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Research report

Healthful grocery shopping. Perceptions and barriers ☆

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ABSTRACT

While there is evidence of the factors influencing the healthfulness of consumers' food choice, little is known about how consumers perceive the healthfulness of their shopping. This study aimed to explore consumers' perceptions of, and identify barriers to, conducting a healthful shop. Using a qualitative approach, consisting of an accompanied shop and post-shop telephone interview, 50 grocery shoppers were recruited. Results showed that consumers used three criteria to identify a healthful shop: (1) inclusion of healthful foods; (2) avoidance or restriction of particular foods; and (3) achieving a balance between healthful and unhealthful foods. Those who take a balanced approach employ a more holistic approach to their diet while those who avoid or include specific foods may be setting criteria to purchase only certain types of food. The effectiveness of any of these strategies in improving healthfulness is still unclear and requires further investigation. Two barriers to healthful shopping were: (i) lack of self-efficacy in choosing, preparing and cooking healthful foods and (ii) conflicting needs when satisfying self and others. This highlights the need for interventions targeted at building key food skills and for manufacturers to make healthful choices more appealing.

Introduction

Current dietary recommendations promote healthful eating by encouraging variety and balance with a view to achieving the Recommended Daily Allowances of nutrients. Pictorial educational tools such as *The Eatwell Plate* (UK) (Food Standards Agency, 2007) and the *Food Pyramid* (Ireland) (Department of Health, 2005) are intended to help consumers to understand the concept of a balanced diet. Despite widespread consumer awareness of what constitutes healthful eating, the rate of diet-related chronic illnesses continues to rise, indicating that appropriate knowledge does not necessarily translate into corresponding behaviour (Brug, 2008; Dube & Cantin, 2000; Wiggins, 2004; Young & Swinburn, 2002). Furthermore, in a recent review on food-based dietary guidelines, Brown et al. (2011) highlighted that there was limited evidence in the literature on the benefits of such guidelines to consumers for healthy eating objectives. While some consumers may use these guidelines subconsciously Lobstein and Davies (2009) stated that, "*when questioned, consumers will usually claim to understand what is or is not healthy, but they acknowledge confusion about how to put generalised dietary advice into practice*" (p. 331). This highlights a disconnection between knowing what should be eaten and how to achieve this. While there is a lot of evidence of how various factors influence the healthfulness of consumers' food choice (Glanz, Basil, Maibach, Goldberg, & Snyder, 1998; Roininen, Lahteenmaki, & Tuorila, 1999; Steptoe, Pollard, & Wardle, 1995; Yu-Hua, 2008), relatively little is known about how consumers perceive the healthfulness of their food shopping and how they might subsequently embark on achieving a healthful shop.

Previous research highlights the difficulties shoppers face in making healthful food selections. Dietary guidelines are not specifically constructed or disseminated to enable consumers to put them into practice for shopping in-store (Glanz & Mullis, 1988; Wiggins, 2004). Furthermore, understanding grocery shopping behaviour is an important prerequisite to facilitate modifying food choice (Ransley et al., 2003; Yoo et al., 2006). The supermarket is a key component in the chain of events that influences both individual and household food intake (Thompson, Cummins, Brown, &

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Kyle, 2013). Throughout the literature, studies on grocery shopping behaviour are well documented and 'health' is often cited as one among many factors influencing product selections (Putrevu & Ratchford, 1997; Scholderer, Brunso, Bredahl, & Grunert, 2004; Steptoe et al., 1995; Turrell, Hewitt, Patterson, Oldenburg, & Gould, 2002; Wardle et al., 2004; Worsley, Wang, & Hunter, 2010). While motivational factors affecting food purchasing behaviour are extensively documented in marketing literature (Arnold & Reynolds, 2003; Dholakia, 1999; Jamal, Davies, Chudry, & Al-Marri, 2006; Jayawardhena, Wright, & Dennis, 2007; Rohm & Swaminathan, 2004) and the relationship between diet and health within the food and nutrition literature (Bucher, van der Horst, & Siegrist, 2013; Gustafson et al., 2011; Kozup, Creyer, & Burton, 2003; Meiselman & MacFie, 1996; Mela, 1999; Shepherd, 1999), there is a paucity of evidence on how consumers judge the healthfulness of their shopping.

How shoppers define health and the ways in which they classify food as healthful or unhealthful can serve as a simple decision heuristic when making product selections (Scheibehenne, Miesler, & Todd, 2007). Individuals with more health concerns place more emphasis on choosing foods that will enable them to achieve optimum health (Sun, 2008). Research to date on the healthfulness of shoppers' food selections has focused predominantly on using till receipt information to measure the nutritional content of shoppers' grocery purchases (Greenwood, Ransley, Gilthorpe, & Cade, 2006; Ransley et al., 2001; Rigby & Tommis, 2008; Tin, Mhurchu, & Bullen, 2007). While these studies provide valuable data on what types of food items are being purchased they do not explore a shopper's rationale for their purchase and the cues triggering their behaviour. Internal cues may include a shoppers' mood and knowledge while external cues include shoppers' reactions to store atmospherics, product availability and the purpose of the shop (Youn & Faber, 2000). Such internal and external cues could affect the outcome of a grocery shop that in turn might impact on food choice and its nutritional quality. Therefore, this study explores consumers' perceptions of what is a *healthful shop* and identifies barriers to conducting a *healthful shop*.

Method

Recruitment and ethical approval

The study was conducted according to the guidelines laid down in the declaration of Helsinki and all procedures involving human subjects were approved by the Research Ethics Committee within the School of Biological Sciences, Queens University Belfast (QUB). Therefore, written informed consent was obtained from all subjects. In February 2011, a sample of 50 participants (aged 18 years and above) were recruited onto the study in two centres (Dublin and Belfast) on the Island of Ireland. Participants recruited were the main grocery shopper in their respective households. A screening questionnaire was used to identify participants' perceived level of health consciousness as well as other key demographics (e.g. age, gender, household size, etc.). The measure of health consciousness used four items from the General Health Interest scale (Roininen et al., 1999) to ensure a diverse range of perspectives were included. Participants scoring 16 or more were classified as *High Health Conscious* and participants scoring 12 or under were classified as *Low Health Conscious*. Any participant scoring between 13 and 15 was automatically excluded from the study. Participants were recruited through a market research company and were provided with a letter explaining the study. Participants were offered monetary recompense for their time and effort upon completion of the tasks.

Study design

The study design comprised a short interview pre-shop (5–10 min before the shop began) followed by the accompanied shop (AS) followed by a post-shop interview on the same day (immediately after the shop was completed) and finally a semi-structured telephone interview (TI) was conducted (within a 2 week period after the AS). Each accompanied shop lasted between 15 and 90 min in which participants were asked to 'think aloud' as they shopped. Participants were informed that they were being observed as they engaged in their normal shopping activity and were not prompted about the concept of health prior to the shop. The short interview, post-AS, explored each participant's perceptions of their shop in terms of its healthfulness, their shopping intentions and shopping experience. More specifically, participants were asked to reflect on their purchases and assess the healthfulness of their shop and the data was used to identify participant's perceptions. Within 2 weeks after the shopping task each participant was contacted by telephone to take part in a more detailed semi-structured interview. The telephone interview explored participants' lifestyles in relation to their shopping and eating behaviour and was used to identify perceived barriers to conducting a healthful shop. The telephone interview lasted between 20 and 45 min.

Data analysis

Qualitative data was used to provide a rich source of information to generate ideas about the rationale behind social behaviours as opposed to testing hypothesis (Holliday, 2010). Both the AS and TI tasks were audio recorded and fully transcribed for analysis. All transcripts were uploaded into NVivo 9.0 qualitative analysis software. A hybrid approach was used (Fereday & Cochrane-Muir, 2006) incorporating an *a priori* template of codes (Crabtree & Miller, 1999) and codes generated inductively from the data (Boyatzis, 1998). This approach allowed existing beliefs associated with shopping behaviour to be integral to the process of analysis while allowing themes to emerge from the data (Fereday & Cochrane-Muir, 2006). Each transcript was read and reread several times before beginning the analysis (Rice & Ezzy, 1999). To address the issue of intercoder agreement a codebook of codes and definitions was developed based on the first five transcripts and applied for subsequent analysis. The process of coding was iterative and reflective; therefore new codes and any discrepancies were discussed and agreed upon by the two researchers involved in the coding process (L.H. and M.OB.) (Fereday & Cochrane-Muir, 2006). Themes were identified by analysing and grouping the codes together and using quotations to illustrate the concepts found within the data (Braun & Clarke, 2006). The source of all verbatim quotes are displayed in brackets in terms of (i) gender of the participant and (ii) the location in which the participant resides (where ROI and NI denotes Republic of Ireland and Northern Ireland, respectively).

Results

The findings are summarised into two key areas; perceptions of a healthful shop and the perceived barriers to a healthful shop. The demographics of the study sample are summarised in Table 1.

Perceptions of a healthful shop

Results from the post-AS interview showed that when asked to judge on the healthfulness of their grocery shop, 42% of participants viewed their shop as healthy, 34% of participants as not