Media Consumption, Body Image and Thin Ideals in New Zealand Men and Women

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This study investigated the relationships among awareness and internalisation of societal ideals, body perception and media consumption for young adult New Zealand men (n=62) and women (n=119) attending the University of Otago. This survey confirms that young New Zealand women, but not men, experience the body image dissatisfaction deemed normative for women living in Westernised cultures. Women, but not men, selected significantly smaller ideal figures than the figures they thought and felt their bodies looked like. Both men and women were equally aware of the importance society places on physical attractiveness and being thin, but women reported significantly greater internalisation of thinness norms. Total media consumption, which did not significantly differ as a function of gender, was correlated with increased awareness and internalisation of thinness ideals for both men and women but only predicted body perceptions in the latter. Overall, these results suggest that young New Zealand women, but not men, are unhappy with their bodies and want to be thinner.

Regardless of their actual weight, the majority of women living in Westernised cultures are concerned about, if not obsessed with, being thinner. Grogan (1999) reported that most British women believe their lives would change for the better if they lost weight, while Garner (1997) found that 89% of American women want to lose weight; 24% would sacrifice three years of their life in return for achieving their desired weight. While it is believed that the majority of Western women experience body dissatisfaction, Dittmar et al. (2000) pointed out that because most research has been conducted in North America, and more recently Australia (e.g., Paxton, Schutz, Wertheim & Muir, 1999), generalisations are somewhat limited.

The scarcity of body image research in New Zealand is illustrated by the fact that, to date, there has been just one published study focusing specifically on body image in the last decade[1]. In that study, Fear, Bulick, and Sullivan (1996) found that nearly three-quarters of the adolescent girls they surveyed desired to be thinner than they currently were. Similarly, nearly two decades ago, in a survey of New Zealand university students, Ritchie (1988) found that eighteen percent of the female participants judged themselves to be of "normal" weight, although objective criteria indicated eighty percent were of normal weight. Researchers have yet to fully investigate whether, as adults, female New Zealanders also experience the body dissatisfaction that is considered normative among women living in Western cultures. Thus, the initial goal of the current study was to gather current normative data from a sample of young New Zealand adults. It was hypothesised that there would be marked gender differences in body image concerns as overseas research indicates that, compared to women, men are typically more satisfied with their physical appearance (e.g., Muth & Cash, 1997).

Researchers have typically attributed this gender difference to dominant Western sociocultural norms that emphasise and idealise extreme feminine thinness (e.g., Harrison & Cantor, 1997). In particular, the media has been accused of setting and portraying differential appearance standards for men and women, with content analyses of television shows and magazines indicating that although images of men range in shape and size, images of women in the media are almost always extremely thin (e.g., Malkin, Wornian & Chrisler, 1999; Petrie et al., 1996; Plous & Neptune, 1997). Researchers argue that this difference explains the gender-differentiated nature of body dissatisfaction; males tend to be satisfied with their bodies because there are not strict physical appearance standards in the media for the male body. In contrast, repetitive exposure to extremely thin women presented as the norm in the media is believed to have a negative effect on women, who have numerous opportunities to compare their bodies unfavourably with this thin female ideal (e.g., Richins, 1991).

In general, research supports the idea that exposure to thin female models in the media has a negative effect on female body satisfaction. In

a correlational study, Stice, Schupak-Neuberg, Shaw and Stein (1994) linked overall media exposure to increased eating disorder symptomatology in a sample of female undergraduates. However, more recent research has typically failed to find this relationship between overall media consumption and increased body dissatisfaction (e.g., Borzekowski, Robinson & Killen, 2000). Instead, it seems that consumption of what Harrison and Cantor (1997) termed "thinness-depicting and promoting" (TDP) media, in which an extremely thin female body shape is emphasised, is more important than simply the quantity of media to which women are exposed. Recent correlational studies have linked specific consumption of TDP media, such as reading fashion magazines or watching body image orientated television shows such as *Melrose Place*, with increased female body dissatisfaction (e.g., Harrison & Cantor, 1997; Thomsen, Weber & Brown, 2002; Van den Bulck, 2000). A limitation of research to date, however, is that most of these correlational studies have only measured the attitudinal and behavioural components of body image, ignoring the perceptual component. Thus, although researchers have linked media consumption of TDP media with (for example) greater body dissatisfaction (Van den Bulck, 2000), eating disorder symptomatology (Harrison & Cantor, 1997) and dieting (Thomsen et al., 2002), few studies have investigated how, or if, media consumption influences what women think their bodies look like.

The most commonly used measure of body image perception is the Figure Rating Scale (FRS; Stunkard, Sorenson, & Schulsinger, 1983), which consists of a series of nine silhouette figures that range from very thin to obese. Researchers frequently ask participants to select their "ideal" figure and the figure they "think" and/or "feel" best represents their body, with the discrepancy between the figure women believe best represents their body ("think" and/or "feel" figures) and their "ideal" described as an indicator of body dissatisfaction (e.g., Fingeret, Gleaves & Pearson, 2004). Intriguingly, the discrepancy between "ideal-feel" figures is typically greater than "ideal-think" figures (Tiggemann & Pennington, 1990; Thompson & Psaltis, 1988), suggesting that "think" figure selection represents the cognitive aspect of body perception and the "feel" figure selection taps into affective perceptions. The discrepancy between ideal-actual FRS figures is frequently conceptualized as body image dissatisfaction (Fingeret et al., 2004; Hofshire & Greenberg; Tiggemann & Pennington, 1990), with discrepancy between ideal and actual selves leading to negative affect (see Higgins, 1987).

Whether or how media consumption influences FRS judgments is less clear, with no studies using adults, and the two studies addressing the question in young girls and adolescents reporting contradictory findings. Hofschire and Greenberg (2002) found that the more television adolescent girls watched, the smaller their ideal figure. On the other hand, Harrison (2000) found that the more television seven-year-old girls watched, the larger their ideal figure and the thinner they thought they were. Theoretically, given that most researchers (e.g., Richins, 1991; Tiggemann, 2002) believe that women experience body dissatisfaction as a result of comparing their body unfavourably with the thin female body shape currently over-represented in the media, increased media consumption should be correlated with smaller ideal and larger actual figure selections, especially for women.

The current study also examined social comparison as a personality variable that might predict detrimental effects of media exposure on body image. If, as most researchers (e.g., Richins, 1991; Tiggemann, 2002) appear to believe, women experience body dissatisfaction as a result of unfavourable body comparisons, women who chronically tend to compare their bodies with others should be most vulnerable to media images. Despite promising findings in research manipulating social comparison motives (Martin & Gentry, 1997), individual differences in social comparison have rarely been examined (see Botta, 1999, and Tiggemann, 2000, for exceptions), because until recently no validated measure of chronic social comparison tendencies existed. However the recent establishment of a scale by Gibbons and Buunk (1999) now allows researchers to identify people who consistently compare themselves with others. Theoretically, social comparison tendencies should predict greater awareness and internalisation of sociocultural ideals, and strengthen the relationship between media consumption and body image.

In summary, the current study extends previous research by simultaneously measuring media consumption patterns, awareness and internalisation of sociocultural ideals and body perception, along with individual differences in social comparison. It was hypothesised, first, that men and women would be equally aware of appearance and thinness norms, but that women would score higher on the internalisation measure than men. Second, we predicted that media consumption would be associated with women's (but not men's) selection of larger "think" and "feel" figures, and smaller "ideal" figures. Finally, it was hypothesised that higher scores on the social comparison scale would be associated with increased media consumption and body dissatisfaction, and for women only, smaller ideal figure preferences.

Method

Participants

Students at the University of Otago, Dunedin, New Zealand participated either as part of a first year psychology research requirements or in return for $10. One hundred and nineteen females and sixty-two males, who ranged in age from 17 to 30 years, participated. Male participants reported an average height of 1.81 metres (range = 1.67-1.95) and weight of 80 kg (range = 61-126 kg). Most (84%) reported being European, 7% Maori, 7% Asian and 2% other. Female participants reported an average height of 1.67 metres (range = 1.52-1.86) and weight of 68kg (range = 46-129kg). Most (88%) reported being European, 7% Maori, 3% Asian and 2% other. Both gender groups had an average age of 22 years and an average body-mass index (BMI = weight in kilograms/height in metres^2) of 24.

Measures

Awareness and Internalisation of Sociocultural Ideals: The Sociocultural Attitudes towards Appearance Questionnaire (SATAQ; Heinberg, Thompson & Stormer, 1995) was used to measure awareness and internalisation of cultural pressures regarding appearance, particularly the thin ideal. The 14 item questionnaire is comprised of two sub-scales, a six item Awareness sub-scale which assesses the acknowledgment of cultural pressure to be thin (e.g., "People think the thinner you are, the better you look in clothes") and an 8-item Internalisation sub-scale which assesses the acceptance of these standards (e.g., "I wish I looked like a swimsuit model"). The scale uses a 5 point Likert type scale, ranging from 1 (completely disagree) to 5 (completely agree), with higher scores reflecting stronger awareness and internalisation of thinness norms.

Although this measure was originally tested and developed for "normal" women, more recent research has seen the measure used to detect preferences for a thin body type in both adolescent girls and boys (Smolak, Levine & Thompson, 2001). Smolak et al. (2001) changed the seven items that referred to thinness in the SATAQ to emphasise muscularity for their male sample (e.g., "Most people believe that the thinner [more muscular] you are, the better you look"). In the current study, however, the scale's original focus on thinness was retained to assess gender differences in awareness and internalisation of thinness norms. This meant that for three items, the word "women" was changed to "men" for the male sample (e.g., "Women who appear in TV shows and movies project the type of appearance that I see as my goal" was changed to "Men who appear in TV shows and movies project the type of appearance that I see as my goal"). For one item, magazine names were replaced by their New Zealand equivalent to make the questions more appropriate for the current sample (*FHM, Cosmopolitan & Cleo*).

Body Perception: Body perception was measured using the Figure Rating Scale (FRS), which consists of nine female and male silhouettes, ranging on a continuum from extremely thin (1) to obese (9) These were first developed by Stunkard et al. (1983) to look at the weight status of parents of adoptees, and later adapted by Fallon and Rozin (1985) to measure individual body perception. Participants were asked to select from among the gender-congruent figures their ideal figure ("ideal"), the figure they thought they possessed ("think"), and the figure they felt they possessed ("feel"). Selection of the "feel" figure is believed to tap a more affective component of body perception.

Media Use and Body Image Influence: The Media Time Use measure was based on that utilised by Borzekowski et al., (2000), whose test-retest reliability ranged from 0.79 to 0.93 among adolescents (Robinson & Killen, 1995). Participants were asked to think of a typical weekday and a typical weekend and to indicate how much time they spent, on a scale ranging from 0 to "12 plus" hours a day, watching television, reading magazines and watching music videos. Participants were also asked to list all the television shows they regularly watched and magazines they regularly read. They were then asked about the impact each of their listed television shows and magazines had on their body image on a visual analogue scale. Participants responded by moving a marker along a line anchored at "no influence at all" to "very great influence". This 'influence' measure was based on work by David and Johnson (1998), who examined the perceived impact of thinness-depicting media on ideal weight perceptions.

Social Comparison: A recent scale developed by Gibbons and Buunk (1999), the 11 item Iowa-Netherlands Social Comparison Orientation Measure (INCOM), was included to measure the extent to which participants chronically tended to compare themselves with others (e.g., "I often compare how I am doing socially (e.g., social skills, popularity) with others"). Participants responded on a 5 point Likert type scale, anchored at 1 (never) and 5 (frequently), with higher scores reflecting stronger tendencies to compare.

Procedure

After informed consent was obtained, participants were randomly assigned to individual experimental cubicles containing a Power Macintosh 7600 computer, on which all instructions and questionnaires were administered. Once in their cubicles, participants were instructed that they be asked to complete a questionnaire investigating "various student attitudes and opinions," particularly "about yourself, the media and your body." Participants answered several demographic questions, then reported their media consumption patterns, completed the social comparison scales, the SATAQ, the media influence and belief questions, and the body perception scale, always in that order. They were then fully debriefed.

Results

Fifteen participants (7 men and 8 women) were excluded from these analyses, as they were older than 30 years. All variables are approximately normally distributed, although the analyses are typically robust to violations of normality. There were only a few missing data points (<10) for each measure, with participants' data simply omitted in those cases.

Gender differences in body perception & sociocultural thinness ideals

The means and standard deviations for all body image awareness, internalisation and perception measures, for both men and women, are displayed in Table 1. A 2 (gender) X 2 (awareness vs. internalization of norms) mixed model Analysis of Variance (ANOVA), with the second factor treated as a repeated measure, revealed an interaction, $F(1,176)=12.42, p=.001$. As predicted, men and women reported equivalent awareness of norms, but women had internalized those norms more than men, $t(176)=4.60, p<.001$. A second gender X body perception (ideal, think, or feel) ANOVA revealed an interaction, $F(2,346)=18.56, p=.001$ such that women "felt" their bodies were larger than they "thought" they were, and both figures were significantly larger than their

ideal (all *ps*<.001). There were no significant differences in men's figure selections.

Following Borzekowski et al. (2000), average weekly media consumption was calculated for each participant by multiplying weekday use by 5 and weekend use by 2 and summing the total. As the means in Table 1 illustrate, men and women did not differ significantly in their consumption of any of the three types of media.

Correlation Analyses

The correlations between media consumption and the other dependent measures are presented in Table 2 for men and women separately. To control for the influence of actual body size, BMI was partialled out of all correlational analyses. To reduce the chance of Type 1 errors given the large number of tests, the critical *p* value was set to .01 except where indicated. As can be seen in the table, the number of hours women spent watching music videos was the most consistent predictor of both their awareness and their internalisation of thinness norms. Music videos also predicted larger cognitive and affective body self-perception (i.e., "think" and "feel" figures). For men, in contrast, media consumption predicted internalisation scores, but generally not awareness scores or figure selections. Media consumption predicted neither ideal figure selections nor social comparison scores for either gender, although the latter was significantly correlated with SATAQ awareness and internalisation scores for both genders (*rs*~.3).

Table 1: Gender differences in body perception and satisfaction

	Women		Men	
	M	SD	M	SD
Sociocultural Norms (SATAQ)				
Awareness	3.40	.76	3.18	.58
Internalisation	2.97	.94	2.35	.67
Body Perception				
Ideal	3.24	.79	4.22	.94
Think	4.38	1.50	4.40	1.50
Feel	4.77	1.50	4.46	1.50
Media Consumption (hours/week)				
Magazines	5.37	4.52	5.79	7.06
Television	16.55	11.88	16.30	11.32
Music Videos	5.31	6.52	5.11	6.47
Social Comparison	3.47	.72	3.48	.50

Mediational Analyses

One of our initial experimental goals was to test the possible mediating role of social comparison in any relationships uncovered between media and body image or attitudes. However, because social comparison was not itself correlated with any media consumption measure, mediation was not possible (Baron & Kenny, 1986).

Discussion

This study, while limited in its scope and findings, extends the body image literature in several ways. First, it confirms that young New Zealand women, but not men, experience body dissatisfaction. To date, the bulk of body image research has been conducted in the United States (e.g., Garner, 1997, Hoyt & Kogan, 2001) and more recently, Australia (e.g., Paxton et al., 1999; Tiggemann et al., 2000) and Britain (Dittmar et al., 2000). This is only the second study to measure body image, and the first to examine body image in young adults, in a New Zealand sample in the last decade. Consistent with previous research in Australia (Tiggemann & Pennington, 1990) and the United States (Fallon & Rozin, 1985), women, but not men, selected significantly smaller ideal figures than the figures than what they thought and felt their bodies looked like. In addition, the SATAQ showed the predicted

Table 2: Partial Corelations, controlling for BMI, among media consumption, awareness and internalisation of sociocultural ideals (SATAQ) and body perception, for men and women

	Women			Men		
	Television	Magazines	Music Videos	Television	Magazines	Music Videos
SATAQ-Awareness	.22 *	.06	.31 *	.14	.04	.06
SATAQ-Internal.	.09	.24 *	.27 *	.24 (*)	.42 *	.45 *
"Think" Figure	.14	-.02	.24 *	.02	.12	.06
"Feel" Figure	.24 *	.05	.24 *	.00	.24 (*)	.13
Ideal Figure	.02	-.14	-.01	.07	-.02	.03
Social Comparison	.17	.11	.08	.09	-.03	.09

Notes: * *p*<=.01, (*) *p*<.08, *** =*p*<.001

gender differences in the extent to which men and women were aware of, and internalised, societal norms emphasising physical appearance and thinness. Both men and women were equally aware of the importance society places on physical attractiveness and being thin, but women internalised these values significantly more.

The role of the media in these gender differences, however, is less clear. Although women reported greater internalisation of the thin ideal body than men, total media consumption did not significantly differ as a function of gender. Moreover, female New Zealanders reported spending approximately the same amount of time each week (21 hours) watching television and reading magazines as their peers in the United States (25 hours; Harrison & Cantor, 1997). It is harder to put men's media use in context, as few studies have measured men's media consumption. In a recent study, young adolescent American males reported spending 38 hours a week watching television, music videos and reading magazines (Hofschire & Greenberg, 2002). That is greater than the 27 hours reported here by the New Zealand males; however, the difference is possibly due to difference in the ages of the samples.

Although men and women showed no notable media consumption trends, at least certain kinds of media consumption were correlated with increased awareness and internalisation of thinness ideals for both men and (to a greater extent) women, but only predicted body perceptions in the latter. A possible explanation of this gender difference, of course, is that the thin female ideal is depicted more prominently in the media than the male ideal. Potentially, men's perceptions of their bodies may not be as influenced by media consumption because there is not a strictly defined ideal male body, with men in the media ranging in weight and size (e.g., Petrie et al., 1996). Unlike men, women in the media are almost always extremely thin. For example, Fouts and Burggraf (2000) used the FRS to code body shapes of female actors in popular prime time television comedies (e.g., *Friends, Mad About You*) and found that 76% had a body shape of 3 or smaller (the mean "think" figure selection for women in the current study was 4.4).

Admittedly, another explanation of gender differences in the predictiveness of media use on body perception is that the FRS, which consists of nine silhouette figures ranging from extremely thin to obese, does not capture an important dimension for males. Given that research indicates men typically desire more muscle, not necessarily to be thinner (e.g., Pope, Phillips & Olivardia, 2000), it is possible that none of the figures on the FRS reflected men's perceptions of their body. However, while having muscles may be more important than being thin to men, leanness is still a valued dimension (e.g., Hoyt & Kogan, 2001). Furthermore, if thinness is indeed more important to women than to men, this is an important finding that itself may require explanation in terms of differential media representations.

Interestingly, media consumption failed to predict body *ideals* for either gender, suggesting that whatever influence such consumption has on individuals' body satisfaction occurs with respect to people's perception of their bodies, rather than the ideals to which they compare them. That is, regardless of individual differences in media consumption, individuals may be equally aware of what their culture defines as attractive and desirable. Media consumption might not influence ideal figure judgments because they are already well-established, but nevertheless influence body satisfaction by reminding them that their own bodies are far from that ideal.

Although previous research (e.g., Stice et al., 1994) has also linked media consumption to increased body dissatisfaction, more recent studies have typically failed to find a simple "dose-response" relationship between overall media exposure and increased body dissatisfaction. Instead, they have usually found that the *type* of media consumed influences body image satisfaction more than overall quantity (see Hofschire & Greenberg, 2002). This research also suggests that the type of media men and women consume affects their awareness and internalisation of sociocultural thinness ideals. For example, exposure to what could be termed as "thinness-depicting and promoting" media, specifically music videos, was the most consistent predictor of awareness (women only) and internalisation (men and women) of thinness norms. Music videos also predicted larger cognitive and affective body self-perception (i.e., "think" and "feel" figures) for women only. For men, in contrast, media consumption predicted internalisation scores, but generally not awareness scores or figure selections. Intriguingly, the magnitude of that relationship was strongest for men, with internalisation scores most strongly correlated with consumption of magazines and music videos. Clearly, more research focussing on the type and content of media men and women consume, and how that might affect body image, is needed.

In this study, although we did not attempt to code the influence of particular television shows and magazines listed by our participants, their own influence ratings are informative. In a post-hoc analysis, consumption of body image media, defined as media that influences one's perception of the ideal body type, was computed idiosyncratically by coding each program and magazine in terms of whether it was rated by a participant above the midpoint on the influence scale. Influential television shows included programmes such as *Sex in the City* and *Friends;* influential magazines included *Cosmopolitan, Cleo,* and *FHM.* Fifty-five percent of women reported regularly watching at least one self-defined high body image orientated television show, compared to only 25% of men. Thirty percent of women reported regularly reading at least one self-defined high body image orientated magazine, compared to 13% of men. Both proportions differed significantly. Unfortunately, there was not enough variation in the amount of self-reported influential media consumed to include this variable in our analyses.

Variation in social comparison tendencies, however, provided some interesting findings. Social comparison did predict SATAQ scores, indicating that both men and women who are predisposed to comparing themselves

with others report greater awareness and internalisation of thinness norms, consistent with research by Botta (1999), who found that women who reported comparing their bodies with women in the media experienced greater body dissatisfaction. Contrary to expectations, however, there was no evidence that individual differences in social comparison, at least as measured by Gibbons and Buunk's (1999) scale, mediated the relationship between media consumption and body perception, or even that social comparison predicts either of these variables on its own. There is no obvious explanation for why social comparison was not influential, however given that no prior published study has explicitly examined whether or how individual differences in social comparison might mediate body image, more research is needed to examine the potentially mediating role of this variable.

The obvious limitation of this study is its correlational design, which means causal inferences cannot be made regarding the relationship between media consumption and body perception. As Harrison (2000) suggested, "media users may be affected by what they view, but they also selectively expose themselves to media content that is congruent with their existing worldview" (p138). It may be that exposure to dominant body ideals leads to awareness and internalisation of these apparent norms, or that people who recognise the norms are attracted to the media representations that confirm them. Only experimental and longitudinal studies can answer such questions of causality. Despite this limitation, however, the results of this study raise a number of important issues that future research should address, including the mechanism accounting for gender differences in the media-body perception relationship, the importance of different representations of women in the same media, and the role, if any, of social comparison and other personality differences.

References

Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality & Social Psychology, 51,* 1173- 1182.

Borzekowski, D.L.G., Robinson, T.N. & Killen, J.D. (2000). Does the camera add 10 Pounds? Media use, perceived importance of appearance and weight concerns among teenage girls. *Journal of Adolescent Health, 26,* 36-41.

Botta, R.A. (1999). Television images and adolescent girls' body image disturbance. *Journal of Communication, 49,* 22-41.

David, P., & Johnson, M. A. (1998). The role of self in third-person effects about body image. *Journal of Communication, 47,* 37-58.

Dittmar, H., Lloyd, B., Dugan, S., Halliwell, E., Jacobs, N., & Cramer, H. (2000). The "Body Beautiful": English Adolescents' Images of Ideal Bodies, *Sex Roles, 42* (9/10), 887- 915

Drummond, K. (1996). *Women's Body Image: Comparisons between normal weight, overweight, eating disordered and body building women.* Unpublished PhD Thesis, University of Auckland.

Fallon, A.E. & Rozin, P. (1985). Sex differences in perceptions of desirable body shape. *Journal of Abnormal Psychology, 94,* 102-105.

Fear, J.L., Bulik, C.M. & Sullivan, P.F. (1996). The prevalence of disordered eating behaviours and attitudes in adolescent girls. *New Zealand Journal of Psychology, 25,* 7-12.

Fingeret, M.C., Gleaves, D.H. & Pearson, C.A. (2004). On the methodology of body image assessment: the use of figure rating scales to evaluate body dissatisfaction and the ideal body standards of women. *Body Image, 1,* 207-212.

Fouts, G. & Burggraf, K. (2000). Television situation comedies: Female weight, male negative comments and audience reactions. *Sex Roles, 42 (9/10),* 925-932.

Garner, D.M. (1997). The 1997 body image survey results. *Psychology Today, 30,* 30-46.

Gibbons, F.X. & Buunk, B.P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality &Social Psychology, 76*(1), 129-142.

Grogan, S. (1999). *Body Image: Understanding body dissatisfaction in men, women and children.* New York: Routledge

Harrison, K. (2000). Television viewing, fat stereotyping, body shape standards, and eating disorder symptomatology in grade school children. *Communication Research, 27(5),* 617-640.

Harrison, K. & Cantor, J. (1997). The relationship between media consumption and eating disorders. *Journal of Communication, 47,* 40-67.

Heinberg, L.J., Thompson, J.K. & Stormer, S. (1995). Development and validation of the sociocultural attitudes towards appearance questionnaire. *International Journal of Eating Disorders, 17,*(1), 81-89.

Higgins, E.T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94,* 319-340.

Hofshire, L.J. & Greenberg, B.S. (2002). Media's impact on adolescents' body dissatisfaction. (pp 125-152). In J.D. Brown, J.R. Steele and K. Walsh-Childers (Eds). *Sexual Teens, Sexual Media: Investigating media's influence on adolescent sexuality.* Lawrence Erlbaum: New Jersey, U.S.A.

Hoyt, W.D. & Kogan, L.R. (2001). Satisfaction with body image and peer relationships for males and females in a college environment. *Sex Roles, 45 (2/3),*199-215.

Malkin, A. R., Wornian, K. & Chrisler, J. C. (1999) Women and Weight: Gendered Messages on Magazine Covers. *Sex Roles* 40, 647-655

Martin, M.C., & Gentry, J.W. (1997). Stuck in the Model Trap: The Effects of Beautiful Models in Advertisements on Female Pre-adolescents and Adolescents. *Journal of Advertising, 26(2),* 19-33.

Miller, E. (2003). *Media and Body Image: Exploring the discrepancy between body perception and satisfaction.* Unpublished PhD Thesis, University of Otago.

Muth, J.L. & Cash, T.F. (1997). Body-Image attitudes: What difference does gender make? *Journal of Applied Social Psychology, 27 (16),* 1438-1452.

Paxton, S.J., Schutz, H.K., Wertheim, E.H., & Muir, S.L. (1999). Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviours, and binge eating in adolescent girls. *Journal of Abnormal Psychology, 108(2),* 255-266.

Petrie, T. A., Austin, L. J., Crowley, B. J., Helmcamp, A., Johnson, C. E., Lester, R., Rogers, R., Turner, J., & Walbrick, K. (1996). Sociocultural expectations of attractiveness for males. *Sex Roles, 35,* 581-602.

Plous, S. & Neptune, D. (1997). Racial and gender biases in magazine and

advertising: a content-analytic study. *Psychology of Women Quarterly, 1*(4), 627-644.

Pope, H.G., Phillips, K.A. & Olivardia, R. (2000). *The Adonis Complex: The secret crisis of male body obsession.* New York: The Free Press.

Richins, M.L. (1991). Social Comparison and the idealized images of advertising. *Journal of Consumer Research, 18,* 71-83.

Ritchie, J. (1988). Eating attitudes and behaviours of a sample of university students. *New Zealand Medical Journal, 101,* 238-240.

Smolak, L., Levine, M.P., & Thompson, J.K. (2001). The use of the sociocultural attitudes towards appearance questionnaire with middles school boys and girls. *International Journal of Eating Disorders, 29,* 216-223.

Stice, E, Schupak-Neuberg, E., Shaw, H.E. & Stein, R. I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. *Journal of Abnormal Psychology, 103, (4),* 836-840.

Stunkard, A.J, Sorenson, T. & Schulsinger, F. (1983). Use of the Danish Adoption Register for the Study of Obesity and Thinness. In S.Kety, L.P.Rowland, R.L.Sidman, & S.W.Matthysse (Eds.). *The genetics of neurological and psychiatric disturbances.* (pp115-120). New York: Raven Press.

Thompson & Psaltis (1988). Multiple aspects and correlates of body figure ratings: A replication and extension of Fallon and Rozin (1985). *International Journal of Eating Disorders, 7,* 813-817.

Thomsen, S.R., Weber, M.M. & Brown, L.B. (2002). Reading beauty and fashion magazines and the use of pathogenic dieting methods among adolescent females. *Adolescence, 37(145),* 1-18.

Tiggemann, M. (2002). Media influences on body image development. In Pruzinsky, T & Cash, T.F. (Eds). *Body Image: A handbook of theory, research and practise.* (pp91-98). New York: Guilford Press

Tiggermann, M. & Pennington, B. (1990). The development of gender differences in body-size dissatisfaction. *Australian Psychologist, 25*(3), 306- 313.

Turangi-Joesph, A. (1998). *Tyranny of appearances: Body image, dieting and eating attitudes among Maori and Pakeha students.* Unpublished Masters Thesis, University of Waikato.

Van den Bulck, J. (2000). Is television bad for your health? Behavior and body image of the adolescent "coach potato". *Journal of Youth & Adolescence, 29(3),* 273-288.

Notes

1. Despite the dearth of recent published research, three unpublished theses have recently investigated body image issues in New Zealand (Drummond, 1996; Miller, 2003; Turangi-Joesph, 1998).

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