Appetite 79 (2014) 51–57

Contents lists available at ScienceDirect

Appetite

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

Research report

Clarifying concepts of food parenting practices. A Delphi study with an application to snacking behavior ☆

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ARTICLE INFO

Article history:
Received 15 August 2013
Received in revised form 21 March 2014
Accepted 2 April 2014
Available online 13 April 2014

Keywords:
Food parenting practices
Snacking
Children
Delphi study

ABSTRACT

Inconsistencies in measurements of food parenting practices continue to exist. Fundamental to this problem is the lack of clarity about what is understood by different concepts of food parenting practices. The purpose of this study was to clarify food parenting practice concepts related to snacking. A three round Delphi study among an international group of experts (n = 63) was conducted. In the first round, an open-ended survey was used to collect food parenting practice descriptions and concept labels associated with those practices. In the second round, participants were asked to match up descriptions with the appropriate concept labels. The third and final round allowed participants to reconsider how descriptions and concept labels were matched, taking into account the opinions expressed in round two. Round one produced 408 descriptions of food parenting practices and 110 different concept names. Round two started with 116 descriptions of food parenting practices and 20 concept names. On 40 descriptions, consensus regarding the underlying concept name was reached in round two. Of the remaining 76 descriptions, consensus on 47 descriptions regarding the underlying concept name was reached in round three. The present study supports the essential process of consensus development with respect to food parenting practices concepts.

Introduction

Considerable attention has been paid to investigating parental influences on children's diets (Ventura & Birch, 2008), revealing that parents are pivotal in shaping children's dietary intake (Faith, Scanlon, Birch, Francis, & Sherry, 2004; Ventura & Birch, 2008). Parents create their children's physical and social environment, for example, by buying foods, by setting rules about foods, by encouraging or discouraging their children to eat certain kinds of foods, and by modeling the consumption of foods (Pinard et al., 2012). Many researchers have tried to capture these food parenting practices (FPPs) to study their impact on children's dietary intake, food preferences, eating styles, or anthropometric outcomes. The ultimate goal of such investigations is to inform interventions to promote healthy eating among children.

Many different instruments to assess FPPs have been used, among which the Child Feeding Questionnaire (CFQ; Birch et al., 2001) is predominant (Corsini, Danthiir, Kettler, & Wilson, 2008). Other popular and validated instruments include the Comprehensive Feeding Practices Questionnaire (CFPQ; Musher-Eizenman & Holub, 2007) and the Parental Feeding Style Questionnaire (PFSQ; Wardle, Sanderson, Guthrie, Rapoport, & Plomin, 2002). When comparing instruments to measure FPPs, several measurement inconsistencies can be noted. First, the names of FPP concepts differ between studies, while referring to the same concept (e.g. "food as a reward"; Musher-Eizenman & Holub, 2007 vs. "instrumental feeding"; Wardle et al., 2002). Second, the operationalization of similar concepts differs between studies, for example, pressure to eat has been operationalized as "if I did not guide or regulate my child's eating, she would eat much less than she should" (Birch et al., 2001), but also with the conceptually different item, "when he/she says he/she is finished eating, I try to get my child to eat one more (two more, etc.) bites of food" (Musher-Eizenman & Holub, 2007). Third, concepts differ in their level of specificity, both across and within studies. Restriction (e.g. Birch et al., 2001), for example, could be regarded as a concept at a general level while the concept of availability (e.g. Gattshall, Shoup, Marshall, Crane, & Estabrooks, 2008; Vereecken, Haerens, De Bourdeaudhuij, & Maes, 2010) may be regarded as one

☆ *Acknowledgments:* We are very grateful to the experts who participated in our study. Our appreciation is expressed to Ciska Hoving for reviewing the invitations and questionnaires for clarity. The authors declare that they have no competing interests.

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http://dx.doi.org/10.1016/j.appet.2014.04.002
0195-6663/

of the multiple ways to restrict a child's unhealthy food intake. Fourth, concepts are operationalized at different dimensions, in which some items reflect behaviors (e.g. "I intentionally keep some foods out of my child's reach"), while other items reflect beliefs (e.g. "I have to be sure that my child does not eat too many high-fat foods") (Corsini et al., 2008). Aside from these inconsistencies, many instruments have concentrated on a limited number of FPPs, most of which are controlling practices (Clark, Goyder, Bissell, Blank, & Peters, 2007). However, a wide range of FPPs seem to exist and FPPs related to concepts such as modeling, educating, and involving are often disregarded (Musher-Eizenman & Holub, 2007). An instrument measuring all potentially important FPPs is lacking.

Fundamental to these issues is the lack of clarity about the full range of FPPs and about what is understood by different FPP concepts. Therefore, initiatives aiming at reaching consensus on FPP concepts are required to solve the inconsistencies in conceptualization and operationalization of concepts (Vaughn, Tabak, Bryant, & Ward, 2013).

This study addresses the conceptualization of FPPs by consulting experts in the field of parenting. The focus of this study is on snacking-related FPPs, as a high intake of energy-dense snacks increases the risk of weight gain and obesity among children (World Health Organization, 2003). Furthermore, snack-related parent–child interactions are likely to occur on a daily basis and to involve a wide range of parenting behaviors (Brown & Ogden, 2004).

Methods

Overview

A three round Delphi study was conducted using an international group of experts and a series of online surveys. The Delphi method is considered to be an appropriate method when aiming at reaching consensus and when experts are located distantly (Adler & Ziglio, 1996). In addition, this method usually starts from a blank slate, without directing or narrowing the focus of the experts to frequently utilized concepts and thereby creating a wider perspective compared with a review of instruments. The standard characteristics of the Delphi method (e.g. iterative process, anonymity of participants, feedback of group responses, and opportunity to reconsider individual opinion) were respected (Landeta, 2006). The focus in the current study was on snacking as child feeding in general would generate a greater number of nonspecific, more global descriptions of food parenting behaviors.

In the first round of the current study, an open-ended survey was used to collect FPP descriptions and concept labels associated with those practices. For this study, snacking-related FPPs were defined as follows: "any behavior of parents which may promote or inhibit the snack intake of their child (between 4 and 12 years old). Parents may engage in parenting practices with or without the explicit aim to influence the snack intake of their children." Snacks were defined as follows (Netherlands Nutrition Centre, 2011): "all savory products, sweet products, and ice creams that are meant to be consumed between meals." These "in-between" products were also considered to be snacks when consumed during meals. After round one, these responses were summarized. In the second round, experts were asked to match up descriptions with the appropriate concept labels. The third and final round allowed experts to reconsider how descriptions and concept labels were matched, taking into account the opinions expressed in the previous round. All three questionnaires were pretested among a small sample of scientists in the field of Health Promotion.

Procedures and participants

Participants in this study represented an international group of experts in the fields of parenting styles and/or parenting practices related to nutrition and/or physical activity. In preparation for the first round, 20 experts were identified through a search in Medline and an additional 75 experts were identified from a *preliminary* list of attendees to the International Society for Behavioral Nutrition and Physical Activity (ISBNPA) preconference on "Parenting measurement: Current status and consensus reports" (held in Houston, TX May 2012; Baranowski et al., 2013). In April 2012, these 95 experts were invited by e-mail to participate in the study. The same experts were also invited for the second round in September 2012, complemented with additional 25 experts identified from the *final* list of attendees to the ISBNPA preconference and eight experts named by second round experts (128 in total). Experts in the second round were invited to participate in the third round in November 2012 (n = 53). Nonresponders received up to two reminder e-mail messages in each round.

First round questionnaire and data-analysis

At the outset of the first round questionnaire, participants were given the aim of the study, which was "to gain insight into specific FPPs which may promote or inhibit the snack intake of children between 4 and 12 years old". Then, experts were asked to write down descriptions of snacking-related FPPs and, subsequently, the names of the concepts they would use to label these practices (one or two words which covered the content of the description). Experts were allowed to provide more than one concept name for each description. The definitions of snacking related FPPs and snacks and four example descriptions of snack parenting practices (e.g. "consuming snacks in the presence of the child"), five example concept names (e.g. availability) and eight example snacks (e.g. biscuits, sweets) were included in the survey instructions.

Three questions were asked to assess the participants' expertise: "is the study on parenting practices one of your primary focus areas of research?" (yes, no); "for which health behavior(s) have you ever studied parenting practices?" (e.g. nutrition, smoking); and "what is your area of expertise?" (e.g. child nutrition, pediatrics). Experts could provide the names of other experts who, in their opinion, should participate, and in each round they were given the opportunity to write down comments.

In line with guidelines, the research team grouped similar descriptions together and provided one description for similar descriptions (Hasson, Keeney, & McKenna, 2000). A similar procedure was followed for the concept labels. No descriptions or concept labels were added or disregarded and the wording used by participants was maintained as much as possible. Descriptions which reflected similar underlying concepts such as phrases with opposite evaluative connotations (positive–negative) were combined. Specific moments (e.g. "when spending time with friends", "during sedentary activities") which were mentioned once in descriptions were removed and specific foods mentioned in sole descriptions were categorized to represent snacks, healthy foods, and foods. Specific foods and moments which were mentioned multiple times were maintained in these descriptions, since it may be relevant to distinguish foods from food groups and moments from descriptions without moments. The descriptions of the FPPs from round one were formulated at different levels of specificity, for example: "restricting snack consumption" vs. "storing snacks in such a way that the child cannot see them." The latter description is an example of a specific act (i.e. a way to restrict snack consumption). Only FPPs described as specific acts were included in the second round. All descriptions were rephrased to start with a verb.