



# Relationships between self-esteem, media influence and drive for thinness

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## ABSTRACT

The media is a powerful societal tool for expressing expectations about how men and women should look. As a result, over the past several years, women have shown an increase in body dissatisfaction (Cash, Morrow, Hrabosky, & Perry, 2004). The present study examined the relationships between drive for thinness, self-esteem, and media influence among men and women. Two hundred ninety-four college students completed the Texas Social Behavior Inventory (Helmreich & Stapp, 1974), Sociocultural Attitudes towards Appearance Scale-3 (Thompson, van den Berg, Roehrig, Guarda, & Hienberg, 2004), self-constructed questionnaire influence of media models, and the drive for Thinness Subscale (DT) from the Eating Disorder Inventory-3 (EDI-3; (Garner, 2004)). We expected to find an association between drive for thinness and media influence and between drive for thinness and self-esteem for both men and women. Finally, we expected that the use of media, social pressures and media internalization would be predictors of drive for thinness. We found a relationship between media influence and drive for thinness. There was also a relationship between self-esteem and drive for thinness. For both men and women, media models were the primary predictor for drive for thinness. However, for women the secondary predictor was social pressures; whereas for men the secondary predictor was internalization. Such findings show the importance of examining the impact of media sources on men and women in order to entangle gender differences.

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## 1. Introduction

Media images of the ideal body can have a profound negative influence on both women and men. It has been suggested that media images may be an important predictor of disordered eating behaviors in both male and female college students (Wright & Pritchard, 2009). For example, when given a magazine or shown slides or websites featuring thin women, women tend to have greater negative feelings toward their bodies including increased drive for thinness (Tucci & Peters, 2008; see also Ahern, Bennett, & Hetherington, 2008; Bardone-Cone & Cass, 2007) and lower social self-esteem (Bardone-Cone & Cass, 2007). Similarly, women with greater overall media exposure report lower levels of social competence and more dissatisfaction with their appearance (Rivadeneyra, Ward, & Gordon, 2007). This is perhaps not surprising given that the amount of written content related to dieting and exercise in magazines has significantly increased over the past few decades (Luff & Gray, 2009). For example, a content analysis of women's magazines, 40% of dominant headlines included objectifying phrases (Aubrey, 2010). Objectifying media has been shown to have a number of negative effects on both women and men, including body dissatisfaction (Hamilton, Mintz, & Kashubeck-West, 2007; Cash, Morrow, Hrabosky, & Perry, 2004), body surveillance or thinking about how the body

looks, and self-objectification (Aubrey, 2007). In addition, female magazine models are generally thinner than the average American woman (Bessenoff & Del Priore, 2007), pressuring women to achieve an ideal that may not be feasible for them. Thus, the influence of media models on body image may be particularly powerful for women (Ahern et al., 2008; Hausenblas, Janelle, Gardner, & Focht, 2004; Tucci & Peters, 2008).

If women are being pressured by media to be thin, men are being pressured to be lean and toned (Ricciardelli, Clow, & White, 2010). Similar to women viewing images of the thin ideal body in magazines, men given a magazine or shown slides of muscular men react negatively to those images. For example, reading fitness magazines predicts drive for thinness (Harrison & Cantor, 1997) (but see (McCabe, Ricciardelli, & James, 2007) for conflicting results) and eating disordered behaviors in men (Giles & Close, 2008; Morry & Staska, 2001). Men also report lower body esteem, lower self-esteem, view their own body as less attractive, and experience greater concern regarding fitness, weight, and muscularity following exposure to pictures of muscular men (Hobza & Rochlen, 2009; Hobza, Walker, Yakushko, & Peugh, 2007). Similarly, there is an inverse relationship between media exposure and social self-esteem and body dissatisfaction in men (Rivadeneyra et al., 2007).

The real problem seems to come when those who are susceptible to media images view those images and then internalize them (Engeln-Maddox, 2005; Giles & Close, 2008). Awareness and internalization of sociocultural standards of appearance significantly predict women's (Lokken, Worthy, & Trautmann, 2004) and men's drive for

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thinness (Carper, Negy, & Tantleff-Dunn, 2010) as well as men's drive for muscularity (Giles & Close, 2008).

Finally, there is some evidence to suggest that those who have internalized these magazine images are more likely to read magazines for the information they provide on how to achieve their ideal body goals. For example, Morrison, Morrison, and Hopkins (2003) suggest that men who desire to be more muscular may gravitate toward muscle magazines and compare themselves with the ideal images contained in them because the media source provides information about how to gain muscle (but see Labre, 2005) for conflicting evidence). Similarly, females' dieting behaviors are influenced by the reading of women's beauty and fashion magazines (Thomsen, McCoy, Gustafson, & Williams, 2002a; Thomsen, Weber, & Beth Brown, 2002b) as women use these magazines for information about thinness and beauty (Rubio-Kuhnert, 1999) and about how to improve themselves (Thomsen et al., 2002; Thomsen et al., 2002). In fact, women who already demonstrate body dissatisfaction are more likely to be affected by images of models (Ferguson, Winegard, & Winegard, 2011).

The media has been shown to have a significant and lasting impact on women's drive for thinness (Ahern et al., 2008; Hargreaves & Tiggemann, 2003; Tucci & Peters, 2008) and men's drive for muscularity (Giles & Close, 2008; Harrison & Cantor, 1997; Hobza & Rochlen, 2009; Hobza et al., 2007), as well as social self-esteem in both men and women. However, less is known about media's influence on drive for thinness in men. Furthermore, research on whether men and women react the same way to media influence is lacking. Are some aspects of media influence (e.g., influence of media models on body image, internalization of media messages, societal pressure, information about how to achieve a certain body ideal) more strongly related to drive for thinness and social competence in women than in men? Few studies have examined this question.

The aim of the present study was to examine what media factors relate to drive for thinness in collegiate men and women, and if those predictors are the same between the sexes. We expected the influence of the media to be significantly related to drive for thinness, but hypothesized that different media factors may be behind women's and men's drive for thinness. For example, we expected the influence of media models on body image to be stronger in women than in men (Ahern et al., 2008; Hausenblas et al., 2004; Tucci & Peters, 2008). In addition, as social self-esteem is known to relate to media influence in both sexes as well as drive for thinness in women (Beren & Chrisler, 1990; Brytek-Matera, 2007; Chiodo, 1989; Cook-Cottone & Phelps, 2003; Filiault, 2007; Gila, Castro, Gómez, & Toro, 2005; James, 2001; Paterson, 2007; Sassaroli, Gallucci, & Ruggiero, 2008), we wanted to explore whether social self-esteem mediated any relationships between media influence and drive for thinness in collegiate men and women (e.g., influence of media models on body image, internalization of media messages, societal pressure, information about how to achieve a certain body ideal).

## 2. Material and methods

### 2.1. Participants

Participants in this study were from a public university in the Rocky Mountain region and were enrolled in a general psychology course. Three hundred twenty three participants volunteered to complete an on-line survey about their eating habits and exercise behaviors. Of those, two hundred and ninety four undergraduate students completed the entire survey (91.0%); 172 were female (58.6%), and 122 were male (41.4%). 80% were Caucasian, 2% African American, 7% Latino, 6% Asian, 1% Pacific Islander, 1% Native American, and 3% identified themselves as Other. Ages ranged from 18 to 55, with a mean of 22.37 ( $SD = 6.25$ ). All participants read an on-line cover letter containing consent information prior to beginning the survey. As participation was anonymous, consent was implied by completion

of the survey. Participants responded to the survey online through Qualtrics and were awarded with credit toward their general psychology course. All procedures were approved by the Institutional Review Board before data collection commenced.

### 2.2. Materials

#### 2.2.1. Social self-esteem

The Texas Social Behavior Inventory (TSBI) was used to measure social self-esteem (Helmreich & Stapp, 1974) and has been widely used as a measure of social competence (Beren & Chrisler, 1990; Harris, 1995) and social self-esteem in college students (Cox, Lopez, & Schneider, 2003; Henriques & Leitenberg, 2002; McGregor, Mayleben, Buzzanga, & Davis, 1991). It seemed more appropriate to measure social self-esteem rather than general self-esteem because the purpose of this study focuses more on a social aspect. Participants responded to statements that measured how comfortable they were in social situations (e.g., I am not likely to speak to people until they speak to me). The TSBI was measured using a 5-point Likert Scale (1 = *not at all characteristic of me*, 2 = *not very characteristic of me*, 3 = *slightly characteristic of me*, 4 = *fairly characteristic of me*, and 5 = *very much characteristic of me*). The 16 items were summed with scores ranging between 0 and 80; the higher the score, the higher the level of self-esteem ( $\alpha = .85$ ).

#### 2.2.2. Media influence

To measure the media influence (e.g., internalization of media messages, societal pressure, information about how to achieve a certain body ideal), participants completed the twenty item Sociocultural Attitudes towards Appearance Scale-3 (SATAQ-3; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). The SATAQ-3 has been widely used in college student populations (Cashel, Cunningham, Landeros, Cokley, & Muhammad, 2003; Low et al., 2003). The SATAQ-3 measures: general media internalization (the extent to which participants internalized the general media messages presented that women should be thin and men should be muscular; 9 items;  $\alpha = .93$ ), internalization of athletic images (the extent to which participants internalized the media messages encouraging a well-toned and defined athletic body; 5 items;  $\alpha = .79$ ), societal pressures (perceived pressure of the media to conform to the idealistic images presented; 7 items;  $\alpha = .94$ ), and media information about how to attain the ideal body (9 items;  $\alpha = .89$ ) ... Items such as, "I would like my body to look like the models who appear in magazines" were responded to on a five-point Likert response scale where 1 = *Definitely Disagree* and 5 = *Definitely Agree*. Higher scores indicated higher influence of the media on appearance.

#### 2.2.3. Influence of media models on body image

Six items were created by the experimenter to specifically assess the influence of media models on body image. ("I feel less confident about my body after looking at models," "After looking at models I feel fat," "After looking at models I feel less confident," "I feel frustrated after looking at models," "I feel inferior after looking at models," and "After looking at models I don't feel good about myself."). Items were answered on a five-point Likert response scale where 1 = *Definitely Disagree* and 5 = *Definitely Agree*. Higher scores indicated more dissatisfaction with one's body following exposure to media models ( $\alpha = .98$ ). However, test-retest reliability was not assessed, therefore reliability may be questionable.

#### 2.2.4. Drive for thinness

Disordered eating symptoms were measured by the Drive for Thinness Subscale (DT) from the Eating Disorder Inventory-3 (EDI-3; Garner, 2004). The subscale is known to reliably distinguish individuals with symptoms of anorexia and those without symptoms of anorexia (Garner, Olmstead, & Polivy, 1983) and has been widely used in male and female college students (Fay, Economos, Lerner,

**Table 1**

Means (standard deviations) and confidence intervals of all measures.

Scale	Female		Male		95% CI	t
	n	M (SD)	n	M (SD)		
Media internalization-general	172	3.19 (.98)	121	2.57 (.90)	[.40, .84]	5.48***
Media internalization-athlete	172	3.09 (.89)	121	3.13 (.88)	[−.25, .16]	−.42
Social pressures	172	3.10 (1.09)	121	2.20 (.91)	[.66, 1.13]	7.36***
Information	172	2.83 (.89)	122	2.35 (.79)	[.29, .69]	4.84***
Influence of media models	171	3.10 (1.28)	120	2.07 (1.09)	[.76, 1.32]	7.23***
Social Self-esteem	171	54.90 (1.98)	121	54.40 (9.67)	[−1.69, 2.70]	.45
Drive for thinness	170	21.10 (8.42)	117	14.07 (6.60)	[5.25, 8.81]	7.78***

\*\*\*  $p < .001$ .

Becker, & Sacheck, 2011; Sepulveda, Carrobbles, & Gandarillas, 2010). Participants respond to statements regarding extreme dieting, preoccupation with weight, and the fear of gaining weight using a 6-point Likert Scale (1 = *always*, 2 = *usually*, 3 = *often*, 4 = *sometimes*, 5 = *rarely* and 6 = *never*). Items were summed to create a scale score ( $\alpha = .92$ ).

### 2.3. Statistical methods

All data was entered into SPSS. Before ascertaining whether media factors relate to drive for thinness in collegiate men and women in the same way, we first had to determine whether there were gender differences in all of our factors using independent t-tests. Next, we needed to find out the relation between social self-esteem and our factors using Pearson's  $r$ . We then tested whether social self-esteem served to either mediate or moderate the relation between media factors and drive for thinness. It did not. Thus, to examine whether media factors relate to drive for thinness in men and women in the same way, we ran separate regressions for men and women including self-esteem as one of the independent variables.

## 3. Results

Table 1 shows the means, standard deviations and confidence intervals of all factors by gender (influence of media models on body image, internalization of media messages, societal pressure, information about how to achieve a certain body ideal, drive for thinness, and social self-esteem). Women exhibited more drive for thinness and reported higher levels of all types of media influence except for internalization of athletic images, but there were no gender differences in social self-esteem (see Table 1).

As hypothesized, there was a significant relationship between all media variables and drive for thinness in women and in men (see Table 2). There was also a significant relationship between self-esteem and all media variables in both men and women except for internalization of athletic images in men (see Table 2).

Because there were gender differences in drive for thinness, in order to determine what variables relate to drive for thinness, we

performed separate regressions for men and women using hierarchical regression models. On the first step, we entered social self-esteem as we expected that variable to mediate the relation between media influence and drive for thinness. On the second step we entered the influence of media models on body image, societal pressures, media information, and media internalization (general and athlete) (see Table 3).

In collegiate women, social self-esteem made a small but significant contribution to the variation in women's drive for thinness, although it should be noted that the influence of social self-esteem became non-significant when the media variables were entered on Step 2. The only media variables that significantly related to drive for thinness in women after controlling for social self-esteem were the influence of media models on body image and societal pressure (see Table 3). Similarly, in collegiate men social self-esteem made a small but significant contribution to the variation in men's drive for thinness, although it should be noted that once again the influence of social self-esteem became non-significant when the media variables were entered on Step 2. The only media variable that significantly contributed to drive for thinness in men was the influence of media models on body image (see Table 3).

## 4. Discussion

The purpose of the present study was to examine how media factors (e.g., influence of media models on body image, internalization of media messages, societal pressure, information about how to achieve a certain body ideal) related to drive for thinness in collegiate men and women. As expected, there was a significant relationship between drive for thinness and the influence of media models (Ahern et al., 2008; Harrison & Cantor, 1997; Hausenblas et al., 2004; Tucci & Peters, 2008), internalization of media message (both general and athletic) (Carper et al., 2010; Lokken et al., 2004), societal pressure (Ahern et al., 2008; Ricciardelli et al., 2010; Tucci & Peters, 2008), and information about how to achieve the ideal body (Morrison et al., 2003; Rubio-Kuhnert, 1999) in both women and men. There was also a significant relationship between social self-esteem and all media variables (Bardone-Cone &

**Table 2**

Correlations among variables.

Measures	1	2	3	4	5	6	7
1. Media internalization-general	–	.69**	.75**	.64**	.68**	.47**	−.21*
2. Media internalization-athlete	.49**	–	.46**	.41**	.45**	.33**	−.11
3. Social pressures	.80**	.48**	–	.57**	.73**	.46**	−.27**
4. Media information	.75**	.46**	.69**	–	.54**	.29**	−.21*
5. Influence of media models on body image	.78**	.50**	.75**	.59**	–	.51**	−.26**
6. Drive for thinness	.65**	.35**	.64**	.49**	.69**	–	−.26**
7. Social self-esteem	−.22**	−.18*	−.24**	−.20*	−.25**	−.18*	–

Note: correlations for women are below the diagonal, correlations for men are above the diagonal.

\*\*  $p < .01$ .\*  $p < .05$ .

**Table 3**  
Hierarchical regression analyses predicting drive for thinness from media influence and social self-esteem in women.

Variable	Women			Men		
	$\Delta R^2$	$\beta$	F	$\Delta R^2$	$\beta$	F
Step 1	.03*	–.16*	4.26*	.07**	–.26**	8.04**
Social Self-esteem						
Step 2	.50***		28.59***	.24***		7.90***
Internalization-general		.21			.19	
Internalization-athlete		–.03			.05	
Societal pressures		.22*			.08	
Information		–.05			–.08	
Influence of media models on body image.		.40***			.31*	
Total R <sup>2</sup>	.52			.31		
n	163			114		

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

Cass, 2007; Rivadeneyra et al., 2007) in both men and women except for internationalization of athletic images in men.

The present study also sought to explore whether different media factors may be behind women's and men's drive for thinness and whether social self-esteem mediated any relationships between media influence and drive for thinness in collegiate men and women. Unfortunately, social self-esteem did not serve to mediate or moderate the relation between media influence and drive for thinness in either sex. However, because social self-esteem did relate to drive for thinness and media variables in both men and women, we chose to control for the influence of social self-esteem in our regressions. The finding that the influence of media models on body image was strongly related to drive for thinness in both men and women is interesting. Based on previous findings (Ahern et al., 2008; Hausenblas et al., 2004; Tucci & Peters, 2008), we expected the influence of media models on body image to be stronger in women than in men. Although the overall model in women predicted nearly twice the variance in drive for thinness than it did in men, the contribution of media influence of models on body image was relatively similar in men and women. Thus, it appears that both men and women are viewing media models and believe that they should have a body similar to those models (Ahern et al., 2008; Harrison & Cantor, 1997). However, as this study was correlational in nature, it is also possible that individuals with higher drive for thinness seek out these media images more often as motivation for reaching a goal that may or may not be achievable for them (Ferguson et al., 2011).

It was surprising that societal pressure seemed to influence women more than men (Ahern et al., 2008; Ricciardelli et al., 2010). It is not clear whether this was a power issue (there were more women than men in the study) or whether this is a robust finding, but may have to do with the fact that we measured the influence of societal pressure on drive for thinness rather than drive for muscularity (Ricciardelli et al., 2010). Future research should investigate this issue.

#### 4.1. Limitations

Possible limitations of this study include the fact that all of these scales were self-reported, and data was collected from college students which may inhibit the generalizability to other populations. In addition, our findings were correlational in nature. Future studies should investigate the impact of media influence on drive for thinness over time. In addition, our measure of the influence of models on body image was self-constructed. Its test–retest reliability, construct validity and convergent validity with the SATAQ have not been tested. Future research should perform psychometric testing on this scale.

## 5. Conclusion

The present study examined relations between media factors, social self-esteem, and drive for thinness among men and women. Although social self-esteem did in fact contribute to the variance in drive for thinness scores in both men and women, once media factors were entered into the equation, the contribution of social self-esteem became insignificant. Parents, teachers, and school counselors may wish to discuss media influence on body image with teenagers and college students in an effort to get students to be more realistic about their own bodies. In addition, future studies may wish to investigate possible factors that may mediate or lessen the relationship between media influence and drive for thinness in men and women. For example, perhaps supportive friends and family members can serve as a buffer against students' possible comparisons of their own bodies with those of models portrayed on TV and in magazines. Future students should also investigate ways to decrease drive for thinness in adolescents and college students. For example, some studies have found that using positive media campaigns can affect positive change in drive for thinness scores in women (Coughlin, 2009). Future studies should examine whether these campaigns may also be effective in men.

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#### Contributors

Fernandez designed the study, collected the data, and wrote some of the paper; Pritchard conducted data analyses and wrote some of the paper.

All authors have approved the final manuscript.

#### Conflict of interest

All authors declare that they have no conflicts of interest.

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