



Children's purchase behavior in the snack market: Can branding or lower prices motivate healthier choices?



Monika Hartmann^a, Sean B. Cash^{b, *}, Ching-Hua Yeh^a, Stefanie C. Landwehr^a,
Anna R. McAlister^c

^a Institute for Food and Resource Economics, University of Bonn, Nussallee 21, D-53115 Bonn, Germany

^b Friedman School of Nutrition Science and Policy, Tufts University, 150 Harrison Avenue, Boston, MA 02111, USA

^c Curtis L. Gerrish School of Business, Endicott College, 376 Hale Street, Beverly, MA 01915, USA

ARTICLE INFO

Article history:

Received 8 April 2017

Received in revised form

3 June 2017

Accepted 14 June 2017

Available online 15 June 2017

Keywords:

children's food preference

Children as consumers

Discrete choice experiment

Aggregated and mixed logit models

Marketing

Branding

ABSTRACT

Background: Children's dietary-related diseases and their associated costs have expanded dramatically in many countries, making children's food choice a policy issue of increasing relevance. As children spend a considerable amount of money on energy-dense, nutrient-poor (EDNP) products, a better understanding of the main drivers of children's independent food purchase decisions is crucial to move this behavior toward healthier options.

Objective: The objective of the study is to investigate the role of branding and price in motivating children to choose healthier snack options.

Methods: The study investigates snack choices of children ages 8 to 11, using a survey and a purchase experiment. The research took place in after-school programs of selected schools in the Boston area. Participants included 116 children. Products in the choice experiment differed on three factors: product type, brand, and price. Data were analyzed using aggregated and mixed logit models.

Results: Children's purchase decisions are primarily determined by product type (Importance Value (IV) 56.6%), while brand (IV 22.8%) and price (IV 20.6%) prove to be of less relevance. Only those children who state that they like the familiar brand reveal a preference for the branded product in their purchase decision. Price is a significant predictor of choice when controlling for whether or not children obtain an allowance.

Conclusion: It is not simple brand awareness but a child's liking of the brand that determines whether a brand is successful in motivating a child to choose a product. The extent of children's experience with money influences their price responsiveness. To the extent that children who receive an allowance are primarily the ones buying food snacks, higher prices for EDNP snacks could be successful in motivating children to choose a healthier option.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

In recent years, the incidence and prevalence of children's dietary-related diseases and their associated costs have grown dramatically in many countries, making children's food choice a policy issue of increasing relevance (CDC, 2015). To improve children's eating habits, various school-based interventions have been

implemented in several countries (e.g., De Sa & Lock, 2008; Evans, Christian, Cleghorn, Greenwood, & Cade, 2012). However, those efforts might be offset by compensatory behavior of children at other times of the day (i.e., the consumption of energy-dense, nutrient-poor (EDNP) foods before or after school). This holds especially as children have a considerable amount of money at their disposal. Much of this is spent on food, especially on EDNP products (Borradaile et al., 2009; Cash & McAlister, 2011). Measures such as regulating food advertisements to children, as well as the implementation of fat or sugar taxes, acknowledge the direct and indirect economic activities of young consumers. The former is motivated by the fact that food advertising and branding of products directed at children are omnipresent, address children via different media

* Corresponding author.

E-mail addresses: monika.hartmann@ilr.uni-bonn.de (M. Hartmann), sean.cash@tufts.edu (S.B. Cash), chinghua.yeh@ilr.unibonn.de (C.-H. Yeh), stefanie.landwehr@ilr.uni-bonn.de (S.C. Landwehr), amcalister@endicott.edu (A.R. McAlister).

and are primarily used to promote EDNP food and drinks (regarding TV advertisements see e.g. Batada, Seitz, Wootan, & Story, 2008; Calvert, 2008; Gantz, Schwartz, Angelini, & Rideout, 2007; Hastings, McDermott, Angus, Stead, & Thomson, 2006; Matthews, Cowburn, Rayner, Longfield, & Powell, 2005; regarding online-marketing see e.g. Alvy & Calvert, 2008; Calvert, 2008; Culp, Bell, & Cassady, 2010; Lee, Choi, Quilliam, & Cole, 2009; Lingas, Dorfman, & Bukofzer, 2009; Mallinckrodt & Mizerski, 2007; regarding product packaging see Foodwatch, 2012; Harris, Pomeranz, Lobstein, & Brownell, 2009a, 2009b; Maschkowski, Hartmann, & Hoffmann, 2014; Mehta, Phillips, Ward, & Coveney, 2012). Furthermore, this widespread food marketing has been shown to influence children's food preferences and consumption patterns (Boyland & Halford, 2012; Cairns, Angus, Hastings, & Caraher, 2012; Cornwell & McAlister, 2013; Cornwell, McAlister, & Polmear-Swendris, 2014; Elliott, 2008; Forman, Halford, Summe, MacDougall, & Keller, 2009; Harris et al., 2009; IOM, 2006; Keller et al., 2012; McNeal & Li, 2003; Mehta et al., 2012). By targeting food ads directly to children, companies strive to increase children's brand awareness and their emotional attachment to products (Connor, 2006). Research shows that children as young as two to four years of age recognize brands (McAlister & Cornwell, 2010; Valkenburg & Buijzen, 2005) and that the branding of products has an influence on children's preferences and product choice (Forman et al., 2009; Keller et al., 2012; Mallinckrodt & Mizerski, 2007; Robinson, Borzekowski, Matheson, & Kraemer, 2007; Wansink, Just, & Payne, 2012). Moreover, Forman et al. (2009) found that children's brand awareness was considerably higher for unhealthy food.

Only few studies have directly investigated the relevance of price to children's food choice, with somewhat inconsistent results. Some studies argue that prices might play only a minor role in children's food purchase decisions since children have no long-term financial obligations, less market experience, less developed cognitive capacities, and rather impulsive behavior (Cash & McAlister, 2011; Farrell & Shields, 2007). Empirical research investigating children's price responsiveness focuses mainly on middle- and high-school children. Findings on the relevance of prices for children's food choice show that children react to prices and that price adjustments can induce unexpected substitution effects that are influenced by children's budgets. With respect to the purchase of EDNP products, the availability of attractive alternatives seems to be of greater relevance for children's food choices than price (e.g., Brown & Tammineni, 2009; Epstein, Dearing, Handley, Roemmich, & Paluch, 2006a, 2006b; French et al., 2001, 1997; Heard, Harris, Liu, Schwartz, & Li, 2016; Kocken et al., 2012).

Overall, the literature on children's price responsiveness and brand awareness is scarce. The former is especially true for younger children (elementary school). With the exception of a handful of studies that examine the ways in which cartoon characters and brand logos increase children's interest in healthy food products (e.g., Robinson et al., 2007), relatively few studies have examined how branding might be used to increase the appeal of healthy foods among young children. Heard et al. (2016) investigated the behavior of 7- to 12-year-olds in a virtual store and considered specific branded products and on-package promotions (for possible prizes) in a budget-constrained simulation, but did not vary the price of the items offered to children. To date, no study has investigated the interacting effects of price, brand, and product type on children's purchase decisions in an experimental framework.

Given this background, the present study seeks to address the research question: What roles do branding and price play in motivating children to choose healthier snack options?

2. Method

2.1. Data collection and survey instruments

The study involves quantitative and qualitative elements to investigate the food choices of children ages 8 to 11. The research took place in after-school programs of selected schools in the Boston area. The study received human subjects approval from the Institutional Review Board at Tufts University. Both parental informed consent and child participant assent were obtained prior to data collection.

The quantitative part of the study involved 116 children and consisted of three tasks: a survey, two cognitive tests, and a purchase experiment. First, children filled out a pencil-and-paper questionnaire¹ (task 1), which asked about whether they receive pocket money or an allowance and how they spend it, their food preferences and consumption habits, their knowledge and liking of brands, their nutritional knowledge as well as information on demographic characteristics such as age and gender. This was followed by two cognitive tests (task 2). Children were then provided with a small remuneration (\$2.00) for their participation in these tests, which was framed explicitly as compensation for their work so far. This was done to underscore that the money to be used in the purchase choices later was actually their own money that they had earned.

In the third task - an incentive-compatible discrete choice experiment (DCE) - children were given a choice between two products, along with a "no purchase" option. Products differed on three factors, namely, healthfulness (i.e. chocolate chip cookie as a less healthy snack option, and apple slices and a tube of drinkable strawberry yogurt as the healthier snack options),² brand (i.e. McDonald's or generic), and price (i.e. \$0.30, \$0.50, or \$0.70) (see Table 1). McDonald's was selected as the brand of interest here as previous studies confirmed widespread high awareness of the McDonald's brand among children (e.g., Forman et al., 2009; McAlister & Cornwell, 2010). The price range considered in the study reflected the current market prices of the products selected at the time of data collection, while allowing sufficient variation for meaningful analysis.³ The "no purchase" option was included as it

Table 1
Attribute and attribute levels used in DCE.

Attributes	Levels
Product	1. Chocolate Chip Cookie 2. Apple Slices 3. Strawberry Tube Yogurt
Brand	1. McDonald's 2. Generic
Price	1. 0.30 US Dollar 2. 0.50 US Dollar 3. 0.70 US Dollar

¹ The questionnaire had been tested in a pilot study in Germany and was adapted to the US environment.

² Products' weight and calories: Chocolate chip cookies: McDonald's 30 g, 170 calories; Generic 27 g, 150 calories. Apple slices: McDonald's 34 g, 15 calories; Generic 51 g, 25 calories. Strawberry yogurt: McDonald's: 64 g, 50 calories; Generic 64 g, 70 calories.

³ Actual market price per item for generic products ranged from \$0.23 to \$0.56 when purchased in multi-unit packages at the time of data collection. Market prices for the McDonald's products ranged between \$0.59 and \$0.69 but was as low as \$0.50 when more than one item was bought (e.g. price for 4 cookies amounted to \$2.00).

Download English Version:

<https://daneshyari.com/en/article/5044080>

Download Persian Version:

<https://daneshyari.com/article/5044080>

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