

Running Head: BODY IMAGE

Pluralistic Ignorance, Social Comparison, and Body Satisfaction

A Senior Honors Thesis

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by

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It is widely recognized that women, for the most part, are insecure about their bodies to some extent. Body image plays a large role in people's perceptions of themselves, especially in women. Because of this, the valuing of thinness as well as the stigmatization of obesity is thought to pressure women to achieve "ideal" body weights and sizes (Striegel-Moore, Silberstein, & Rodin, 1986). The extent of this issue can be seen in the fact that these insecurities and skewed perceptions are learned at a very early age. A previous study found that 42% of first-, second-, and third-grade girls preferred body types thinner than their own perceived figures and indicated that the onset of disparate figure perceptions and expectations among females could be apparent as early as age six or seven (Collins, 1991). But where does this idea of the thin ideal come from in the first place and how does it become so ingrained?

One important factor that has not been studied as well is what women believe about how other people think about weight and body types. Do most women think that other women feel the same as they do about weight, or do most women believe that they think about weight differently than all the others? It seems possible that women may vary in how important they think weight is to their own and others' attractiveness, yet many women act in a way that suggests that they endorse the cultural value placed on thinness.

One basis for our perceptions of social norms and cultural values is what we see in the media. From a young age, people in America are taught to associate thin with good and fat with bad and a host of research has found evidence of these associations (Crandall, 1994). The media perpetuates these associations by inundating us with pictures of super-skinny models and promoting this ideal of thinness, a thinness that is

almost impossible to attain. It is no wonder that women are affected by socially comparing themselves with these idealized bodies.

It is, however, interesting that women vary in how social comparisons affect them (Posavac, Posavac & Posavac, 1998). Although in general most women have some sort of dissatisfaction with their bodies, women obviously do not all feel the same way about their bodies. This difference in overall body satisfaction could mean differences in how women perceive others as well as how they are affected by things such as media. We would argue, for example, that women who generally have high body satisfaction would most likely be less affected by media images than would women with low body satisfaction. Further, the degree to which women believe they differ from the cultural value placed on thinness may affect their satisfaction with their own bodies.

Pluralistic Ignorance

Pluralistic ignorance refers to the belief that one's private attitudes and judgments are different from those of others, even though one's public behavior is identical (Miller and McFarland, 1991). People who exhibit pluralistic ignorance think that they are the only ones who think differently, even though most other people actually agree with them. Everyone sees everyone else acting a certain way and so they assume that everyone is acting in accordance to their personal attitudes, even though they themselves are not. In turn, they act in the same way (which is contradictory to their personal beliefs), perpetuating the situation.

Although it has not yet been demonstrated, I believe that pluralistic ignorance may characterize women's beliefs about other women and how they think about weight. Pluralistic ignorance commonly happens when there is a prevalent misrepresentation of

individuals' private views regarding an issue. An individual's behavior may be driven by social pressure, but they believe that, although other people are acting in exactly the same way, other people's actions are driven by their true feelings (Prentice & Miller, 1993). I might not personally think that weight is so important, but I may still give off the impression that I do, therefore perpetuating this misconception. For some reason it may not cross my mind that everyone else is doing the exact same thing that I am.

Pluralistic ignorance has been seen in areas such as politics (Boven, 2000), alcohol use (Prentice & Miller, 1993), emergency situations (Latané & Darley, 1970), and classroom settings (Miller & McFarland, 1987, 1991). Prentice and Miller (1993) found that undergraduate students at Princeton were much less comfortable with the drinking habits of students than they believed other students to be. The study also found that men and women react differently when trying to reduce the discrepancy between their private attitudes and the social norm. Prentice and Miller (1993) suggested that men may be more inclined to react by conforming, while women react by alienating themselves, which is consistent with other research that has found that men react with externalizing defenses, whereas women react with internalizing defenses (Cramer, 1987; Levit, 1991). In the face of pluralistic ignorance, men took steps to become less deviant, while women turned against themselves for being deviant (Prentice & Miller, 1993).

Although neither of these reactions involves internalizing the social norm, people will often convert public standards into their own ideal. Internalization has occurred when a person comes to believe that a certain standard originates from within the self, and the cultural value then becomes an individual's habit or choice (Bessenoff & Snow, 2006). Although this is different than pluralistic ignorance, in which the personal value is

not the same as the cultural value, internalization involves a private acceptance of a cultural norm that people do not necessarily initially believe in. Women may be conforming to what they believe others think about weight; although they personally may not place very much importance on their weight. If they think they are the only ones who do not place so much importance on weight, the result will be pluralistic ignorance in that each woman believes that others in general are more concerned about weight than they are privately.

In some ways, the cultural norm does directly affect personal ideals, particularly in the context of weight. Although, on average, women consider the cultural body ideal to be thinner than their personal ideal, the thinner women think the cultural standard is, the thinner their personal ideals are (Bessenoff & Snow, 2006). It seems possible that pluralistic ignorance may play a vital part in how people view their bodies, as well as weight in general. This is especially interesting because, although pluralistic ignorance has been looked at in a variety of different domains, it has not been researched directly in the context of body image.

Social Comparison and Media Images

Social comparisons are a normal part of everyday life, and have often been looked at as fundamental contributors to body image, as well as being crucial to self-evaluations (Wood, 1989). There are two main types of social comparison, including downward social comparison and upward social comparison. Downward comparisons occur when we compare ourselves to people who we believe are less fortunate than us in some domain and upward comparisons occur when we compare ourselves to people who we believe are better than us (Bessenoff, 2006). Downward comparisons have been found to

cause people to feel better about themselves, while upward comparisons cause people to feel worse. This concept is interesting when discussing media images, because for the majority of women the comparison between themselves and a thin model is an upward comparison, causing them to feel bad about their bodies. This is very troubling, considering the media's increasing obsession with thinner and more unattainable body shapes.

According to the similarity hypothesis, people tend to compare themselves with others whom they consider relevant comparison targets (Festinger, 1954). If this is true, it does not make sense for people to socially compare to models, yet research has consistently found that participants will socially compare to them. Trampe, Stapel, & Siero (2007) conducted a study in which female participants were presented with attractive or unattractive women, who were either described as models or non-models. This study found that participants were more likely to socially compare themselves to both attractive and unattractive targets who were described as non-models, although they still compared to a lesser extent to targets described as models. Although the study concluded that participants did indeed compare more with a more similar target (non-models), the main factor that influenced self-evaluation following the social comparison was the attractiveness of the target.

Body dissatisfaction has been examined in the past as a factor that may determine why some women seem susceptible to the exposure of the thin ideal in the media, while other women remain, for the most part, unaffected. In the past body satisfaction has been found to moderate the relationship between media exposure and weight satisfaction, among other things (Bessenoff, 2006). Women high in body satisfaction have been

found to be less influenced by attractive social comparison models than women lower in body satisfaction.

Posavac, Posavac and Posavac (1998), for instance, showed that only body-dissatisfied individuals reported greater weight concerns after socially comparing to thin-ideals in the media. They interpreted that this is because body-satisfied individuals did not have a self-discrepant body image and, therefore, were not affected by upward comparisons.

The Present Research

The links between social comparison, body satisfaction, and pluralistic ignorance in this domain of body image could be important ones. The way in which women perceive others around them could greatly affect their own body satisfaction, which in turn could moderate the effects of social comparisons to images in the media. The present research focuses on all three of these concepts individually as well as how they relate to each other.

First, this research will measure the extent to which pluralistic ignorance exists in the domain of body image and will try to determine the relationship between this pluralistic ignorance, if it exists, on body satisfaction. By asking participants questions concerning how they feel about certain issues regarding body image, as compared to how they think other women feel, this research will determine whether or not pluralistic ignorance is a phenomenon exhibited in the area of body image. Body satisfaction will also be taken into account, as we want to see if there is a difference in the way that women who have more or less positive body satisfaction perceive others compared to

themselves. We predict that we will find evidence of pluralistic ignorance in the domain of weight for both body-satisfied and body-dissatisfied women.

The second purpose of the present research is to assess the effects of models in the media on personal body self-evaluations for women high and low in initial body satisfaction. In the current study, the primary factor of interest will be the weight of actual models who are consistently attractive. Women participants will be exposed to either typical thin attractive models or to “plus-size” models. We expect that women are affected by media images because they socially compare their own weight with the weight of the comparison target. If this is true, participants should show lower body self-evaluations following exposure to thin models than when they have just been exposed to attractive plus-size models.

Although we expect that women will compare themselves with both thin and plus-size models, we also believe that self-evaluations will take into account more than just the simple social comparison. The current research will also examine the link between social comparison and body satisfaction. Participants will be initially divided into two groups based on whether they have high body satisfaction or low body satisfaction, in order to examine the differences between these two groups throughout the study. We predict that low body satisfaction participants will be more affected by both kinds of social comparisons. In contrast, we predict that body-satisfied participants will not be affected much by the social comparisons. For both groups we assume that participants will have the highest self-evaluations after viewing the plus-size models and the lowest self-evaluations after seeing the skinny models, with the control group having self-evaluation ratings somewhere in between.

Lastly, we are interested in trying to predict self-evaluation and body image. Do perceptions of others' concerns about weight impact self-evaluation and body image above and beyond the expected effects of a participant's own self concern and body satisfaction? We predict that others' concerns about weight will have an effect on participants' self-evaluation and body image, such that the more a participant believes that others are highly concerned about weight, the lower their self-evaluation and body image will be, regardless of their personal concerns.

Method

Participants

Participants were 156 female undergraduate students at the Ohio State University. All participants were recruited through Ohio State's REP program that is in conjunction with the psychology 100 course.

Procedure

Participants' body satisfaction was determined during prescreening and was used as a selection criterion for analyses. Although we intended for all participants to have completed this part prior to the experiment, we did have a number of participants complete the body satisfaction measure at the beginning of the experimental session because of a lack of prescreened participants. Body satisfaction was measured using the Body Dissatisfaction subscale of the Eating Disorder Inventory (Trampe et al., 2007). On this inventory, answers are given on a 6-point scale (*1 = never* to *6 = always*) (see Appendix A).

When participants arrived for the experimental session, they were told that they were participating in a study about what people find to be attractive and visually pleasing. The first thing that the participants were exposed to was a body image continuum. This body image continuum, used with the permission of Albert Stunkard, has been used in other weight-related studies, and includes nine schematic figures of women, ranging from underweight to overweight (see Appendix D). While looking at the continuum, participants were asked two questions designed to address pluralistic ignorance ('Where do you think the cut-off point is for what is too fat?', and 'Where do you think most women would say the limit is?'). This was done in order to examine what participants personally think and what they believe other women think about fatness. Participants were also asked six additional questions to assess their concern about weight and body image (see Attachment E). Half of these questions asked about their personal feelings and the other half examined their perception of others. Examples of these questions included 'How much do you care about your weight?', 'How much do you pay attention to other peoples' weights?', 'Approximately how many months of the year are you on a diet?' Thus, the four topics that were examined for evidence of pluralistic ignorance dealt with fat threshold on the body image continuum, the extent to which people care about weight, the extent to which people pay attention to other people's weight, and amount of time that people spend dieting every year.

In the second part of the study, participants were told that they are going to look at a series of advertisements (see Appendix F). The first three advertisements, which consisted of a camera, a ring, and a car, were shown as filler items. The last advertisement that the participant saw was one of three possible options. Participants in

condition 1 saw an advertisement with a skinny model, participants in condition 2 saw an ad with a plus-size model, and participants in condition 3 saw an advertisement for a room (the control condition). Following each advertisement, participants were asked questions regarding how attractive the advertisement was, how remarkable the advertisement was, and how professional the advertisement was. This was done in order to make the cover story credible. After the participants were finished reviewing the ads, they completed a self-evaluation, comprised of three questions (see Appendix G). These three questions were taken from Trampe et al. (2007) and were scored on a 7-point scale, (*1 = not at all* to *7 = extremely*). Later on these questions were averaged into one score which we called self-evaluation.

Finally, participants were shown the body image continuum for a second time. This time they were instructed to indicate which body shape is most similar to their own in order to get a body image measure (see Appendix H). As part of a suspicion check, participants were asked to recall the purpose of the study (see Appendix I). Lastly, every participant was fully debriefed and thanked for their participation (see Appendix J).

Results

Body satisfaction

A body satisfaction score was computed for each participant by calculating their mean response to the eight items on the body satisfaction measure (with some items reverse-scored). Because we wanted to compare responses of participants who differed in their initial body satisfaction, we looked at the distribution of scores on this body satisfaction scale to determine a cutoff for distinguishing high and low satisfaction

subgroups. The mean body satisfaction score was 3.56 (s.d =1.01) with a range from 1-6 and a midpoint of 3.5. Because the mean and the midpoint of the scale were very close, we used the midpoint (+ or - .25) as the basis for dichotomization. Participants with a body satisfaction score ≤ 3.25 were classified as low (n = 63) and participants with a mean body satisfaction score ≥ 3.75 were classified as high in initial body satisfaction (n = 76). The 17 participants who fell between these scores were deleted from the sample and not used in further analyses.

Concern with weight measures

In order to determine whether pluralistic ignorance exists in the domain of body image, we looked at the questions that participants answered regarding what they personally think and what they believe other people think about different aspects of weight. The first step in our analysis was to compute the correlations between all of the self ratings and the ratings of others on the four weight concern items. The intercorrelations can be seen in Table 1. In general, the self and other ratings were moderately positively correlated, but only two of the self-other correlations (fat threshold and attention to weight) were significantly greater than zero. These small correlations mean that participants are not simply projecting their own thoughts onto what they believe others think. In addition, the correlations between the different weight concern items were small and often non-significant. Because of this, we treated them as four separate measures in further analyses.

Table 1:

Correlations among concern for weight measures

	SELF Fat threshold	OTHER Fat threshold	SELF Care Weight	OTHER Care Weight	SELF Attention to weight	OTHER Attention to weight	SELF Dieting	OTHER Dieting
SELF Fat threshold	1	.333(**)	-.026	.157	-.096	.005	-.007	-.008
OTHER Fat threshold	.333(**)	1	-.096	-.087	-.110	-.091	-.044	-.174(*)
SELF Care Weight	-.026	-.096	1	.153	.287(**)	.069	.378(**)	-.020
OTHER Care Weight	.157	-.087	.153	1	.017	.281(**)	.027	.176(*)
SELF Attention to weight	-.096	-.110	.287(**)	.017	1	.293(**)	.095	-.186(*)
OTHER Attention to weight	.005	-.091	.069	.281(**)	.293(**)	1	-.042	.175(*)
SELF Dieting	-.007	-.044	.378(**)	.027	.095	-.042	1	.106
OTHER Dieting	-.008	-.174(*)	-.020	.176(*)	-.186(*)	.175(*)	.106	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

(The bolded items are the correlations between the self and other ratings)

We next ran a 2(high, low) x 2(self, other) repeated measures ANOVA for each of the four questions that the participants answered in order to see whether there were any differences between the self and other ratings as well as between participants with high and low body satisfaction. See Table 2 below for mean scores on each measure.

Table 2

Means and Standard Deviations of weight concern variables

<i>Table 2a</i> <i>Fat Threshold</i>			<i>Table 2b</i> <i>Care about weight</i>		
	Self	Other		Self	Other
High BS	5.37 (1.33)	5.28 (0.95)	High BS	4.83 (1.34)	4.89 (1.26)
Low BS	5.27 (1.20)	5.11 (0.90)	Low BS	5.48 (1.01)	5.49 (0.80)

<i>Table 2c</i> <i>Attention to weight</i>			<i>Table 2d</i> <i>Dieting</i>		
	Self	Other		Self	Other
High BS	3.64 (1.37)	4.89 (1.10)	High BS	1.95 (1.37)	4.22 (1.27)
Low BS	4.25 (1.48)	5.08 (0.99)	Low BS	3.10 (1.95)	4.30 (1.33)

The first factor that we looked at is what we call fat threshold. This was assessed by the responses that participants gave when looking at the body image continuum (see Appendix E). They were asked both where they think the figures begin to get fat and where they think most women think the figures begin to get fat. The ANOVA showed

that there was no statistical difference between any of the four cells (see table 2a). The average score for the high body satisfaction participants was a 5.37 for the self questions and a 5.28 for the other questions. The average score for the low body satisfaction participants was a 5.27 for the personal threshold and a 5.11 for the other questions. Overall, there appears to be considerable agreement about where the threshold for perceived overweight is set, independent of respondents' own body image.

Next we looked at how much participants care about weight and how much they perceive others to care about weight. For this measure we found a main effect of body satisfaction (see table 2b). There was a significant effect such that participants with low body satisfaction reported themselves and others as caring more about weight (mean = 5.49) than participants with high body satisfaction (mean = 4.86), $F_{1,139} = 18.784$, $p < .0001$.

The questions examining attention to weight proved to be even more interesting than the first two factors. Not only was there a main effect of body satisfaction, but there was also a main effect of self versus other (see table 2c). There was a significant effect of body satisfaction similar to the previous measure, such that the mean for participants with low body satisfaction (mean = 4.67) was higher than for participants with high body satisfaction (mean = 4.27), $F_{1,139} = 5.46$, $p < .021$. Participants with low body satisfaction reported higher scores on how much they, as well as how much they believe others pay attention to weight. Of more interest was the main effect of the self versus other ratings. The mean of the self ratings (mean = 3.92) was less than the mean for the other ratings (mean = 4.98), $F_{1,139} = 64.87$, $p < .0001$. This result shows that pluralistic

ignorance is present in the domain of body image, at least in regards to how much people believe others pay attention to weight, compared to themselves personally.

The last factor that we looked at involved amount of dieting, measured in terms of the number of months per year self and others spend on a diet (see table 2d). Once again, there was a main effect of body satisfaction such that the mean for participants with low body satisfaction (mean = 3.70) was higher than for participants with high body satisfaction (mean = 3.09), $F_{1,139} = 10.65, p < .001$. Participants with low body satisfaction reported higher amounts of dieting per year and also believed that others dieted more. There was also a main effect of self versus other ratings such that the self ratings (mean = 2.47) were less than what was perceived for others (mean = 4.26), $F_{1,139} = 104.92, p < .0001$. This once again shows pluralistic ignorance because people believe that although they might not diet that much, everyone else does. These two main effects were qualified by a significant interaction between the self/other measure and body satisfaction, $F_{1,139} = 9.90, p < .01$. People have the same perception of others regardless of whether they have high or low body satisfaction; they all believe that others diet more. The difference is how many months per year they themselves spend dieting

Although there was a main effect of body satisfaction for three of the four self/other measures, the most interesting findings dealt with the attention to weight and dieting measures. Both of these measures showed the presence of pluralistic ignorance such that participants believe that others are more concerned with weight than they are themselves.

Effects of exposure to ads

The final phase of the experiment was designed to assess the effects of exposure to models who varied in body weight on participants' own self-evaluations. The three conditions in this experiment varied in the fourth ad that the participants saw. In the "skinny model" condition, participants viewed an ad displaying three slender models. In the "heavy" condition, they viewed an ad with three plus-size models, and in the control condition participants saw an ad for a bedroom (see Appendix F). The dependent variables were the measures of self-evaluation (the mean of the three self-evaluation items) and body image, given after the participants were exposed to the ads.

We first conducted two one-way ANOVAs to see if there were any condition effects on self-evaluation or body image. We had predicted that the participants who saw the plus size models would have higher self-evaluation ratings than the participants who saw skinny models, with the control participants falling somewhere in between. The means for each condition are reported in Table 3.

Table 3

Means and Standard Deviations of self-evaluation and body image as a function of ad condition

	Self-evaluation	Body Image
1 (skinny)	4.37 (1.07)	3.94 (1.15)
2 (plus-size)	4.43 (1.08)	4.04 (1.13)
3 (control)	4.44 (1.21)	4.26 (1.24)

There were no significant condition effects for either self-evaluation $F_{1,139} = .060$, $p < .942$ or body image $F_{1,139} = .920$, $p < .401$. Since there were no significant condition effects overall, we decided to conduct additional one-way ANOVAs, this time splitting the participants by high and low body satisfaction. The table summarizing these data can be seen in Appendix K. The direction we predicted was obtained for the low body satisfaction participants on self-evaluation, but on body image they actually rated their own bodies as skinnier after seeing the skinny model. Participants with high body satisfaction actually had higher self-evaluation ratings after seeing the skinny model and the direction was the same as it was for low body satisfaction participants when it came to body image. Overall, however, there were no significant condition effects for either participant group. This could be due to a weak stimulus, among other things. Perhaps

one ad was not enough to generate a significant effect. There was however a main effect of body satisfaction, where high body satisfaction participants had overall higher self-evaluation scores.

Predicting self-evaluation/body image

Our last step in the analysis was to run four separate regressions using the self and other measures as predictors of self-evaluation and body image. This was done with the goal of determining whether perceptions of other's concerns about weight impacts self-evaluation and body image above and beyond the expected effects of a participant's own body satisfaction and self concern. Each of the four regressions had three predictors that included body satisfaction, self concern, and other concern.

The regressions showed that the ratings of others had no direct effect above and beyond the self measure on self-evaluation (see Table 4). The only measure that came even close to significance was the dieting measure (mean = 4.26), $F_{1,139} = 1.808$, $p < .073$. The regressions also showed that the ratings of others had no direct effect above and beyond the self measure on body image. None of the measures came even close to significance, with attention to weight being the closest (mean = 4.98), $F_{1,139} = 1.612$, $p < .109$.

Table 4
Predicting self-evaluation

	Fat Threshold as predictor	Care about weight as predictor	Attention to weight as predictor	Dieting as predictor
Body Satisfaction regression weight	.456(**)	.410(**)	.442(**)	.347(**)
Self-Perception regression weight	-.047	-.207(**)	-.116	-.358
Other Perception regression weight	.075	.010	.064	.128
R2	.218	.252	.226	.335

Although these results did not show exactly what we had hoped, they are promising. With no previous research on pluralistic ignorance in the domain of weight, we had to come up with measures from scratch. Taking this into account, I think that the significant results that we obtained for both the attention to weight and dieting measures are very promising. Both of these measures showed pluralistic ignorance in the domain of weight, which has never been shown before. I also believe that if I were to redo the social comparison part of this study, I could obtain better results. The stimulus that was used was most likely not strong enough to produce any sort of condition effects and the low number of participants could also have contributed to these non-significant results.

Discussion

This study was interesting in that although we did not find everything that we expected to, we did correctly predict some of the outcomes, and we did not find anything contradictory to our hypotheses. Although not all four of the weight concern items showed evidence of pluralistic ignorance, two of them did, which is extremely exciting because pluralistic ignorance has never been shown before in the domain of body image. The fact that pluralistic ignorance was shown means that the participants believed that other people are more concerned with weight than they themselves are. This could have very serious consequences for women, considering that they must believe they are walking through a world where everyone is much more concerned with body image than themselves. Even if someone were to be completely unconcerned with their own body image, it is unlikely that they would be completely unaware of everyone else's concerns and this would most likely have some sort of impact on them. It isn't hard to see then, how the perception of others could have an impact on a person's own self-evaluation. People are inundated with media images and people's opinions from a very young age and this could definitely have an effect on their own self concerns, even if they may not have been that concerned in the first place.

The ad materials provided for social comparisons were most likely not strong enough and we found no condition effects on self-evaluations. Although we predicted the correct direction for low body satisfaction participants, we were wrong when it came to participants with high body satisfaction. It was interesting that high body satisfaction participants actually had higher self-evaluations after seeing the skinny model. If the stimulus had been stronger, we might have seen one of two things. The direction might

have flipped making their self-evaluations lowest after seeing the skinny model, as we had predicted. On the other hand, the direction might have stayed the same. High body satisfaction participants could possibly feel better about themselves after seeing a skinny model because it makes salient what they like about their own bodies.

There was also no significant evidence to show that the perception of others had any direct effect on participants' self-evaluation. We assumed that body satisfaction and self concern would be predictors of self-evaluation, but we were interested in whether or not others' concern would predict self-evaluation above and beyond the expected results of body satisfaction and self concern. The results indicated that perceptions of others' concern does not directly predict self-evaluation, but there was nothing to show that there might not be an indirect effect. More specifically, the perceptions of others' concern could possibly be affecting participants' own self concern, which then directly affects self-evaluation. This possible relationship can be seen in the Figure 1 below.

Figure 1

Others' concern \leftrightarrow Self concern \rightarrow Self-evaluation

It seems very feasible that the perception of other's concerns may have an effect on self concern and visa versa. If this is so, the perception of other's concern could indirectly affect self-evaluation. Being exposed to thin media images from a very young age could certainly cause women to believe that others are very concerned with weight, regardless of their personal feelings. If this is true, over time this perception of others could become so ingrained that it becomes part of their own self concern. Once this takes

place, it becomes difficult to show that others' concern is even part of the equation, even if it is.

If I were to repeat this study, I would definitely make some changes that could not have been foreseen. I believe that having a larger group of participants could have helped the results and I also believe that a stronger social comparison would have caused significant condition effects. Instead of showing the participants only one advertisement having to do with weight, I would show them numerous advertisements and most likely skip the filler ads.

There may not have been an abundance of significant results in this study, but if nothing else this study has begun to look at pluralistic ignorance in a new domain and has shown that not all social comparisons are strong enough to have an immediate effect on women's self-evaluation. Future studies will be able to take a deeper look into pluralistic ignorance and body image and possibly be able to figure out if there is a connection between this and how social comparisons affect different people.

In future studies it could be very interesting to look at these phenomena not only in women, but for men also. Although body image and weight concerns have been generally attributed to women in the past, research has shown that these concerns, as well as eating disorders, are becoming more and more prevalent in men. Not only has research indicated that media portrayals of ideal male bodies are being marketed in increasingly exaggerated forms (Hobza, Peugh, Walker, & Yakushko, 2007), but one study showed that males actually reported feeling pressured by the media to look muscular and built (Ridgeway & Tylka, 2005). It was also shown that men who saw

ideal male media reported higher levels of muscle dissatisfaction and depression (Agliata & Tantleff-Dunn, 2004).

If possible, it would also be interesting to test our new hypothesis that others' concern indirectly affects self-evaluation by first affecting participants' self concern. Assuming that these values that have become ingrained in our society are not going to change anytime soon, it is important to understand the effects of the media as well as who is most adversely affected. It is also important to try to understand how women conceptualize these things in order to try and change their perceptions. It is hoped that research such as this can begin to make way for further research that could potentially help to reverse what is happening in the minds of women everywhere.

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Attachment A. Prescreening questionnaire (Body satisfaction subscale of the Eating Disorders Inventory).

1. I think that my stomach is too big. *

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

2. I think that my thighs are too large. *

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

3. I think that my stomach is just the right size.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

4. I feel satisfied with the shape of my body.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

5. I like the shape of my buttocks.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

6. I think my hips are too big. *

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

7. I think that my thighs are just the right size.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

8. I think by buttocks are too large. *

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

Attachment B. Solicitation email and REP website posting for experiment.

Email Solicitation

Our records indicate that you completed our prescreening measure in the beginning of Autumn 2007. We would like to invite you to participate in our experiment, which can be accessed on the REP website, at <http://www.psy.ohio-state.edu/rep/>. The name of the study is “Perceptions of what is visually pleasing.” The experiment will last 30 minutes and you will receive 30 minutes of REP credit. The receipt of this email is all you need to sign up for this experiment. Your participation is strictly voluntary.

Thank you,
Kierstin Montano

REP Website Posting

Title: Perceptions of what is visually pleasing

Description: In this experiment, participants will participate in a study looking at what people consider attractive and visually appealing. Participants will be asked to complete different scales measuring factors relating to attractiveness. Participants will also be asked to rate different advertisements on how visually pleasing they are. **YOU MUST HAVE RECEIVED AN EMAIL FROM THE EXPERIMENTER TO PARTICIPATE.**

Attachment C. Script.

Introduction

In this experiment, we are interested in looking at what people find attractive and visually appealing. You will complete a few short tasks in this experiment and will receive a specific set of instructions for each task on the computer. You can withdraw from this study at any point, without penalty. No personally identifying information is required and only the experimenters will have access to your answers. Please feel free to ask the experimenters if you have any questions. Please turn to your computer.

First task-COMPUTER WILL READ:

In the first task, you will be asked a series of questions regarding what you find attractive and visually pleasing as well as what you think other people find attractive and visually pleasing. There will also be questions involving ideas closely related to attractiveness. Please answer all questions honestly. Your answers will not be linked to your name and only the experimenters will have access to them. At the end of this first task, you will receive instructions for the second task.

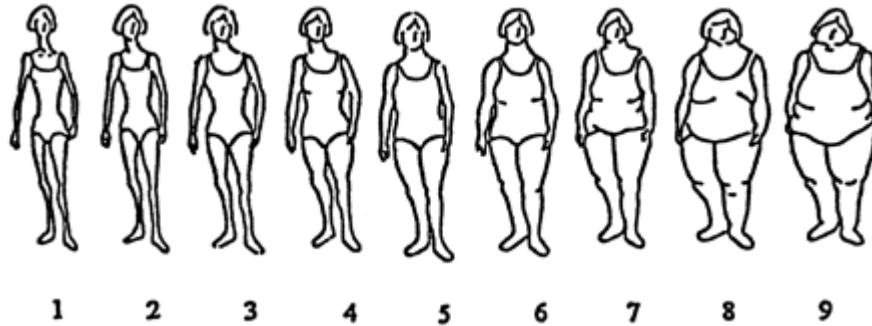
Second task COMPUTER WILL READ:

In the second task, you will be asked to evaluate three different advertisements on their attractiveness, remarkableness, and professionalism.

Third task COMPUTER WILL READ:

In the last task, you will be asked questions relating to yourself. Once again, no personally identifying information is required and only the experimenters will have access to your answers. Please answer honestly and wait for experimenter instructions when you are finished.

Attachment D. Pluralistic Ignorance and body continuum.



1. Indicate the number where **you** think the figures in the continuum begin to get fat.
2. Indicate the number where **most women** would say the figures in the continuum begin to get fat.

Attachment E. Pluralistic Ignorance measures.

1. How much do **you** care about your weight?

1	2	3	4	5	6	7
not at all						extremely

2. How much do you think **other people** care about their weight?

1	2	3	4	5	6	7
not at all						extremely

3. How much do **you** pay attention to other people's weight?

1	2	3	4	5	6	7
not at all						all the time

4. How much do you think **other people** pay attention to other's weights?

1	2	3	4	5	6	7
not at all						all the time

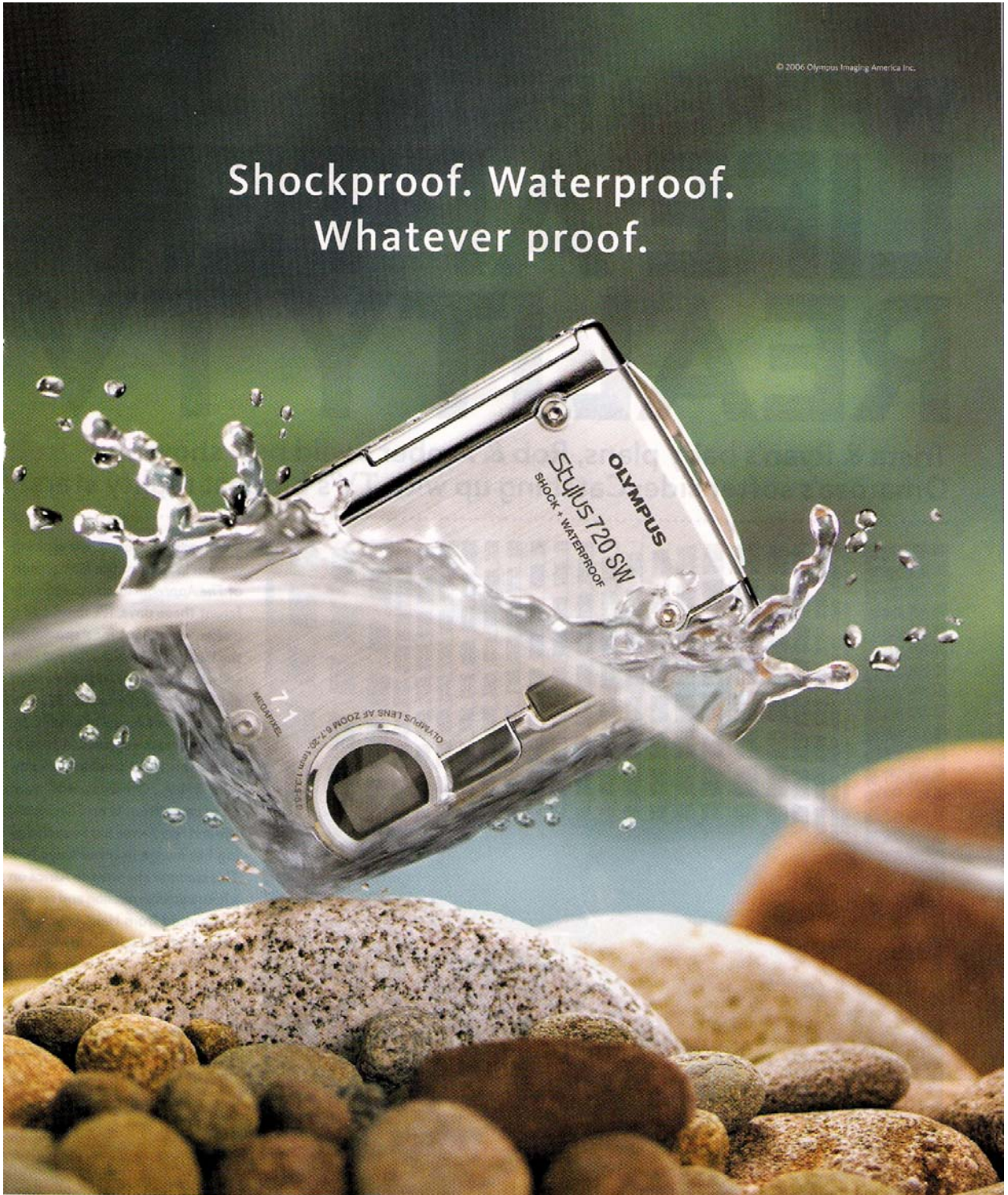
5. Approximately how many months of the year are you on a diet?

0	1	2	3	4	5	more than 5

6. How many months per year, on average, do you think **other people** are on diets?

0	1	2	3	4	5	more than 5

Attachment F. Advertisements.



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MONITICA JEWELRY Coral Gables, FL. 305 446 2957 | **BROWN & CO. JEWELERS** Roswell, GA. 800 535 0620 | **SOLOMON BROTHERS FINE JEWELRY** Atlanta, GA. 800 275 4475
D. GELLER & SON Smyrna, GA. 770 955 5995 | **C. D. PEACOCK** Select Stores Oakbrook Center, Woodfield Mall, Northbrook Court, IL. 800 CDP 1837 | **M. J. MILLER & CO.** Barrington, IL. 847 381 7900
MERRY RICHARDS JEWELERS Oakbrook, Glenview, IL. 630 516 8000 | **JAMES & SONS, LTD.** Lincoln Park, Orland Park, Olympia Fields, IL. 708 226 0800 | **GOLD CASTERS** Bloomington, IN. 812 332 1071
J.S. MARTEN JEWELERS Carmel, IN. 800 473 0701 | **HERZOG JEWELERS** Ft. Mitchell, KY. 859 331 4653 | **LUCIDO FINE JEWELRY** Sterling Heights, MI. 800 814 7937
DARAKJIAN JEWELERS Southfield, MI. 888 THE ONLY | **ALBRITON'S** Jackson, MS. 601 982 4020 | **PETER & CO.** Avon Lake, OH. 800 347 6956
C STERLING JEWELERS Maumee, OH. 419 897 9131 | **ROGERS JEWELERS** Cincinnati, OH. 800 371 7144 | **ANDREWS JEWELERS** Dublin, Columbus, OH. / Carmel, Lafayette, IN. 800 371 7144
VILLAGE JEWELERS Nashville, TN. 615 383 1226 | **MARKMAN'S DIAMONDS AND FINE JEWELRY** Knoxville, Chattanooga, TN. 800 757 0247 | **T. O. DIAMONDS** Madison, WI. 608 833 4500



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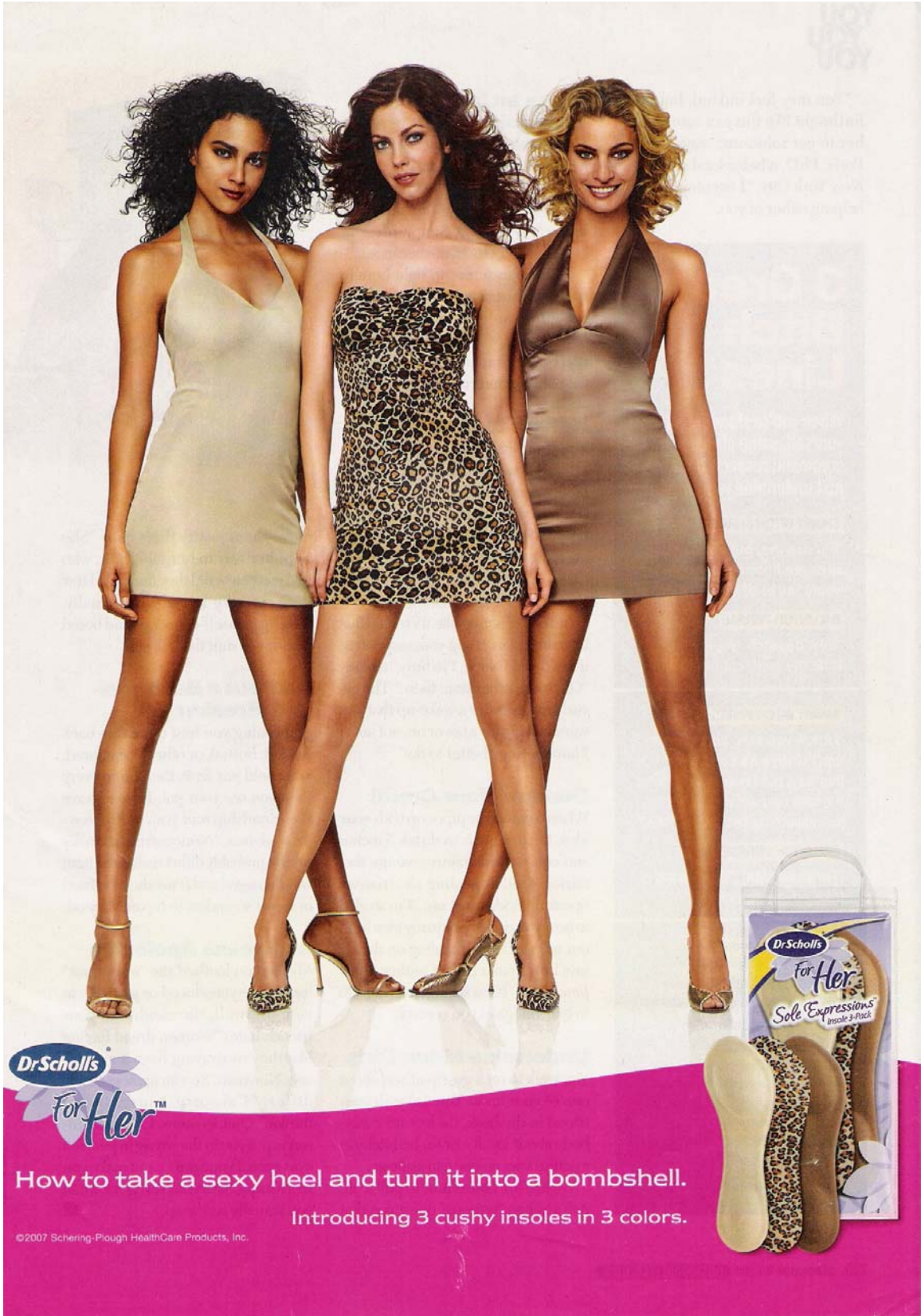
NORESUND queen bed frame \$159 Last year's price \$209 Black-brown powder-coated steel. RA. 698.389.64 See p. 197 to see what is included in the price.
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1. How attractive do you think this advertisement is?
2. How remarkable do you think this advertisement is?
3. How professional do you think this advertisement is?

Attachment G. Self-evaluation.

1. How attractive do you consider yourself?

1	2	3	4	5	6	7
not at all						extremely

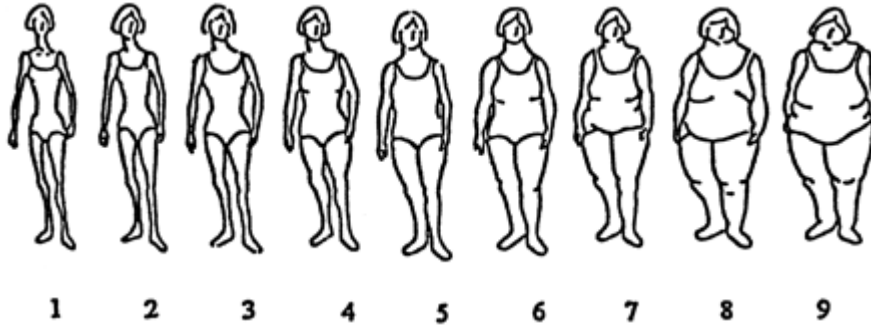
2. How satisfied are you with your appearance?

1	2	3	4	5	6	7
not at all						extremely

3. How satisfied are you with your body?

1	2	3	4	5	6	7
not at all						extremely

Attachment H. Body Image Continuum.



Which body shape is most similar to your own body?

Attachment I. Suspicion check before debriefing.

1. Briefly, what do you recall that this study was interested in looking at?
2. Do you think that any event occurring before the experiment could have affected your performance in this study?

Yes / No

How do you think you might have been influenced?

3. Did any part of the study seem suspicious or strange to you?

Yes / No

What seemed suspicious or strange?

Attachment J. Debriefing.

Now that you are finished with this study, I'd like to tell you what it is all about. In this research we are trying to learn more about how women's own body image is affected by the media and cultural standards of beauty for females.

You were selected because you completed the prescreening. This study was interested in investigating whether perceptions of how weight is evaluated, in terms of norms and images in the media, influence an individual's evaluation of themselves and others. During the first part of the study we were interested in seeing if you believe that other people think the same way as you do about weight and body image. In the second part of the study, we were interested to see if looking at images of other women in advertisements had an effect on your perception of your own body. The last two measures that you completed were actually measuring your self-evaluation.

In this line of research, we are interested in learning more about body image, particularly for women. We are interested not only in how body satisfaction and social comparison are related, but also why women have certain perceptions about their bodies.

Although minimal deception about the nature of the tasks you were completing was a necessary part of our research procedures, we want you to be aware that your participation has been vital to our understanding of what determines whether women in our society are satisfied or dissatisfied with their own bodies and how they feel about themselves. In order to resolve body issues among women, we first need to understand how and why different types of women are affected when comparing themselves to other women. Your participation has helped us to do that. Your prescreening id information will be destroyed at the end of our data collection for this experiment and the data that you provided will only be accessible to the experimenters. Your answers will remain strictly confidential. Do you have any questions?

If you have any questions in the future, feel free to contact either Kierstin Montano (montano.12@osu.edu) or Professor Marilyn Brewer (brewer.64@osu.edu, 614-292-9640).

For questions or concerns about your rights as a research participant in this study please contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

Thank you for your participation!

Attachment K. Effects of Exposure to Ads

Self-evaluation as a function of ad condition and body satisfaction

	Low body satisfaction		High body satisfaction	
	Self-evaluation	Body image	Self-evaluation	Body image
1	3.84 (.92)	4.20 (1.23)	4.97 (0.92)	3.64 (1.00)
2	3.87 (1.01)	4.50 (1.10)	4.87 (0.94)	3.69 (1.05)
3	3.85 (1.13)	4.67 (1.37)	4.82 (1.12)	4.00 (1.09)

Attachment L. ANOVA ResultsFat Threshold

<u>Effect</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Condition	1.08	1.33	0.25
BS	1.20	.760	0.39
C x B	0.08	0.09	0.76

Care about Weight

<u>Effect</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Condition	0.12	0.10	0.76
BS	26.68	18.74	.001
C x B	0.04	0.04	0.85

Attention to Weight

<u>Effect</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Condition	74.18	64.87	.001
BS	10.85	5.46	0.02
C x B	3.11	2.72	0.10

Dieting

<u>Effect</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Condition	208.90	104.92	.001
BS	25.88	10.65	.001
C x B	19.72	9.90	.002

