

Does Body Weight Dissatisfaction Change with Age? A Cross-Sectional Analysis of American Women

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This study explored the relationship between age and body weight dissatisfaction in American women using a cross-sectional approach. A sample of 55 women between the ages of 22 and 65 completed a questionnaire measuring the discrepancy between current and ideal body types, current perceptions of weight, the extent to which weight affected self-concept, and ratings of specific bodily features. The results did not indicate a significant difference in body weight dissatisfaction between young (22-34), middle-aged (35-49), and older (50-65) women. The impact of weight on women's self-perception did not vary with age. Moreover, dissatisfaction with specific body parts was consistent across age cohorts. Evidence suggests that body weight dissatisfaction among women is pervasive across the lifetime, displaying no significant changes with age.

Over the last 30 years, the ideal body depicted in magazines and on film has become thinner (Wiseman, Gray, Mosimann, & Ahrens, 1992), while the average weight of American women has increased (Spitzer, Henderson, & Zivian, 1999). Garner, Garfinkel, Schwartz, and Thompson (1980) found that the average weight of Playboy centerfolds and Miss America pageant contestants significantly declined between 1959 and 1978. A subsequent study by Wiseman et al. indicated that the weight of Miss America pageant contests continued to decline through the 1980s, while the Playboy centerfold models reached a plateau at a weight that is approximately 13-19% below what is considered to be healthy. While thinness is generally accepted as beautiful and desirable (Dittmar, 2009; Neighbors, Sobal, Liff, Amiraian, 2008; Smith, Waldorf, Trembath, 1990), it is impossible or unhealthy for most women to achieve the degree of thinness endorsed by the media (Tiggemann & Lynch, 2001). Research suggests that exposure to magazine photographs displaying the thin ideal results in increased body dissatisfaction and decreased self-esteem (Hawkins, Richards, Granley, Stein, 2004; Irving, 1990). Furthermore, the number of hours adolescent girls spent watching soap operas and movies correlates positively with body weight dissatisfaction (Tiggeman & Pickering, 1996). The body weight dissatisfaction resulting from the discrepancy between

idealistic and realistic standards has many negative consequences and has been implicated in the development of eating disorders (Graber, Brooks-Gunn, Paikoff, & Warren, 1994; Stice & Shaw, 2002; Wertheim, Koerner, & Paxton, 2001; Wiseman, Gray, Mosimann, & Ahrens, 1992), depressive symptoms (Fabian & Thompson, 1989; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Sarwer, Wadden, & Foster, 1998; Stice & Bearman, 2001; Tiggemann, 1997), and low self-esteem (Gullone, & Kostanski, 1998; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Powell & Hendricks, 1999; Sarwer, Wadden, & Foster, 1998; Tiggeman, 2005).

Polivy and Herman (1987) proposed three explanations for the importance of thinness in Western society. First, Western cultures tend to value aesthetics and regard thinness as an aspect of beauty. The desire for thinness may be linked with the desire for beauty. Second, Western women learn to associate beauty, and therefore thinness, with positive aspects of social status (e.g., success, wealth and popularity). Third, Polivy and Herman suggested that behaviors and personality traits associated with thinness—rather than thinness itself—may be partly responsible for its desirability in Western cultures. Women may come to view thinness as a reflection of characteristics such as self-control and determination. While thinness standards occur in other cultures, such a review is beyond the scope of this article and will not be addressed here.

Many studies suggest that body weight dissatisfaction

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tion begins to emerge around age 5 and increases with age (Davison, Markey, & Birch, 2000; Davison, Markey & Birch, 2003; Dohnt & Tiggemann, 2005; Field, Camargo, Taylor, Berkey, Frazer, Gillman & Colditz, 1999; Flannery-Schroeder & Chrisler, 1996; Lowes & Tiggemann, 2003; Robinson, Chang, Haydel & Killen, 2001). In a study of 81 girls between 5 and 7 years old from two all-female schools, Dohnt and Tiggemann found that 28.6 % of kindergarteners, 41.7% of first graders, and 71.4% of second graders desired to be thinner than their current weight. Rolland, Farnill, and Griffiths (1997) found that 40% of 8 to 12-year old girls reported dieting to lose weight. In a study by Schur, Sanders, and Steiner (2000), 77% of children indicated that they learned about the concept of dieting from an adult, most often a parent.

While societal standards of muscularity and masculinity are equally prevalent for males (Tom, Chen, Liao, & Shao, 2005), women of all ages express more concern regarding their appearance than men (Altabe & Thompson, 1993; Feingold & Mazzella, 1998; Furnham, Badmin, & Sneade, 2002; Lokken, Ferraro, Kirchner, Bowling, 2003; Pliner, Chaiken & Flett, 1990). A study by Rozin and Fallon (1988) compared body weight dissatisfaction between male and female college students with that of their mothers and fathers. Only sons did not describe themselves as overweight. Fathers, like mothers and daughters, perceived their weight as heavier than their ideal; however, fathers did not share the same concern regarding weight and food consumption as did mothers and daughters.

Given that body weight tends to increase linearly with age, it seems logical that body weight dissatisfaction would increase as well. Biological processes, such as pregnancy and menopause, make idealistic weight standards increasingly more unattainable later in life. Not only does body shape change with age (Webster & Tiggemann, 2003), but the average woman also gains approximately 10 lbs (4.6 kg) during every decade of life (Andres, 1989). Moreover, decreased metabolism and weight gain often occur during menopause (Peat, Peyerl, & Muehlenkamp, 2008). In a study of 1,000

women between the ages of 60 and 70, 90% reported feeling fat and 56% reported restricting caloric intake to control weight (Mangweth-Matzek et al., 2006).

Research suggests the aging process is more difficult for women than men due to the combined impact of ageism and sexism (Banister, 1999; Wilcox, 1997). Ferraro et al. (2008) found that older women reported thinking about their body shape and appearance more often than older men. When asked to pick their ideal figure from a series of drawings, older women more likely to choose thinner figures than older men. Hummert, Garstka, Shaner, and Strahm (1994) found that negative stereotypes were more commonly attributed to individuals who had an older appearance. However, older women were more likely to encounter negative cultural stereotypes and evaluations of their physical features in comparison to older men. In a study by Keating (1985), participants rated pictures of men with mature features (thick eyebrows and thin lips) as more attractive than women with these same features. Pictures of women were perceived as more attractive when the women possessed immature features (thin eyebrows and thick lips). In another study, participants were more likely to associate pictures of unsmiling older women with negative stereotypes than pictures of unsmiling older men (Hummert, Garstka, & Shaner, 1997).

Despite these biological and cultural factors, research suggests that body weight dissatisfaction remains stable throughout women's lives. In a study using Fallon and Rozin's (1985) nine figure drawings ranging from thin to obese, Stevens and Tiggemann (1998) found no difference in body weight dissatisfaction in Australian women between the ages of 18 and 59. Tom, Chen, Liao and Shao (2005) found that body weight dissatisfaction was not impacted by age; however, marital status was a factor in that single women placed more importance on achieving the ideal body than did married women. A study comparing middle-aged women (50 to 65; $M = 56.4$) to elderly women (66 and older; $M = 78.8$) found no difference in body weight dissatisfaction between the two age groups (Lewis &

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Cachelin, 2001). Several other studies also found no difference in body weight dissatisfaction between 20 to 65-year old women (Webster & Tiggemann, 2003), or 20 to 84-year old women (Tiggemann, 1992; Tiggemann & Lynch, 2001).

The purpose of this research was to re-examine body weight dissatisfaction among women of different age groups. This study used a cross-sectional approach to compare women's dissatisfaction with their body weight and the extent to which weight impacted women's self-concept. Unlike previous studies, this study incorporated participants' dissatisfaction with 10 specific body parts in addition to the extent to which weight impacted women's self-concept. It was predicted that levels of body weight dissatisfaction would be relatively equal among women of various ages. Moreover, it was expected that evaluations of current body weight and 10 specific body parts as well as the importance of weight in relation to self-concept would not differ by age group.

Method

Participants

Participants were recruited from a medical clinic, a city municipal office, and both research methods and social psychology classes at Metropolitan State University. Participation in this study was voluntary. Seventy questionnaires were distributed and 63 were returned (90%). Because the purpose of this study was to examine body weight dissatisfaction across the life span of American women, six questionnaires completed by women who were born abroad were excluded from the data. Two questionnaires completed by respondents who were outside the age range of this study were also excluded. The remaining 55 questionnaires were divided into three groups according to age ($M = 39$, $SD = 12.9$): young adulthood (22-34 years; $n = 25$); middle adulthood (35-49; $n = 15$); and late adulthood (50-65; $n = 15$). The majority of participants were Caucasian (87.2%).

Materials and Procedure

Many valid and reliable assessments have been created to measure body image dissatisfaction, such as the Body Image Disturbance Questionnaire (BIDQ; Cash & Grasso, 2005; Cash, Phillips, Santos, & Hrabosky, 2004), Body Image Assessment (BIA; Goreczny, and Gleaves, 1989; Williamson, Davis, Bennett), Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1986), and the Body Dissatisfaction subscale of the Eating Disorder Inventory (EDI; Garner, Olmstead, & Polivy, 2006). The purpose of this study was to examine body weight dissatisfaction—a specific component of body dissatisfaction. These instruments were reviewed for items pertaining to weight dissatisfaction and a questionnaire containing weight-related items was specifically developed for use in this study (see Appendix).

Participants were informed that the purpose of the present research was to investigate body image. They were asked to provide demographic information, their current weight and height and their ideal weight and height. The questionnaire also asked participants to evaluate their current weight (underweight, normal, or overweight) and the extent to which their current weight influenced their self-perception (not at all, moderately, or very much so). Finally, participants were asked to rate 10 specific parts of their bodies, including face, neck, arms, shoulders, breasts, stomach, waist, hips, buttocks and thighs, on a 5-point Likert-type scale (1 = extremely positive to 5 = extremely negative). The 10 body parts included in the questionnaire were chosen because they make up the entire body; however, hands, feet, and hair were not included on the list of body parts because dissatisfaction with these body parts is likely due to factors other than weight.

Results

The weight and height of the sample ranged from 46 to 132.3 kg (101.4 lbs to 291.7 lbs; $M = 72.6$, $SD = 17.8$) and 144.8 to 180.3 cm (4 ft 8 in to 5 ft 9 in; $M = 163$, $SD = 7.6$), respectively. In consideration of

the influence that height has on weight, Body Mass Index (BMI) was used as a standard comparison between participants. BMI is calculated as the ratio of weight (kg) to height squared (m²) and includes the following categories: underweight (below 18.5), normal weight (18.5 to 24.9), overweight (25 to 29.9) and obese (30 and above; Garrow & Webster, 1985). The mean BMI of the sample ($M = 27.3$, $SD = 6.9$) fell in the middle of the overweight weight range (BMI = 25-30).

Table 1

Weight Categories of BMI Scale

BMI Weight Ranges
Underweight: < 18.5
Normal weight: 18.5-24.9
Overweight: 25-29.9
Obese: 30 or greater

Note. From "Quetelet's Index (W/H²) as a Measure of Fatness," by J. S. Garrow and B. S. Webster, 1985, *International Journal of Obesity*, 9, 149.

Body weight dissatisfaction was defined as the mean difference between the current and ideal BMI scores for each of the three cohorts. For women ages 22 to 34, 35 to 49, and 50 to 65, the mean differences were 6.9, 7.1 and 7.2, respectively (see Table 1). A one-way analysis of variance (ANOVA) confirmed there was no significant difference in body dissatisfaction between the three age groups, $F(2, 52) = .21$, $p = .81$. There was also no significant difference in how the groups perceived their current weights, $X^2(4, N = 55) = 5.50$, $p = .24$. Across age groups, 20% of the women in the normal weight range (BMI = 18.5-24.9) perceived themselves as overweight. There was no significant difference between the groups when asked to rate the extent to which weight influenced their attitudes about their bodies, $X^2(4, N = 55) = 4.17$, $p = .38$. Almost three-fourths (73%) of the women reported that their weight moderately impacted their attitudes, while 22% reported that it had a very strong impact.

As shown on Table 2, there were no significant dif-

ferences between the ways in which the three cohorts rated 10 specific parts of their bodies: face, $X^2(4, N = 55) = 2.30$, $p = .68$; neck, $X^2(4, N = 55) = .85$, $p = .93$; arms, $X^2(4, N = 55) = 3.78$, $p = .44$; shoulders, $X^2(4, N = 55) = 3.47$, $p = .48$; breasts $X^2(4, N = 55) = .90$, $p = .92$; stomach, $X^2(4, N = 55) = 7.65$, $p = .11$; waist, $X^2(4, N = 55) = 3.6$, $p = .46$; hips $X^2(4, N = 55) = 1.54$, $p = .82$; buttocks, $X^2(4, N = 55) = 4.62$, $p = .33$; and thighs, $X^2(4, N = 55) = 3.99$, $p = .41$ (see Table 2). Notably, women from all age groups expressed more dissatisfaction with their stomach, hips and thighs.

Discussion

The results of this study replicate previous research results. There were no significant differences in body dissatisfaction among the three age groups. Both current and ideal BMI scores increased with age, suggesting that participants adjusted their ideal weight to correspond with age-related weight gain. Perhaps women reappraise their evaluations of the ideal body because biological changes make the ideal body weight more difficult to attain. As expected, age did not have an effect on women's perceptions of their bodies or the extent to which weight influenced their self-concepts. Ratings of specific body parts failed to yield any between-group differences; however, participants as a whole rated their stomachs, hips and thighs more negatively than other aspects of their bodies.

There are several limitations to this study. As participants' height and weight were obtained by self-report and not otherwise confirmed, the accuracy of these details cannot be known. It is unknown whether women provided their accurate height and weight. Moreover, the sample size was small and was not representative of the general population. Most of the participants were Caucasian, so the results should not be generalized to women of color. Furthermore, the results do not take other factors such as sexual orientation or socioeconomic status into account. The questionnaire used in this study was created by the author and while it pulled from a series of accepted/widely used questionnaires,

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Table 2

Mean Differences of Current and Ideal Height, Weight and BMI

	Age					
	22-34		35-49		50-65	
	M	SD	M	SD	M	SD
Age	26.9	4.5	42.4	4.6	55.6	4.8
Current weight	68.8	10.4	72.8	24.5	78.6	19.4
Ideal weight	57.7	5.7	58.8	10.9	62.3	6.8
Current height	163.4	7.7	161.5	8.7	163.9	6.4
Ideal height	167.9	6.8	168.1	4.6	165.4	6.8
Current BMI	26.2	3.9	27.9	9.5	29.3	7.5
Ideal BMI	19.3	2.5	20.9	4.6	22.1	1.9
Current - Ideal	6.9	4.7	7.1	7.2	7.1	7.2

Note. Measurements in kg and cm. BMI = body mass index.

Table 3

Percent of Women Dissatisfied with Specific Body Parts

	Age			Total
	22-34	35-49	50-65	
Face	16	13.3	20	16.4
Neck	12	13.3	20	14.5
Arms	48	46.7	60	50.9
Shoulders	20	6.7	26.7	18.2
Breasts	44	33.3	46.7	41.8
Stomach	76	53.3	80	70.1
Waist	60	40	53.3	52.7
Hips	60	60	73.3	63.6
Buttocks	52	46.7	73.3	56.3
Thighs	60	46.7	73.3	60

its own validity and reliability have not yet been demonstrated.

One central methodological limitation of this study was the cross-sectional design. It is possible that there were no differences in body weight dissatisfaction between age groups simply due to cohort effects. In addition, the average weight of Americans continues to increase. Thus, the discrepancy between women's actual weight and the thin ideal portrayed in the media will also increase. Standards of beauty and thinness have changed over time and are likely to continue to evolve in the future. A longitudinal or a cross-sequential design evaluating changes in body image across the life span could better address the impact of cultural zeitgeist on body weight dissatisfaction.

Future Research

While this study concentrated on the body weight dissatisfaction of American women, future research may want to investigate how societal standards affect women across cultures. Comparisons between women from different countries may elucidate the influence of culture and aging on body weight dissatisfaction. For example, in a study of Moroccan Saharawi culture, the majority of women reported a desire to gain weight (Rguibi & Belahsen, 2006). In order to gain weight, women undergo a cultural ritual in which they overeat and restrict activity for 40 days. Examining standards of beauty in other cultures may help understand the causes and effects of body weight dissatisfaction so that mental health professionals can help women view their bodies more positively throughout their lives. The survey created for this study did not inquire about past or current pregnancies. Future research may also want to investigate the ways in which pregnancy impacts body image and whether age at the time of pregnancy influences post-pregnancy body dissatisfaction.

References

- Altabe, M., & Thompson, J. K. (1993). *Body image changes during early childhood*. *International Journal of Eating Disorders*, 13(3), 323-328.
- Andres, R. (1989). *Does the "best" body weight change with age?* In A. J. Stunkard & A. Baum (Eds.), *Perspectives in behavioral medicine: Eating, sleeping, and sex* (pp. 99-107). Hillside, NJ: Erlbaum.
- Banister, E. M. (1999). *Women's midlife experience of their changing bodies*. *Qualitative Health Research*, 9(4), 520-537.
- Cash, T. F., & Grasso, K. (2005). *The norms of stability of new measures of the multidimensional body image construct*. *Body Image: An International Journal of Research*, 2, 199-203.
- Cash, T. F., Phillips, K. A., Santos, M. T., & Hrabosky, J. I. (2004). *Measuring "negative body image": Validation of the body image disturbance questionnaire in a non-clinical population*. *Body Image: An International Journal of Research*, 1, 363-372.
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C.G. (1986). *The development and validation of the Body Shape Questionnaire*. *International Journal of Eating Disorders*, 6, 485-494.
- Davison, K. K., Markey, C. N., & Birch, L. L. (2000). *The etiology of body dissatisfaction and weight concerns among 5-year olds*. *Appetite*, 35, 143-151.
- Davison, K. K., Markey, C. N., & Birch, L. L. (2003). *A longitudinal examination of patterns in girls' weight concerns and body dissatisfaction from ages 5 to 9 years*. *International Journal of Eating Disorders*, 33(3), 320-332.
- Dittmar, H. (2009). *How do "body perfect" ideals in the media have a negative impact on body image and behaviors? Factors and processes related to self and identity*. *Journal of Social & Clinical Psychology*, 28(1), 1-8.

BODY WEIGHT DISSATISFACTION

- Dohnt, H. K., & Tiggemann, M. (2005). *Peer influences on body dissatisfaction and dieting awareness in young girls*. *The British Journal of Developmental Psychology*, 23, 103-116.
- Fabian, L. J., & Thompson, J. K. (1989). *Body image and eating disturbance in young females*. *International Journal of Eating Disorders*, 8(1), 63-74.
- Fallon, A. E., & Rozin, P. (1985). *Sex differences in perceptions of desirable body shape*. *Journal of Abnormal Psychology*, 94, 102-105.
- Ferraro, F. R., Muehlenkamp, J. J., Painter, A., Wasson, K., Hager, T., & Hoverson, F. (2008). *Aging, body image, and body shape*. *Journal of General Psychology*, 135(4), 379-392.
- Feingold, A., & Mazzella, R. (1998). *Gender differences in body image are increasing*. *Psychological Science*, 9(3), 190-195.
- Field, A. E., Camargo, C. A., Taylor, C. B., Berkey, C. S., Frazier, A. L., Gillman, M. W., Colditz, G. A. (1999). *Overweight concerns, and bulimic behaviors among girls and boys*. *Journal of the American Academy of Child Adolescent Psychiatry*, 38(6), 754-760.
- Flannery-Schroeder, E. C., & Chrisler, J. C. (1996). *Body esteem, eating attitudes, and gender-role orientation in three age groups of children*. *Current Psychology*, 15, 235-248.
- Furnham, A., Badmin, N., & Sneade, I. (2002). *Body image dissatisfaction: Gender differences in eating attitudes, self-esteem, and reasons for exercise*. *The Journal of Psychology*, 136(6), 581-596.
- Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1980). *Cultural expectations of thinness in women*. *Psychological Reports*, 47, 483-491.
- Garner, D. M., Olmstead, M. P., & Polivy, J. (2006). *Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia*. *International Journal of Eating Disorders*, 2, 15-34.
- Garrow, J. S., & Webster, B. S. (1985). *Quetlet's Index (W/H²) as a measure of fatness*. *International Journal of Obesity*, 9, 147-153.
- Graber, J. A., Brooks-Gunn, J., Paikoff, R. L., & Warren, M. (1994). *Prediction of eating problems: An 8-year study of adolescent girls*. *Developmental Psychology*, 30, 823-834.
- Gullone, E., & Kostanski, M. (1998). *Adolescent body image dissatisfaction: Relationships with self-esteem, anxiety, and depression controlling for body mass*. *Journal of Child Psychology and Psychiatry & Allied Disciplines*, 39(2), 255-262.
- Hawkins, N., Richards, P. S., Granley, H. M., & Stein, D. M. (2004). *The impact of exposure to the thin-ideal media image on women*. *Eating Disorders*, 12, 35-50.
- Hummert, M. L., Garstka, T. A., & Shaner, J. L. (1997). *Stereotyping of older adults: The role of target facial cues and perceiver characteristics*. *Psychology and Aging*, 12, 107-114.
- Hummert, M. L., Garstka, T. A., Shaner, J. L., & Strahm, S. (1994). *Stereotypes of the elderly held by young, middle-aged, and elderly adults*. *Journal of Gerontology: Psychological Sciences*, 49, 240-249.
- Irving, L. M. (1990). *Mirror images: Effects of the standards of beauty on the self- and body-esteem of women exhibiting varying levels of bulimic symptoms*. *Journal of Social and Clinical Psychology*, 9(2), 230-242.
- Keating, C. F. (1985). *Gender and the physiognomy of dominance and attractiveness*. *Social Psychology Quarterly*, 48, 61-70.
- Lewis, D. M., & Cachelin, F. M. (2001). *Body image, body dissatisfaction, and eating attitudes in midlife and elderly women*. *Eating Disorders*, 9(1), 29-39.
- Lokken, K., Ferraro, F. R., Kirchner, T., Bowling, M. (2003). *Gender differences in body size dissatisfaction among individuals with low, medium or high levels of body focus*. *The Journal of General Psychology*, 130(3), 305-310.
- Lowes, J., & Tiggemann, M. (2003). *Body dissatisfaction, dieting awareness and the impact of parental influence in young children*. *British Journal of*

- Health Psychology, 8, 135-147.
- Mangweth-Matzek, B., Rupp, C. I., Hausmann, A., Assmayr, K., Mariacher, E., Kemmler, G., Whitworth, A. B., Biebl, W. (2006). *Never too old for eating disorders or body image dissatisfaction: A community study of elderly women*. International Journal of Eating Disorders, 39, 583-586.
- Neighbors, L., Sobal, J., Liff, C., Amiraian, D. (2008). *Weighing Weight: Trends in body weight evaluation among young adults, 1990 and 2005*. Sex Roles, 59, 68-80.
- Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). *Body dissatisfaction prospectively predicts depressive mood and low-self esteem in adolescent girls and boys*. Journal of Clinical Child and Adolescent Psychology, 35(4), 539-549.
- Peat, C. M., Peyerl, N. L., Muehlenkamp, J. J. (2008). *Body image and eating disorders in older adults: A review*. The Journal of General Psychology, 135(4), 343-358.
- Pliner, P., Chaiken, S., & Flett, G. L. (1990). *Gender differences in concern with weight and physical appearance over the life span*. Personality and Social Psychology Bulletin, 16, 263-273.
- Polivy, J., & Herman, C. P. (1987). *Diagnosis and treatment of abnormal eating*. Journal of Consulting and Clinical Psychology, 55, 1-10.
- Powell, M. R., & Hendricks, B. (1990). *Body schema, gender, and other correlates in nonclinical populations*. Genetic, Social, and General Psychology Monographs, 125, 333-412.
- Rguibi, M., & Belahsen, R. (2006). *Fattening practices among Moroccan Saharawi women*. Eastern Mediterranean Health Journal, 12(5), 619-624.
- Robinson, T. N., Chang, J.Y., Haydel, K. F., & Killen, J. D. (2001). *Overweight concerns and body dissatisfaction among third-grade children: The impacts of ethnicity and socioeconomic status*. The Journal of Pediatrics, 138, 181-187.
- Rolland, K., Farnill, D. & Griffiths, R. A. (1997). *Body figure perceptions and eating attitudes among Australian schoolchildren aged 8 to 12 years*. International Journal of Eating Disorders, 21(3), 273-278.
- Rozin, P., & Fallon, A. (1988). *Body image, attitudes to weight, and misperceptions of figure preferences of the opposite sex: A comparison of men and women in two generations*. Journal of Abnormal Psychology, 97(3), 342-345.
- Sarwer, D. B., Wadden, T.A., & Foster, G. D. (1998). *Assessment of body image dissatisfaction in obese women: Specificity, severity and clinical significance*. Journal of Consulting and Clinical Psychology, 66(4), 651-654.
- Schur, E. A., Sanders, M., & Steiner, H. (2000). *Body dissatisfaction and dieting in young children*. International Journal of Eating Disorders, 27(1), 74-82.
- Smith, J. E., Waldorf, V. A., & Trembath, D. L. (1990). *"Single white male looking for thin, very attractive..."* Sex Roles, 23(11-12), 675-685.
- Spitzer, B. L., Henderson, K. A., & Zivian, M. T. (1999). *Gender differences in population versus media body sizes: A comparison over four decades*. Sex Roles, 40, 545-565.
- Stevens, C., & Tiggemann, M. (1998). *Women's body figure preferences across the life span*. The Journal of Genetic Psychology, 159(1), 94-102.
- Stice, E., & Bearman, S. K. (2001). *Body-image and eating disturbances prospectively predict increases in depressive symptoms in adolescent girls: A growth curve analysis*. Developmental Psychology, 37(5), 597-607.
- Stice, E., & Shaw, H. E. (2002). *Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings*. Journal of Psychosomatic Research, 53(5), 985-993.
- Tiggemann, M. (1992). *Body-size dissatisfaction: Individual differences in age and gender, and relationship with self-esteem*. Personality and Individual Difference, 13, 39-43.
- Tiggemann, M., & Pickering, A. S. (1996). *Role of television in adolescent women's body dissatisfaction*.

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- faction and drive for thinness.* International Journal of Eating Disorders, 20(2), 199-203.
- Tiggemann, M. (1997). *Dieting in moderation: The role of dietary restraint in the relationship between body dissatisfaction and psychological wellbeing.* Journal of Health Psychology, 2, 501-507.
- Tiggemann, M., & Lynch, J. E. (2001). *Body image across the life span in adult women: The role of self-objectification.* Developmental Psychology, 37(2), 243-253.
- Tiggemann, M. (2005). *Body dissatisfaction and adolescent self-esteem: Prospective findings.* Body Image, 2(2), 129-135.
- Tom, G., Chen, A., Liao, H., & Chao, J. (2005). *Body image, relationships and time.* The Journal of Psychology, 139(5), 458-468.
- Webster, J., & Tiggemann, M. (2003). *The relationship between women's body satisfaction and self-image across the life span: The role of cognitive control.* The Journal of Genetic Psychology, 164(2), 241-252.
- Wertheim, E. H., Koerner, J., & Paxton, S. (2001). *Longitudinal predictors of restrictive eating and bulimic tendencies in three different age groups of adolescent girls.* Journal of Youth and Adolescence, 30, 69-81.
- Wilcox, S. (1997). *Age and gender in relation to body attitudes: Is there a double standard of aging?* Psychology of Women Quarterly, 21, 549-565.
- Williamson, D. A., Davis, C. J., Bennett, S. M., Goreczny, A. J., & Gleaves, D. H. (1989). *Development of a simple procedure for assessing body image disturbances.* Behavioral Assessment, 11, 433-446.
- Wiseman, M. A., Gray, J. J., Mosimann, J. E., & Ahrens, A. H. (1992). *Cultural expectations of thinness in women: An update.* International Journal of Eating Disorders, 11, 85-89.