Children’s attention to online adverts is related to low-level saliency factors and individual level of gaze control

# Details

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## Authors

Holmberg N.;Holmqvist K.;Sandberg H.

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* Internet usage, practices and engagement
* Content-related issues
* Other

## Sample

26 3rd-grade pupils in 2 classes in 1 school in 1 municipality in Sweden.

## Implications For Educators About

## Implications For Stakeholders About

* Researchers
* Industry
* Other

## Other Stakeholder Implication

Build better browsers that can filter out distracting advertising content

# Abstract

Twenty-six children in 3rd grade were observed while surfing freely on their favourite websites. Eye movement data were recorded, as well as synchronized screen recordings. Each online advert was analyzed in order to quantify low-level saliency features, such as motion, luminance and edge density. The eye movement data were used to register if the children had attended to the online adverts. A mixed-effects multiple regression analysis was performed in order to test the relationship between visual attention on adverts and advert saliency features. The regression model also included individual level of gaze control and level of internet use as predictors. The results show that all measures of visual saliency had effects on children’s visual attention, but these effects were modulated by children’s individual level of gaze control.

# Outcome

"In relation to the hypotheses presented at the outset of this study, the main findings are as follows: (H1) low-level visual saliency features of internet adverts have a strong influence in determining children’s visual attention; (H2) children’s individual level of oculomotor control seems to modulate the effect of visual saliency features in internet ads, and thus oculomotor control impacts on children’s visual exposure to advertising; (H3) gender does not seem to directly influence children’s attention to internet adverts; (H4) children’s individual level of weekly internet usage time does not influence their attention to adverts." (Authors, 7)