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Parenting to prevent body dissatisfaction and unhealthy eating patterns in preschool children: A Delphi consensus study

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ABSTRACT

Interventions to prevent body dissatisfaction and unhealthy eating patterns are needed in early childhood. Identifying effective parenting strategies would be useful for parents and prevention researchers. To develop expert consensus, an online Delphi study was conducted with experts ($N = 28$, $M_{age} = 44.34$) who rated statements describing potential parenting strategies gleaned from a systematic literature search. If 90–100% rated a statement as either *Essential* or *Important*, it was endorsed as a guideline. From a total of 335 statements 153 were endorsed. Despite some areas of disagreement, including whether parents should weigh their child or discourage weighing, experts were able to reach consensus on a wide range of issues, such as how to discuss healthy eating with children. The developed guidelines provide a novel and required resource for parents, and a framework for researchers developing interventions to prevent the onset of body dissatisfaction and unhealthy eating patterns in early childhood.

Introduction

As the foundations for body image and eating patterns appear to be laid in early childhood, it is important that prevention efforts in body dissatisfaction and unhealthy eating, target preschool children. By the end of the preschool years, at age 6, children have started to develop their *body image*; that is, their subjective evaluation of their physical body and appearance (Smolak & Thompson, 2009a, 2009b). Research suggests that three- to five-year-old children internalize body size stereotypes, associating positive characteristics with thin body figures and negative characteristics with fatter figures (Holub, 2008; Spiel, Paxton, & Yager, 2012). Young children have also been found to show behaviors consistent with body dissatisfaction, such as body checking and negative comments about their appearance (Tremblay & Limbos, 2009). In adolescence, body dissatisfaction has been linked to the development of a range of poor health outcomes, including higher depressive symptoms, lower self-esteem, lower physical activity, and greater risk of disordered eating and clinical eating disorders (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Stice & Shaw, 2002).

By age 6, children have also developed consistent *eating patterns*. Eating patterns may be defined as the broad contexts and components of food consumption, including: meal timing, frequency, and environment (e.g., family, school, restaurant or take-away meals), as well as portion sizes and dietary quality (e.g., intake of fruit, vegetables and energy density) (Nicklas, Baranowski, Cullen, & Berenson, 2001). However, a more inclusive definition also involves attitudes toward food and nutrition (Margetts, Thompson, Speller, & McVey, 1998). Eating patterns can therefore be thought of as eating *behaviors*, such as portion size and dietary quality, but also eating *attitudes* that influence what, when, and how much is eaten. We use the term *unhealthy eating patterns* to refer to eating behaviors and attitudes in children that have been associated with poor health outcomes. These include, for example, emotional eating to soothe negative affect, disordered eating including binge eating or dieting for weight loss, and negative attitudes to food, such as fear of fatty or 'unhealthy foods'. Research suggests that unhealthy eating patterns occur from early childhood; an American study found 14% of five-year-olds reported dieting behaviors (Holub et al., 2005), and in Australia, clinical eating disorders, such as anorexia nervosa, have been found in children as young as five (Madden, Morris, Zurynski, Kohn, & Elliot, 2009). Importantly, unhealthy eating patterns not only impact on child health, they are also important

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determinants of adult health outcomes over the longer term (Dietz, 1998; Kotler, Cohen, Davies, Pine, & Walsh, 2001).

As body image and unhealthy eating patterns have their foundations in the early childhood years, prevention work needs to target this formative developmental period. In recent years there has been an increase in nutrition-based prevention programs for children to arrest unhealthy weight gain (Waters et al., 2011). However, there has also been a concomitant increase in concern about the iatrogenic effects of anti-obesity programs. Anti-obesity programs often narrowly focus on Body Mass Index as a primary outcome, without consideration of the impact on child body image or eating attitudes (Ikeda, Crawford, & Woodward-Lopez, 2006; O'Dea, 2005). Importantly, there is a promising and emerging literature focusing on the prevention of eating problems at both ends of the weight spectrum, through the reduction of shared risk factors for bulimia nervosa and obesity (Austin, Field, Wiecha, Peterson, & Gortmaker, 2005; Haines et al., 2012; Neumark-Sztainer, 2005). In addition, the role of body satisfaction in the maintenance of healthy weight is also increasingly noted and targeted in prevention programs (e.g., Stice, Trost, & Chase, 2003; Wilksch & Wade, 2013).

Although these prevention interventions have been developed to improve positive body image and healthy eating attitudes, they have largely focused on the school setting (Hart, Cornell, Damiano, & Paxton, in press; Waters et al., 2011), or older adolescents and young adults (e.g., Becker et al., 2010; Stice, Shaw, Burton, & Wade, 2006). Parents are also known to strongly influence the development of a wide range of risk and protective factors for body image and eating problems in their children (Fisher, Sinton, & Birch, 2009; Rodgers & Chabrol, 2009). Parents are salient role models who also communicate attitudes and display behaviors relating to body weight and shape. A review by Rodgers and Chabrol (2009) found that parental focus on the importance of appearance and weight can increase body shape and weight concerns among their children, and that this effect is particularly strong when parents directly criticize their child, or actively encourage them to lose weight. As parents provide both the genes and the environment for their child's eating patterns, parents play a powerful role in shaping their development (Savage, Fisher, & Birch, 2007). Child eating patterns can be influenced in utero through maternal diet, and are shaped in infancy and early childhood through parental modeling (Johannsen, Johannsen, & Specker, 2006; Rodgers & Chabrol, 2009; Savage et al., 2007), parental feeding practices (Birch & Fisher, 2000; Birch, Fisher, & Davison, 2003; Johannsen et al., 2006), parental comments (Smolak, Levine, & Schermer, 1999) and the family environment in which food is prepared and consumed (Birch, 1999; Wansink, 2004).

While there is an increasingly complex understanding of how parents influence the development of unhealthy body image and eating patterns in their children, there has not yet been a systematic attempt to identify reliable parenting strategies that could be used with young children to help prevent the onset of body dissatisfaction and unhealthy eating patterns. The delineation of safe and effective parenting strategies would create a foundation for prevention programs designed for parents of young children, which could be provided in the family rather than school setting. However, traditional research methods such as longitudinal observation and experimental designs are sparse and difficult to achieve in this area, because of the very large sample sizes needed and the complexity of the multitudinous parenting and environmental variables impacting on child body image and eating patterns (Rodgers & Chabrol, 2009). In addition, although the academic literature provides an understanding of the risk factors associated with the development of body dissatisfaction and unhealthy eating patterns, a systematic review is unlikely to provide guidance for parents, as public health commentators have noted the dearth of experimental data being translated into practical strategies and resources useful for parenting (Hart, Damiano, Cornell, & Paxton, (2014); Schwartz, Scholtens, Lalanne, Weenen, & Nicklaus, 2011).

An alternative approach to identifying parenting strategies is to use clinical and research expertise to develop consensus guidelines. The Delphi consensus method is a mixed qualitative and quantitative research framework for gathering expert opinion (Hasson, Keeney, & McKenna, 2000; Linstone & Turoff, 1975), which has been used widely in public mental health over the last decade, and in particular, to develop guidelines for parents on the prevention of alcohol misuse (Ryan et al., 2011), and depression and anxiety disorders (Yap, Pilkington, Ryan, Kelly, & Jorm, 2014). These guidelines have not only been used as an accessible resource for parents, they have also been used as a framework to develop more complex intervention resources for population-level prevention interventions (Jorm & Kitchener, 2011; Yap et al., 2011). The aim of the current study was therefore to develop guidelines for parents to prevent body dissatisfaction and unhealthy eating patterns in preschool children, by using the Delphi method for establishing expert consensus.

Method

Participants

Experts involved in treatment, research, or education in the fields of body image, eating disorders, or parenting were invited to participate on the expert panel. Expertise was determined through authoring relevant books or scientific papers, or membership in key professional or advocacy groups (e.g., member of Academy for Eating Disorders, Body Image and Prevention Special Interest Group). Experts were recruited via an emailed invitation to participate accompanied by an information sheet about the study. Participants were recruited from Australia, Canada, Ireland, the United Kingdom, and the United States. The current study aimed to recruit 30 expert participants to allow a large enough sample for stable results while allowing for some panel attrition across survey rounds (Akins, Tolson, & Cole, 2005; Hasson et al., 2000; Keeney, Hasson, & McKenna, 2001). A sample size of as few as 23 expert participants has been found to provide reliable decision-making (Akins et al., 2005).

Measures

A systematic search (Gough, Oliver, & Thomas, 2012) of resources available to parents (e.g., websites and books) was conducted to collect statements about how parents can help prevent body dissatisfaction and eating problems. This involved entering key search terms (parent, prevention, shape dissatisfaction; parent, prevention, eating disorders) into three search engines (Google.com, Google.co.uk, and Google.com.au). The first 20 sites for each set of search terms were examined. Any links appearing on these websites, which the authors thought may contain useful information, were followed. Relevant books, such as publications by expert authors with membership to relevant professional bodies, were located via website recommendations or references. The aim of the search was to collect statements that could be presented to the expert panel members for rating. The information gleaned from the search was used to develop the first round questionnaire.

To do this, one researcher extracted any statement from website or book text that represented a potential parenting strategy. Each novel idea uncovered was included, irrespective of the authors' opinions on relevance or effectiveness. Statements were noted, along with their source, in a structured data extraction template. Three researchers then performed a content analysis on