Appetite 76 (2014) 23–29

Contents lists available at ScienceDirect

Appetite

journal homepage: www.elsevier.com/locate/appet

Research report

The role of parental control and modelling in predicting a child's diet and relationship with food after they leave home. A prospective study

Emma Dickens, Jane Ogden *

School of Psychology, University of Surrey, Guildford, Surrey GU2 7XH, UK

ARTICLE INFO

Article history:
Received 14 November 2013
Received in revised form 10 January 2014
Accepted 18 January 2014
Available online 27 January 2014

Keywords:
Diet
Eating behaviour
Control
Modelling
Independence

ABSTRACT

Research indicates that parental control and parental modelling are key factors in shaping a child's eating behaviour. To date, however, little is known about how these factors influence a child's diet once they have left home. This prospective study evaluated the extent to which a parent's own behaviour and their use of control over food whilst their child was still living at home predicted their child's relationship with food once they had begun to live independently. Parent/child dyads ($n = 93$) took part in the study. Parents completed baseline measures of parental control practices (overt control, covert control and pressure to eat), their own diet (unhealthy snacks, unhealthy meals, healthy foods) and eating behaviours (emotional, uncontrolled and restrained eating). At one year follow up, once their child had left home, the child completed measures of their own diet and eating behaviours. The results showed a clear role for modelling with concordance between a child's intake of unhealthy snacks and emotional eating and their parents' own reports of these behaviours. Furthermore, the child's intake of healthy foods was also predicted by their parent's behaviour although there was both concordance and discordance between parents and their children. No role for parental control was found for any measure of diet or eating behaviour. It is concluded that a parent's own behaviour rather than parental control has a stronger longer lasting influence once a child has left home and that although this mostly involves a child copying their parent's behaviour (action) at times it also involves the opposite (reaction).

Introduction

Over the past forty years there has been an increased prevalence of diet related problems in children in the Western world including childhood obesity and eating disorders (Chinn & Rona, 2001). Evidence also indicates that dietary habits acquired in childhood persist through to adulthood (Kelder, Perry, Klepp, & Lytle, 1994; Nicklas 1995) and that childhood nutrition relates to adult health (e.g. Berenson et al., 1998). Research has therefore addressed the problem of children's eating behaviour and has highlighted a number of key factors including the obesogenic environment, peer pressure, bullying, schools and the child's own tastes and preferences (Lindsay, Sussner, Kim, & Gortmaker, 2006). One area that has received particular interest is the impact of the parent's own behaviour with a focus on modelling and parental control.

Modelling describes how human behaviour is learned through observation and vicarious reinforcement and much research suggests that parents act as clear role models for their children (Bandura, 1977). For example, Olivera et al. (1992) reported a correlation between mothers' and children's food intakes for most nutrients in pre-school children, and suggested targeting parents to try to improve children's diets. Likewise, Contento et al. (1993) found a relationship between mothers' health motivation and the quality of children's diets. Moreover, longitudinal studies have revealed similar findings with parental intake of fruit, vegetables and dairy predicting young-adult intake five years later (Arcan et al., 2007; Vereecken, Haerens, De Bourdeaudhuij, & Maes, 2010). Research also indicates that children may not only model their parents' food intake but also their attitudes to food and their body dissatisfaction. For example, Hall and Brown (1982) reported that mothers of girls with anorexia show greater body dissatisfaction than mothers of non disordered girls, Steiger, Stotland, Ghadirian, and Whitehead (1994) found a direct correspondence between mothers' and daughters' levels of weight concern and Hill, Weaver, and Blundell (1990) reported a link between mothers' and daughters' degree of dietary restraint. Similarly, Brown and Ogden (2004) reported correlations between parents and children in terms of snack food intake, eating motivations and body dissatisfaction. Research therefore emphasises the role of modelling with a particular role for parental attitudes and behaviour.

* Corresponding author.
E-mail address: J.Ogden@surrey.ac.uk (J. Ogden).

http://dx.doi.org/10.1016/j.appet.2014.01.013
0195-6663/

Other studies have highlighted a role for parental control and one study revealed that parental restrictive rules were the most frequently reported style of food management in the homes of children aged 7–11 years (Hart, Bishop, & Truby, 2002). In addition, Casey and Rozin (1989) found that 40% of parents believed that restricting access to certain foods would decrease their child's preference for these foods. In line with this, control practices have been conceptualised into different constructs by different authors. For example, Birch and colleagues have carried out a number of studies exploring the impact of control and developed the Child Feeding Questionnaire which operationalised control in terms of monitoring, restriction and pressure to eat (Birch, Fisher, Grimm-Thomas, Sawyer, & Johnson, 2001). In a similar vein, Wardle, Sanderson, Guthrie, Rapoport, and Plomin (2002) categorised control in terms of providing food in response to a child's emotional distress, using food as a reward, applying pressure to eat or applying restrictions upon eating. In contrast, Ogden, Reynolds, and Smith (2006) focused on the restrictive aspects of parental feeding practices and categorised this into two main types of control termed covert and overt control. Covert control was defined as when the child is unaware of the restriction placed upon them, such as managing their environment through choosing not to buy unhealthy foods or only taking children to restaurants that sell healthy options, whereas overt control was defined as a form of control that the child is aware of.

Using these frameworks research has therefore explored the impact of parental control on a child's diet and several studies suggest that control can be problematic. For example, research has concluded that parental restriction is associated with weight gain and higher levels of body fat in children (Sprunijt-Metz, Lindquist, Birch, Fisher & Goran; 2002; Clark, Goyder, Bissell, Blank, & Peters, 2007). Similarly, studies indicate that restrictive feeding practices increase children's preference for the restricted food (Ogden et al., 2013) and promote overeating when restricted foods are freely available (Fisher & Birch, 1999; Fisher, Birch, Smiciklas-Wright, & Piocciano 2000). Furthermore, research has also shown that parental restriction may cause children to restrain their own eating which can paradoxically lead to uncontrolled eating (Erskine, 2007; Fedoroff, Polivy, & Herman, 1997). Likewise parental pressure has been associated with the development of dietary restraint and disinhibition (Carper, Fisher & Birch; 2000; van Strien & Bazelier, 2007) with possible explanations being that pressurising a child to eat may be autonomy-limiting (Lewis & Butterfield, 2005) which undermines self-regulation (Costanzo & Woody, 1985).

In contrast, however, some studies suggest that parental control may actually reduce weight and improve eating behaviour. For example, Wardle et al. (2002: 453) suggested that 'lack of control of food intake [rather than higher control] might contribute to the emergence of differences in weight'. Similarly, Brown and Ogden (2004) reported that greater parental control was associated with higher intakes of healthy snack foods and Ogden et al. (2006) concluded that whereas overt control was associated with an increased intake of healthy snacks, covert control was linked to a decrease in unhealthy snacks. Similar results were also found in another sample of parents with small children (Brown, Ogden, Vögele, & Gibson, 2008).

Research therefore shows that parental behaviour in the form of both modelling and parental control can impact upon their child's eating behaviour. To date, however, much of this research has been cross sectional in nature which limits conclusions about causality. Furthermore, given that children eventually leave home to become independent, little is known about the impact of a parent's behaviour whilst the child is still at home on the child once they have left.

Moving out of the family home to live independently is a major transition whereby the adolescent must learn to take responsibility for themselves in many areas, including their diet (Graber & Brooks-Gunn, 1996). Many young people, however, often lack the experience of shopping for, preparing and cooking their own food (Beasley, Hackett, & Maxwell, 2004) and moving out of home can represent the first time they take control of their diet (Colić Barić, Šatalić, & Lukešić, 2003). Thus, this transition can be a critical period in the development of food-related problems.

Some research has explored the impact of transitioning to independent living of aspects of a child's eating behaviour. At times, leaving home has been associated with improvements. For example, some research suggests that diets can improve once children leave home which may be because the child has more autonomy and can start to take responsibility for their diet (Beasley et al., 2004; Piggford, Raciti, Harker, & Harker, 2008). In contrast, however, leaving home has mostly been associated with a deterioration in a numbers of aspects of eating behaviour. For example, research indicates that going to university can result in weight gain (Racette, Deusinger, Strube, Highstein, & Deusinger, 2005), unhealthy dietary practices (Huang, Harris, Lee, Nazir, & Born, 2003; Papadaki, Hondros, Scott, & Kapsokefalou, 2007), binge-eating (Striegel-Moore, Silberstein, Frensch, & Roding, 1989) and other eating disorders (Smolak & Levine, 1996). Colić Barić and Šatalić (2002) also found that skipping breakfast was more common in students.

Research therefore shows that a child's diet is influenced by both modelling and parental control. Research also shows that many young's people's diets change once they leave home, often for the worse. Little is known however, about the role of parental modelling and control whilst a child is still living at home on their behaviour after they have left. In line with this, the present longitudinal study aimed to explore the longer term impact of both modelling (defined as the parent's own behaviour) and their level of parental control on their child's relationship with food one year after they had left to become independent. In particular, the study focused on diet in terms of which foods both parents and children consumed and eating behaviour in terms of their relationship with food operationalised in terms of restrained eating, emotional eating and uncontrolled eating. Based upon previous cross sectional research it was hypothesised that the parents' own behaviour (i.e. modelling) would predict their child's behaviour at follow up. Due to the conflicts in the existing literature concerning parental control no specific hypotheses were made concerning the links between parental control and child behaviour at follow up.

Method

Design

The study used a prospective design with parental data collected whilst the child lived at home and child data collected 12 months later after they had left home. Ethical approval was obtained from the University Ethics Committee.

Sample

A baseline questionnaire was given to 403 children aged 17–18 who were still living at home, from five different colleges in South East England to give to one of their parents to complete and return. They were instructed that the study was longitudinal and that the researcher would contact them a year later for the follow-up. Completed questionnaires were received from 203 parents (response rate = 54%). At follow-up, one year later, the children were re-contacted by email, of whom 118 responded (response rate = 58.1%).