# README file

**Eye tracking data of white individuals' movements when looking at bowel cancer promotion messages.**

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While promotional visual imagery can significantly increase CRC screening, the specific impact of messages and imagery among ethnic minorities and individuals from socioeconomically deprived communities needs further exploration. This study informed the development of optimized bowel cancer screening promotion images tailored at the wider audience, South Asian community in the UK, in which screening uptake is only 33% and in India where both awareness and organized screening programs from colorectal cancer is scarce. The research aims to bridge the gap between existing visual health communication methods and their effectiveness among diverse populations, ultimately working to reduce screening disparities and improve early detection rates.

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**Contents**

Each csv files includes participants’ response to one bowel cancer screening poster (advertising material). The picture is split into numerous Areas Of Interest (AOIs) in order to get more precise information from the eyetracker. Hence, the eye tracking related columns are names:

* aoi\_fixation\_total\_count (the number of times a participant fixated on the specific AOI)
* aoi\_fixation\_average\_duration\_ms (the duration of participant’s gaze fixation on an AOI in milliseconds)
* aoi\_fixation\_ttff\_ms (time-to-first-fixation in milliseconds -how long it took a participant to fixate in said AOI)
* aoi\_fixation\_total\_time\_spent\_ms (the total time spent gazing in a specific AOI in milliseconds)
* aoi\_fixation\_first\_fixation\_average\_duration\_ms (the average duration for the first fixation per AOI)
* aoi\_visit\_total\_count (the number of visits, or gazes, in a specific AOI)
* aoi\_revisit\_total\_count (the number of times this AOI was revisited, looked at again, by the participant)
* aoi\_revisit\_average\_count (the average number of revisits in a specific AOI)
* aoi\_attention (the scale regarding ReaEye’s calculation of attention catching per AOI)

**Methods**

RealEye online platform was used for the eye tracking experiment. We used Prolific research agency to recruit participants in the UK, and our own network to recruit participants in Asia. The participants were sent a RealEye link and asked to look at a number of bowel cancer screening adverts and rate them (thumbs up or down). The participants could use any device they wanted (laptop, tablet, smartphone) and the experiment would start as long as there was an internet connection. Each experiment lasted about 2minutes. The RealEye eyetrackers were recording participants gaze and fixation for 5seconds per advert. The AOIs were manually entered by the researcher after the experiments were finished.

The results of the study will be published to an academic journal in the forthcoming months.