Consumers Research Using Eye-Tracking Device: Consumers´ Perception on Health Claims

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➲ Introduction

The eye tracking device is a video technology tool used to measure and track eye movements with the aim of observing ones path of attention (Duchowski, 2007 p. 3). This device can be used in many fields including the food industry to examine consumer´s gaze behaviour. In recent times, most food industries put health claims on their products to distinguish themselves from other similar competitive products or for the purposes of marketing. However, the extent to which consumers understand and perceive products with health claims has still not been established (Tarabella and Burchi, 2012 p. 2175).

➲ Objectives

• To evaluate whether the consumers noticed the health claims on food products
• To evaluate the effect of health claims on consumers´ perceived healthiness of the food products

➲ Methods / Procedures

Selection criteria:
• Participants: minimum 18 years of age, fluent in German, at least regular buyer of one of the products, have no background knowledge in food or agriculture area and in total 18 eligible participants
• Products: 5 cornflakes and 7 orange juices of different brands; design of health claims
• Mode of survey: Imitated shopping situation using combination of eye tracking device and questionnaire
• Data analysis: IBM SPSS Statistics version 24

Figure 1: The picture of the cornflakes and orange juices products used in the experiments

➲ Constraints

• Calibration drift of the eye tracking device during the experiment
• Small sample size and variation in the socio-demographic data
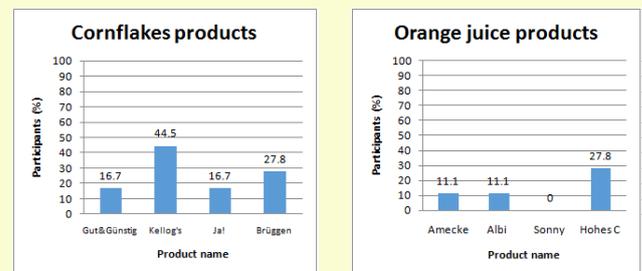
➲Results and Discussion

Figure 2: The percentage of participants who noticed the health claims on both categories of the food products

• Only few consumers noticed the health claims on both categories of food products, with the highest percentage for "Kellogg´s" (44.5%) and lowest for "Sonny" (0%)

• The consumers noticed the health claims on the cornflakes products more than the health claims on the orange juice products

Cornflakes products			Orange juice products		
Product	Pearson correlation value (Pearson's r)	P	Product	Pearson correlation value (Pearson's r)	P
Gut &	0.174	0.038	Amecke	0.093	0.268
Kellog's	0.336	<0.001	Albi	-0.197	0.018
Ja!	0.307	<0.001	Sonny	-0.149	0.074
Brüggen	0.367	<0.001	Hohes C	0.289	<0.001

Table 1: The correlation between fixation time on health claims and perceived healthiness of cornflakes and orange juices products

• Generally, health claim influences the participant`s perceived healthiness for all cornflakes products, but not for the orange juice products

• Other factors might play a role in influencing participant`s perceived healthiness on a product, especially on the orange juice products

➲ Conclusions

• The consumers awareness on the health claim was considerably low
• Health claims can play a potential role in positively influencing consumer`s perceived healthiness of a product
• The placement of a product close to eye level of the consumer and/or closer to the entrance of a supermarket or shelf draws consumers´ attention

References:
1) Duchowski, A.T. 2007. Eye Tracking Methodology: Theory and Practice. Springer-Verlag
2) Tarabella, A. and Burchi, B. 2012. The Role of Nutrition and Health Claims in Consumers Perception. Creating Educational Paths to Resolve Information Asymmetries Caused by Promotion and Marketing Activities Regarding Foodstuff. In: Procedia-Social and Behavorial sciences. Vol. 46, 2173-2177