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# Fat or Thin? The Relationship of Body Image to the Perception of Others

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Research has found that overweight individuals are often judged negatively by others. This study investigated the relationship between an individual's body image and that individual's perception of a female with varying body weight. Fifty-five college-age females served as participants in this study because research has found that appearance is an issue of special concern to this group. Participants completed questionnaires assessing their body image and their evaluation of a female model. The model's picture was electronically manipulated such that one group saw a thin model and the other group saw an overweight model. Findings indicate variability among participants' body image. However, participants did not evaluate the thin model any differently than the overweight model and no correlation between body image and evaluations of the female model was found.

There is strong evidence that we initially judge others by their physical appearances (Eagly, Ashmore, Makhijani & Longo, 1991). Physically attractive individuals are seen as more socially competent than those that are physically unattractive; they are also regarded as more intelligent, well-adjusted, and self-assertive (Eagly et. al, 1991). Compared to attractive individuals, unattractive individuals (including those who are overweight) are seen as unhealthy, unpopular, and unintelligent (Lundberg & Sheehan, 1994). While there is ample evidence that others' physical appearance is important in how we judge them (e.g., Lundberg & Sheehan, 1994), little research has examined the possible relationship between an individual's body image and his/her perceptions of others' physical appearance. The current study had a twofold purpose. Firstly, the experimenters wanted to determine if any differences existed in how participants rated the same female model when her weight varied. Secondly, any potential relationships between participants' body image and their ratings of others' personal characteristics were examined.

### PERCEPTIONS OF PHYSICALLY ATTRACTIVE INDIVIDUALS

As mentioned above, physical attractiveness is associated with many positive qualities such as intelligence and personality (Lundberg & Sheehan, 1994). Not only do we attribute positive qualities to attractive people, we also give them an edge in a variety of situations. For instance, Abramowitz and O'Grady (1991) found that undergraduate participants, when looking at bogus job applications, preferred women of higher attractiveness to those of lower attractiveness.

Weight is a prime component of physical attractiveness (Lundberg & Sheehan, 1994), especially for women. Lundberg and Sheehan used a computer graphics program to modify the body weight of a female stimulus person. When this stimulus person was of normal

weight, participants rated her physical appearance more positively than when this stimulus person was overweight. Additionally, research suggests that overweight women are systematically discriminated against in the workplace (Snow & Harris, 1985) and are more likely to have "bad" qualities such as laziness attributed to them (Wooley & Wooley, 1980).

### PERCEPTIONS OF OUR OWN BODY

Not only do we base our perceptions of others on their physical appearances, but we also judge our own worth on our physical appearances (Gabriel, Critelli & Ee, 1994). Bezner (1991) examined the presence of body dissatisfaction among 16-72 year-old males and females. Findings indicated that women of all ages tended to be more dissatisfied with their bodies than males. Images of "ideal" body types throughout the media have been found to correlate with poor body images in females. For instance, it was discovered that exposure to media images of attractive female models was significantly related to female participants' lowered self-esteem and decreased body satisfaction (Stice, Schupak-Neuberg, Shaw, & Stein, 1994). Past research has found weight to be an issue of special concern to women; therefore, this study focused on college females. Poor body image can be detrimental to one's well being. For example, Rierdan & Koff (1997) found that adolescent females with the most negative body images also had the highest depression scores on the Beck Depression Inventory (BDI), where high scores indicate higher levels of depression. While it is understandable that body image affects one's self-esteem, does it also follow that one's body image would affect how one views others of varying weight? There is little research on this topic. The current study explores the potential relationship between personal body image and perceptions of others. It was hypothesized that participants would attribute more positive characteristics to normal weight females than to overweight females. It was also hypothesized that participants with low body images would rate the overweight female model differently than those participants with high body images.

### **METHODS**

### **Participants**

Fifty-eight Caucasian female college students were used for this study, 3 of whom were discarded due to recognition of one or both of the models on the brochure. Participants ranged in ages from 18-22, with a mean age of 19. Participants were recruited from a general psychology course at a mid-sized mid-western public university. Participants received extra credit for their participation.

### **Procedure**

Participants were randomly assigned into one of two groups and told they would be evaluating some new recruitment material (brochures) for their university. One group viewed a brochure, which included a normal weight female model and a normal weight male model. The other group viewed a different version of the "brochure" at the same time as the other group. This group's version of the "brochure" differed only in that the female model was overweight. The experimenters manipulated the female model's image to become overweight with a computer graphics program (see Figure 1. A,B).

Before reviewing the university recruitment material, participants were asked to complete a personal questionnaire about their lives at their university. Imbedded in this questionnaire were several items regarding participants' views of their bodies, such as how satisfied were FAT OR THIN? 149

## Meet Two UW-La Crosse Students:



Sarah Multisuf Homerowa Milwaukee, Wisconsin



Jim Bailey Hometown: Richland Center, Wisconsin

Stath is in her second your at the University of Misconsin-La Crosse. Stath is majoring in Bology and enineeing in Secondary Education. She is active to the Starbest Wisconsin Education Association (S.W.E.A.) and redundress at the Y.M.C.A. Starth enjoys believe inline, listing to massic, and drawing.

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### FIGURE 1-A

### Meet Two UW-La Crosse Students:



Samb Hultsof Hometown: Milwandow, Hisconsin



Jim Balley Hamestown: Richland Center, Weconsin

Surah is in her second your at the University of Wesconsin-La Crosse. Surah is responing in Biology and onlineing in Secondary Education. She is notive in the Student Wesconsin Biocariton Association (S.W.E.A.) and volunteers at the YM.C.A. Surah cripsys bits richting, listening to musel, and danwing.

Jim in in his third year and in majoring in Business. Jim onjoys playing busineball, soccer and golf plus watching sports and movies. Jim sings in the UPA-La Couse-Choral Union, and likes to sing at weddings. Jim works part time as a graphics assistant in Campus Gusphics at UPA-L.

FIGURE 1-B

they with their current weight. After completing the personal questionnaire, participants were then asked to view the university recruitment brochures for several minutes. Finally, they were asked to complete another questionnaire which included questions about the female model's ("Sarah") and the male model's ("Jim") characteristics, including their perceptions of how representative each model was of students at their university. The questionnaire also included questions about Sarah and Jim's future success. Since the experimenters were only looking at differences in participants' responses due to change in Sarah's body weight, only those responses related to her characteristics were analyzed.

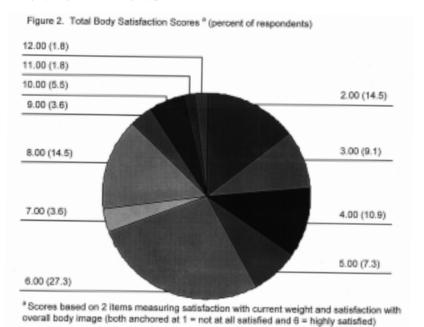
### RESULTS

Results indicated that participants differed in the satisfaction of their body weight and body image. Using a six-point Likert scale (1 = not at all satisfied; 6 = highly satisfied), participants' body weight scores ranged from 1 to 6, with a mean body weight satisfaction score of 2.82 (SD = 1.36). The participants' body image scores ranged from 1 to 6, with a mean body image satisfaction score of 2.89 (SD = 1.31).

Body weight and body image scores were summed to create an overall total body satisfaction score with a possible range of 2 to 12. The mean total body satisfaction score was 5.7 (SD = 2.57). Less than 31% of participants were satisfied with their bodies (See Figure 2).

A Chi-square analysis indicated that there was a lack of independence between participants' gaining or losing weight during college and an increase or decrease in participants' body image ( $X^2$  (2, N = 55) = 12.17, p < .005). The degree of this relationship was .59, as indicated by Cramer's V.

Overall, no significant differences in the ratings of Sarah were found between the group that viewed the normal weight Sarah and the group that viewed the overweight Sarah. For both groups, the overall impression score for Sarah was 4.6, using a six-point Likert scale (1 = highly negative; 6 = highly positive).



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### DISCUSSION

Based on past research, it is no surprise that these Caucasian females are largely dissatisfied with their bodies. It is also no surprise that participants who report gaining weight in college also show a decrease in body image satisfaction. American society seems to value thinness in females, especially among Caucasian females. For instance, Akan & Grilo (1995) found that Caucasian females reported greater levels of disordered eating behaviors, attitudes, and greater body dissatisfaction than did either Asian Americans or African Americans. Many college-bound females also hear of the rumored "freshmen fifteen" that suggests that gaining weight during their college tenure is likely, but is not necessarily welcomed.

The hypotheses of our study were not supported—no significant relationships between Sarah's weight and participants' ratings on several of Sarah's characteristics were found. Furthermore, no significant relationship was found between participants' body image and their ratings of the overweight Sarah.

Several explanations are possible for these unexpected findings. The overweight Sarah is not terribly overweight. Perhaps negative characteristics are attributed to individuals who are significantly overweight, but not to those who are moderately heavier than normal. Furthermore, the description of Sarah on the brochure indicates that she is involved in several academic and extra-curricular activities. Explanations made by participants about their ratings of Sarah suggest that they focused more on her involvement than on her body weight. Additionally, several participants commented on the male model (Jim) as not being representative of male students at their university because of his dress attire. Jim's picture, in combination with Sarah's school involvement and her being only moderately overweight, may have diverted participants' attention from body weight as being the sole criterion used in rating Sarah.

### LIMITATIONS

Limitations of this study include the unintentional exclusion of female participants of varying ethnicity and of varying age. All of the participants were Caucasian. It would have been interesting to look at differences in body image scores between Caucasian college-age females and college-age females from underrepresented minorities at this university. Furthermore, to find a more significant relationship, we may have needed to increase the number of total participants. To increase the total number of participants and to increase the age range, we could have looked at differences in body image scores between college-age females and middle-age females. Another limitation of the study was the fact that Sarah was not extremely overweight and her whole body was not shown on the brochure. In order to correct for this, we could have had a full-length shot of a thin model and used a more advanced computer graphics program to add a large amount of weight onto her body.

### **IMPLICATIONS**

Female college students may be more vulnerable to lowered body image because many of them live in enclosed spaces, and in turn may become more aware of discrepancies in their body weight as opposed to others. Because our findings did indicate that more than 69% of the participants had low body satisfaction, it is important for society to encourage the development of educational programs in this area. Schools should continue to use and improve specialized programs to emphasize the importance of respecting individual differences, including differences in physical appearance and body weight. College programs, residence

hall directors, and residence staff should recognize potential problems that can exist due to over-emphasis on body size and appearance. Also, it is important for college courses to include discussions on diversity, including differences in the physical appearances of individuals.

### **ACKNOWLEDGEMENTS**

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### REFERENCES

- Abramowitz, I. A. & O'Grady, K. E. (1991). Impact of gender, physical attractiveness, and intelligence on the perception of peer counselors. *The Journal of Psychology*, 125, 311-326.
- Akan, G. & Grilo, C. (1995). Sociocultural influences on eating attitudes and behaviors, body image, and psychological functioning: A comparison of African American, Asian American and Caucasian college women. *International Journal of Eating Disorders*, 18, 1181-1187.
- Bezner, J. R. (1991). Relationships of body dissatisfaction to physical health and wellness. *American Journal of Health Behavior*, 21, 147-155.
- Eagly, H., Ashmore, D., Makhijani, M. & Longo, C. (1991). What is beautiful is good: A meta-analytic review of research on the physical attractiveness stereotype. *Psychology Bulletin*, 110, 107-128.
- Gabriel, M. T., Critelli, J. W. & Ee, J. S. (1994). Narcissistic illusions in self-evaluations of intelligence and attractiveness. *Journal of Personality*, 62, 143-155.
- Lundberg, J. K. & Sheehan, E. P. (1994). The effects of glasses and weight on perceptions of attractiveness and intelligence. *Journal of Social Behavior and Personality*, 9, 753-760.
- Rierdan, J. & Koff, E. (1997). Weight, weight-related aspects of body image and depression in early adolescent girls. *Adolescence*, *32*, 615-625.
- Snow, J. T. & Harris, M. B. (1985). Maintenance of weight loss: Demographic, behavioral, and attitudinal correlates. *The Journal of Obesity and Weight Regulation*, 4, 234-235.
- Stice, E., Schupak-Neuberg, E., Shaw, H. E., & Stein, R. I. (1994). Relation of media exposure to eating disorder symptomology: An examination of mediating mechanisms. *Journal of Abnormal Psychology*, 103, 836-840.
- Wooley, S. C. & Wooley, O. W. (1980). Eating disorders: Anorexia and obesity. Cited in: A. M. Brodsky & R. Hare-Mustin. Women and Psychotherapy, 135-158. New York: Guilford.