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TELEVISION AND ADOLESCENT BODY IMAGE: THE ROLE OF PROGRAM CONTENT AND VIEWING MOTIVATION

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The aim of the study was to investigate the relationship between several aspects of television viewing, in particular total exposure, selective viewing of specific genres, and motives for viewing, with body attitudes among adolescents. Participants were 1,452 secondary school students who completed questionnaire measures of eating disorder attitudes and symptomatology, internalization of appearance ideals, appearance schemas, and uses of television. Participants also provided a detailed account of their television watching in the previous week, from which measures of total exposure and viewing of specific genres were generated. It was found that total television time was not related to any body image variable for either boys or girls. However, the time spent watching soap operas was related to drive for thinness in both genders. This relationship was mediated by internalization and appearance schemas. The time spent watching soap operas and music videos was also related to drive for muscularity in boys. Three major components of television usage were identified: entertainment, social learning, and escape from negative affect. The latter two uses had substantial correlations with negative outcomes for both genders. The similar pattern of correlations observed for boys and girls suggests that similar processes are operating in the two genders. It was concluded that television watching does have an impact on young people's sense of body image but that the critical aspects are the type of material and motivations for watching, not the total amount of television watched.

There is no doubt that the mass media (TV, movies, magazines) pervade the everyday lives of people living in Western societies. Among the many potential media effects is the pervasive transmission of unrealistic

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beauty ideals to women. These current female beauty standards inordinately emphasize the desirability of thinness, and thinness at such a level as to be increasingly impossible for most women to achieve by healthy means (Wiseman, Gray, Mosimann, & Ahrens, 1992). Accordingly, such media images are postulated to play an important causal role in the current high levels of body dissatisfaction and disordered eating observed among women (e.g., Nemeroff, Stein, Diehl, & Smilack, 1994; Stice, 1994).

More recently there has been a documented increase in the use of lean but muscled male bodies in fashion magazines and advertising (Pope, Olivardia, Borowiecki, & Cohane, 2001). Thus, men and boys are also increasingly subject to media images that prescribe an ideal, in this case a mesomorphic body shape defined by broad shoulders and well-developed upper body, but flat stomach with narrow hips (Pope et al., 2000). Furthermore, these male ideals often convey muscularity at such a level as to be impossible for most men to achieve without the use of anabolic steroids (Leit, Pope, & Gray, 2001). For both genders, then, the current media-presented beauty ideals are increasingly different from the body size and shape of real men and women (Irving & Berel, 2001; Spitzer, Henderson, & Zivian, 1999). Thus, it is not surprising that men and boys are joining their female counterparts in experiencing increasing levels of body dissatisfaction (McCreary & Sasse, 2000).

The link between media and body concerns or disturbed eating is supported by women's and girls' own reports (e.g., Field et al., 2001; Tiggemann, Gardiner, & Slater, 2000; Wertheim, Paxton, Shutz, & Muir, 1997) and by the results of experimental studies investigating the effects of acute media exposure (for a meta-analytic review, see Groesz, Levine, & Murnen, 2001). However, the results of empirical research that measures naturally occurring media exposure and weight concern *independently* are less clear. On the one hand, some studies have demonstrated media exposure to be positively correlated with body dissatisfaction (Anderson, Huston, Schmitt, Linebarger, & Wright, 2001), perceptions of overweight (McCreary & Sadava, 1999), and eating disorder symptomatology (Harrison, 1997; Harrison 2000a, 2000b; Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Thomsen, Weber, & Brown, 2002). Other studies, however, have found no relationship (Botta, 1999; Cusumano & Thompson, 1997) or inconsistent (Harrison & Kantor, 1997; Tiggemann 2003) or limited relationships (Borzekowski, Robinson, & Killen, 2000; Tiggemann & Pickering, 1996; Van den Bulck, 2000).

I (2003) have argued that these inconsistent results may arise because researchers do not differentiate between the various types of media, as illustrated by the construction of "composite" measures combining

magazine and television exposure (e.g., Stice et al., 1994). Although content analyses suggest that thin ideals are presented in both television and magazines, the ways in which these media are processed and responded to may be quite different. This idea is central to the Uses and Gratifications account of media effects (Rubin, 1994), which specifically conceptualizes the reader or viewer as an active media consumer who deliberately selects and uses the media in different ways to derive different gratifications. These uses and rewards may include diversion, relaxation, escape, information, personal identity, or as a resource for behavioral or appearance standards (e.g., Arnett, 1995). Fashion magazines, for example, may be purchased and read primarily as a source of information on the latest trends, whereas a particular television program may be watched primarily for its entertainment value. The resulting differential information processing associated with these motives, it is then argued, *produces different attitudinal and behavioral effects.*

The present study focuses on the particular contribution of television to adolescent body image and disordered eating symptomatology. Although the medium of television has attracted far less research attention than have fashion magazines, it is arguably the most pervasive form of the mass media, especially for adolescents. Virtually every home has a television set, switched on for an average of 7 hours per day, with individuals watching 3 to 4 hours (Levine & Smolak, 1996). The cumulative effect of such ongoing exposure is a central hypothesis in a second prominent account of media effects, Cultivation theory (e.g., Gerbner, Gross, Morgan, & Signorielli, 1994). Here it is assumed that television's constant portrayal of certain values, types of people, and themes (as well as the omission of others) leads viewers to adopt these as social reality. Such effects can be subtle in that they occur over time without necessary awareness.

Although theoretical discussions of mass communication have traditionally pitted the active viewer assumed by Uses and Gratification theory against the passive viewer assumed by Cultivation theory, there has been a recent tendency to try to reinterpret and integrate these perspectives (Harris, 1994; Livingstone, 1996). Thus, for example, although people may deliberately select action films for their sense of excitement and adventure (which will have implications for subsequent effects), they may also be influenced by the messages contained in such films about conflict resolution or sex roles. The present study uses both of these frameworks to investigate the role of television in a more detailed way than previous research. Rather than using simple measures of total exposure, television viewing was broken down into exposure to different content types and, for the first time to the author's knowledge, the motivations for viewing were examined in relation to body image.

An important question is what are the mechanisms by which the activity of television watching is translated into body concerns and disordered eating behaviors. At the general level, I (2002) have identified three potential mechanisms in increasing scope of influence: social comparison, internalization of the thin ideal, and the development of elaborate appearance schemas (in which appearance becomes the core basis of self-evaluation), each of which has been identified as an important predictor of weight concern and body dissatisfaction (Cash & Labarge, 1996; Jones, 2001; Thompson & Stice, 2001). In contrast to social comparison, where people can compare their bodies with a single image presented in the media (and almost invariably find themselves wanting), the latter two processes necessarily develop over time and require repeated and ongoing exposure to idealized images. Although there is a small amount of empirical evidence for a mediating role for internalization (Stice et al., 1994; Tiggemann, 2003), the role of appearance schemas has not yet been investigated. These schemas warrant attention because the media do not present beauty ideals in isolation, but rather present more complex cultural scripts that link thinness (or muscularity) and attractiveness to happiness, desirability, and status. Acceptance of this cultural schema can become internalized as the equation of a person's attractiveness with his or her self-worth. This is likely to be particularly salient in adolescence, when the major developmental task is the establishment of identity and where self-awareness, self-consciousness, introspectiveness, and preoccupation with self-image all dramatically increase (Harter, 1998).

In sum, the present study sought to investigate the role of television watching in a more detailed way than previous research. In addition to measuring simple television exposure, television viewing was broken down on the basis of content, and the uses and gratifications adolescents derive from television were assessed. Furthermore, the processes of internalization and appearance schemas were investigated as potential mediators of any relationship between television exposure and body image. Finally, in contrast to the bulk of previous research, adolescent boys were included to test the generality of media effects on body image.

METHOD

PARTICIPANTS

The participants were 1,452 students (652 boys, 799 girls; 1 did not specify) recruited from Years 8 to 11 in 13 South Australian high schools. Their mean age was 14.37 years ($SD = 1.15$). The sample was overwhelmingly (>90%) white, reflecting the demographic composition of the

schools and their surrounding communities. A language other than English was spoken in 209 homes (14%), with the most common individual language being Greek (1.8% of homes), followed by Italian (1.4%), German (1.1%), and Polish (0.8%). Schools were chosen to be reasonably representative and covered a range of public and private schools of different socioeconomic status and included one rural school.

MEASURES

A two-part questionnaire was administered to participants. The first part contained background information, measures of media usage, the proposed mediators of appearance schemas and internalization of cultural standards of beauty, and the outcome variables of drive for thinness, bulimia, and drive for muscularity.

The second part of the questionnaire was completed by most ($n = 1,259$) but not all of the participants, due to time constraints imposed by the schools. This section asked participants to record the television programs they had actually watched in the previous week.

Background Information. Section A of the questionnaire (entitled "About You") asked participants their gender, age, school year level, cultural background, height, and weight. From the last two items, body mass index (BMI) was calculated as the ratio of weight (kg) to height squared (m^2) (Garrow & Webster, 1985). The students were also asked to indicate how overweight or underweight they considered themselves to be using a scale that ranged from *extremely underweight* (1) to *extremely overweight* (7). The final question in this section asked participants to indicate their degree of satisfaction with their current weight, using a scale that ranged from *extremely dissatisfied* (1) to *extremely satisfied* (7).

Television Uses and Gratifications. After completing general questions about their television preferences and frequency of magazine reading and music listening, participants were presented with a scale developed for the current study to measure the reasons for and gratifications obtained from watching television. Ideas for items in this scale came from many sources (e.g., Abelman, Atkin, & Rand, 1997; Blumler & Katz, 1974; Carveth & Alexander, 1985; Frank & Greenberg, 1979), including several focus groups run with adolescent girls about reasons for watching television. In particular, one item ("I can learn about what it would be like to have a particular profession e.g., lawyer") was identified by participants in the focus groups but not by any previous literature.

The resultant scale asked students to rate the frequency of 14 items (e.g., "enjoyment," "to forget about school," "it shows me how other people deal with the same problems I have") as "things I get out of watching TV" on 5-point Likert scales from *never* (1) to *always* (5). A principal com-

ponents analysis followed by varimax rotation produced three clear factors (eigenvalues > 1), which were labeled: Enjoyment (two items: "enjoyment" and "relaxation"), Negative Affect (three items: bored, sad, "to forget about school") and Social Learning (six items, e.g., "to learn how people my age behave," "to get ideas about what clothes and hairstyles are in fashion"). The remaining three items did not load highly ($< .5$) on any single factor. A score for each factor was obtained by summing and averaging the individual items. The resulting internal reliability for Social Learning was high ($\alpha = .80$), with lower reliabilities (due to the small number of items) for Enjoyment and Negative Affect (α s = $.60, .56$).

Appearance Schemas. The Appearance Schemas Inventory is a 14-item scale designed to assess core beliefs and assumptions about the importance, meaning, and effect of appearance in an individual's life (Cash & Labarge, 1996). The present study used Cash's (1997) slightly simplified 10-item version as more appropriate for adolescent readers. Participants rated their level of agreement with items (e.g., "Physically attractive people have it all") on 5-point scales that ranged from *strongly disagree* (1) to *strongly agree* (5). Cash and Labarge (1996) reported an alpha coefficient of 0.84 for the 14-item scale. Reliability was the same for the 10-item version in the present sample $\alpha = .84$.

Internalization of Beauty Ideals. Three items were used to address internalization of socially accepted standards of beauty. These were loosely based on items from the Internalization subscale of the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ; Heinberg, Thompson, & Stormer, 1995), but rendered appropriate for both men and women, in contrast to the original scale, which focuses on thinness and is therefore appropriate only for women. For these items the word *women* was replaced by the word *people*. Smolak, Levine and Thompson (2001) have likewise independently produced a female and male adaptation of the scale. The items in the present study were: "People who appear in TV shows and movies project the type of appearance that I see as my goal," "I try to look like the people in fashion magazines," and "I wish my body looked like those of the people in magazines and on TV." Participants rated their agreement with these statements on 5-point scales from *strongly agree* (5) to *strongly disagree* (1). The alpha coefficient for the original Internalization scale of the SATAQ was reported by Heinberg et al. (1995) to be 0.93. Reliability for the three items used here was a little lower, but clearly acceptable ($\alpha = .82$).

Disordered Eating Symptoms. The final section of the first part of the questionnaire measured disordered eating symptomatology by two behavioral subscales, Drive for Thinness and Bulimia, of the Eating Disorders Inventory (Garner, Olmsted, & Polivy, 1983). The Drive for Thinness subscale measures intense pursuit of thinness as well as the fear of

being fat. The Bulimia subscale assesses tendencies to think about and engage in bouts of uncontrolled overeating. In addition, the present study included a Drive for Muscularity scale developed by Yelland and Tiggemann (2003) for their study of body image among gay men. The Drive for Muscularity scale was developed by adapting the items of the Drive for Thinness scale to focus on muscularity rather than thinness (e.g., "I think about dieting" became "I think about building up my muscles," and "I am preoccupied with the desire to be thinner" became "to be more muscular"). Yelland and Tiggemann reported good internal consistency for the scale ($\alpha = 0.87$). All items were rated from *always* (6) to *never* (1). Internal reliabilities for the present sample were all acceptable: Drive for Thinness ($\alpha = .90$); Bulimia ($\alpha = .75$); and Drive for Muscularity ($\alpha = .85$).

Television Viewing. For the second part of the questionnaire, participants were presented with a copy of the previous week's television guide and asked to circle the programs they had actually watched, following the procedure of Tangney and Feshbach (1988). Although ideally this would have been completed prior to the body image variables to guard against any carryover effects, the particular procedure of using specific instructions pertaining to an explicitly defined time period has demonstrated reliability (Huston & Wright, 1996). Instructions were given so that if a student did not watch a program in its entirety, he or she indicated on the questionnaire how much of that program he or she did watch. From this, total television viewing hours were calculated.

In addition, the week's television viewing was coded for every half-hour for program, and subsequently recoded for genre. The initial 20 genre types were movies, situation comedies, soap operas, news, sport (events), sport (talk shows), drama, music videos, children's television, documentary (educational), documentary (entertainment), live chat shows, lifestyle programs, game shows, reality TV, current affairs, satire, adult cartoons, comedy (sketches), and religious. Thus, we have a much more finely grained and precise measure of television exposure than previous research. These genre types were subsequently regrouped into five categories: information (news, documentary, current affairs), sport (events plus talk shows), soap operas, music videos, and other entertainment (the remainder). Soaps and music videos were retained as separate categories because these have been identified as especially crucial by some previous studies (Borzekowski et al., 2000; Tiggemann, 2003; Tiggemann & Pickering, 1996; Van den Bulck, 2000).

A reliability check on the coding of the most frequently watched 100 programs was carried out by an independent rater. There was a 96% agreement rate for the five genre categories.

RESULTS

CHARACTERISTICS OF THE SAMPLE

Of the sample of high school students, 34% were in Year 8, 27% in year 9, 24% in Year 10, and 15% in Year 11. Only one student (.07%) did not have a television set at home, with the average number of television sets per house being 3.0. By far the majority of the sample (92.4%) nominated one of South Australia's three commercial channels (as opposed to two non-commercial channels) as their favorite. In the last month, half (49.6%) had bought a weekly or monthly magazine, and they had spent an average of 3.0 hours ($SD = 1.2$) per week listening to music on the radio or CD. Although the sample as a whole "rarely" read fashion magazines, not surprisingly this was more common among girls ($M = 2.7$, "once a month," $SD = 0.9$) than boys ($M = 1.4$, "never" to "rarely," $SD = 0.8$), $t(1441) = 21.51$, $p < .001$.

GENDER DIFFERENCES IN BODY IMAGE

As can be seen from Table 1, which displays the means for the body image variables, there was no difference in BMI between boys and girls, $t(1042) = 1.81$, $p > .05$ (although it should be noted that there were a large number of missing values for this variable). An initial 2 (gender) \times 2 (year level) MANOVA of the body image variables produced a significant main effect of gender, $F(7, 1163) = 83.09$, $p < .001$, and a significant Gender \times Year Level interaction, $F(21, 3495) = 1.85$, $p < .05$. Follow-up univariate tests confirmed that there was a significant gender difference on each variable, with no year level effect. Specifically, girls considered themselves as more overweight, $F(1, 1169) = 21.33$, $p < .001$, were less satisfied with their weight, $F(1, 1169) = 85.63$, $p < .001$, and had higher scores on drive for thinness, $F(1, 1169) = 238.11$, $p < .001$, and bulimia, $F(1, 1169) = 18.76$, $p < .001$. As expected, boys scored higher on drive for muscularity, $F(1, 1169) = 70.49$, $p < .001$. These large gender effects were modified by smaller univariate interactions for perceived weight, $F(3, 1169) = 4.13$, $p < .01$, drive for thinness, $F(3, 1169) = 4.01$, $p < .01$, and drive for muscularity, $F(3, 1169) = 2.94$, $p < .05$, whereby the observed gender differences tended to be smaller for Year 8 students than for students in Years 9–11.

Univariate tests also showed that the girls scored significantly higher on the two proposed mediators: internalization, $F(1, 1169) = 44.35$, $p < .001$, and appearance schemas, $F(1, 1169) = 5.80$, $p < .05$. These were not modified by any age effect or interaction. Given that these scales were modified to be appropriate for both genders and mention explicitly nei-

TABLE 1. Mean Scores (Standard Deviations in Parentheses) on Body Image for Boys and Girls

	Boys	Girls	<i>p</i>
BMI	20.8 (3.5)	20.4 (3.4)	
Perceived Weight	4.1 (0.9)	4.3 (1.0)	**
Weight Satisfaction	4.6 (1.6)	3.6 (1.6)	**
Internalization	7.4 (3.0)	8.5 (3.3)	**
Appearance Schemas	27.9 (7.0)	29.0 (7.6)	*
Drive for Thinness	13.3 (6.3)	20.6 (9.3)	**
Bulimia	14.0 (5.6)	15.2 (6.1)	**
Drive for Muscularity	18.8 (7.6)	15.0 (6.4)	**

* $p < .01$; ** $p < .001$.

ther thinness nor muscularity, these results indicate a greater focus on appearance for girls.

GENDER DIFFERENCES IN TELEVISION EXPOSURE

On average, the students watched 22.6 hours of television per week, equivalent to 3.2 hours per day. The boys ($M = 24.5$, $SD = 14.1$) watched significantly more television than the girls, ($M = 21.1$, $SD = 12.4$), $t(1256) = 4.50$, $p < .001$.

The means for the five genre categories are tabled separately for boys and girls in Table 2. A 2 (gender) \times 2 (year level) MANOVA produced significant main effects of gender, $F(5, 1234) = 99.69$, $p < .001$, and year level, $F(15, 3708) = 4.43$, $p < .001$. Univariate tests showed that boys watched much more sport, $F(1, 1238) = 116.24$, $p < .001$, and somewhat more entertainment, $F(1, 1238) = 23.93$, $p < .001$, and information shows, $F(1, 1238) = 12.36$, $p < .001$, than did girls. Girls, on the other hand, watched more soap operas, $F(1, 1238) = 219.02$, $p < .001$, and music videos, $F(1, 1238) = 23.56$, $p < .001$. Significant year level effects were found for entertainment, $F(3, 1238) = 8.83$, $p < .001$, soaps, $F(3, 1238) = 9.97$, $p < .001$, and sport, $F(3, 1238) = 4.63$, $p < .01$, whereby students watched less of soaps and entertainment and more of sport with increasing year level.

GENDER DIFFERENCES IN USES OF TELEVISION

An overall 2 (gender) \times 2 (year level) MANOVA of the three uses of television factors found significant main effects for gender, $F(3, 1391) = 15.83$, $p < .001$, and year level, $F(9, 4179) = 4.87$, $p < .001$. It can be seen in

TABLE 2. Mean Scores (Standard Deviations in Parentheses) on Television Exposure for Boys and Girls

	Boys	Girls	<i>p</i>
Total TV	24.5 (14.1)	21.1 (12.4)	**
Sport	5.0 (6.4)	1.7 (3.7)	**
Information	1.2 (2.3)	0.7 (1.6)	**
Soaps	1.6 (1.9)	3.8 (2.8)	**
Music Video	1.3 (2.5)	2.2 (3.0)	**
Entertainment	14.6 (8.8)	12.2 (8.0)	**

** $p < .001$.

Table 3, which displays the means by gender, that boys watched more for enjoyment, $F(1, 1393) = 5.11, p < .05$, and girls watched more for social learning purposes, $F(1, 1393) = 31.54, p < .001$. There was no gender difference in watching television to escape from negative affect. Significant year level effects observed for social learning, $F(3, 1393) = 11.76, p < .001$, and negative affect, $F(3, 1393) = 3.14, p < .05$, reflect gradual decreases in watching television for these purposes with age.

RELATIONSHIP BETWEEN MEDIA EXPOSURE AND BODY IMAGE VARIABLES

Correlational analyses were conducted separately for boys and girls to examine the relationship between time spent watching the various types of television and both the proposed mediators and outcome variables. Because of the multiple tests, a Bonferroni correction was applied to decrease the possibility of Type 1 error. Thus, a significance level of .002 was adopted, instead of the usual .05. With the large sample size, this equates to a critical value of r of approximately .12.

Total television exposure was not significantly related to any of the body image variables for either boys or girls. This contrasts with the results for the simple measure of frequency of fashion magazine reading, which was correlated with all of internalization, appearance schemas, drive for thinness, bulimia, and drive for muscularity for girls (respective r s = .22, .18, .18, .12, .15, all p s < .002), confirming previous work. This relationship was not significant for boys (respective r 's = .11, .04, .03, .03, -.01). With respect to genre type, there was no relationship for sport, information shows, and other entertainment. The watching of soap operas, however, was related to both outcome and mediator variables. Spe-

TABLE 3. Mean Scores (Standard Deviations in Parentheses) on Uses of Television for Boys and Girls

	Boys	Girls	<i>p</i>
Enjoyment	3.8 (0.8)	3.6 (0.7)	*
Negative Affect	3.1 (0.8)	3.0 (0.8)	
Social Learning	2.1 (0.7)	2.4 (0.7)	**

* $p < .01$; ** $p < .001$

cifically, watching soaps was related to drive for thinness ($r_s = .14, .12, p_s < .002$) and internalization of societal ideals ($r_s = .19, .18, p_s < .001$) for both boys and girls, and to appearance schemas in girls ($r = .17, p < .001$), with a tendency for boys ($r = .12, p < .01$). In boys, watching soaps was also related to drive for muscularity ($r = .16, p < .001$). Although the watching of music videos was not related to any body image variable for girls, it was related to boys' drive for muscularity ($r = .14, p < .002$).

THE MEDIATING ROLE OF INTERNALIZATION AND APPEARANCE SCHEMATICITY

It was predicted that the relationship between television exposure and outcome variables would be mediated by internalization and appearance schemas. Baron and Kenny (1986) outlined three preconditions for testing a mediation effect. First, the independent variable (here television exposure) must relate to the proposed mediators (internalization, appearance schemas), which has been shown above. Second, the mediator must relate to the dependent variables. Here both internalization and appearance schemas were related to all of drive for thinness (boys $r_s = .32, .33, p < .001$; girls $r_s = .55, .58, p < .001$), bulimia (boys $r_s = .26, .31, p < .001$; girls $r_s = .34, .36, p_s < .001$), and drive for muscularity (boys $r_s = .41, .45, p_s < .001$; girls $r_s = .33, .38, p_s < .001$) for both boys and girls. The final precondition is that the independent variable (television exposure) be related to the outcome variables. Previous analyses have shown that this occurs for girls and boys only for the genre of soap operas with drive for thinness. For boys, the watching of soaps and music videos are additionally related to drive for muscularity. Thus, only these effects need be tested for mediation.

In order for mediation to be established, the effect of the independent variable on the outcome variable must be less when the mediator is entered into the regression equation than when the independent variable is entered on its own. Here separate hierarchical regressions were con-

ducted for drive for thinness and muscularity for boys and girls separately. In each case, the television variable was entered on Step 1, and the two proposed mediators (internalization and appearance schemas) on Step 2. Under these conditions, the relationship between soaps and drive for thinness reduced to nonsignificance for both boys ($\beta_1 = .14, p < .002; \beta_2 = .07, p > .05$) and girls ($\beta_1 = .12, p < .002; \beta_2 = -.00, p > .05$). This was also the case for the effect of soap operas on drive for muscularity for boys ($\beta_1 = .16, p < .001; \beta_2 = .07, p > .05$). This indicates that internalization and appearance schemas do mediate the observed effects of soap operas. Music videos, however, remained a significant predictor for boys' drive for muscularity ($\beta_1 = .14, p < .002; \beta_2 = .11, p < .01$) when the mediators were added into the equation.

RELATIONSHIP BETWEEN USES OF TELEVISION AND BODY IMAGE VARIABLES

In general, watching television for the purposes of escape from negative affect or social learning was correlated with negative body image, whereas watching television for enjoyment was not. Specifically, the application of the earlier Bonferroni correction for multiple tests, showed that using television for the purpose of social learning was significantly related to all of internalization, appearance schemas, drive for thinness, bulimia, and drive for muscularity for both boys ($.20 < r_s < .34, p_s < .001$) and girls ($.21 < r_s < .41, p_s < .001$). Watching television to ease negative affect was related to internalization, appearance schemas, bulimia, and drive for muscularity in both boys ($.19 < r_s < .28, p_s < .001$) and girls ($.22 < r_s < .35, p_s < .001$), and to drive for thinness in girls only ($r = .30, p < .001$). These correlations for television usage are considerably larger than those for viewing a specific genre (average r^2 for uses = $.08; r^2$ for soaps = $.02$), and in the main tend to be larger for girls than for boys.

It is interesting that the use of television as a source of social learning was positively correlated with time spent watching soaps (boys $r = .16$, girls $r = .24, p_s < .001$) and music video shows (boys $r = .12$, girls $r = .11, p_s < .01$).

PREDICTION OF INTERNALIZATION, APPEARANCE SCHEMAS, AND OUTCOME VARIABLES

To assess the unique contribution of the variables, a series of standard regression analyses were conducted. The genre types (sport, information, soaps, music videos, other entertainment) were entered together with the three uses of television factors. The demographic measures of

TABLE 4. Partial Regression Coefficients (betas) for the Prediction of Body Image for Boys and Girls

	Internalization	Appearance Schemas	Drive for Thinness	Bulimia	Drive for Muscularity
Boys					
Age	.04	.03	-.07	-.05	.07
Perceived wt.	.04	.08	.42**	.06	.02
Sport	.05	.02	.01	.05	.01
Info	-.14**	-.03	-.06	-.04	-.04
Entertainment	-.03	-.02	-.17**	-.09	-.10*
Soaps	.17**	.08	.14*	.03	.14*
Music Videos	.04	.03	-.01	.06	.12*
Social Learning	.29**	.23**	.17**	.17**	.21**
Negative Affect	.02	.14**	.03	.21**	.11*
Enjoyment	.04	-.04	-.01	.05	.09
Multiple R	.41**	.34**	.53**	.37**	.38**
Girls					
Age	.07	.05	.09*	.05	.14**
Perceived wt.	.16**	.21**	.43**	.06	.08*
Sport	-.02	-.03	.01	-.02	.09*
Info	-.07	-.04	-.05	-.04	-.02
Entertainment	-.07	-.00	-.07	-.03	-.05
Soaps	.11*	.09*	.10*	.01	.01
Music Videos	.02	-.02	.04	-.00	.04
Social Learning	.30**	.30**	.14**	.12*	.18**
Negative Affect	.14**	.19**	.16**	.29**	.11*
Enjoyment	.02	-.07*	.01	-.01	-.02
Multiple R	.46**	.50**	.54**	.37**	.32**

* $p < .05$; ** $p < .001$.

age and perceived weight (as a proxy for BMI) were also included. Table 4 displays the results of these regression analyses for both boys and girls.

Table 4 shows significant prediction of all variables for both boys and girls. Other than perceived weight, watching television for the purpose of social learning emerged as the most consistent predictor across the body image variables. With two exceptions, watching television to escape negative affect was also related to each outcome variable. In addition, the television content variables offered unique prediction for some variables. Specifically, time spent watching soaps offered unique prediction for both boys' and girls' internalization and drive for thinness, and for girls' ap-

pearance schemas and boys' drive for muscularity. In addition, for boys, information shows now contributed (negatively) to internalization, and other entertainment contributed (also negatively) to drive for thinness and muscularity. Music videos contributed to drive for muscularity. For girls, watching sport predicted drive for muscularity.

DISCUSSION

The major aim of this study was to investigate the role of the medium of television in the body image of adolescent boys and girls, as most previous media research has focused on fashion magazines. The results showed that the total time spent watching television was not related to any of the body image variables assessed. Thus, researchers who use broad-band or composite measures of television consumption are unlikely to find significant results. However, more detailed analyses showed that the time spent watching particular genres was related. Specifically, the watching of soap operas was correlated with the internalization of cultural beauty ideals and drive for thinness in both girls and boys, and further with drive for muscularity in boys only. Finally, the major and novel finding was that the motives and gratifications for television watching were moderately strong predictors of body image variables for both boys and girls.

The main characteristic that distinguishes the genre of soap operas from other forms of drama or sitcoms is a sense of "realness" (Barbatsis & Guy, 1991). Viewers are asked to share in what is ostensibly a drama of everyday life. Content analyses of soap operas, however, show substantial divergence from real life in a number of aspects; for example, there is an over-representation of professional occupations, divorce, expensive products, serious illness, crimes, and jail (e.g., Buerkel-Rothfuss & Mayes, 1981). A number of studies have documented heavy soap-opera viewing to be related to overestimates of these aspects in the population (e.g., Larson, 1996; Shrum, 1999), in accord with cultivation theory's contention that the constant depiction of certain values, types of people, and themes powerfully influences conceptions of reality. Although thin ideals for women (and, increasingly, muscular ideals for men) are depicted in many television genres in addition to soap operas (e.g., Fouts & Burggraf, 2000; Silverstein, Perdue, Peterson, & Kelly, 1986), the "reality" of soap operas makes them uniquely positioned to offer the more complex cultural schemata that appearance and thinness (or muscularity) are vital to success.

Although two previous studies have shown music videos to be related to weight concerns for girls (Borzekowski et al., 2000; Tiggemann & Pickering, 1996), this was not the case here, perhaps as a result of a some-

what younger age group in this study. The watching of music videos was, however, related to boys' drive for muscularity. Content analyses of music videos show high levels of sex-role stereotyping (Kalof, 1993), an emphasis on physical appearance (Gow, 1996), and men engaged in aggressive and dominant behavior (Sommers-Flanagan, Sommers-Flanagan, & Davis, 1993). In general, the effect sizes of genre type on body image were small, but this is not surprising given the heterogeneity of the sample and the multiple influences on body image. Nevertheless, the results support the contention that the content of *what* young people watch is more important for body image than how much time they spend watching television.

The mediational analyses sought to examine the underlying mechanisms linking exposure to particular television content to body concern. Here it was found that the influence of watching soap operas on the drives for thinness and muscularity was mediated by internalization and appearance schemas. Thus, it appears that television viewing affects these cognitive structures, which in turn influence weight- and eating-related behaviors. This finding supports and extends Stice's model (Stice, 1994; Thompson & Stice, 2001), which has received relatively little empirical testing, although it needs to be remembered that the watching of soap operas is itself an active choice made by viewers. Future studies might usefully examine in more detail precisely what is internalized by the viewers of soap operas. It may be that repeated exposure to soap operas (and other genres) contributes to self-objectification (Fredrickson & Roberts, 1997), the process by which women and girls in our society are gradually socialized to view themselves in objectified terms and to evaluate themselves primarily on the basis of appearance. The internalized nature of these processes also suggests that even were the media to change their depiction of body types, perhaps in response to advocacy or other groups, any change in adolescent body image would show a considerable time lag.

The present study was the first to investigate the consequences of the uses and gratifications adolescents obtain from television watching. Indeed, these emerged as the strongest predictors in the regression analyses. In general, watching television for the purposes of escaping negative affect or social learning was correlated with negative body image. The finding that girls watched more for social learning and boys for enjoyment is consistent with the greater overall body concern among girls. As Arnett (1995) points out, television is a potent source of self-socialization for adolescents. In particular, the use of television as a source of behavioral and appearance standards (social learning) parallels young women's use of fashion magazines at least in part to gain information

about beauty, grooming, and style (Levine & Smolak, 1996; Levine, Smolak, & Hayden, 1994). The stronger effects on body image variables usually obtained for reading fashion magazines may be due to the primacy of this social learning motivation, whereas watching television generally involves other motives besides social learning. It is interesting that although the use of television for social learning or escape from negative affect had negative consequences for body image, watching television for enjoyment was completely benign. As a whole, these findings support a conceptualization of adolescents as *active* consumers of media content.

One finding of practical significance is that adolescents who use television content (such as soap operas) to learn about life tend to have more negative body image and symptoms of disordered eating. This sort of information might usefully be incorporated into media literacy programs, which seek to develop skills in resisting media pressure and which are beginning to show some success in reducing body concerns and disordered eating (e.g., Levine & Smolak, 1998). Clearly such programs need to extend beyond transmitting knowledge about air-brushing and other image distortion techniques to a more sophisticated appreciation of media images and messages. In particular, adolescents need to be able to recognize and think critically about the pervasive but more complex and subtle messages that link appearance and body type with success and happiness. The present study further suggests that adolescents be encouraged to adopt a more critical approach to their own objectives in viewing television (or reading magazines), and be made aware that social learning objectives are liable to be met only in a very partial and distorted way.

The results obtained for young men in this study justify the generalization of conclusions about media effects previously based on the study of young women, in accord with the general sociocultural model (e.g., Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). There were clear gender differences on both body image and television preferences, with few and slight effects of year level. Confirming much previous research (e.g., Paxton et al., 1991), girls were much more dissatisfied than boys with their weight and wished to be thinner. On the other hand, boys scored higher on the newly developed Drive for Muscularity scale, reflecting current thinking about male ideals (e.g., Pope et al., 2000). The lack of a significant developmental trend on body image across this age range confirms some recent research (e.g., Fisher, Dunn, & Thompson, 2002) that suggests that weight and shape-related attitudes and behaviors are established by early adolescence. On television viewing, boys watched more television in total, and more of most genres, with the exception of soap operas and music videos, which

were watched more by girls. Yet despite these sometimes large gender differences, the pattern of relationships between television exposure and body image was quite similar. The overall finding is that the various aspects of television contribute to body image in a similar way for both boys and girls, a finding that carries unfortunate implications. Although men currently suffer lower levels of body concern, the findings suggest that as muscular male ideals are increasingly promoted in the media (and increasingly woven into cultural schemata about success and happiness), boys and young men will also increasingly experience dissatisfaction, together with potentially harmful behavioral consequences of attempting to attain the elusive ideal (e.g., the use of steroids).

One important limitation of the current study is its correlational design. On the basis of results relating aspects of television viewing to negative body image, it is tempting to conclude that watching a large dose of idealized images on television soap operas produces negative body image (television as cause). However, the converse causal assumption is equally plausible—that is, those girls and boys with the highest levels of body concern and internalization of societal beauty ideals may be most interested in and seek out particular media content (television as consequence). In fact, it is probable that the causal sequence is complex and reciprocal. Most likely, both boys and girls do actively select particular television (or other media) content for particular immediate purposes and rewards, in accord with Uses and Gratification theory (Rubin, 1994), but they also experience unintended consequences of that content over the longer term, in accord with Cultivation theory (Gerbner et al., 1994). Only a long-term longitudinal study could begin to disentangle these causal relationships with any confidence.

Despite the unanswered questions, the present study has made an important start toward a more sophisticated understanding of the role of television in adolescent body image. It has confirmed the influence of genre content in a large sample of both boys and girls. More importantly, it has identified a new and stronger predictor, namely, the uses and benefits adolescents derive from television, which warrants further research investigation and practical application. In sum, the findings clearly demonstrate that what is important for adolescents' body image is not how much television they watch, but *what* they watch and how they use it.

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