

Consumer Perceptions of Product Healthfulness

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Abstract

A series of four studies were carried out to identify packaging cues that communicate product healthfulness to consumers and thus hold a potential for facilitating healthy food choice. A total of 16 different cues were examined using eye tracking and verbal response measures. Counter to both expectations and previous literature, the studies revealed that only a few highly familiar cues had an effect on consumer evaluations of product healthfulness. The results could hardly be more negative for social marketers since any future attempts to improve healthy food choice using new forms of packaging cues must first understand how to override these entrenched consumer heuristics.

Introduction

As part of a larger project aiming at improving healthy food choice among consumers a series of four studies were carried out to identify packaging cues that communicate product healthfulness. The ambition is to identify health cues that are sufficiently likely to attract consumer attention and thereby support and activate healthy eating goals without licensing consumers to indulge or overeat the carrier food, which has recently been suggested as one of major negative externalities of health claims (Bublitz, Peracchio, & Block, 2010).

Study 1 was an eye tracking experiment designed to measure visual attention to packaging health cues and aimed at answering two fundamental questions concerning health cues; what constitutes a health cue and to what degree do consumers attend to these health cues during purchase considerations? Based on the results from Study 1 three more studies were carried out based on questionnaire responses. The studies were designed to answer more specific questions about the interaction effects of different health cues and as a further improvement a new set of product packaging was developed to experimentally control for product familiarity.

Study 2 measured the effect of indirect or implied health claims such as health and exercise related images, brands with health associations, and packaging color schemes on perceived healthfulness, perceived tastefulness and purchase likelihood. The health and exercise related images were borrowed

from a recent health branding study which had revealed a significant effect of such images on perceived healthfulness and purchase likelihood (Chrysochou, 2010).

Study 3 examined the individual and combined effects of health and taste claims which has had very mixed results in previous studies with regards to their effect on consumer attitudes and behavior (Bech-Larsen & Grunert, 2003; Kozup, Creyer, & Burton, 2003; van Trijp & van der Lans, 2007). Study 4 examined the effect of three types of front-of-pack food labels already available in the market but differing in consumer familiarity. Previous studies have indicated that simpler types of front-of-pack nutrition labels can facilitate consumer decision making and thus improve healthy food choice (Feunekes, Gortemaker, Willems, Lion, & van den Kommer, 2008).

Methodology

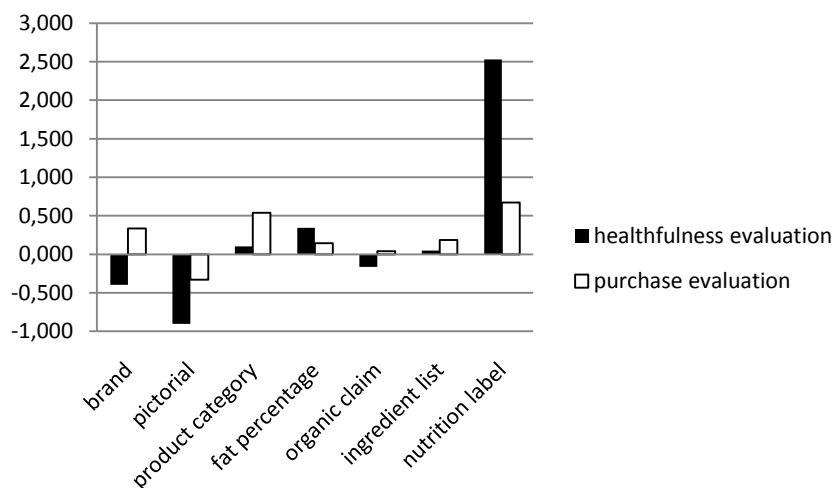
Study 1 was an eye tracking experiment using a three group mixed within-between subjects design where the stimuli (five different dairy products) was varied within subjects and the viewing task (free viewing, product healthfulness evaluation, purchase likelihood evaluation) was varied between subjects. The viewing tasks were expected to result in different scan paths (Wedel & Pieters, 2006; Yarbus, 1967) and the free viewing condition was later used as a baseline to measure relative increases or decreases in attention under the product healthfulness evaluation and purchase likelihood evaluation (Pieters & Wedel, 2007). The idea behind using the free viewing condition as a baseline is that the free viewing task is more open to bottom-up visual saliency (Einhäuser, Rutishauser, & Koch, 2008) which means that the free viewing condition can be used to control for visual saliency as well as surface size of the health and purchase cues.

As a follow-up on the eye tracking experiment three more studies were carried out. To avoid product familiarity and brand associations a new set of carrier packages were developed and a pilot test ($N = 42$) showed no significant differences between the products. Study 2 used a 3 x 2 x 2 group mixed design manipulating product images (control images, health related images, exercise related images), brand (control brand, health association brand), and color scheme (control color scheme, green health association color scheme). Study 3 was a 2 x 2 group mixed design manipulating health claims (absent, present) and taste claims (absent, present). Study 4 was a four group between-subjects design manipulating food labels (a national organic label, EU organic label, a national keyhole label, a combination of all labels). Studies 2 to 4 were based on verbal response measures and the dependent variables were perceived healthfulness, perceived tastefulness and purchase likelihood measured on seven point likert scales.

Major findings

Results from Study 1 revealed that the only element operating as a health cue during product healthfulness evaluation was the nutrition label. As can be seen in Table 1 there was also a tendency to rely on the fat percentage under product healthfulness evaluation, although this relationship was non-significant. The packaging cues used during purchase likelihood evaluation were the name of the product category and the nutrition label. Taken together, the results suggest that the only packaging cue that consumers consistently view as a health cue is the nutrition label and that only a limited amount of attention is devoted to reading nutrition labels during purchase likelihood evaluations. The study also revealed that the probability that a consumer will read the nutrition label during purchase considerations depends on the gender, body mass index and health motivation of the consumer.

Table 1: relative number of fixations under product healthfulness and purchase likelihood evaluations.



Results from Study 2 and 3 were surprisingly non-significant. None of the five independent variables (packaging images, brand, color scheme, taste claims, health claims) had an effect on either perceived healthfulness, perceived tastefulness nor on purchase likelihood. Results from Study 4 were also surprising since only the organic label turned out to have an effect on perceived healthfulness. It is debatable whether an organic label is really a health cue or a production claim but the results seem to suggest that consumers do in fact view it as a health cue. Summarizing all four studies there seem to be but one unambiguous conclusion: only a few highly familiar forms of packaging cues have an effect on consumer attitudes and evaluations of food products, and any future attempts to use new and more effective forms of nutrition labels and health cues must first understand how to override these entrenched consumer heuristics.

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