



Effect of Viewing Thin Versus Normal Body Shapes on Body Image Perception

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Introduction

The pervasive cultural message that an unrealistically thin body is the ideal for women (e.g., Lew et al., 2007) can impact individuals' perceptions of themselves and others. Both Williamson (1996) and Clark and Tiggemann (2007) argued that specific, visual cues can activate body-relevant schemas, affecting subsequent body-image evaluations. If people's existing schemas reflect the internalization of cultural norms of thinness and dissatisfaction with their own bodies, these cues are more likely to have a negative impact on self-perceptions.

Social comparison is one process by which media affects body image. Research consistently shows that viewing images of attractive, same-sex models results in a decreased body-esteem (e.g. Grogan, Williams, & Conner, 1996; Stice & Shaw, 1994; Wilcox & Laird, 2000). Those who feel dissatisfied with their appearances and invest more in appearance are more likely to engage in social comparison (Smeets, Jansen, Ruf, & Roefs, 2010; Trampe, Stapel, & Siero, 2007). Persistent exposure to images of thin, attractive models can have short-term and long-term effects. Most experimental research focuses on short-term exposure to images of thin, attractive models; few have made direct comparisons to overweight (Odgen & Munday, 1996) or average weight (Smirles & Sullivan, 2010) models.

The relationship between media and body image is more complex than social comparison can explain alone. Lin and Reid (2009) found that dysfunctional beliefs about one's appearance mediated the relationship between exposure to magazines and anti-fat attitudes. Holub (2008) found that perceived (not actual) body size predicted anti-fat biases. However, the distinction between body perception and body satisfaction is not typically addressed in the literature. Women's acceptance of cultural norms of thinness and their tendency to engage in social comparison may help to distinguish between perception and evaluation.

The current study represented an attempt to bridge the gap in existing literature and extend the work using more realistic images of women.

Hypotheses

1. Women who view images of models with thin body sizes will have a significant reduction in body satisfaction and an increase in anti-fat attitudes. Those viewing averaged sized models will experience an increase in body satisfaction and a decrease in anti-fat attitudes.
2. The model size will only affect participants' body satisfactions and body images when they evaluate each image along appearance factors (i.e. appearance-related primes), and not along personal factors (i.e. non-appearance-related primes).
3. Women's tendency to engage in social comparison with regards to physical appearance will be positively correlated with anti-fat attitudes, acceptance of cultural standards of beauty, and dysfunctional beliefs about appearance, and negatively correlated with body perception and satisfaction.

Methods

Participants

- 217 undergraduate females participated (61%white)
- On-line Psychology subject pool maintenance system (Sona).

Materials: Stimulus Images

- 22 Images of "thin" and 22 Images of "average" models
- Criteria for selection and matching of images
- Full, frontal image of body, neutral pose and background
- Body shape not obese or emaciated
- Clothing commercially sold (product name not apparent)
- Thin/average images matched for general clothing styles
- Inclusion of non-white models in both conditions
- Each image rated along 5 adjectives on a 5-point scale
- Appearance-Related vs. Non-Appearance-Related

Measures

- Demographics
- Figure Rating Scale (FRS) ** - "actual" and "ideal" ratings
• Actual - Ideal = Body Image

Discrepancy (BID)

- Body Parts Satisfaction Scale-Revised (BPSS-R) **
- Anti-Fat Attitudes Scale (AFAS) **
- General Media Consumption
- Upward Physical Comparison Scale (UPACS)
- Downward Comparison Scale (DACS)
- Beliefs About Appearance Scale (BAAS)
- Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ)

** Indicates Pre and Post Treatment measures taken

Procedures

Pre-treatment measurements.

Indicate perceived and ideal body-image using the Figure Rating Scale (Stunkard et al., 1983). Current height and weight, demographics (e.g., year, race/ethnicity). Time 1 measures FRS, BPSS-R and AFAS

Treatment: Image exposure and ratings.

Presentation/rate 22 images of either "thin" or "average" sized models.



Media exposure scale
Time 2 measures of FRS, BPSS-R
UPACS and DACS
Time 2 measure of AFAS
BAAS
SATAQ

Results

Hypothesis 1:

Paired samples t-tests for pre and post measures were conducted for the thin and average model conditions (across rating type). Women viewing thin models had a significant drop in body satisfaction (BPSS) from pre to post ($t(113)=3.24, p=.002, \eta^2=.09$). Women viewing models of an average size experienced an increase ($t(102)=-3.23, p=.001$), in body satisfaction and a decrease in anti-fat attitudes (AFAS) ($t(102)=-3.21, p=.002, \eta^2=.09$) (See Table 1).

Table 1: Condition:

	Thin Model	Average Model
BPSS-Pre	4.05 (.71)	3.94 (.84)
BPSS-Post	3.99 (.78)	4.05 (.91)
AFAS-Pre	2.71 (.67)	
AFAS-Post	2.61 (.62)	

Hypothesis 2:

Change scores were calculated for the BPSS Pre/Post and the AFAS Pre/Post. Differences between the experimental conditions (2 model type x 2 rating type) along the BPSS and the AFAS were tested with ANOVAs. Regardless of the rating prompt, women who viewed images of thin models experienced a significant decrease in body satisfaction, while those who viewed average sized models showed an increase ($F(3,216)=8.18, p<.001, \eta^2=.10$) (See Table 2).

Table 2: BPSS (Post -Pre)

		Rating:	
		Appear	Non-Appear
Model:	Thin	-0.56 (.20)	-0.06 (.20)
	Average	0.13 (.35)	0.07 (.25)

Hypothesis 3:

Pearson's r correlations revealed significant relationships between most of the factors (See Table 3). Upward social comparison, beliefs that one's value is based on appearance, acceptance of cultural standards of thin ideals, and body satisfaction were all strongly related to one another. Note: Since pre and post comparisons were similar, only pre-treatment measures were included below.

Table 3:

	BID (Pre)	AFAS (Pre)	UPACS	DACS	BAAS	SATAQ
BPSS (Pre)	-0.63**	0.05	-0.42**	-0.15*	-0.54**	-0.50**
BID (Pre)		-0.15*	0.34**	0.18**	0.32**	0.48**
AFAS (Pre)			0.17**	0.15*	0.22**	0.26**
UPACS				0.36**	0.51**	0.62**
DACS					.031**	0.29**
BAAS						0.63**
.05						
.01						

Conclusion

Consistent with previous research and social comparison theory, looking at thin models resulted in a drop in women's body satisfaction, while looking at average size models resulted in an increase; this was regardless of how participants were asked to rate the images or the participants' BMI. Follow-up tests showed that women rated thin models more positively on the appearance-related factors and average models more positively on the non-appearance factors. Within this experimental context, it appears that both social comparison and acceptance of cultural ideals of thinness are significant predictors of how women evaluate themselves and others.

While body satisfaction (BPSS) and body perception (BID) were strongly related to one another, BID was not as strongly related to any other factor; additionally, body perceptions did not change as a result of the experimental manipulation. This may be evidence that women's views of themselves as larger or smaller than their ideal is more stable over time; it may also be an effect of the limited variability of the FRS. Body perception and satisfaction are difficult to tease apart quantitatively, yet neither may reflect reality. Strowman (1996) found that the discrepancy between a woman's and an objective observer's judgment of her actual shape was positively correlated with patterns of disordered eating.

Further research is needed to fully understand the complex relationship between body perceptions, evaluations, and the potential consequences in real women's lives.

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