## **Study: smartphone game shows baggage screeners likely to miss ultra-rare items**

December 26, 2013

## Wired:

A study has used data collected from a smartphone game that allows users to act as airport baggage screeners to prove that ultra-rare items are highly susceptible to search errors.

Cognitive psychologists from Duke University in North Carolina analysed data collected from a game called *Airport Scanner*, which was developed by Kedlin Company and tests gamers' visual scanning skills. Overall the team studied 20 million virtual suitcase search results collected between December 2012 and March 2013 and discovered that in the majority of cases, participants failed to identify objects which only occurred rarely.

The study has been published in the journal *Psychological Science* and suggests that in situations where high levels of accuracy are crucial, such as radiology and security scanning at airports, it's unlikely that troublesome items that rarely crop up will be correctly identified. This is particularly worrying in the case of spotting cancer through radiography, which in the case of mammography is only present approximately 0.5 percent of the time. One particular marker of potential breast cancer are architecture distortions, which occur even less frequently — around 0.05 percent of the time.

Read the whole story: Wired