’s body ideals.

Normative Body Ideals and Body Dissatisfaction

Because very thin body ideals have been associated with body dissatisfaction, one might expect that a manipulation that influences women toward a more realistic body ideal might also reduce body dissatisfaction. Research by Halliwell and Dittmar (2004) supports this possibility. They found that after exposure to advertisements with thin models, women reported higher levels of body dissatisfaction than those exposed to average-sized models (Halliwell & Dittmar, 2004). It is also possible that higher levels of body dissatisfaction lead to the endorsement of smaller body ideals and that these ideals, in turn, are more difficult to challenge because of the existing high levels of body dissatisfaction and internalization of Western thinness ideals. The findings of both Glauert and colleagues (2009) and Wedell and colleagues (2005) support this possibility. In both studies, participants with high levels of body dissatisfaction and internalization of socio-cultural norms were less susceptible to the influence of the manipulated contextual and perceptual cues relating to body size. In the current study we test both of these possibilities.

The Present Research

The first goal of the current research was to examine whether women’s personal body ideals are influenced by normative body ideals in the form of the purported preferences of peers. Based on the previous literature, women exposed to a thinner peer preference were predicted to report a thinner ideal than those exposed to a heavier peer preference. The second goal was to examine whether the gender of the source of the body preference has any differential influence on personal body ideals. Based on previous research (Cohn & Adler, 1992; Crossley et al., 2012; Jacobi & Cash, 1994) we hypothesized that both male and female peer preferences would influence personal body ideals. Finally, the third goal was to examine the influence of normative body ideals on women’s body dissatisfaction and to examine whether higher levels of body dissatisfaction could inhibit the influence of peer preference on women’s body ideals. Consistent with previous findings (Glauert et al., 2009; Wedell et al., 2005) we hypothesized that the personal body ideals of women with higher levels of body dissatisfaction would be less

susceptible to the influence of manipulated cues relating to body size.

Method

Participants

A total of 162 female undergraduate students at York University participated in the study for course credit. Data from 16 participants were excluded either because they identified as being lesbian or bisexual ($n=4$) or they accurately guessed the true purpose of the study ($n=12$). Of the remaining 146 participants, 119 were randomly assigned to one of four conditions in a 2 (Normative Body Ideal Provider: Male, Female) \times 2 (Normative Body Ideal Weight: Thin, Heavy) design. An additional 27 participants were randomly assigned to a control condition wherein they received no normative body ideal information. The ethnic breakdown of participants in the sample included 32% “White,” 22% “South Asian,” 14% “Black,” 13% “East Asian,” 9% “Middle Eastern,” 3% “Hispanic” and 7% “Other”. The age range for participants was 18 to 47, with a mean age of 20.66 ($SD=3.87$).

Procedure and Measures

Participants completed an online survey on “body type preference.” After giving informed consent, they were shown a screen depicting nine silhouette drawings of bodies taken from the *Thompson & Gray Contour Drawing Scale* (Thompson & Gray, 1995), a

commonly used questionnaire featuring female body silhouettes ranging from extremely thin to extremely heavy (see Fig. 1). To manipulate normative body ideals, participants were shown a graphic representation of the number of bogus “votes” each body size had received from “previous participants” for being the most attractive body type. Although not explicitly stated, the nature of the recruitment process implied that participants in this study would be peers enrolled in the introduction to psychology course.

To manipulate normative body ideals, participants were exposed to one of three conditions. In the thin condition, the votes presented gave the impression that participants had selected relatively thin body types and in the heavy condition the votes presented created the impression that participants had selected relatively larger body types (see Fig. 1). Specifically, in the thin condition, the votes were distributed between Drawings 2 through 5 with the majority preferring Drawing 3. In the heavy condition, the votes were distributed between Drawings 5 through 8, with Drawing 7 being the majority preference. In the control condition, no normative body ideals were presented. The bogus ranges in body size preference were chosen because they allowed for maximum divergence between conditions while remaining within a range that participants might still find believable as representations of peer norms.

We also manipulated the gender of the purported normative body ideal provider. In the female normative body ideal provider condition, participants were told that the preferred body types represented the votes of female students who had participated in the study. In the male normative body ideal provider

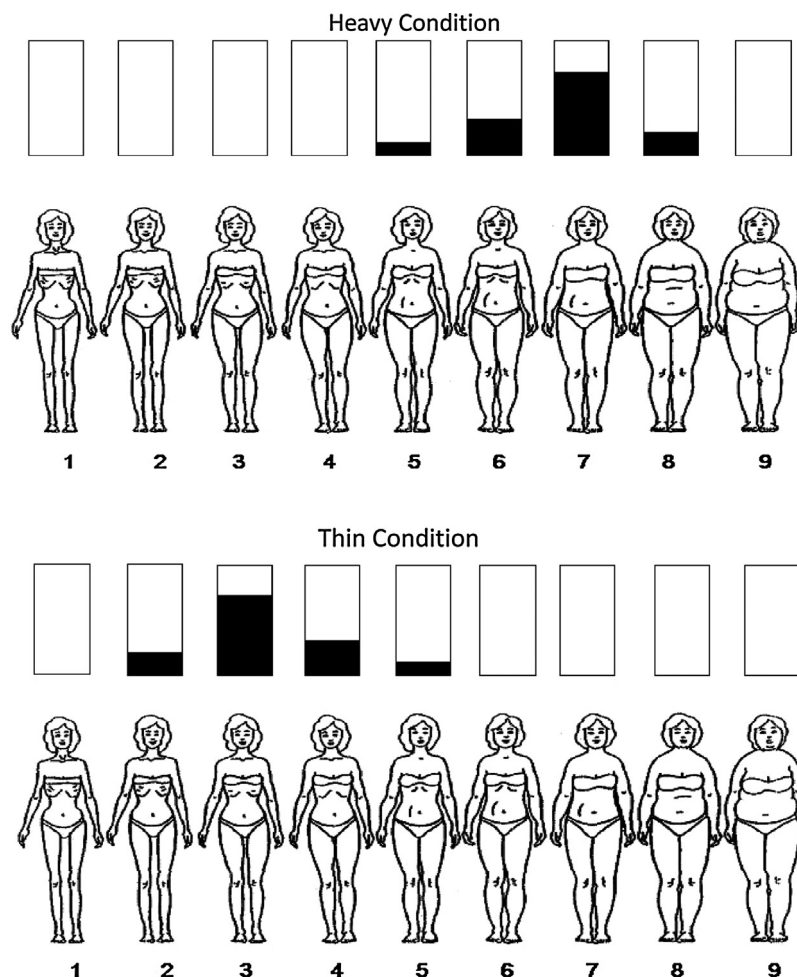


Fig. 1. Graphical representation (Thompson & Gray, 1995) of peer preferences in the experimental conditions.

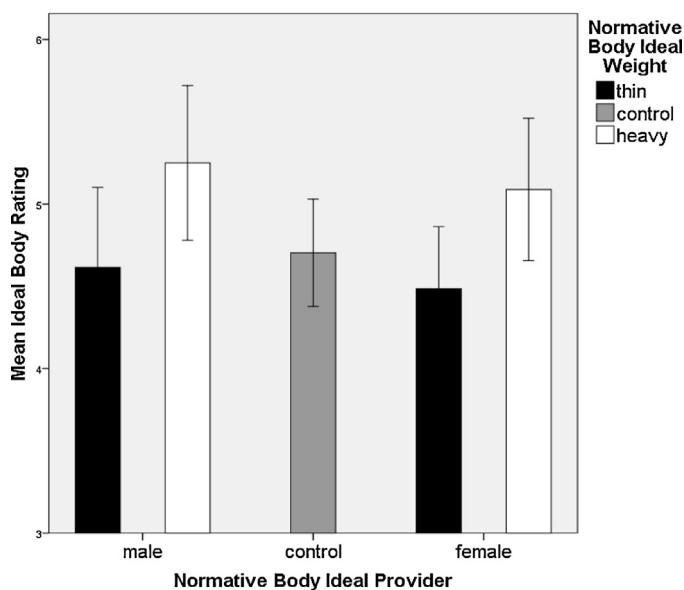


Fig. 2. Mean ideal body rating by weight condition and gender of normative body ideal provider. Error bars represent 95% confidence intervals.

condition, participants were told that they represented the votes of male students who had participated in the study. In the control condition, no normative body ideal information was presented. Participants were instructed to indicate the silhouette that corresponded to the body size that they preferred for themselves. In other words, women selected the female body that they would prefer to have.

Following the vote, participants were asked about their perception of the purpose of the study so that those who suspected the true purpose could be excluded from the analyses. Participants then completed the State Self-Esteem Scale (Heatherton & Polivy, 1991), which includes a state appearance self-esteem subscale. This subscale includes items such as “I am dissatisfied with my weight” and “I feel satisfied with the way my body looks right now” (reverse-scored) rated on a 5-point Likert type scale (1 = not at all to 5 = extremely; Cronbach’s alpha = .85). Participants also completed a demographics questionnaire including, age, race, and sexual orientation. A manipulation check that asked participants to recall the gender of the normative body ideal provider and the preferred body size presented, was also included. Upon completion of the study participants read an online debriefing. This study was approved by an institutional ethics review board.

Results

The manipulation check conducted at the end of the experiment was intended to see whether participants had been aware of the gender of the normative body ideal provider and the weight preference in the weight manipulation. The results revealed that many of the participants were not able to subsequently recall either the gender of the source of the normative body ideal “votes” ($n = 35$) or the weight preference that had been presented ($n = 35$). The results of the analyses with and without these participants are presented below.

To examine how exposure to same-sex and opposite-sex body preferences influenced women’s personal body ideals, a 2 (Normative Body Ideal Provider: Male, Female) \times 2 (Normative Body Ideal Weight: Thin, Heavy) between-subjects ANOVA was conducted on the entire sample, using participants’ personal ideal body ratings as the dependent measure. Results are depicted in Fig. 2. In line with our first hypothesis, a main effect of the weight manipulation

emerged, $F(1, 115) = 8.16, p = .005$, with a preference for larger targets being found in the heavy ($M = 5.16, SD = 1.18$), compared to the thin ($M = 4.54, SD = 1.13$), condition. The effect size was moderate ($\eta_p^2 = .07$). In line with our hypothesis regarding the effect of the gender of the normative body ideal provider, there was no reliable main effect of normative body ideal provider, $F(1, 115) = 0.45, p = .50$, and no interaction was found, $F(1, 115) = 0.005, p = .94$.

The sample that excluded participants who did not correctly identify the gender or body ideal norm presented produced very similar results. A main effect of the weight manipulation emerged, ($F(1, 56) = 11.71, p = .001$), with a preference for larger targets being found in the heavy ($M = 5.37, SD = 1.21$), compared to the thin ($M = 4.27, SD = 1.00$) condition. The effect size was large ($\eta_p^2 = .17$). There was, again, no main effect of normative body ideal provider ($F(1, 55) = 2.54, p = .12$), and no interaction was found, $F(1, 55) = 0.45, p = .50$. Because the results with and without the participants who did not recall their experimental condition were comparable, the entire sample was retained for subsequent analyses in order to maximize statistical power.

To examine the nature of the main effect of the normative body ideal manipulation, independent samples *t*-tests examining differences in personal body ideals between the control and experimental groups were conducted (see Fig. 2). A significant difference emerged between the heavy and the thin ($M = 4.54, SD = 1.13$) conditions, $t(117) = 2.89, p = .005$. The difference between the heavy ($M = 5.16, SD = 1.18$) and control ($M = 4.70, SD = 0.82$) conditions approached significance, $t(70.28) = 2.04, p = .05$. The difference between the thin and control conditions, however, was not statistically significant, $t(67.39) = 0.76, p = .45$.

To examine how exposure to same-sex and opposite-sex body preferences influenced women’s body dissatisfaction, a 2 (Normative Body Ideal Provider: Male/Female) \times 2 (Normative Body Ideal Weight: Thin/Heavy) between-subjects ANOVA was conducted, using participants’ body dissatisfaction scores as the dependent measure. No main effects or interactions emerged (all $F_s < 0.35$, all $p_s > .56$), suggesting that women’s appearance state self-esteem was not directly influenced by either manipulation.

To test the hypothesis that the personal body ideals of women with higher levels of body dissatisfaction were less susceptible to the influence of manipulated cues relating to body size, we divided participants into three groups (high, average and low) based on their self-reported body dissatisfaction scores. We then conducted a one-way (Normative Body Ideal Weight: Thin/Heavy) ANOVA using participants’ personal ideal body weight as the dependent measure separately for each of the three groups. In the case of participants with both low and average scores in body dissatisfaction, there was a main effect of the normative body ideal weight manipulation, ($F_{low\ dissatisfaction}(1, 34) = 4.55, p = .04, \eta_p^2 = .12$ and $F_{avg\ dissatisfaction}(1, 42) = 5.62, p = .02, \eta_p^2 = .11$), with participants selecting larger personal ideals in the heavy versus thin condition. No effect of the normative body ideal weight manipulation emerged, however, among the participants high in body dissatisfaction, $F_{high\ dissatisfaction}(1, 37) = 0.53, p = .47$.

Discussion

This study provides the first empirical evidence that women’s personal body ideals can be changed by shifting normative body ideals in the form of the perceived preferences of peers. This influence occurred following a mild one-time normative body ideal manipulation. Consistent with our first hypothesis, women exposed to thinner peer preferences had a thinner ideal than did those exposed to heavier peer preferences. Additionally, women exposed to a heavier norm showed a trend toward choosing a heavier ideal for themselves than did those for whom no normative

preferences were shown. There was, however, no trend toward women exposed to the thinner norm choosing a thinner ideal than those in the control condition. This finding provides compelling evidence that women can be influenced by the preferences of their peers to prefer a heavier, but not a thinner, body ideal for themselves, likely due to the extremely thin current body ideal.

In line with our second hypothesis, we found no effect of the gender of the normative body ideal provider on ideal body size, suggesting that women can be equally influenced by the preferences of their male and female peers. The manipulation check revealed that many participants were unable to correctly recall the gender of the normative body ideal provider. However, the results were comparable with and without those participants, leading us to conclude that in this study, information about other women's preferred body size was just as influential as information about men's preferred body size.

In addition, we found no direct effect of the experimental manipulation of purported peer preferences on body dissatisfaction. This suggests that although women's personal body ideals are influenced by the preferences of their peers, this does not directly impact their body dissatisfaction, at least in the immediate short term. It is important to note, however, that this was a one-time intervention. Because body dissatisfaction likely develops over time in response to repeated exposures to unrealistic body ideals, it may be less susceptible to a one time manipulation.

Finally, we examined whether higher levels of body dissatisfaction might inhibit the influence of peer preferences on women's body ideals. This possibility was supported, with participants with average or low levels of body dissatisfaction showing an influence of peer preferences on personal body ideals, but those high in body dissatisfaction showing no such effect. This finding is consistent with past research that found changing body ideals by manipulating thin or large perceptual or contextual cues relating to body size was possible; however, those participants with higher body dissatisfaction and more internalization of socio-cultural norms of thinness were more resistant to change as a result of these manipulations (Glauert et al., 2009; Wedell et al., 2005). This finding is important in that it suggests that for most women, exposure to manipulated peer preferences is an effective method for changing body ideals. For the women most vulnerable to the negative effects of body dissatisfaction, however, this manipulation may be of little value. If this is the case, perhaps addressing the issue of women's body ideals early, before socio-cultural ideals are internalized and body dissatisfaction is entrenched, may be a more effective preventative measure.

Overall, these results add to the body-image literature by highlighting the malleable nature of body image and, particularly, ideal body size. The accumulated research on the various socio-cultural influences on women's ideal body size seems to show that the body that women think they want to have incorporates their beliefs about how they will be perceived by others. If women's body ideals are shaped by normative social influences, then body-image issues and body dissatisfaction may have less to do with women's actual appearance than has been previously hypothesized (Gerner & Wilson, 2005).

Research has shown that greater differences between a woman's actual and ideal body result in greater body dissatisfaction (Durkin & Paxton, 2002; Thompson et al., 1999), and that the more women internalize normative socio-cultural body ideals, the more body dissatisfaction they report (Glauert et al., 2009; Knauss, Paxton, & Alsaker, 2007). These findings suggest that body dissatisfaction is influenced by the internalization of normative body ideals. Our finding that normative body ideals influence personal body ideals is important because it suggests a novel direction for interventions designed to challenge extremely thin body ideals: changing women's perceptions of normative body ideals.

It is interesting to consider these findings from the perspective of objectification theory (Fredrickson & Roberts, 1997), which posits that women are exposed to a conceptualization of themselves as a collection of body parts or functions that is experienced as separate from their actual selves. This exposure may be so frequent and pervasive that women may begin to self-objectify, thinking of themselves as objects whose value is based on appearance and is subject to the approval of others (Moradi & Huang, 2008). In the current study women select an ideal body from a range of bodies that vary in weight after having been exposed to what they perceive to be the majority preference of their peers. This manipulation may influence the participant's urge to self-objectify by varying the extent to which they incorporate the approval of others into their own ideal (control versus experimental conditions). It can also reveal whether the urge to self-objectify might be more pronounced depending on the gender of the "others" whose approval one may be seeking. The women in our study appeared to incorporate the approval of others into their own body ideals when the ideal was heavier, as if to suggest that when given external permission to appreciate a larger female body for themselves, women took it. In the thin condition, no such effect emerged even though the circumstance (the weight manipulation in each experimental condition) was equally objectifying. This suggests that perhaps objectification can be used to women's advantage if we manipulate the nature of the perceived ideal. Further, although body shame has been proposed as one of the mechanisms through which objectification influences women's body image, it is possible that the direction of this influence could be turned around and objectification could potentially be used to promote body pride.

Our finding that the gender of the normative body ideal provider did not interact with the weight manipulation suggests that opposite sex preferences are not required in order for self-objectification to occur. This finding is consistent with research showing that the phenomenon behaves in a manner similar to the internalization of cultural beauty standards which are perceived to be shared by both genders (Myers & Crowther, 2007). Although firm conclusions regarding the significance of the current findings to objectification research are beyond the scope of this paper, this discussion provides an interesting potential direction for future research in this area.

General Limitations and Future Directions

There were some methodological limitations to this research. One limitation is that we used the *Thompson Gray Contour Drawing Scale* (1995) to represent female body ideals. This measure was used for convenience and in order to establish the presence of an effect in a commonly used body image assessment instrument. Our study shows that the effect is sufficiently robust to emerge in spite of the comparatively primitive nature of this scale. That being said, body image assessment now allows for the simulation of realistic 3D images of female bodies, wherein both body size and body shape can be manipulated in very small gradients (Crossley et al., 2012). The use of novel and innovative body image assessment techniques is an area for future research.

Our manipulation check showed that many participants could not remember either the gender of the social norm provider and/or the preferred body size presented in the manipulation. While our results show that this issue had little impact on the results, the use of stimuli which more effectively highlight the importance of these factors would be of value in the future. It is also worth noting that our sample consisted exclusively of self-identified heterosexual young adults, a group for whom body image and peer acceptance are particularly salient issues (Holson et al., 2012). Our findings, therefore, might not generalize to a broader sample. This limitation should be examined in future research.

Finally, while we demonstrated that a one-time exposure to preferences for heavier bodies had an impact on women's body ideals, we were not able to show a corresponding decrease in body dissatisfaction. Because internalization of normative body ideals seems to be a key factor in the perpetuation of body dissatisfaction, it stands to reason that internalization of the "new" normative body ideal would be required before body dissatisfaction could be reduced (McCabe & Ricciardelli, 2004). Whether repeated or prolonged exposure to manipulated normative body ideals can ultimately influence body dissatisfaction is an interesting avenue for future research. Further, longitudinal research examining the effects of early interventions with manipulated peer preferences on female adolescents' personal body ideals should be conducted to test whether this will ultimately reduce the incidence of internalized socio-cultural norms for extreme thinness and their associated ill-effects among women.

Despite these limitations, the current research provides direct empirical support for the assertion that women's personal body ideals are both malleable and influenced by social factors, such as beliefs about the body preferences of others. The preferences of either male or female peers can be a source of such influence, and although exposure to larger peer preferences in body size can influence personal body ideals, it does not appear to directly influence body satisfaction. Further, women with higher levels of body dissatisfaction seem to be more resistant to the influence of peer preferences than those with lower levels of body dissatisfaction.

Taken together, these findings suggest that changing women's perception of normative body ideals may be a fruitful avenue to explore to reduce the disparity between women's actual and ideal body size. This is a novel approach that takes pressure off of the individual woman to focus on health while disregarding existing beauty norms. Instead it allows women to reevaluate their perception of what is considered attractive or desirable by others. If the drive for thinness is equally if not more motivated by social factors such as needs for belonging and acceptance than health factors, it may prove more effective in the long-run.

References

- Cohn, L., & Adler, N. (1992). Female and male perceptions of ideal body shapes: Distorted views among Caucasian college students. *Psychology of Women Quarterly*, 16, 69–79. <http://dx.doi.org/10.1111/j.1471-6402.1992.tb00240.x>
- Crossley, K., Cornelissen, P., & Tovee, M. (2012). What is an attractive body? Using an interactive 3D program to create the ideal body for you and your partner. *PLoS ONE*, 7, 1–11. <http://dx.doi.org/10.1371/journal.pone.0050601>
- Durkin, S., & Paxton, S. (2002). Predictors of vulnerability to reduced body image satisfaction and psychological well-being in response to exposure to idealized female media images in adolescent girls. *Journal of Psychosomatic Research*, 53, 995–1005. [http://dx.doi.org/10.1016/S0022-3999\(02\)00489-0](http://dx.doi.org/10.1016/S0022-3999(02)00489-0)
- Fallon, A. E., & Rozin, P. (1985). Sex differences in perceptions of desirable body shape. *Journal of Abnormal Psychology*, 94, 102–105. <http://dx.doi.org/10.1037//0021-843X.94.1.102>
- Franko, D., Coen, E., Roehrig, J., Rodgers, R., Jenkins, A., Lovering, M., & Dela Cruz, S. (2012). Considering J. Lo and Ugly Betty: A qualitative examination of risk factors and prevention targets for body dissatisfaction, eating disorders, and obesity in young Latina women. *Body Image*, 9, 381–387. <http://dx.doi.org/10.1016/j.bodyim.2012.04.003>
- Fredrickson, B., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173–206. <http://dx.doi.org/10.1111/j.1471-6402.1997.tb00108.x>
- Gerner, B., & Wilson, P. (2005). The relationship between friendship factors and adolescent girl's body-image concern, body dissatisfaction, and restrained eating. *International Journal of Eating Disorders*, 17, 313–320. <http://dx.doi.org/10.1002/eat.20094>
- Glasser, C., Robnett, B., & Feliciano, C. (2009). Internet dater's body type preferences: Race-ethnic and gender differences. *Sex Roles*, 61, 14–33. <http://dx.doi.org/10.1007/s11199-009-9604-x>
- Glauert, R., Rhodes, G., Byrne, S., Fink, B., & Grammer, K. (2009). Body dissatisfaction and the effects of perceptual exposure on body norms and ideals. *International Journal of Eating Disorders*, 42, 443–452. <http://dx.doi.org/10.1002/eat.20640>
- Grabe, S., Ward, M., & Hyde, J. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134, 460–476. <http://dx.doi.org/10.1037/0033-2909.134.3.460>
- Halliwell, E., & Dittmar, H. (2004). Does size matter? The impact of model's body size on women's body focused anxiety and advertising effectiveness. *Journal of Social and Clinical Psychology*, 23, 104–122. <http://dx.doi.org/10.1521/jscp.23.1.104.26989>
- Heatherton, T., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, 60, 895–910. <http://dx.doi.org/10.1037//0022-3514.60.6.895>
- Heinberg, L. J. (1996). Theories of body image: Perceptual, developmental, and socio-cultural factors. In J. K. Thompson (Ed.), *Body image, eating disorders, and obesity: An integrative guide for assessment and treatment*. (pp. 27–48). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10502-002>
- Hildebrandt, T., Shiovitz, R., Alfano, L., & Greif, R. (2008). Defining body deception and its role in peer based social comparison theories of body dissatisfaction. *Body Image*, 5, 299–306. <http://dx.doi.org/10.1016/j.bodyim.2008.04.007>
- Holston, I., Jones, D., & Birkeland, M. (2012). Body image satisfaction among Norwegian adolescents and young adults: A longitudinal study of the influence of interpersonal relationships and BMI. *Body Image*, 9, 201–208. <http://dx.doi.org/10.1016/j.bodyim.2012.01.006>
- Jackson, L. A., & McGill, O. D. (1996). Body type preferences and body characteristics associated with attractive and unattractive bodies by African Americans and Anglo Americans. *Sex Roles*, 35, 295–307. <http://dx.doi.org/10.1007/BF01664771>
- Jacobi, L., & Cash, T. (1994). In pursuit of the perfect appearance: Dissimilarities among self-ideal percepts of multiple physical attributes. *Journal of Applied Social Psychology*, 24, 379–396. <http://dx.doi.org/10.1111/j.1559-1816.1994.tb00588.x>
- Jones, D. C. (2004). Body image among adolescent girls and boys: A longitudinal study. *Developmental Psychology*, 40, 823–835. <http://dx.doi.org/10.1037/0012-1649.40.5.823>
- Knauss, C., Paxton, S., & Alsaker, F. (2007). Relationships amongst body dissatisfaction, internalization of media body ideals, and perceived pressure from media in adolescent girls and boys. *Body Image*, 4, 353–360. <http://dx.doi.org/10.1016/j.bodyim.2007.06.007>
- Matera, C., Nerini, A., & Stefanile, C. (2013). The role of peer influence on girl's body dissatisfaction and dieting. *European Journal of Applied Psychology*, 63, 67–74. <http://dx.doi.org/10.1016/j.erap.2012.08.002>
- McCabe, M., & Ricciardelli, L. (2004). Weight and shape concerns of boys and men. In J. K. Thompson (Ed.), *Handbook of eating disorders and obesity* (pp. 606–634). Hoboken, NY: Wiley & Sons. Retrieved from <http://search.proquest.com.ezproxy.library.yorku.ca/docview/620280140?accountid=15182>
- Mills, J., Jadd, R., & Key, B. (2012). Wanting a body that's better than average: The effect of manipulated body norms on ideal body size perception. *Body Image*, 9, 365–372. <http://dx.doi.org/10.1016/j.bodyim.2012.03.004>
- Mills, J., McCabe, R. E., & Polivy, J. (1999). Exploding the myth: Dieting makes you happier. *Healthy Weights Journal*, 13, 9–11.
- Mills, J., Polivy, J., Herman, P., & Tiggemann, M. (2002). Effects of exposure to thin media images: Evidence of self-enhancement among restrained eaters. *Personality and Social Psychology Bulletin*, 28, 1687–1699. <http://dx.doi.org/10.1177/014616702237650>
- Mills, J. S., Roosen, K., & Vella-Zarb, R. (2011). The psychology of body image: Understanding body image instability and distortion. In S. B. Greene (Ed.), *Body image perceptions, interpretations and attitudes* (pp. 59–80). New York: Nova Science Publishers.
- Molloy, B. L., & Herzberger, S. D. (1998). Body image and self-esteem: A comparison of African American and Caucasian women. *Sex Roles*, 38, 631–643. Retrieved from <http://search.proquest.com.ezproxy.library.yorku.ca/docview/619904652?accountid=15182>
- Moradi, B., & Huang, Y. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly*, 32, 377–398. <http://dx.doi.org/10.1111/j.1471-6402.2008.00452.x>
- Mussap, A., & Salton, N. (2006). A 'rubber-hand' illusion reveals a relationship between perceptual body image and unhealthy body change. *Journal of Health Psychology*, 11, 627–639. <http://dx.doi.org/10.1177/1359105306065022>
- Myers, T. A., & Crowther, J. H. (2007). Sociocultural pressures, thin-ideal internalization, self-objectification, and body dissatisfaction: Could feminist beliefs be a moderating factor? *Body Image*, 4, 296–308. <http://dx.doi.org/10.1016/j.bodyim.2007.04.001>
- Overstreet, N., Quinn, D., & Agocha, V. (2010). Beyond thinness: The influence of a curvaceous body ideal on body dissatisfaction in Black and White women. *Sex Roles*, 63, 91–103. <http://dx.doi.org/10.1007/s11199-010-9792-4>
- Owen, P., & Laurel-Seller, E. (2000). Weight and shape ideals: This is dangerously in. *Journal of Applied Social Psychology*, 30, 979–990. <http://dx.doi.org/10.1111/j.1559-816.2000.tb02506.x>
- Owen, R., & Spencer, R. (2013). Body ideals in women after viewing images of typical and healthy weight models. *Body Image*, 10, 489–494. <http://dx.doi.org/10.1016/j.bodyim.2013.04.005>
- Parker, S., Nichter, M., Nichter, M., Vukovic, N., Sims, C., & Ritenbaugh, C. (1995). Body image and weight concerns among African American and white adolescent females: Differences that make a difference. *Human Organization*, 54, 103–115. Retrieved from <http://search.proquest.com.ezproxy.library.yorku.ca/docview/618907552?accountid=15182>
- Paxton, S. J., Eisenberg, M. E., & Neumark-Sztainer, D. (2006). Prospective predictors of body dissatisfaction in adolescent girls and boys: A five-year longitudinal study. *Developmental Psychology*, 42, 888–899. <http://dx.doi.org/10.1037/0012-1649.42.5.888>
- Paxton, S. J., Schut, H. K., Wertheim, E. H., & Muir, S. L. (1999). Friendship clique and peer influences on body image attitudes, dietary restraint, extreme weight-loss

- behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology*, 108, 255–266. <http://dx.doi.org/10.1037/0021-843X.108.2.255>
- Roberts, A., Cash, T., Feingold, A., & Johnson, B. (2006). Are Black–White differences in females' body dissatisfaction decreasing? A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 74, 1121–1131. <http://dx.doi.org/10.1037/0022-006X.74.6.1121>
- Singh, D., Dixon, B., Jessop, T., Morgan, B., & Dixon, A. (2010). Cross-cultural consensus for waist–hip ratio and women's attractiveness. *Evolution and Human Behavior*, 31, 176–181. <http://dx.doi.org/10.1016/j.evolhumbehav.2009.09.001>
- Strahan, E., Wilson, A., Cressman, K., & Buote, V. (2006). Comparing to perfection: How cultural norms for appearance affect social comparisons and self-image. *Body Image*, 3, 211–227. <http://dx.doi.org/10.1016/j.bodyim.2006.07.004>
- Stice, E., Maxfield, J., & Wells, T. (2003). Adverse effects of social pressure to be thin on young women: An experimental investigation of the effect of 'fat talk'. *International Journal of Eating Disorders*, 34, 108–117. <http://dx.doi.org/10.1002/eat.10171>
- Stice, E., & Shaw, H. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of Psychosomatic Research*, 53, 1985–1993. [http://dx.doi.org/10.1016/S0022-3999\(02\)00488-9](http://dx.doi.org/10.1016/S0022-3999(02)00488-9)
- Stice, E., & Whitenton, K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology*, 38, 669–678. <http://dx.doi.org/10.1037/0012-1649.38.5.669>
- Sypeck, M. F., Gray, J. J., Etu, S. F., Ahrens, A. H., Mosiman, J. E., & Wiseman, C. V. (2006). Cultural representations of thinness in women, redux: Playboy magazine's depiction of beauty from 1979 to 1999. *Body Image*, 3, 229–235. <http://dx.doi.org/10.1016/j.bodyim.2006.07.001>
- Thompson, J., Heinberg, L., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment and treatment of body image disturbance*. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10312-000>
- Thompson, M. A., & Gray, J. J. (1995). Development and validation of a new body image assessment scale. *Journal of Personality Assessment*, 64, 258–269. http://dx.doi.org/10.1207/s15327752jpa6402_6
- Thompson, S. H., Sargent, R. G., & Kemper, K. A. (1996). Black and white adolescent males' perceptions of ideal body size. *Sex Roles*, 34, 391–406. <http://dx.doi.org/10.1007/BF01547808>
- Wedell, D., Santoyo, E., & Pettibone, J. (2005). The thick and thin of it: Contextual effects in body perception. *Basic and Applied Social Psychology*, 27, 213–227. http://dx.doi.org/10.1207/s15324834basps2703_3
- Wiseman, C. V., Gray, J. J., Mosiman, J. E., & Ahrens, A. H. (1992). Cultural expectations of thinness in women: An update. *International Journal of Eating Disorders*, 11, 85–89. [http://dx.doi.org/10.1002/1098-108X\(199201\)11:1<85::AID-EAT2260110112>3.0.CO;2-T](http://dx.doi.org/10.1002/1098-108X(199201)11:1<85::AID-EAT2260110112>3.0.CO;2-T)
- Yamamiya, Y., Cash, T., Melnyk, S., Posovac, H., & Posovac, S. (2005). Women's exposure to thin-and-beautiful media images: Body image effects of media-ideal internalization and impact-reduction interventions. *Body Image*, 2, 74–80. <http://dx.doi.org/10.1016/j.bodyim.2004.11.001>