Body Image

Body dissatisfaction and adolescent self-esteem: Prospective findings

Marika Tiggemann *

School of Psychology, Flinders University, GPO Box 2100, Adelaide, SA 5001, Australia

Abstract

The aim of the study was to investigate prospectively the direction of the relationship between adolescent girls' body dissatisfaction and self-esteem. Participants were 242 female high school students who completed questionnaires at two points in time, separated by 2 years. The questionnaire contained measures of weight (BMI), body dissatisfaction (perceived overweight, figure dissatisfaction, weight satisfaction) and self-esteem. Initial body dissatisfaction predicted self-esteem at Time 1 and Time 2, and initial self-esteem predicted body dissatisfaction at Time 1 and Time 2. However, linear panel analysis (regression analyses controlling for Time 1 variables) found that aspects of Time 1 weight and body dissatisfaction predicted change in self-esteem, but not vice versa. It was concluded that young girls with heavier actual weight and perceptions of being overweight were particularly vulnerable to developing low self-esteem.

Introduction

There is a large amount of evidence that many women and girls in Western societies experience considerable dissatisfaction with their body size and shape, with a particular wish to be thinner. Two decades ago, Rodin, Silberstein, and Striegel-Moore (1985) characterized weight as "a normative discontent" for females in our society, and this continues to be the case. The present study focuses on the potential consequences of such negative body evaluation for global views of self-worth.

* Tel.: +61 8 8201 2482; fax: +61 8 8201 3877.
  E-mail address: Marika.Tiggemann@flinders.edu.au.

Self-concept theories in the Jamesian tradition (James, 1890) propose that dissatisfaction in a particular domain will have an impact on overall global self-esteem to the extent that the domain is central to the individual's self-definition. For example, Crocker's (e.g., Crocker, Luhtanen, Cooper, & Bouvrette, 2003) Contingencies of Self-Worth theory proposes a number of specific sources of self-esteem, including appearance. Although physical self-concept is an important component of self-concept and identity for everyone, the greater importance of weight and appearance for women (Rodin et al., 1985) leads to the prediction that a woman's satisfaction with her body will impact on her global self-esteem to a much greater extent than for men (who can more readily receive self-esteem from other

sources, e.g., money, status). Such a gender difference in the size of the negative correlation between body satisfaction and self-esteem has generally been supported in young adults (e.g., Mintz & Betz, 1986; Wade & Cooper, 1999), and adolescents (e.g., Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001), but not always (McCaulay, Mintz, & Glenn, 1988; Tiggemann, 1992). A related meta-analysis by Miller and Downey (1999) concluded that there was a moderate relationship ($r = -0.18$, $d = -0.36$) between weight and self-esteem, with lower self-esteem associated with heavier weight. Effect sizes were significantly larger for self-perceived overweight than for actual weight, for women than for men, and for high school and college students than for children.

Issues of self-worth become particularly salient in adolescence when the major developmental task is the establishment of identity and a coherent sense of self (Erikson, 1968). Thus self-awareness, self-consciousness and introspectiveness all dramatically increase. Harter (1998) describes adolescents as ''morbidly preoccupied with how they appear in the eyes of others'' (p. 573). This preoccupation with self-image includes an enormous focus on external physical appearance, particularly for adolescent girls. Unfortunately, the developmental changes associated with puberty tend to move girls further away from rather than closer toward the current societally prescribed thin beauty ideal. Adolescence is also the time when there is a notable dip in self-esteem, more pronounced among girls than boys (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002), suggested by some authors to be a function of these appearance concerns.

However, the causal direction of the relationship between body dissatisfaction and low self-esteem needs clarification. On the one hand, self-discrepancy theories that conceptualize global self-esteem as a composite of the various domains central to an individual (the reasoning outlined above) clearly stipulate that the direction of the link goes from body dissatisfaction to self-esteem. On the other hand, etiological theories of the development of poor body image and eating disorders often model low self-esteem as a precursor, either directly (e.g., Button, 1990), mediated by other variables (e.g., overvalued ideas about body weight and shape; Fairburn & Cooper, 1989), or in interaction with other variables (e.g., perfectionism; Vohs, Bardone, Joiner, Abramson, & Heatherton, 1999). One require-

ment for causality is temporal precedence, whereby the putative cause must precede the putative effect in time (Menard, 1991). Thus only longitudinal studies that assess both body dissatisfaction and self-esteem over time can begin to resolve the causal direction with any confidence.

Although a number of studies have found initial self-esteem to predict later eating concerns and disorder problems (e.g., Button, Sonuga-Barke, Davies, & Thompson, 1996), this does not provide an adequate test for temporal precedence. Temporal precedence is established when a variable predicts subsequent increase in another variable, controlling for initial levels of the outcome variable (Stice, 2002). It is critically important for longitudinal analyses to control for initial levels of the outcome, for otherwise cross-lagged (across time) correlations may simply reflect synchronous (within time) correlations. In this vein, Stice's (2002) recent meta-analytic review of risk factors for eating pathology did not nominate low self-esteem as a risk factor, but commented more generally that half the reviewed studies did not properly test for temporal precedence.

In sum, the present study sought to utilize the capabilities of a longitudinal research design to articulate more precisely the temporal relationship between adolescent body dissatisfaction and self-esteem. Self-discrepancy theories of self-esteem predict that body dissatisfaction will be temporally antecedent to self-esteem, while several etiological models of disordered eating predict the reverse temporal sequence.

Method

Participants

Participants were 242 girls recruited from twelve high schools in South Australia. The girls were initially participants in a larger cross-sectional study of both boys and girls that investigated the role of television in adolescent body image (Tiggemann, 2005). A sub-sample of 391 girls who had been in Grades 8–10 at Time 1 were invited by letter to participate in a follow-up 2 years later (Time 2). Questionnaires were matched across time by individual ID code, resulting in 242 matched questionnaires