

## Invited Commentary: Why Body Image is Important to Adolescent Development

Charlotte N. Markey

Published online: 26 March 2010  
© Springer Science+Business Media, LLC 2010

**Abstract** Although the majority of adolescents report body dissatisfaction and the consequences of body image concerns are developmentally significant, most research addressing body image has been conducted by clinicians. Developmental scientists are in a unique position to contribute to body image research given their understanding of the intrapersonal (e.g., pubertal development) and interpersonal (e.g., family relationships) factors that affect the development of body image. The adolescent years provide a particularly good example of the developmental nature of body image because a myriad of “normal” developmental factors (e.g., peer relationships) coalesce to shape adolescents’ body image. This commentary will summarize some of the significant body image research—focusing on adolescence—in the hope that it will encourage developmental psychologists to recognize the central role body image plays in development and address this topic in future research.

**Keywords** Body image · Adolescence · Developmental psychology

### Introduction

Although body image is a construct critically relevant to human development, it has been studied primarily by clinicians. A recent (December, 2009) literature search in PsycInfo for the key words “body image” produced 7,368 articles, books, chapters, and dissertations addressing this

topic. Dating back to 1903, “body image” research originally focused on self-image or self-concept and usually examined samples of mentally retarded or otherwise psychologically ill or impaired individuals’ sense of self (not necessarily their physical body). This early research differs from contemporary body image research in its relatively general approach, psychoanalytic undertones, and scarcity (<1% of body image research was published before 1970). The majority (approximately 90%) of body image research has been published since 1980, paralleling an increase in research addressing eating disorders in the last three decades. What may be most striking is not the relatively recent proliferation of research addressing body image, but the predominantly clinical nature of this research. Of all the body image publications, the vast majority can be found in abnormal, clinical, health/medical, or social/personality journals. Only a minority (<1% it appears) can be found in developmental psychology journals and even fewer are longitudinal studies in peer reviewed journals.

Understandably, interest in body image has come to researchers’ attention most often under conditions of extreme distortion or dissatisfaction. Body dysmorphic disorder, anorexia nervosa, and bulimia nervosa represent psychiatric disorders hallmarked by negative body image. However, the range of normal and pathological body image experiences is broad and has psychological, behavioral, and developmental consequences all along its spectrum (Markey and Markey 2009). Body image is not a static property of an individual and it is not merely an intrapersonal quality. Understanding body image requires understanding how individuals feel about themselves as they inevitably undergo physical changes across the lifespan. It also requires considering the myriad factors that contribute to body image as well as the concurrent and longitudinal consequences of body image. The adolescent years provide

---

C. N. Markey (✉)  
Psychology Department, Rutgers University, 311 North  
5th Street, Camden, NJ 08102, USA  
e-mail: chmarkey@camden.rutgers.edu

a particularly salient example of the developmental significance of body image and the contemporary importance of body image research. What follows is a review of recent and classic research addressing developmental precursors and consequences of body image. Although researchers' current understanding of body image is complex, developmental scientists' contribution to this research is necessary so that youths' body image may be improved.

### **Pubertal Development and Body Image**

The physical development that accompanies the adolescent years is more extensive than that experienced at any other time of life (aside from infancy). Girls' physical changes that accompany puberty often bring them further from the cultural ideal of beauty with significant weight gain (~25 lbs; Warren 1983). Although different studies suggest the effects of these physical changes vary in severity and importance relative to other factors (e.g., sociocultural influences) in predicting girls' body image, most reveal puberty as a risk factor for girls' body dissatisfaction (O'Dea and Abraham 1999). The timing of girls' pubertal development relative to their peers also appears to be significant, with earlier developers more inclined to gain more weight and most likely to report greater body dissatisfaction (Ackard and Peterson 2001; Archibald et al. 2003). Puberty may present a risk factor for boys' body image as well (Ricciardelli and McCabe 2003); however, post-pubertal boys tend to have higher body satisfaction than do boys who are pre-pubertal or currently experiencing puberty (O'Dea and Abraham 1999). Developmental research that further addresses adolescents' ability to cope with pubertal changes and incorporate these changes into a positive body image is needed.

### **Identity Development and Body Image**

Identity development has long been viewed (see Erikson 1968) as a central task of adolescent development. Researchers such as Harter (see 1988, 2003) have described different constructs that contribute to adolescents' sense of self including academic competence, popularity and social acceptance, romantic appeal, and physical appearance. Relevant to researchers' understanding of body image development, Harter's work (e.g., 2001, 2003) suggests that adolescents' perceptions of their physical appearance contributes most significantly to their overall sense of self. With changing bodies to make sense of, adolescents' views of their bodies no doubt contribute to their physical appearance self-concepts and their identity (Frost and McKelvie 2004; Rosenblum and Lewis 1999).

Research that extends our understanding of the relative importance of different factors (e.g., body satisfaction) to youths' identity and ways in which the value of these factors may be altered may contribute to efforts to improve both youths' body image and general sense of self.

### **Family Relationships and Body Image**

Adolescents' relationships with their family members, particularly their parents, change during this developmental period. These relationship changes are speculated to be linked with physical changes accompanying puberty (see Steinberg 1987) and have the potential to impact parents' influence on their adolescents' developing body image (McCabe and Ricciardelli 2003). Specifically, low levels of family expressiveness have been found to predict body dissatisfaction (Babio et al. 2008) and longitudinal research examining both adolescent girls and boys shows a link between parental support deficits and later increases in body dissatisfaction (Bearman et al. 2006). Parents' influences may be most significant when they are explicit, such as actively encouraging their adolescent to try to lose weight or participate in particular dieting techniques (Benedikt et al. 1998; Wertheim et al. 1999). However, some research suggests that parents may indirectly teach their adolescents to be dissatisfied with their bodies by modeling body dissatisfaction and dieting behaviors (Haines et al. 2008). Developmental researchers could contribute to body image research by addressing ways in which parents can sustain and improve their children's body image.

### **Peer Relationships and Body Image**

The adolescent years are an important period for the development of peer relationships. Recent research (e.g., Jones and Crawford 2006) suggests the important role peers may play in shaping adolescents' feelings about their bodies. This research indicates that both adolescent girls and boys talk with their friends about their appearances and changing their appearances (e.g., dieting, muscle building) and peers' feedback is associated with adolescents' behavioral attempts to alter their bodies (see Clark and Tiggemann 2006; McCabe and Ricciardelli 2003). Explicit negative feedback from peers in the form of appearance-related teasing has been found to be particularly detrimental to the development of body image and may have long-term consequences for not only body image, but the development of self-concept and interpersonal relationships (Davison and Birch 2002; Eisenberg et al. 2006). Developmental research addressing the potentially positive

ways that youths influence each other's body image and encourage healthy eating and physical activity patterns is needed.

### Romantic Relationships and Body Image

Emerging research suggests links between adolescents' development of romantic relationships, weight status, and body image (Markey and Markey 2009). For example, some research suggests that adolescent girls who are in romantic relationships may be more likely to try to change their bodies via dieting than are their peers who are not in relationships (Halpern et al. 2005). Perceived pressure to be thin from romantic partners has also been associated with body dissatisfaction and disordered eating across time (Shoemaker, personal communication, August 5, 2009). Once in romantic relationships, young men's and women's own body satisfaction has been found to be correlated with their perceptions of their romantic partners' satisfaction with their bodies (Goins and Markey 2009; Markey and Markey 2006). Tantleff-Dunn and Thompson (1995) go as far as to suggest that romantic partners may not only shape body image, but may influence individuals' vulnerability to disordered eating and their general psychological health. However, some research (e.g., see Markey et al. 2004) hints that romantic relationships may serve a positive role in the development of body image, provided romantic partners communicate supportively about these issues. Future research that addresses the development of body image as a factor in the initiation of romantic relationships and romantic relationships as potential contributors to body image is needed.

### Obesity, Eating Disorders, and Body Image

In addition to the nonclinical correlates of body dissatisfaction, consequences of body dissatisfaction includes life-threatening health problems. In particular, obesity is described as a growing "epidemic" that has been linked with body dissatisfaction (Centers for Disease Control and Prevention 2009; World Health Organization 2009). Research seems to clearly suggest that body dissatisfaction and weight concerns are forerunners to dieting and other body-change strategies (Lowe et al. 2006; Markey and Markey 2005; Stice et al. 1999; Tomiyama and Mann 2008). However, the efficacy of most weight-loss approaches is highly questionable, with weight gain being a likely outcome of most attempts to lose weight (Polivy and Herman 2002; Stice et al. 1999). Consistent with these findings is additional research indicating that self-restriction and external attempts to control food intake tend to result in increased food consumption, binge eating, and

higher weight status (see Polivy and Herman 2002, for a review). Thus, it appears that body dissatisfaction and related attempts at weight loss may ultimately contribute to obesity (Markey and Markey 2009).

In addition to links between body image and obesity, research has established links between body dissatisfaction and disordered eating. Body dissatisfaction has been found to consistently predict disordered and maladaptive eating behaviors as well as other psychological problems (e.g., clinical eating disorders, depression) among girls (Smolak 2004; Stice and Bearman 2001; Stice and Shaw 2002). In fact, Stice's meta-analysis (2002) suggests that body dissatisfaction is one of the most significant predictors of disordered eating. Among boys, body image concerns appear to be concurrently associated with dieting, weight loss strategies, low self-esteem, depression, eating disorders, and the adoption of maladaptive body change strategies (e.g., steroid use; see Cafri et al. 2005; McCabe and Ricciardelli 2004). Although less common than obesity (<6% of adolescents are affected), eating disorders represent a significant threat to adolescents' health and are often referred to as the most deadly of all psychiatric disorders (Hudson et al. 2007). Even though obesity and eating disorders are typically viewed as the terrain of clinical psychologists, collaborations with developmental psychologists may enhance our ability to understand the complex factors contributing to these problems and the inevitably even more complex solutions needed to prevent and treat them.

### Conclusion

The above research suggests that body image is related to many issues that psychologists regard as critical to development: puberty, identity, family, peer, and romantic relationships. Significant health concerns, including obesity and eating disorders, are associated with body dissatisfaction. Further, the large number of girls (24–90%) and boys (10–75%)<sup>1</sup> affected by body dissatisfaction makes it essential that developmental psychologists direct their attention to this area of research (Collins 1991; Jones, personal communication, July 16, 2009; Ericksen et al. 2003; McCabe and Ricciardelli 2004; Neumark-Sztainer et al. 2002; Presnell et al. 2004).

Body image is an important construct for researchers (as well as health care providers and laypersons) to consider even if they are not necessarily concerned with the clinical ramifications of body dissatisfaction. Developmental

<sup>1</sup> Percents are presented as a range because different studies report different percents of boys and girls who are dissatisfied with their bodies. The discrepancies are most likely due to measurement issues.

psychologists are uniquely suited to study body image because of their training and research in topics that overlap with, are correlated with, or represent causes or consequences of body image. In particular, longitudinal research that helps to clarify factors that could help improve adolescent girls' and boys' body image should contribute significantly to researchers,' clinicians,' and laypersons' goals of helping young people grow up to become happy and well-adjusted men and women.

## References

- Ackard, D. M., & Peterson, C. B. (2001). Association between puberty and disordered eating, body image, and other psychological variables. *International Journal of Eating Disorders*, 29(2), 187–194.
- Archibald, A. B., Graber, J. A., & Brooks-Gunn, J. (2003). Pubertal processes and physiological growth in adolescence. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 24–47). Malden, MA: Blackwell Publishing.
- Babio, N., Arija, V., Sancho, C., & Canals, J. (2008). Factors associated with body dissatisfaction in non-clinical adolescents at risk of eating disorders. *Journal of Public Health*, 16, 107–115.
- Bearman, S. K., Presnell, K., Martinez, E., & Stice, E. (2006). The skinny on body dissatisfaction: A longitudinal study of adolescent girls and boys. *Journal of Youth and Adolescence*, 35, 229–241.
- Benedikt, R., Wertheim, E. H., & Love, A. (1998). Eating attitudes and weight-loss attempts in female adolescents and their mothers. *Journal of Youth and Adolescence*, 27(1), 43–57.
- Cafri, G., Thompson, J. K., Ricciardelli, L. A., McCabe, M. P., Smolak, L., & Yesalis, C. (2005). Pursuit of the muscular ideal: Physical and psychological consequences and putative risk factors. *Clinical Psychology Review*, 25, 215–239.
- Centers for Disease Control and Prevention. (2009). *Obesity among U.S. adults continues to rise: Obesity prevalence 25 percent or higher in 32 states*. Retrieved July 14, 2009, from <http://www.cdc.gov/media/pressrel/2009/r090708.html>.
- Clark, L., & Tiggemann, M. (2006). Appearance culture in nine-to-12-year-old girls: Media and peer influences on body dissatisfaction. *Social Development*, 15(4), 628–643.
- Collins, M. E. (1991). Body figure perceptions and preferences among preadolescent children. *International Journal of Eating Disorders*, 10, 199–208.
- Davison, K. K., & Birch, L. L. (2002). Processes linking weight status and self-concept among girls from ages 5 to 7 years. *Developmental Psychology*, 38(5), 735–748.
- Eisenberg, M. E., Neumark-Sztainer, D., Haines, J., & Wall, M. (2006). Weight-teasing and emotional well-being in adolescents: Longitudinal findings from project EAT. *Journal of Adolescent Health*, 38(6), 675–683.
- Ericksen, A. J., Markey, C. N., & Tinsley, B. J. (2003). Familial influences on Mexican American and Euro-American preadolescent boys' and girls' body dissatisfaction. *Eating Behaviors*, 4, 245–255.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Frost, J., & McKelvie, S. (2004). Self-esteem and body satisfaction in male and female elementary school, high school, and university students. *Sex Roles*, 51, 45–54.
- Goins, L., & Markey, C. N. (2009). *Understanding men's body image in the context of romantic relationships*. Manuscript under review.
- Haines, J., Neumark-Sztainer, D., Hannan, P., & Robinson-O'Brien, R. (2008). Child versus parent report of parental influences on children's weight-related attitudes and behaviors. *Journal of Pediatric Psychology*, 33(7), 783–788.
- Halpern, C. T., King, R. B., Oslak, S. G., & Udry, J. R. (2005). Body mass index, dieting, romance, and sexual activity in adolescent girls: Relationships over time. *Journal of Research on Adolescence*, 15(4), 535–559.
- Harter, S. (1988). *Self-perception profile for adolescents*. Denver: Denver University Press.
- Harter, S. (2001). On the importance of importance ratings in understanding adolescents' self-esteem: Beyond statistical parsimony. In R. J. Riding & S. G. Rayner (Eds.), *Self perception: International perspectives on individual differences* (Vol. 2, pp. 3–23). Westport, CT: Ablex.
- Harter, S. (2003). The development of self-representations during childhood and adolescence. In M. R. Leary & J. P. Tagney (Eds.), *Handbook of self and identity* (pp. 610–642). New York, NY: Guilford Press.
- Hudson, J. I., Hiripi, E., Harrison, P., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the National comorbidity survey replication. *Biological Psychiatry*, 61(3), 348–358.
- Jones, D. C., & Crawford, J. K. (2006). The peer appearance culture during adolescence: Gender and body mass variations. *Journal of Youth and Adolescence*, 35(2), 257–269.
- Lowe, M. R., Annunziato, R. A., Markowitz, J. T., Didie, E., Bellace, D. L., Riddell, L., et al. (2006). Multiple types of dieting prospectively predict weight gain during the freshman year of college. *Appetite*, 47(1), 83–90.
- Markey, C. N., & Markey, P. M. (2005). Relations between body image and dieting behaviors: An exploration of gender differences. *Sex Roles: A Journal of Research*, 53, 519–530.
- Markey, C. N., & Markey, P. M. (2006). Romantic relationships and body satisfaction among young women. *Journal of Youth and Adolescence*, 35, 256–264.
- Markey, C. N. & Markey, P. M. (2009). Body image. In R. Levesque (Ed.), *Encyclopedia of Adolescence*. Manuscript submitted.
- Markey, C. N., Markey, P. M., & Birch, L. L. (2004). Understanding women's body satisfaction: The role of husbands. *Sex Roles: A Journal of Research*, 51, 209–216.
- McCabe, M. P., & Ricciardelli, L. A. (2003). Sociocultural influences on body image and body changes among adolescent boys and girls. *Journal of Social Psychology*, 143(1), 5–26.
- McCabe, M. P., & Ricciardelli, L. A. (2004). Body image dissatisfaction among males across the lifespan: A review of past literature. *Journal of Psychosomatic Research*, 56, 675–685.
- Neumark-Sztainer, D., Story, M., Hannan, P. J., Perry, C., & Irving, L. M. (2002). Weight-related concerns and behaviors among overweight and non-overweight adolescents: Implications for preventing weight-related disorders. *Archives of Pediatric and Adolescent Medicine*, 156, 171–178.
- O'Dea, J. A., & Abraham, S. (1999). Onset of disordered eating attitudes and behaviors in early adolescence: Interplay of pubertal status, gender, weight, and age. *Adolescence*, 34(136), 671–679.
- Polivy, J., & Herman, C. P. (2002). If at first you don't succeed: False hopes of self-change. *American Psychologist*, 57(9), 677–689.
- Presnell, K., Bearman, S. K., & Stice, E. (2004). Risk factors for body dissatisfaction in adolescent boys and girls: A prospective study. *International Journal of Eating Disorders*, 36, 389–401.
- Ricciardelli, L. A., & McCabe, M. P. (2003). Longitudinal analysis of the role of biopsychosocial factors in predicting body change strategies among adolescent boys. *Sex Roles*, 48(7–8), 349–359.

- Rosenblum, G. D., & Lewis, M. (1999). The relations between body image, physical attractiveness, and body mass in adolescence. *Child Development, 70*, 50–64.
- Smolak, L. (2004). Body image in children and adolescents: Where do we go from here? *Body Image, 1*, 15–28.
- Steinberg, L. (1987). The impact of puberty on family relations: Effects of pubertal status and pubertal timing. *Developmental Psychology, 22*, 433–439.
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*(5), 825–848.
- 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*, 597–607.
- Stice, E., Cameron, R. P., Killen, J. D., Hayward, C., & Taylor, C. B. (1999). Naturalistic weight-reduction efforts prospectively predict growth in relative weight and onset of obesity among female adolescents. *Journal of Consulting and Clinical Psychology, 67*(6), 967–974.
- 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*, 985–993.
- Tantleff-Dunn, S., & Thompson, J. K. (1995). Romantic partners and body image disturbance: Further evidence for the role of perceived-actual disparities. *Sex Roles, 33*(9–10), 589–605.
- Tomiyama, A. J., & Mann, T. (2008). Focusing on weight is not the answer to America's obesity. *Epidemic American Psychologist, 63*, 203–204.
- Wertheim, E. H., Mee, V., & Paxton, S. J. (1999). Relationships among adolescent girls' eating behaviors and their parents' weight-related attitudes and behaviors. *Sex Roles, 41*, 169–187.
- Warren, M. P. (1983). Physical and biological aspects of puberty. In J. Brooks-Gunn & A. C. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives* (pp. 3–28). New York: Plenum.
- World Health Organization (2009) Global strategy on diet, physical activity and health: Obesity and overweight. Retrieved July 15, 2009, from <http://www.who.int/dietphysicalactivity/publications/facts/obesity/en/>.

### Author Biography

**Charlotte N. Markey** is an Associate Professor in the Department of Psychology at Rutgers University. Her research addresses social and personality influences on health with an emphasis on romantic relationship influences on eating behaviors and body image.