

UNLOCKING OPTICAL SHOP CUSTOMERS' SHOPPING BEHAVIOURS: INSIGHTS FROM AN EYE TRACKING STUDY

Mizhanim Mohamad Shahimin^{1*}, Kang Chooi Cheun²

¹Optometry and Vision Sciences Programme, Center for Community Health Studies (ReaCH), Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur Campus, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur, Malaysia.

²Ophthalmic Instruments Pte. Ltd., 65 Ubi Road 1 #03-74 Oxley Bizhub, 408729, Singapore.

*Corresponding author's email: mizhanim@ukm.edu.my

ABSTRACT

Background: We investigated optical shop customers' eye movements whether their shopping behaviors were influenced by in-store or out-of-store visual attention factors (VAF), or both. The VAF which relates to buying decision explored in this study were the spectacles' brand, price and spectacle design and the promotion banner. There is limited research on actual browsing and purchasing behavior and the elements that may influence behavior in optical stores from first-person observational input. Thus, this research integrates the use of eye tracker to assess VAF in a retail environment.

Methodology: Thirty customers (age range: 20-59 years) of an optical shop participated in this study. All participants were naïve to eye tracking procedures. A set of stimuli consisted of in-store and out-of-store photos of an optical shop was displayed on an eye tracker screen (Tobii TX300). Participants were asked to choose the most preferred spectacles to buy from the stimuli displayed. The eye tracker captured the eye movement during the selection process. The relationship between time-to-first-fixation and fixation duration recorded from VAF were analysed using the eye tracker (quantitative data) and were correlated with the heat maps data (qualitative data).

Results: Findings showed that participants looked at spectacle designs significantly more ($p < 0.001$) than other factors (brand, price and promotion banner). Results also showed that participants tend to fixate on in-store VAF significantly more ($p < 0.001$) compared to out-of-store VAF. The heat maps show most concentrated fixations were at the primary gaze, which could be use as strategy in marketing.

Conclusions: The spectacle design was an important factor in participants' selection behaviour while shopping for their preferred spectacles. Other factors have minimal influence in the shopping behavior.

Keywords: eye tracking, in-store visual attention factors, out-of-store visual attention factors, optical shop