

2005

Parents' inferences about other parents' motives for food choices for children: a pilot study

Sandra C. Jones

University of Wollongong, sandraj@uow.edu.au

D. McVie

University of Wollongong

G. Noble

University of Wollongong

Publication Details

This conference paper was originally published as Jones, SC, McVie, D and Noble, G, Parents' inferences about other parents' motives for food choices for children: a pilot study, in Purchase, S (ed), Proceedings for the ANZMAC Conference, University of Western Australia, 2005.

Parents' inferences about other parents' motives for food choices for children: a pilot study

Abstract

The traditional approach to improving children's diets has been to educate parents about the importance of healthy food choices. However, it is recognized that knowledge does not necessarily lead to improved food choices. This study used an indirect measure to investigate the underlying reasons for parents' decisions about their children's diets. We found a significant difference in parents' perceptions of a hypothetical mother on items that related directly to food choices. It appears from these results that parents do indeed make value judgments about the food choices that mothers make for their children. Our results suggest that indirect question techniques, such as those used in these studies, may be useful in determining the underlying reasons for parents' food choices for their children.

Disciplines

Arts and Humanities | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

This conference paper was originally published as Jones, SC, McVie, D and Noble, G, Parents' inferences about other parents' motives for food choices for children: a pilot study, in Purchase, S (ed), Proceedings for the ANZMAC Conference, University of Western Australia, 2005.

Parents' Inferences About Other Parents' Motives For Food Choices For Children: A Pilot Study

Sandra C. Jones, Danielle McVie and Gary Noble, University of Wollongong

Abstract

The traditional approach to improving children's diets has been to educate parents about the importance of healthy food choices. However, it is recognized that knowledge does not necessarily lead to improved food choices. This study used an indirect measure to investigate the underlying reasons for parents' decisions about their children's diets. We found a significant difference in parents' perceptions of a hypothetical mother on items that related directly to food choices. It appears from these results that parents do indeed make value judgments about the food choices that mothers make for their children. Our results suggest that indirect question techniques, such as those used in these studies, may be useful in determining the underlying reasons for parents' food choices for their children.

Introduction

Childhood obesity

It is estimated that 14 to 18 percent of Australian children are overweight and 5 to 6 percent obese (Booth et al., 2001). Overweight children are far more likely to become obese as adults (Variyam et al., 1999). Research shows that the majority of children consume insufficient amounts of fruit, vegetables, dietary fibre (Hampel, Taylor and Johnston, 1999), milk and meat products, zinc, folate, and vitamins D and E (Skinner et al., 1999); and exceed the recommended contribution of fat to energy consumption (Butriss 1995). There is considerable evidence that eating habits acquired during childhood carry over into adulthood (Contento et al., 1993; Nicklas, 1995; Steptoe, Sanderman and Wardle, 1995).

Parents' influence on children's eating behaviours

Campbell and Crawford (2001) reviewed the published literature and concluded that children's eating behaviours are strongly influenced by the family food environment. Factors that were found to be important in the family food environment were: parental food preferences and beliefs, children's food exposure, role modeling, media exposure and parent-child interactions surrounding food.

Direct influences: It is widely agreed that there is an element of control in parent-child interactions surrounding food. This can, broadly, be categorized as: (a) controls over food, whereby parents restrict their children's consumption of 'unhealthy' foods in order to improve their general health; and (b) controls using food, whereby parents utilize food rewards to encourage other non-nutrition related behaviours (such as tidying their room).

Indirect influences: Particularly for young children, parental attitudes influence children's nutrition through exposure to different types of foods and to parental food habits & preferences (Wardle, 1995). Parental food choice has been reported to be influenced by a number of factors such as mothers': beliefs about the healthfulness of foods (Contento et al., 1993), parenting style (Morton, Santich and Worsley, 1996), own consumption practices

(Vereecken, Keukelier and Maes, 2004), perceived environmental and social barriers (Hart, Bishop and Truby, 2002), social class (Hupkens et al., 1998) and nutrition knowledge (Variyam et al., 1999). Thus, it is not surprising that studies find a correlation between mothers' and children's food intakes (e.g., Olivera, Ellison, Moore, Gillman, Garrahe and Singer, 1992).

Studies also show that there is a relationship between mothers' health motivation and children's diets (Contento et al., 1993), although the nature of this relationship has been called into question by a recent UK study of 211 mothers and female carers of primary school children (St John Alderson and Ogden, 1999). While these mothers reported that their choices of foods for their children were motivated by their concerns for long-term health value and nutritional value and that they were more motivated by health considerations when choosing food for their children than for themselves, their food records showed that they actually fed their children more unhealthy (or less healthy) foods and than they fed themselves. The authors suggested that one reason for the apparently contradictory results may be that the mothers' responses to the motivations section of the questionnaires reflected what they thought their motivations *should* be. This highlights the need for different research techniques designed to counter such biases if we are to begin to understand the underlying reasons for parents' decisions about their children's food.

The present study

The traditional approach to improving children's diets has been to educate parents about the importance of healthy food choices. However, there is considerable evidence that the majority of parents know, at least at a basic level, which foods are 'good' or 'bad' for their children (Variyam et al., 1999). So, the questions remains: what factors motivate the food decisions parents make for their children? Recognizing that direct questioning will not provide the answer to this question, the current study used an indirect measure to investigate the underlying reasons for parents' decisions about their children's diets.

The study reported in this paper used the projective methodologies of picture response and third-person techniques (projective questioning), which are designed to elicit people's underlying motivations, beliefs, attitudes and concerns (Gordon and Langmaid, 1988; Kassarjan, 1974), particularly those beliefs which people find hard to articulate (Webb, 1992).

Method

Survey instrument: The survey instrument was designed to gain an understanding of the factors that motivate the food decisions parents make for their children. Based on a review of relevant literature, we developed a series of eight statements about the woman in the scenario (photo or story). For each question, respondents were asked to indicate on a 5-point Likert scale (1 = "strongly disagree" to 5 = "strongly agree") the extent to which they agreed with each statement. The questionnaire also allowed for a "don't know" response. The statements are set out in the results section.

Stimuli: Four different scenarios (two picture scenarios and two written scenarios) were developed to precede the questions. As this was a pilot study, one of the aims was to test the two scenario types (picture and written) to ensure that participants were willing, and considered themselves able, to answer the questions based on the limited information

provided. All other aspects of the four questionnaires were identical.

In the picture scenarios, participants were given a photograph of a mother shopping for after-school snacks with her two children. In the “healthy photo” condition the family was in the fruit and vegetable section of the supermarket, purchasing carrots and apples, with a bottle of milk in the shopping cart. In the “unhealthy photo” condition the same family was in the confectionery aisle purchasing chocolate bars, with a bottle of cordial in the shopping cart.

In the written scenarios, participants were presented with a ‘story’ about a mother and her two children. Both stories were identical except for the food the mother purchased for the children’s dinner. The story read as follows:

“Naomi is 35 years old. She has two children, Emily aged 5 and Lucy aged 3. On Tuesday afternoon Naomi finished work and picked up Emily from school (kindergarten) and Lucy from pre-school at 3 pm. She took them to the supermarket and bought Emily and Lucy (an apple, carrot and milk / a Mars Bar and Pop Top each) to snack on, then they went to the park to play on the swings and feed the ducks. At 5pm she drove them home, and they all watched a Disney video together before dinner. At 7.00 pm, Naomi gave Emily and Lucy a bath, and read them a story in bed.”

Participants: A university child-care centre operated as the setting for data collection in this pilot study. Pre-school aged children (3-5 years old) were the focus of this research as parents of children in this age group are responsible for the majority of food decisions. Potential participants were invited to participate in the survey during a one-week period in July 2004, by collecting and completing a questionnaire from their child’s day care centre. Participants were given a \$10 book voucher for returning their completed survey. In total eighty surveys were distributed to parents during the week in July 2004, and 27 parents completed and returned the survey (response rate of 33.75%).

The mean age of respondents was 34 years (range 24 to 46, SD 5.4 years); and 77.8% of the respondents were female. All but one of the respondents had completed a post-secondary qualification: 22 (81.5%) had completed a graduate or postgraduate university degree or diploma and four (14.8%) had completed a TAFE certificate or diploma. Nineteen of the respondents (70.4%) reported that English was the primary language spoken at home. Nine of the respondents had one child, 14 had two children, three had three children, and one had four children. Interestingly, of the 49 children for whom gender was reported, 34 were male and only 15 female. Of the 50 children, seven were aged less than two, 33 between two and five years, and 10 aged six or older.

Results

Due to the small sample size, it was not practicable to separately analyse the four conditions. Thus, the analysis compared the two “healthy” conditions (healthy photo and healthy scenario) to the two “unhealthy” conditions (unhealthy photo and unhealthy scenario). The results are provided in Table 1, and discussed below.

Table 1: Mean ratings of the mother in the “healthy” versus “unhealthy” scenarios

	healthy photo/ scenario (n=17)	unhealthy photo/ scenario (n=10)	t
Quality time	3.76	3.30	.99
Boundaries	3.06	2.50	1.04
Being friend	3.59	2.90	1.46
Have fun	3.59	3.40	.48
Healthy food	3.41	2.22	2.24*
Variety	2.94	1.11	3.08**
Educating	3.12	1.20	3.74**
Control weight	2.59	1.50	2.04*

* less than .05; ** less than .01

Spending quality time: The difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was spending quality time with her children was not significant (mean score 3.8 vs 3.3, ns), and there was minimal difference between the proportions of respondents agreeing with the statement.

Educating children about boundaries: The difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was educating her children about boundaries was not significant (mean score 3.1 vs 2.5, ns), although proportionally *more* respondents in the healthy condition agreed with the statement (47.1% vs 20.0%).

Being children’s friend: The difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was being her children’s friend as well as being their parent was not significant (mean score 3.6 vs 2.9), although proportionally *more* respondents in the healthy condition agreed with the statement (76.5% vs 40.0%).

Making sure children have fun: The difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was making sure that her children are having fun was not significant (mean score 3.6 vs 3.4, ns), and there was minimal difference between the proportions of respondents agreeing with the statement.

Providing healthy food: There was a significant difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was providing her children with healthy food (mean score 3.4 vs 2.2, $t = 2.24$, $p = .03$). Seventy-one percent of the respondents in the “healthy” condition agreed with the statement, compared to none of those in the “unhealthy” condition.

Exposing children to variety: There was a significant difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was exposing her children to a variety of food (mean score 2.9 vs 1.1, $t = 3.08$, $p = .005$). Forty-seven percent of the respondents in the “healthy” condition agreed with the statement, compared to none of those in the “unhealthy” condition.

Educating children about food: There was a significant difference between respondents in the “healthy” and “unhealthy” conditions in perceptions that the mother was educating her children about food and nutrition (mean score 3.1 vs 1.2, $t = 3.74$, $p = .001$). Twenty-three percent of the respondents in the “healthy” condition agreed with the statement, compared to 10% of those in the “unhealthy” condition.

Controlling children's weight: There was a significant difference between respondents in the "healthy" and "unhealthy" conditions in perceptions that the mother was controlling her children's weight (mean score 2.6 vs 1.5, $t = 2.04$, $p = .05$). Fifty-three percent of the respondents in the "healthy" condition agreed with the statement, compared to none of those in the "unhealthy" condition.

Discussion

We found a significant difference in parents' perceptions of the woman in the scenario on all four of the items that related directly to food choices. That is, parents who read the healthy (photo or written) scenario rated the mother more favourably in response to the items: "providing her children with healthy food," "exposing her children to a variety of foods," "educating her children about food and nutrition," and "controlling her children's weight." It is interesting to note that only two of these (providing healthy food and controlling children's weight) could be said to be objectively related to the information in the scenario – that is, feeding children fruit, vegetables and milk as opposed to chocolate bars and fruit-flavoured drinks. The other two could arguably be said to apply to both scenarios: particularly exposing her children to a variety of foods.

Further, while the differences were not statistically significant, we found large differences in the proportion of parents agreeing that the mother was "educating her children about boundaries" and "being her children's friend as well as a being their parent;" in both cases the proportion agreeing was higher among those reading the healthy scenario.

It appears from these results that parents do indeed make value judgments about the food choices mothers make for their children; and, consistent with previous studies (Jones and Rossiter, 2003) that they are comfortable doing so on the basis of very limited information (only one respondent expressed any reluctance about making such judgments based solely on one photograph).

There were several limitations in this study which limit our ability to generalize the results. First, the small sample size means that, while there were clearly differences on some variables, it was difficult to determine whether the differences on other items were meaningful. Second, the fact that the study was conducted through a university child care centre raises the possibility that the respondents may differ from the general population of parents on variables such as education level and nutrition knowledge. Thus, there is a need to replicate the study with a larger sample of parents, with more diverse backgrounds.

References

- Booth, M. L., Wake, M., Armstrong, T., Chey, T., Hesketh, K., Mathur, S., 2001. The epidemiology of overweight and obesity among Australian children and adolescents. *Australian and New Zealand Journal of Public Health* 25, 162-69.
- Butriss, J., 1995. *Nutrition in General Practice* (1st Edition.). London: Royal College of General Practitioners.
- Campbell, K., Crawford, D. 2001. Family Food Environments as Determinants of Preschool-aged Children's Eating Behaviours: Implications for Obesity Prevention Policy: A Review. *Australian Journal of Nutrition and Dietetics* 58, 19-25.
- Contento, I. R., Basch, C., Shea, S., Gutin, B., Zybert, P., Michela, J.L., Rips, J. 1993. Relationship of Mothers' Food Choice Criteria to Food Intake of Preschool Children: Identification of Family Subgroups. *Health Education Quarterly* 20, 243-59.
- Gordon, W., Langmaid, R. 1988. *Qualitative Market Research*. Aldershot: Gower.
- Hampl, J.S., Taylor, C.A., Johnston, C.S. 1999. Intakes of vitamin C, vegetables and fruits: Which schoolchildren are at risk? *Journal of the American College of Nutrition* 18(6), 582-90.
- Hart, K.H., Bishop, J.A., Truby, H. 2002. An investigation into school children's knowledge and awareness of food and nutrition. *Journal of Human Nutrition & Dietetics* 15, 129-40.
- Hupkens, C.L.H., Knibbe, R.A., Otterloo, A.H.V., Drop, M.J. 1998. Class Differences in the Food Rules Mothers Impose on their Children: A Cross-National Study. *Social Science and Medicine* 47(9), 1331-39.
- Jones, S.C., Rossiter, J.R., 2003. Personality characteristics ascribed to young women who drink alcohol. *Drug and Alcohol Review* 22 (2), 117-24.
- Kassarjan, H.H., 1974. Projective methods. In: Ferber, R. (Ed.), *Handbook of Marketing Research*. New York, McGraw-Hill.
- Lupton, D., 1996. *Food, the body and the self*. London: Sage.
- Morton, H., Santich, B., Worsley, A. 1996. Mother's perspectives on the eating habits of two-years-olds: a pilot study. *Australian Journal of Nutrition and Dietetics* 53, 100-05.
- Nicklas, T.A., 1995. Dietary studies of children: the Bogalusa heart study experience. *Journal of the American Dietetic Association* 95, 1127-33.
- Olivera, S.A., Ellison, R.C., Moore, L.L., Gillman, M.W., Garrahe, E.J., Singer, M.R., 1992. Parent-child relationships in nutrient intake: the Framingham Children's Study. *American Journal of Clinical Nutrition* 56, 593-98.
- Skinner, J.D., Carruth, B.R., Houck, K.S., Bounds, W., Morris, M., Cox, D.R., Moran, J., Coletta, F. 1999. Longitudinal study of nutrient and food intakes of white preschool children aged 24 to 60 months. *Journal of the American Dietetic Association* 99, 1514-21.
- St John Alderson, T., Ogden, J., 1999. What do mothers feed their children and why? *Health Education Research* 14, 717-27.
- Steptoe, A., Sanderman, R., Wardle, J., 1995. Stability and changes in health behaviours in young adults over a one year period. *Psychology and Health* 10, 155-69.
- Variyam, J., Blaylock, J., Lin, B., Ralston, K., Smallwood, D. 1999. Mother's nutrition knowledge and children's dietary intakes. *American Journal of Agricultural Economics* 81, 373-84.
- Vereecken, C.A., Keukelier, E., Maes, L., 2004. Influence of mother's educational level on food parenting practices and food habits of young children. *Appetite* 43, 93-103.
- Wardle, J., 1995. Parental influences on children's diets. *Proceedings of the Nutrition Society*, 54, 747-58.
- Webb, J.R., 1992. *Understanding and Designing Marketing Research*. London: Academic Press.