Effect of Familiarity on Visual Attention and Choice at the Point of Purchase

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1 Introduction

Being familiar with an environment can have great effects on our eye movements and visual attention. With experience, we learn to attend to things that are important to us and to ignore less relevant information (Droll, Gigone & Hayhoe, 2007; Haider & Frensch, 1999; Jovancevic-Misic & Hayhoe, 2009; Meisner & Decker, 2010). This is one of the reasons why it is preferable to take studies out of the lab and into more natural environments. The present study investigated the effect of familiarity on visual attention and choice of consumers doing their grocery shopping. In a familiar environment where we make decisions repeatedly, our visual attention will change over time. For instance, familiarity with the task and task environment reduces time and effort and the relative influence of bottom up factors will decrease (Orquin, Bagger & Loose, 2013).

2 Experiment

The eye movements of fifty consumers were recorded in their familiar supermarket (group 1). All participants were instructed to buy a product from three different product categories during their regular shopping. These consumers were later recorded in another, unfamiliar supermarket of the same supermarket chain, again instructed to buy products from the same categories. A control group of twenty five consumers, familiar with the second supermarket, was also recorded (group 2), performing the same task, to determine if there was in fact familiarity and not differences in shelf organization or any other peculiarities of the second supermarket that made an impact on the results.

The SMI ETG glasses were used for this study, recording binocular eye movements at a rate of 30Hz. The collected eye tracking data was analysed manually frame-by- frame, using semantic gaze mapping in the SMI BeGazeTM Software by four independent coders. The fixations on AOI's where then divided into dwells according to the definition stated in Gidlöf et al. (2013) i.e. all fixations within an AOI for a duration of at least 120msec.

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The quality of the decision was calculated by having participants fill out a questionnaire of how important each attribute of a product category were for them when choosing a product. By summing up the values each product got an option quality (Gidlöf et al., 2013).

3 Preliminary Results and Discussion

All results are based on two of the three product categories since the third category is still being analysed. In general participants were more familiar with the yogurt category compared to the pasta category. Participants did spend more time inspecting the products in the unfamiliar supermarket compared to the familiar one, specifically in the pasta category. A paired t-test on group1 suggests an increase in total time between group1 in supermarket No.1 and in supermarket No.2. This difference was also reflected in the quality of their choices with participants making significantly better choices in pasta category in their familiar supermarket compared to the unfamiliar supermarket. The results showed no general differences between group 1 in supermarket no.1 and the control group in supermarket no.2.

The present findings are a first step in examining the effect of familiarity on visual attention and choice. These effects will be investigated further by for example studying the top-down and bottom-up influences on visual attention in these environments.

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