Due to concerns that body shape preferences contribute to eating disorders among women, a new method to assess observer preferences for female body shapes was devised. In prior studies women have preferred thin models, but men have preferred models of average weight. In Experiment 1, an underweight female model was photographed in a white top and jeans. Later, she was padded to match the measurements of an average weight model and rephotographed. A slide of either the thin or padded model was shown to two separate Introductory Psychology classes, the first with 26 students and the second with 18 students. Due to low numbers of women in one condition, the results for the female subjects were inconclusive. But, contrary to prior findings, male subjects tended to find the thin model to be more appealing. In Experiment 2, student ratings indicated that the model was not perceived to be of the sizes intended. While subjects significantly differentiated the average model from the thin and very thin models, they did not clearly differentiate between the latter two. Because of this, body shape preferences could not be analyzed. The findings pinpoint certain limitations in the method of assessment. All photographs of models need to be pretested. Also, the finding that men prefer thin over average weight women is contrary to prior findings and seems worthy of further study. (Author/LLL)
Body Shape Preferences

Initial Findings Using an Alternative Assessment of Body Shape Preferences
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Abstract
Due to concerns that body shape preferences contribute to eating disorders among women, we devised a new method to assess observer preferences for female body shapes. In prior studies women have preferred thin models, but men have preferred models of average weight. In Experiment 1, an underweight female model was photographed in a white top and jeans. Later, she was padded to match the measurements of an average weight model and rephotographed. A slide of either the thin or padded model (but not both) was shown to separate Introductory Psychology classes. Due to low numbers of women in one condition, the results for the female subjects were inconclusive. But, contrary to prior findings, male subjects tended to find the thin model to be more appealing (p < .10). In Experiment 2, student ratings indicated that the model was not perceived to be of the sizes intended. Thus, body shape preferences could not be analyzed. However, we learned that fine discriminations of body shapes may not be feasible with our method of assessing preferences and that pretesting is necessary. Given the possible contradictory finding for men, further research seems warranted.
Initial Findings Using an Alternative Assessment of Body Shape Preferences

Our research initially grew out of a concern that our culture's obsession with thinness contributes to the development of eating disorders among American women. More specifically, we were concerned about the possible dietary impact of male preferences in female body shapes. However, in examining prior research we were surprised to learn that men prefer women with average figures (Fallon & Rozin, 1985). Yet, women themselves appear to desire body shapes thinner than what these men claim to prefer (Collins & Plahn, 1988; Fallon & Rozin, 1985). Is it possible that our cultural obsession with feminine thinness is more a product of self-imposed female standards than of male body shape preferences?

In order to answer this question, we re-examined some of the past studies. What we found led us to wonder whether certain methodological procedure may have biased their outcomes. Prior studies on body shape preferences have primarily used silhouettes or line drawings of human figures. The figures were arranged from thinnest to heaviest, with subjects indicating their preference along the continuum. Is it possible that such preferences do not correspond to preferences for actual human shapes? More importantly, does the use of a continuum of figures make the median body shape...
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too obvious? Subjects--especially males judging female figures--may feel social desirability pressures to exhibit a more moderate preference than they actually hold.

In an effort to examine this issue and circumvent these possible problems, we devised an alternative method of assessing body shape preferences. Our procedure involved individual slides of a human model not presented as part of a continuum. The following two studies represent our attempts to perfect this method, along with notes concerning its problems and comments on our initial findings.

Experiment 1

Method

In order to examine the issues raised by prior studies, we devised an alternative method of assessing body shape preferences. Based upon the Metropolitan Life Insurance weight chart, we recruited an underweight, female college student (5 feet 7 inches tall, 115 pounds) to serve as our model. She was provided with a white turtleneck and blue jeans and photographed outdoors in front of a brown wooden fence.

Body measurements were then taken of a different woman of the same height (5 feet 7 inches tall), but of average weight (135 pounds). The underweight model was then padded with cloth to match the measurements of the average weight woman. The white turtleneck used in the initial photos
still fit the model, but the extra padding necessitated a larger pair of blue jeans. The padded model was then rephotographed outdoors in the same location in front of the brown wooden fence.

Slides were made of the two photos of the same model (thin and then padded to appear of average weight) and shown to two separate sections of an Introductory Psychology class. To eliminate possible social desirability influences, the two photos were never simultaneously shown. The first class (n = 26) saw the slide of the underweight coed. The second class (n = 18) saw the slide of the same coed padded to appear to be of normal weight.

All students were given a questionnaire and asked to use a seven-point scale to rate the model on several personality dimensions. Among the ratings were questions asking the students to evaluate the model’s level of attractiveness (1 = very unattractive, 4 = average, 7 = very attractive) and her body shape (1 = very thin, 4 = average, 7 = very heavy).

Results and Discussion

Before analyzing the data for body shape preferences, we checked the students' evaluations to insure that they perceived the thin model to be thin and the padded model to be of average weight. On a scale from 1 to 7 (1 = very thin,
4 = average, and 7 = very heavy), women gave the thin model a mean rating of 3.38; men gave her a mean rating of 3.21. Both means are significantly lower than the average rating of 4 (t's = 2.45 and 3.67, respectively, p's < .05). As for the padded model, women gave her a mean rating of 4.00; men gave her a mean rating of 4.17. Neither rating is significantly different from 4 (t's = .00 and .56, respectively, p's > .05). Thus, the models were perceived to be of their intended size, and we went ahead with the analysis of the subjects' body shape preferences.

In terms of such preferences, female subjects in the class viewing the slide of the thin model gave her a mean attractiveness rating of 4.75; female subjects in the class viewing the slide of the average weight model gave her a mean attractiveness rating of 4.33. Unfortunately, the small number of women who occurred by chance in the latter class (n = 6) made any realistic analysis of body shape preferences impossible (t(17) = 1.00, p = .34); no significant difference could be assumed.

For the male subjects, the analysis tended to contradict prior findings. Rather than favoring the model of average weight (M = 3.92), men tended to rate the thin model as more attractive (M = 4.57, t(24) = 1.37, p < .10). While the samples are relatively small (n's = 12 and 14) and this difference is tenuous, it does raise some questions about the finding that
men prefer women of average weight. Is it possible that the prior use of line drawings and/or a continuum of figures biased responses towards a more socially acceptable mean? Given the viability of our new method for assessing body shape preferences, a follow-up study was conducted.

Experiment 2

Method

The intent of this study was both to validate the method of assessing body shape preferences devised in the first study and to reaffirm the findings obtained through the method's application. Furthermore, we tried to make a finer discrimination of subjects' preferences for female body shapes.

Based upon the Metropolitan Life Insurance weight chart, we obtained a very thin model who met the DSM III-R weight criterion for anorexia. She was photographed in a white turtleneck and blue jeans. She was then padded with cloth to match the measurements of a thin woman of the same height, but between average and anorexic weight. The padded model was rephotographed wearing the same white turtleneck and jeans. Finally, the model was repadded, but to match the measurements of a woman of her same height, but of average weight. She was rephotographed, wearing the same turtleneck, but required a larger pair of blue jeans.

A slide of the anorexic weight model was shown to a class of Introductory Psychology students. A slide of the thin,
padded model was shown to a second Introductory Psychology class. And, a slide of the model padded to be of average weight was shown to a third class. No class saw more than one slide of the model.

As in the previous study, all students were given a questionnaire and asked to rate the model on several personality dimensions. Since the questionnaire was identical to the one used in Experiment 1, the students were asked to rate the model in terms of her level of attractiveness (1 = very unattractive, 4 = average, 7 = very attractive) and her body shape (1 = very thin, 4 = average, 7 = very heavy).

Results and Discussion

Our primary concern for this study was the feasibility of the body shape assessment technique devised in Experiment 1. Accordingly, we examined the subjects' perceptions of the very thin, thin, and average weight models. As show in Table 1, some problems arose.

While subjects significantly differentiated the average model from the thin and very thin models, they did not clearly differentiate between the latter two. Males perceived the thin and very thin models to be of similar size, while females perceived the thin model to be even leaner than the very thin model ($t(62) = 3.05, p < .01$). Thus, a limitation of this assessment technique seems to be its ability to make finer
Table 1
Perceived Body Shape and Attractiveness of Model
(1=very thin/unattractive, 4=average, 7=very heavy/unattractive)

<table>
<thead>
<tr>
<th></th>
<th>Female Ratings</th>
<th></th>
<th>Male Ratings</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Perceived</td>
<td>Perceived</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thinness</td>
<td>Attractiveness</td>
<td></td>
</tr>
<tr>
<td>Very Thin Model</td>
<td>2.78*</td>
<td>4.48</td>
<td></td>
</tr>
<tr>
<td>Thin Model</td>
<td>2.23</td>
<td>4.15</td>
<td></td>
</tr>
<tr>
<td>Average Model</td>
<td>3.83</td>
<td>4.50</td>
<td></td>
</tr>
</tbody>
</table>

*Significant difference between levels (p < .05)
**Significantly less than average value of 4 (p < .05).

A second problem revealed by the data pertains to the subjects' perception of the average model; the subjects mean body shape ratings are lower than the designated average of 4. While this lower difference is not significant for female subjects (t(11) = .70, p > .05), it is significant for male subjects (t(29) = 2.14, p < .05). Thus, for males at least, none of the models was perceived to be of average weight. This indicates
that the perceived body shape of each model needs to be pretested before body shape preferences are actually assessed.

Given the males' perception of the models, it was not possible to examine the men's supposed preference for women of average weight. But, for the sake of interest, the attractiveness rating for each of the perceived body shapes is listed in Table 1. None of the differences are statistically different (F(2, 62) = .78 for women, F(2, 71) = 1.60 for men, p's > .05), but the highest ratings appear to be for the model of average weight—who was perceived to be thin. Given that this model was seen as thin, it is impossible to speculate how she would compare to a model who is perceived to be of average weight.

Conclusions

The results of our two studies address two issues of initial concern: the feasibility of our newly devised method of assessing body shape preferences and the nature of men's preferences in female body shapes. With respect to the former, our findings pinpoint certain limitations in our method of assessment. The method may be able to elaborate gross distinctions between thin and average weight models, but may not be able to adequately portray finer gradations in perceived body shapes. Furthermore, all photographs of models need to be pretested; subjects may not perceive them to be of the shape intended. Thus, for example, a model of average weight
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according to the Metropolitan Life Insurance weight chart, may be perceived to be thin by subjects.

In terms of men's preferences for female body shapes, the results of Experiment 1 hint at the possibility that men prefer thin over average weight women. This is contrary to prior findings and seems worthy of further study, especially if such preferences are contributing the prevalence of eating disorders among women. At this time we recommend further study regardless of the method of assessment used. And, we recommend that such studies not use a continuum of body shapes in making preference assessments.
References
