

Expectancies of objects in visual displays

Expectancies: based upon prior experience or learning

The aged, driving, and expectancies

The aged have trouble driving, mostly due to visual attention deficits.

Is part of their deficit due to the inability to use expectancy information?

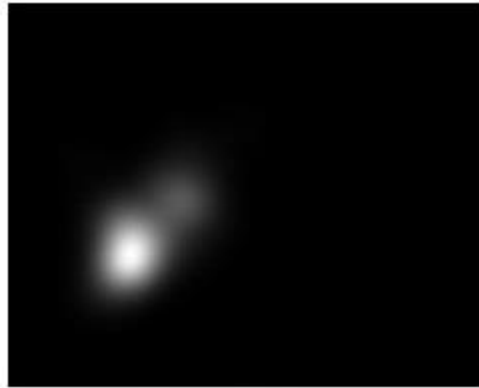
1. Assess the expectancies of users



Original image



Expectancy responses



Expectancy heat map



Original image,
filtered by heat map

2. Adjust the visual layout to account for the expectancies



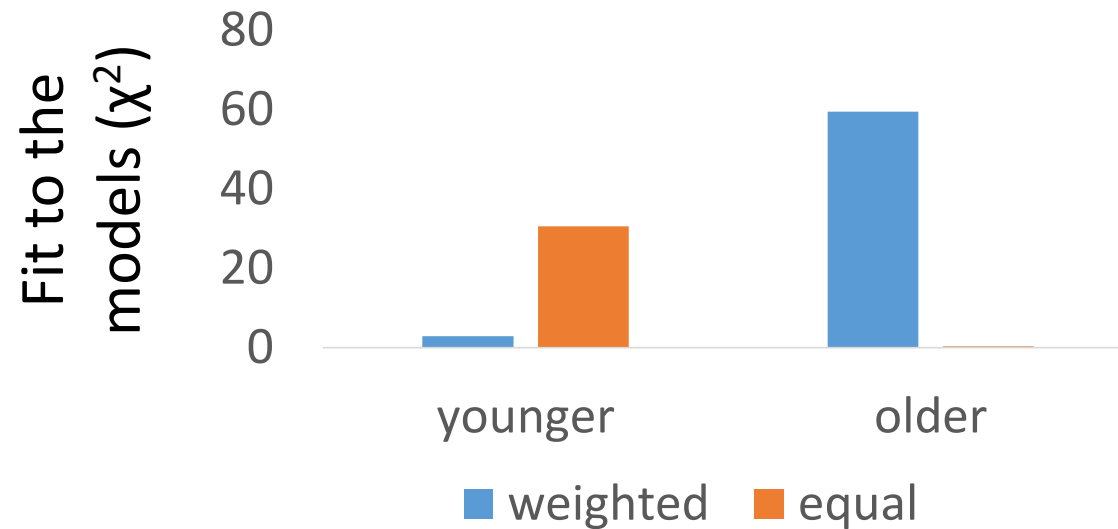
High expectation



Low expectation

3. Assess if the users employ the expectancy information

Control study, then comparison of results to Bayesian model



- Weighted model: use of expectancy
- Equal model: no use of expectancy
- Younger: results suggest use of expectancy
- Older: results suggest no use of expectancy

Expectancy analysis applied to webpage design

Proposal: make web browsing more efficient by placing information where users expect it