## AB101. Portable closed-circuit TV versus iPad in spot reading tasks

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**Background:** Spot reading, the ability to obtain short pieces of visual information, can easily be rehabilitated with magnification devices, such as loupes or portable closed-circuit TVs (CCTVs). However, they have limitations such as screen size and price and have previously been shown to be stigmatizing when used in public. The arrival of tablet computers provides an alternative with greater magnification at a reduced price. We present preliminary results on the objective and subjective comparison of the iPad and a portable CCTV for spot-reading tasks.

**Methods:** Twenty-three men and 30 women aged 19–93 years, with impaired visual acuity (<20/60) due to central visual impairment, were asked to complete spot-reading tasks involving three common objects (TV cable bill, nutrition info on food package, box of eye drops) using the iPad and a portable CCTV in randomized order. We measured their ability to complete each task and the time it took, in addition to their subjective device assessment and preference.

**Results:** A Bayes Factor and effect size analysis showed no statistically significant differences between the device conditions in the time to complete each task [BF01>4.05, median =-0.043, 95% credible interval (-0.21, 0.234)]. Choosing one device over the other may simply depend on preference which, in our cohort, was divided (39.6% iPad, 56.6% CCTV, 3.8% neither) and which could be influenced by factors such as device size, usability or stigmatization.

**Conclusions:** The data indicate that, for certain spot reading tasks and levels of difficulty, the use of a tablet computer may be as efficient and effective as a traditional device such as a portable CCTV. Future investigations will further examine device preference as we predict that it may influence device success and continuation of use.

Keywords: Portable CCTV; iPad; spot reading

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