

Review article

Weight concerns among elementary school children: A review of prevention programs

Kate E. Holt, Lina A. Ricciardelli *

School of Psychology, Deakin University, Melbourne, Australia

Received 21 January 2007; received in revised form 4 January 2008; accepted 7 February 2008

Abstract

There is increasing evidence that children display high levels of weight and muscle concerns, which include body dissatisfaction and problem eating. In order to address these issues, researchers have designed and implemented prevention programs for this age group. Thirteen published studies were located and reviewed, with children aged 8–12 years from elementary schools, or equivalent. Overall, the programs were shown to be effective in improving children's knowledge at post-test and at follow-up assessments. However, there is limited evidence to show that the programs reduced or prevented body image concerns and/or problem eating. Too few studies have examined muscle concerns so no conclusions can yet be drawn about this domain. Limitations of the studies and suggestions for future prevention efforts are discussed.

© 2008 Elsevier Ltd. All rights reserved.

Keywords: Prevention; Children; Preadolescents; Programs; Weight and muscle concerns; Body image

Introduction

During the last decade there has been increasing evidence that elementary school children and younger display weight and muscle concerns (Davison, Markey, & Birch, 2000; Davison, Markey, & Birch, 2003; Grogan, 2007; Smolak & Levine, 2001a). These include: body dissatisfaction (Clark & Tiggemann, 2006; Dohnt & Tiggemann, 2005), dieting practices (Davison et al., 2003; Phares, Steinberg, & Thompson, 2004), exercise to lose weight (McCabe & Ricciardelli, 2005; McCabe, Ricciardelli, & Holt, 2005), preoccupation with food (Holt & Ricciardelli,

2002; Thomas, Ricciardelli, & Williams, 2000), binge eating (Field et al., 1999; McVey, Tweed, & Blackmore, 2004), and strategies to increase muscles (Holt & Ricciardelli, 2002; Murnen, Smolak, Mills, & Good, 2003). While weight and muscle concerns amongst children occur with lower frequency and severity than in adolescence and young adulthood, these behaviors and concerns have been identified as risk factors for the concurrent and later development of chronic health problems and eating disorders (Deckelbaum & Williams, 2001; O'Dea, 2007; Shisslak et al., 1998).

The focus of this review will be on children who are in elementary school (U.S.) or the equivalent in other countries (e.g., primary school in Australia and the UK). As argued by Smolak (1999) children in middle school are faced with different challenges from those in elementary school. One of these is the transition from being the oldest student in the school to the youngest

* Corresponding author at: School of Psychology, Deakin University, 221 Burwood Highway, Burwood, Victoria 3125, Australia.
Tel.: +61 3 9244 6866; fax: +61 3 9244 6858.

E-mail address: lina@deakin.edu.au (L.A. Ricciardelli).

(see Wardle & Watters, 2004 for the possible impact of this on girls' body image).

To date we have located four recent reviews which have included children. One review has only examined age differences very broadly; less than 15 years versus greater than 15 years (Stice & Shaw, 2004), and the researchers did not separate the effects for elementary, middle or high school. In another review, programs were classified according to whether they included "elementary", "middle", or "high" school students (Levine & Smolak, 2006). However, one of the elementary school programs was included in the middle school category (Baranowski & Hetherington's, 2001 study from the UK). In addition, we included the 2003 work by McVey et al. (McVey, Lieberman, Voorberg, Wardrope, & Blackmore, 2003a; McVey et al., 2003b), as these two studies included both elementary and middle schools, and two studies published after Levine and Smolak's (2006) review (Haines, Neumark-Sztainer, Perry, Hannan, & Levine, 2006; McCabe, Ricciardelli, & Salmon, 2006).^{1,2} The third recent review also included children but no age differences were examined (Fingeret, Warren, & Cepeda-Benito, 2006). Finally, Taylor (in press) only included recent studies, and combined elementary and middle school-based programs.

We located 13 published studies which have examined prevention programs with children aged 8–12 years from elementary (Canada, US) or primary schools (Australia, UK).³ All reviewed studies involved universal-selective or primary prevention research as none of the participants were identified as having an eating problem or as being "at risk" (see Levine & Smolak, 2006 for more details). The studies were located by searching the databases PsycINFO, MED-

LINE, and Current Contents for all previous years till 2007 (June). The reference sections of these articles were also examined to identify any additional published prevention initiatives.

Prevention programs

Programs designed to reduce and/or prevent body image concerns and problem eating attitudes and behaviors began in the late 1980s. Prevention programs were introduced in response to the increasing incidence rates of sub-clinical and clinical levels of eating disorders, and the difficulty in treating individuals with anorexia nervosa or bulimia (Levine & Smolak, 2001; Neumark-Sztainer, Butler, & Palti, 1995). Only a small number of programs have been found to be successful at reducing or preventing weight and shape concerns among adolescents and adults (see reviews: Fingeret et al., 2006; Levine & Smolak, 2001; Levine & Smolak, 2006; O'Dea, 2007; Paxton, 2002a, 2002b; Stice & Hoffman, 2004; Stice & Shaw, 2004; Taylor, in press). Some researchers have argued that programs which target children are more likely to be effective than programs that target adolescents, as by adolescence many attitudes and behaviors have become entrenched so they may be more difficult to modify (Irving, 2000; Neumark-Sztainer, Sherwood, Collier, & Hannan, 2000; Smolak, Levine, & Schermer, 1998a; Smolak, Levine, & Schermer, 1998b; cf. Stice & Shaw, 2004). In addition, children's weight and shape concerns are often viewed to be more malleable and amenable to change (McCabe et al., 2006).

Program content and approach

A summary of the located published studies, which have examined prevention programs with elementary children, is given in Tables 1 and 2. The aims of the programs range from promoting healthy eating, exercise and/or a positive body image to prevent attitudes and behaviors associated with problem eating. As there is not a well-agreed upon standard way to classify prevention programs in this field, we classified the programs according to the six categories used by Stice and Shaw (2004), and the five categories used by Levine and Smolak (2006). Although the categories used by Stice and Shaw are not orthogonal, they provide an informative way of summarizing the program content: psychoeducational (e.g., increasing children's knowledge in nutrition), sociocultural resistance skills (e.g., critical thinking about mass media), healthy weight-control skills (e.g., teaching healthy weight-

¹ The other studies by McVey et al. (McVey & Davis, 2002; McVey et al., 2004a, 2004b; McVey, Tweed, & Blackmore, 2007) were not included in this review as these included only middle school or "senior elementary" girls (G. McVey, personal communication, July 17, 2007). It is not always easy to distinguish elementary from middle schools when one is comparing findings across different countries and sometimes the schooling system varies even within the same country (e.g., Canada; G. McVey, personal communication, July 17, 2007; also see Wardle and Watters, 2004 for differences in the UK).

² Another important developmental marker is puberty. However, very few studies with children as young as 12 years assess pubertal development and/or timing, and this is more difficult to assess with boys (Ricciardelli & McCabe, 2004). However, future studies need to address this limitation, as it is may be an important mediator or moderator (Ricciardelli & McCabe, 2004).

³ Levine and Smolak (2006) also included three unpublished studies.

Download English Version:

<https://daneshyari.com/en/article/903351>

Download Persian Version:

<https://daneshyari.com/article/903351>

[Daneshyari.com](https://daneshyari.com)