

Must-See TV or ESPN: Entertainment and Sports Media Exposure and Body-Image Distortion in College Women

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Many studies offer clear evidence that exposure to TDP (thinness depicting and promoting) media leads to distorted body-image perceptions in school-age females and college women. This study investigated women's exposure to two types of media—entertainment and sports media—and looked for possible associations with body-image distortion and eating disorders. College women were surveyed in the fall of 2001 and asked to report exposure to 40 programs airing on prime-time networks and report exposure to specific men's and women's sports. Exposure to "thin-ideal" television was a significant predictor of four dimensions of disordered eating for women of all races. However, women's exposure to sports media was not a significant predictor of lower degrees of disordered eating.

Several studies over the past decade have examined women's exposure to entertainment media and the possible effects this exposure has on disordered eating (see Harrison, 1997, 2000; Thompson & Heinberg, 1999). Many of these studies offer clear evidence that exposure to TDP (thinness depicting and promoting) media leads to distorted body-image perceptions in school-age females and college women. These studies have further found young males and college men more likely to endorse thinness in women if exposure to TDP media is high. Although the findings in this area are strong and certainly important, most of these studies have looked at "thin-ideal" media in entertainment television, fashion magazines, and advertisements.

Content analyses of entertainment television, fashion magazines, and advertisements indicate that the body shape standard for women has increasingly become thinner (Gagnard, Garner, Garfinkel, Schwartz, & Thompson, 1980; Silverstein, Perdue, Peterson, & Kelly, 1986; Wiseman, Gray, Mosimann, & Ahrens, 1990). The body shape of women in sports media does appear to be different from that in

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entertainment media, yet how different is an area needing more research. Harrison and Fredrickson (2001) suggested that because many athletes do possess very lean bodies, and viewers are encouraged to focus on these bodies, sports media should be considered thin-ideal media. The purpose of this study was to determine if the type of thin-ideal media—entertainment or sports—leads to different outcomes in disordered-eating symptomatology in women.

Research examining exposure to sports media and related body-image outcomes has been almost nonexistent, although work in this area seems to be developing. A few studies have documented that sports media exposure leads to improved body-image perceptions. Harrison and Fredrickson (2001) found sports magazine reading to be related to increased body satisfaction in girls between 10 and 19, a positive outcome. Tiggemann and Pickering (1996) had a similar finding. Tiggemann and Pickering found that exposure to televised sports was negatively correlated with body dissatisfaction in girls, again suggesting that sports media exposure had a positive outcome on girls' perceptions of their bodies. Although the Harrison and Fredrickson (2001) and Tiggemann and Pickering's (1996) studies found young girls' perceptions of their own body image had improved slightly based on exposure to sports media, another study found contradictory results. Harrison (2000) found 12th-grade females who read sports magazines to be fairly dissatisfied with their body shape, although sports magazine exposure did not predict disordered eating or drive for thinness. The conflicting results in this area of research suggest more research is needed in order to better understand the way males and females respond to sports media.

As Harrison and Fredrickson (2001) suggested, it seems fairly logical that sports media, which often emphasize physique, would have an effect on viewers similar to the effects of entertainment media. The unknown about this relationship is how exposure to specific sports media affects or influences the way women feel about their bodies.

Theoretical Foundation

Recent research in mass communication focused on the media content/body-image relationship has advanced two theories: self-objectification and social comparison theory.

Social comparison theory (Festinger, 1954; Goethals, 1986) suggests that people look to images that they perceive to be attainable and realistic and subsequently make comparisons among themselves, others, and the idealized images. Several researchers using social comparison theory have linked attitudes and behavior by suggesting women see images in the media that they want to attain, internalize a comparison between themselves and the idealized image, then behave in a way that will allow them to achieve the idealized look (Botta, 2000; Goethals 1986; Kruglanski & Mayseless, 1990; Wood, 1989; Wood & Taylor, 1991). Wood and Taylor (1991) suggested that when women make comparisons between themselves and idealized images, their beliefs about the importance of being thin are confirmed, and they become motivated to achieve that goal. Therefore, as women

watch television, they compare their appearance to that of television characters, and when they perceive a discrepancy between the two, they do whatever they can to narrow the gap between their own image and the idealized image. Social comparison theory suggests that through the prevalence of thin females in the media, young women may attempt to model what they see because they are presented with the ideal of a thin body and compare their body shape to what is seen in the media. Furthermore, young girls may acquire the motivation to engage in dieting behavior and may certainly be presented with instructions on how to obtain the “ideal” body via the numerous health and fitness articles in fashion magazines.

Social comparison theory may also help explain why women of different races respond to the media in different ways. A few studies have found that despite greater exposure to television in general, non-White women are more satisfied with the shape of their bodies than White women (Abrams, Allen, & Gray, 1993; Rucker & Cash, 1992). The theory suggests that women may see images in the media that they find realistic, then compare themselves to that idealized image, and do whatever is necessary to achieve the look. One of the key concepts of the social comparison is similarity (Festinger, 1954), which means individuals prefer to compare themselves with similar others. Taking the factor of similarity into consideration, non-White women may be less influenced by thin-ideal images, which are often related to White culture.

Other studies have found that African American women have less of a desire for a thin body shape than White women and identify heavier body shapes as ideal (Akan & Grilo, 1995; Harris, 1994; Powell & Kahn, 1995; Rucker & Cash, 1992). Botta (2000) found that African American females responded differently to images of the thin ideal, compared to White women. This project tests these assumptions.

Objectification theory, used in mass communication research by Harrison and Fredrickson (2001), is used as a framework for understanding how females are affected by the objectification of the female body in this society. “Objectification theory posits that girls and women are typically acculturated to internalize an observer’s perspective as a primary view of their physical selves” (Fredrickson & Roberts, 1997, p. 173). Self-objectification is hypothesized to produce body shame, which leads to disordered eating (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Noll & Fredrickson, 1998). So, do young women take cues about the way the female body is perceived, based on what is presented to them in the media, and do young women subsequently internalize those perceptions and expect similar standards of themselves?

Social cognitive theory asserts that subjects are more likely to model certain behaviors when the following conditions are present: (a) Media models are attractive, (b) media models are idealized, and (c) media models receive rewards rather than punishment (Bandura, 1994, p. 71). In entertainment and sports media, the thinnest actors or athletes are often met with the greatest reward. In prime-time television, thin female characters are often portrayed as successful professionally and socially, often possess wealth and fame, and are often the object of desire by others. Fouts and Bургgraf (2000) analyzed television programming and advertising and found overweight female characters received the most negative com-

ments from male characters, compared with below-average weight female characters. They conclude by saying,

The message for young female viewers appears to be that males do pay attention to women's bodies and if one fails to match the "thin ideal," one may be subjected to sarcasm, derision, ridicule, and "helpful" suggestions to lose weight. (p. 930)

In sports media, the leanest athletes and the athletes who are the most physically fit often win competitions and receive accolades for their achievements. It is reasonable to expect that women who are presented with the many rewards for being thin would want similar rewards for themselves and subsequently model the behavior. This study explored the relationship between exposure to entertainment and sports media and the possible association both have on perceptions of the ideal body image for women. We argue that self-objectification occurs in most women, at least at some level. We further assert that through the process of comparing themselves to others, and in many cases, similar others, the respondents in our sample internalized media messages promoting the thin ideal and subsequently developed attitudes related to their own body satisfaction.

Hypotheses

H1: Exposure to thin-ideal television will be positively associated with eating-disorder symptomatology, independent of interest in body-improvement television shows.

Myers and Biocca (1992) found that women who watched even 30 minutes of television programming a day had greater body-image distortion than those who did not. Thus, this first hypothesis predicts that on the continuum of entertainment television exposure, those higher on the scale will be more likely to be higher on the eating-disorder symptomatology scales.

H2: Exposure to thin-ideal magazines will be positively associated with eating-disorder symptomatology, independent of interest in body-improvement magazines.

The assumptions made for H1 mirror assumptions for H2. Multiple studies have found that women with a body shape larger than average are not often found in the media (Garner et al., 1980; Silverstein et al., 1986; Wiseman et al., 1990). This is especially true in entertainment and fashion magazines. Harrison (2000) found that exposure to thin-ideal magazine content was a predictor of anorexia in high school girls.

H3: Exposure to thin-ideal television will be associated with greater body dissatisfaction with body image for White females than it will for non-White females.

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Characters in prime-time television are more diverse in ethnicity than they have been in the past. However, content analyses of female body shapes on prime-time television suggest that most of the thinnest actresses on television are White. Greenberg and Brand (1994) report that many viewers prefer watching programs with characters of their own race. Thus, if non-White women watch television programs with a predominant number of characters of their own race, the ideals of thinness may not be as pervasive or as persuasive. However, if non-White women watch programming identified more with White culture, they may be more likely to compare themselves to the thin-ideal body shape and subsequently be more dissatisfied with their body shape (Botta, 2000).

These hypotheses predict that non-White women may not be completely unaffected by thin-ideal media, even though White women will be more likely to have higher incidents of disordered eating.

RQ1: Will exposure to sports on television be positively associated with lower degrees of eating-disorder symptomatology?

RQ2: Will exposure to sports magazines be positively associated with lower degrees of eating-disorder symptomatology?

Only a few studies offer evidence that exposure to sports media will result in a different effect on women's disordered-eating symptomatology (Harrison & Fredrickson, 2001; Tiggemann & Pickering, 1996). Yet, the results from these studies indicate there may be a threshold at which exposure to sports media helps mediate some of the more negative effects of entertainment media, depending on the type of sport women are watching. With these research questions, we predict that women who are exposed to sports media may be a little less likely to be dissatisfied with their body shape. However, we still predict women will engage in a process of social comparison. That said, what we are trying to test is the media image in which the comparison is made. An assumption with these predictions is that the images of female athletes are different from the images of women in entertainment media, even if those differences are slight. Subsequently, we hope to identify if sports media exposure has any relationship to different outcomes on the disordered-eating symptomatology scales.

Method

We chose college students as the population for this study because college women are presumed to be at a high risk for disordered eating, and this is subsequently one reason much of the research examining the effects of TDP media on others has been conducted with college students. To facilitate comparisons between

exposure to different media and the subsequent attitudes and behaviors that might be related to that exposure, students enrolled in an introductory mass communication class at a university in the southern United States were recruited to participate.¹ The total obtained female sample was 218, of whom 192 were White; 21, African American; 3, Asian; 1, multiracial; and 1, Native American. Among them, 5 respondents were Hispanic. The average age of respondents was 19, $SD = 1.23$.

Independent and Dependent Variables

Exposure to entertainment TV, exposure to thin-ideal TV, and interest in body-improvement TV content. Exposure to entertainment TV was measured by asking respondents to record the total number of minutes per day they spent viewing entertainment television. Female respondents reported viewing between 0 and 780 minutes of entertainment television per day ($M = 156.51$, $SD = 117.20$).

In order to measure exposure to thin-ideal TV, respondents were asked to indicate how frequently they watched specific programs by using a 5-point scale (0 = *never*; 4 = *regularly*). Forty television shows airing on six networks—NBC, ABC, CBS, Fox, UPN, and WB—were selected from the fall 2001 season. Television programs from the fall season included such shows as *My Wife and Kids*, *Scrubs*, *Friends*, *The Hughleys*, and *That 70s Show*. The programs chosen represented shows in the top 50 programs viewed by 18–24-year-olds, and they represented a diverse sampling of body types. In an earlier pilot study, an analysis of the body shape of the primary female characters in each of the 40 programs was conducted using 20 college students from another sample who used a 1–5 scale (1 = *conspicuously thin*, 3 = *about average*, 5 = *conspicuously fat*). Coders were instructed to list the character or characters they considered to be “primary,” then assign a body shape code using the 1–5 scale to those primary characters. Using Harrison’s (2000) framework of obtaining an index of thin-ideal television, coders were instructed to consider a body size as “conspicuous” if at least one character on the show drew attention to her body shape because she was either thin or fat. Inter-coder reliability tests were run on each of the 40 programs used in the pilot study. The overall reliability score was .82, using Scott’s π . The body-size rating assigned to each of the 40 programs² was used with the frequency of viewing scores to create a scale representing thin-ideal television viewing. The survey results indicate some programs were not watched frequently by the respondents. In data analysis, we selected the eight most-watched programs, which translated into selecting shows for which the mean frequency of viewing was a 1 or higher on the 0–4 scale (see Table 1). The eight programs used in statistical analysis were

¹ Students enrolled in this course were required to participate in 3 hours of research projects as part of their course grade, and the subjects’ participation in this project earned them 1 hour of research credit for the course.

² In most cases, coders rated the body size of multiple characters on each show. These scores were averaged in order to assign a single score for each program. For *Friends*, the body size assigned to each of the three primary characters was very similar. However, for some shows, such as *The Practice*, they varied: Lara Flynn Boyle’s character received a mean score of 1.11; Camryn Manheim’s character, 4.78. Three other female characters from this show were included for an average body shape index of 2.45 for all female characters on *The Practice*.

Table 1. Most Watched Television Programs by College Females

All college females (N = 218)		
Program*	M	SD
<i>Friends</i>	3.20	1.14
<i>Dawson's Creek</i>	1.88	1.54
<i>Will & Grace</i>	1.78	1.51
<i>7th Heaven</i>	1.73	1.45
<i>Felicity</i>	1.50	1.48
<i>ER</i>	1.20	1.33
<i>Dharma & Greg</i>	1.12	1.12
<i>Gilmore Girls</i>	1.07	1.34

Non-White college females (N = 21)		
Program*	M	SD
<i>The Hughleys</i>	2.44	1.18
<i>My Wife and Kids</i>	2.13	1.56
<i>Friends</i>	2.06	1.79
<i>7th Heaven</i>	1.69	1.53
<i>Girlfriends</i>	1.56	1.72
<i>Charmed</i>	1.56	1.68
<i>Felicity</i>	1.50	1.50
<i>Dawson's Creek</i>	1.50	1.64
<i>Buffy the Vampire Slayer</i>	1.19	1.13

*Viewing scales are listed as 0 = *never*, 1 = *rarely*, 2 = *sometimes*, 3 = *often*, and 4 = *regularly watch*.

shows such as *Friends*, *Dawson's Creek*, and *Will and Grace*. All eight programs were rated as "conspicuously thin" in terms of primary female characters according to results from the pilot study. We then added the responses to these eight programs together to get an additive score for each respondent as a measure of each respondent's exposure to thin-ideal television programs.

Interest in body-improvement television was measured using the question, "How interested would you be in a new 30-minute television show focused on the topics below?" The responses listed categories such as news and politics, violent crime, and dieting. The categories of dieting, sports, fitness, and exercise were viewed as body-improvement television content. Thus, we added these four items together and got an additive score as respondents' interest in body-improvement television content.

Exposure to Thin-Ideal Magazine and Interest in Body-Improvement Magazine Content

In the pilot study, the 20 college students who coded the 40 television programs were also asked to assign body shape codes to the six different types of magazines. Coders were instructed to read through five issues of each magazine, then assess from a general standpoint the body shape size of women portrayed in the magazine. Coders were instructed to consider that multiple body shapes might be

seen in each type of magazine, but they were to consider the body shape that was the dominant one seen in each genre. Coders used the same 5-point scale (1 = *conspicuously thin* to 5 = *conspicuously fat*) as used in the television program coding.³ Intercoder reliability for magazines of all genres was .77, using Scott's π .

Based on the results of the pilot study, we added exposure to entertainment, fashion, and fitness magazines, which represented respondents' exposure to thin-ideal magazine content.

Interest in body-improvement magazines was measured in the same way as that of interest in body-improvement TV.

Exposure to Televised Sports, Exposure to Sports Magazines

Respondents were asked to report their average time per day spent watching televised sports. Responses ranged from 0 minutes to 645 minutes ($M = 43.00$, $SD = 73.10$). Exposure to sports magazines was measured by asking respondents to rate how frequently they read sports magazines. Answers ranged from 0 = *never* to 5 = *always*.

Dependent Variable

The dependent variable for this project was eating-disorder symptomatology. Eating-disorder symptomatology represented four subscales—anorexia, bulimia, drive for thinness, and body dissatisfaction. The questions on the survey come from the Eating Attitudes Test (Garner, Olmstead, Bohr, & Garfinkel, 1982) and the Eating Disorders Inventory (Garner, Olmstead, & Polivy, 1983). For hypothesis testing, each individual subscale was compared to the media exposure variables rather than creating a single eating-disorder scale. The responses to 40 questions on the survey were used to create an additive scale for each dimension—drive for thinness, body dissatisfaction, bulimia, and anorexia.

The drive for thinness subscale included eight statements such as "I weigh myself frequently on a scale." Cronbach's α for the DFT subscale was .89. The anorexia subscale included seven statements such as "I cut my food into small pieces." Cronbach's α for the anorexia subscale was .77. The bulimia subscale included seven statements, such as "I stuff myself with food." Cronbach's α for the bulimia subscale was .78. The body dissatisfaction subscale included nine statements, such as, "I think my hips are too big" and "I am satisfied with the shape of my body." Cronbach's α for the BD scale was .87.

Results

Descriptive Statistics

The results indicate that interest in body-improvement television content was positively related to all of four scales of eating-disorder symptomatology—bulimia, anorexia, drive for thinness, and body dissatisfaction (see Table 2). Descriptive statis-

³ News magazines had a mean body-shape index of 3.17; entertainment magazines, 1.78; sports magazines, 2.81; fashion magazines, 1.24; and fitness magazines, 1.43.

Table 2. Correlations Between Media Exposure, Interest, and Eating-Disorder Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Anorexia	-	.60**	.85**	.71**	.34**	.35**	-.07	.22**	.23**	.02	.00	.21**
2. Bulimia		-	.61**	.55**	.20**	.26**	.00	.24**	.13*	.00	-.03	.22**
3. Drive for thinness			-	.78**	.37**	.38**	-.07	.21**	.17*	.00	-.07	.22**
4. Body dissatisfaction				-	.18**	.20**	-.07	.17*	.07	.02	-.09	.04
5. Interest in body-improvement TV					-	.81**	.02	.26**	.37**	.10	.27**	.26**
6. Interest in body-improvement mag						-	.07	.29**	.41**	.11	.33**	.32**
7. Entertainment TV exposure							-	.14*	.09	.21**	.13	.09
8. Thin-ideal TV exposure								-	.47**	.06	.22**	.27*
9. Thin-ideal mag exposure									-	-.03	.31**	.22**
10. Televised sports exposure										-	.60**	.00
11. Sports magazine exposure											-	.16*
12. Interest in thin-ideal sports												-

Note. * $p < .05$. ** $p < .01$.

tics indicate that approximately 42% of the respondents reported an interest in body-improvement television and body-improvement magazines. This control variable was measured using a 5-point Likert scale ranging from 1 = *not at all interested* to 5 = *very interested*. However, fewer than 10% of the respondents reported a score of 4 or higher on the body-improvement television scale, and just under 12% reported a score of 4 or higher on the body-improvement magazine scale. Although we feel these measures are good indicators of interest in specific content, these measures do not represent time spent viewing body-improvement media content. Overall exposure to entertainment television content was not related to any subscale of eating-disorder symptomatology, but exposure to thin-ideal television was positively related to all of the four scales. Interest in body-improvement magazines was also positively related to all subscales of eating-disorder symptomatology, and exposure to thin-ideal magazines was positively related to drive for thinness, bulimia, and anorexia.

Testing of Hypotheses and Research Questions

Hypothesis 1 predicted that exposure to thin-ideal television would be a predictor of higher scores on the eating-disorder subscales. Because of the correlation between interest in body-improvement television content and exposure to thin-ideal television, the relationship between exposure to thin-ideal television and eating-disorder symptomatology may be confounded by interest in body-improvement television programs. Partial correlations were used to test this hypothesis. We found that exposure to thin-ideal television programs was positively related to bulimia ($r = .19, p < .05$) and anorexia ($r = .14, p < .05$), when we controlled for interest in body-improvement television. When body-improvement television was controlled, exposure to thin-ideal television was positively associated to drive for thinness and body dissatisfaction, but the p value only approached significance. All four subscales of eating-disorder symptomatology were significantly related to thin-ideal television when the control variable was dropped. Furthermore, although the general measure of entertainment media exposure was not related to any of the disordered-eating subscales, when we created a scale using the most frequently viewed entertainment programs, that measure of entertainment media exposure *was* positively related to all four eating-disorder dimensions. As it turns out, the eight programs that were the most frequently viewed were also programs assigned a code of "conspicuously thin" by independent coders. Generally speaking, hypothesis 1 was partially supported.

Hypothesis 2 predicted that exposure to thin-ideal magazines would be related to eating-disorder symptomatology in women. Partial correlation results reveal that there was no significant relationship between exposure to thin-ideal magazines and eating-disorder symptomatology when interest in body-improvement magazine content was controlled. However, when the control variable was dropped, thin-ideal magazine exposure was significantly related to anorexia, bulimia, and drive for thinness.

Hypotheses 3 and 4 predicted White women would be more likely to have higher scores on the disordered-eating subscales than African American women or women of other races. Both hypotheses were supported. Regression analysis indicated the interaction between race and thin-ideal television exposure was a signifi-

Table 3. Means for Media Interest, Media Exposure, and Eating-Disorder Symptomatology of White (EA) and Non-White (AA)

Variables	Range	EA	AA	<i>t</i>	<i>df</i>
Interest					
Body-improvement TV	1-5	2.90	2.65	1.06	211
Body-improvement magazine	1-5	2.87	2.50	1.54	211
Exposure					
Entertainment TV	Minutes	139.89	308.57	4.74***	211
Televised sports	Minutes	39.04	85.24	2.69**	211
Sports magazine	0-5	1.09	1.52	1.39	209
Thin-ideal TV	0-4	1.75	1.23	2.68**	211
Thin-ideal magazine	0-5	2.82	2.78	.15	211
Thin-ideal women's sports	1-5	3.15	2.94	.87	211
Eating-disorder symptomatology					
Anorexia	0-5	2.18	1.21	3.75***	211
Bulimia	0-5	1.89	1.13	3.32**	211
Drive for thinness	0-5	2.75	1.70	3.71***	211
Body dissatisfaction	0-5	2.75	1.87	3.24**	211

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

cant predictor of three of the four disordered-eating dimensions: drive for thinness ($\beta = .169, p < .01$), bulimia ($\beta = .202, p < .01$), and anorexia ($\beta = .148, p < .05$). We ran *t*-tests to compare means on specific variables between respondents of the two ethnicities and found that non-White college females were less likely to exhibit eating-disorder traits in terms of all four subscales than the White women. As Table 3 indicates, although non-White college females self-reported they spent more time watching entertainment television than Whites ($t = 4.74, df = 211, p < .001$), they watched less thin-ideal television programming ($t = 2.68, df = 211, p < .01$). The *t*-test results indicate that there was no significant difference in either group's interest in body-improvement media. White women's scores on the anorexia subscale were nearly double the scores for non-White women. Furthermore, White women scored almost a point higher on the drive for thinness and body dissatisfaction subscales.

When we looked at the same relationship based on exposure to thin-ideal magazines, we found similar results. The interaction between race and thin-ideal magazines was a significant, positive predictor of three of the four eating-disorder dimensions: anorexia ($\beta = .191, p < .01$), bulimia ($\beta = .196, p < .001$), and drive for thinness ($\beta = .171, p < .001$). For these hypotheses, the key seems to be not how much total media respondents were exposed to but the type of content they were exposed to most frequently.

Research questions 1 and 2 predicted exposure to sports media would produce lower scores on the eating-disorder subscales than exposure to entertainment media. Sports media exposure was not at all related to any of the four eating-disorder subscales. This suggests both hypotheses were at least partially confirmed. This confirmation, though, does not come without explanation. Ideally,

we would like to have seen significant negative correlations between sports media exposure and the four disordered-eating dimensions, but we feel no significant relationship between the variables is better than a positive one.

Sports magazine exposure was negatively related to bulimia ($r = -.03$), drive for thinness ($r = -.07$), and body dissatisfaction ($r = -.09$), but the relationships only approached significance.

In order to look at the relationship between the two variables in another way, we asked respondents about their exposure to certain kinds of women's sports, including ice skating, gymnastics, track and field, basketball, soccer, tennis, golf, softball, and swimming/diving. In the data analysis, we added respondents' exposure to thin sports such as ice skating, gymnastics, and swimming/diving together to create an additive score for each respondent's exposure to thin sports. The results indicated that exposure to thin-ideal women sports was positively related to respondents' drive for thinness, bulimia, and anorexia. Although general exposure to sports media was not a predictor of any of the four dimensions of disordered eating, exposure to "thin" sports did predict three of the four.

Conclusion

Whereas substantial literature documents the behavioral effects of the mass media on patterns of disordered eating, a smaller band of literature examines exposure to a specific type of media—sports media—and the relationship this exposure has on body-image attitudes and disordered eating. This study compared college women's exposure to two types of media—entertainment and sports media—and looked for possible associations with body-image distortions and eating disorders. Although this study was broad in scope, the point of looking at so many variables was simply to get a better sense of the relationship between thin-ideal media and disordered eating.

Females who were exposed to "thin-ideal" television scored fairly high on the eating-disorder subscales. Even though overall exposure to entertainment media was not a predictor of any of the disordered-eating dimensions, when we looked at the type of entertainment media the women reported watching most frequently, we consistently found that exposure to be related to anorexia, bulimia, body dissatisfaction, and drive for thinness. This finding, however, was not too surprising. Entertainment television, movies and fashion advertisements have long been linked to disordered eating in women (Levine & Smolak, 1996, 1998; Thompson & Heinberg, 1999). Furthermore, our analysis of 40 prime-time programs aired during the fall 2001 season suggests the shows college women indicated watching most frequently were also the programs with "conspicuously thin" female characters. Similar conclusions can be made about college women's exposure to entertainment and fashion magazines. College women who reported reading magazines categorized as "thin ideal" were more likely to exhibit disordered-eating characteristics such as bulimia, anorexia, and drive for thinness. Again, this was not too surprising given that it is in the fashion magazines where models used for advertising and editorial content are the slimmest.

What we know from our findings is that college women who indicated they were frequently exposed to “thin-ideal” media content on television or in magazines were also the women who were more likely to be dissatisfied with the way they looked and may even have taken dangerous steps to modify their body shape. However, this trend seems to be especially predominant for White women compared to women of other ethnicities. Our study findings resonate with Botta’s (2000) findings—non-White women do respond to media differently and appear to be affected by media in a way that differs from White women. The non-White women in this study reported greater satisfaction with their body image and had significantly lower scores on each of the disordered-eating subscales. Whereas non-White women spent more time watching entertainment television in general, they did not seem to watch as many of the television shows coded as “conspicuously thin.” For example, White respondents reported watching *Friends* the most, with a mean frequency of viewing of 3.30, whereas non-White respondents had a mean frequency of viewing of 2.06 (on a scale of 0–4, with 0 = *never* to 4 = *regularly*). Non-White women also reported watching television programs such as *My Wife and Kids* and *The Hughleys* more frequently than other shows ($M = 2.13$ and $M = 2.44$ on the frequency of viewing scales, respectively). *My Wife and Kids* was assigned a code of 2.89 as a mean body-size rating; *The Hughleys* was assigned a 3.01. White respondents had a mean frequency of viewing score for both shows of less than 1. Although it is not unusual for people of different ethnicities to differ in their preferences for television viewing, it is important to consider that many of the programs with predominantly White casts were also the shows more likely to have a main female character with a conspicuously thin body shape. Even though non-White women spent more time watching television in general, the content they indicated watching more frequently was content with female characters who were not assigned a conspicuously thin code.

The less prominent relation between exposure to thin-ideal programming and body dissatisfaction on non-White women than on White women may also be explained by social comparison theory. As the theory asserts, individuals are prone to comparing themselves with similar others. In terms of body image, ethnicity is a very important factor defining the similarity between media images and comparers. Non-White women may not view thin White models as their comparison targets because of obvious physical differences. Thus, non-White women may be less influenced by thin-ideal media content, which is arguably imbedded with “White” culture. Milkie (1999) observed that the non-White girls in her study could not identify with the “White” media images and did not believe significant others were affected either; subsequently, Milkie argued the non-White participants in her study were not as prone to being affected by negative media messages about the self.

The variation in attitudes regarding self-perception of body shape and evaluations of others’ body shape among different ethnic groups is fairly well documented. Grogan (1999) reported that body dissatisfaction is highest among American White women and less frequent with other comparison groups, including Asians, Hispanics, and African Americans. Susie Orbach (1993) has asserted that women have been taught and trained from an early age to view their bodies as

commodities. Although the objectification of women's bodies in the media has arguably declined, the problem is still rampant, and Orbach and others have argued this objectification creates body-image problems for women, especially White women. Orbach (1993) and Grogan (1999) suggested that the promotion of femininity is more common with White women than it is for women of other ethnicities. Based on the theoretical framework proposed by Fredrickson and Roberts (1997), it seems as if some of the White women in our study were taking cues about the way the female body is perceived, based on what was presented to them in the media. We make this assertion based on the number of women in our study who reported some degree of dissatisfaction with their bodies.

The prime-time viewing habits of our pool may explain some of the differences in the disordered-eating subscale scores, but the respondents' exposure to sports media may offer other evidence with regard to the difference in scores. Our predictions about the relationship between sports media exposure and eating-disorder symptomatology were not entirely supported for the whole population. Ideally, we would like to have seen significant, negative correlations between the sports media exposure variables and the eating-disorder subscales. What we found were negative correlations that neared significance but were, in fact, not significant. The positive outlook to this is that sports media exposure was not positively correlated to the subscales either. However, what we still do not know is how much sports media exposure plays a role in the development of a more positive body image for women.

The findings suggest sports media exposure might be linked to more positive attitudes about the body, but that finding may be predicated on the type of sport to which women are exposed. Furthermore, the notion of similarity as it relates to social comparison may also be relevant with this independent variable. If participants were infrequent sports participants, it is possible the comparisons between themselves and female athletes were not made. Subsequently, if the female participants who were frequent users of sports media were not engaging in social comparison, changes in their self-perception may not be occurring as frequently as when exposed to entertainment media. This certainly helps us understand why overall sports media exposure was not particularly related to either outcome—body satisfaction or dissatisfaction, whereas higher exposure to thin sports was related to specific outcomes. Women of all ethnicities who reported high exposure to thin sports also tended to have fairly high scores on the disordered-eating subscales. This suggests the type of sport, the way the female athlete is portrayed in the coverage of the sport, and the amount of body seen by viewers may really determine how much women are affected by this type of exposure. Women who watch women's sports such as basketball, soccer, tennis, or golf may focus on the female athlete's athleticism, skill, and perseverance. On the flip side, the negative outcomes to thin-ideal sports viewing may be a product of how much body the viewer is exposed to. It is possible that when women actually see the athlete's body shape via leotards or swimsuits, that impression may trigger negative reactions. It may be easier to focus less on the body shape and more on the athlete herself when the athlete is wearing clothing that hides the specific body shape. If exposure to a specific type of sport—lean or nonlean—determines the outcome,

positive or negative, the resounding message is that exposure to sports may either encourage women to feel better about themselves or drive women to feel even more discouraged about their body shape.

For this study, exposure to thin-ideal media was clearly a predictor of higher scores on the disordered-eating scales whereas exposure to sports media may be tangentially related to lower scores on the same scale. The findings from this survey regarding sports media exposure and body-image mirror those reported by Harrison and Fredrickson (2001) and Tiggemann and Pickering (1996), even though the statistical findings here were not as robust. Furthermore, higher exposure to thin-ideal entertainment television did predict decreased satisfaction with the body and more negative attitudes regarding the “ideal” body shape.

Although entertainment media and sports media appear to have a different effect on attitudes and behavior, the relationship does seem to be quite complicated. The key may be to better measure and understand what types of sports media lead to these positive outcomes. In this study, very few women reported watching women’s sports on television. For example, 41% indicated watching no sports on television, and 65% reported not watching televised women’s sports at all. A goal for future research might be to find a way to measure sports media exposure more precisely. Even though we asked respondents about the amount of time they spent watching specific types of men’s and women’s sports, we recognize that it may be very difficult for these women to recall how much time they spent watching these sports because coverage depends on the season of the sport and coverage of women’s sports tends to be much more sporadic. Although we acknowledge that there are many potentially relevant factors that could drive disordered-eating tendencies in women, research in a variety of fields (Harrison, 1997, 2000; Thompson & Heinberg, 1999; Botta, 2000) has suggested the media are a defining factor in a young woman’s desire to be thin.

Another key variable in this relationship is sports participation. It may be very important to determine how sports participation interacts with the body self-esteem variables. Fredrickson and colleagues (1998) suggested that chronic self-objectification is what is most frequently linked to body shame, depression, and eating disorders in young girls. A useful study for the future would be to analyze the thin-ideal in both types of media so researchers can better understand their relationship to attitudes and behavior. In this study, exposure to the two types of thin-ideal media had a similar relationship to disordered eating. Logic suggests factors such as sports participation may operate as intervening variables. Future studies should include more children and adolescents who are actively and regularly involved in sports. If sports exposure and sports participation mediate the possible effect of entertainment media, getting a better grasp of young people’s exposure to the various messages throughout the day might yield better understanding of how frequently body-image concerns arise throughout the day.

Although the breadth of this study allows us to examine the big picture of disordered eating and its relationship to the media, a more narrowly focused study might allow much greater depth and understanding of the relationship between these variables. The findings here suggest that if young girls and college women are encouraged to view more sports media or participate more in sports,

their overall attitude toward their bodies might indeed improve. That said, these same girls are pummeled with “objectifying images” (Harrison & Fredrickson, 2001, p. 24) in a media that has “culturally conditioned them [girls] to hate their bodies” (Pipher, 1994, p. 184). The goal for future research is to continue to find ways to combat the negative messages often found in entertainment media.

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