The use of colour is an integral component in visual interface design for creating separation between objects and for conveying meaning. It has previously been established that colours can be separated in a hierarchy of primary colours and secondary colours, and that colours are consistently associated with specific mood tones. However, it has thus far not been investigated whether these two factors, which we refer to as the perception-primacy and emotion-conveyance, are associated with attentional capture in a congruent manner. To investigate this, we conducted a visual search task study in a controlled environment, in which 11 participants scanned a 20 item display for a coloured target amongst coloured distractors. We found evidence to support that primary colours capture attention significantly more than secondary colours, and inconclusive evidence that colours convey their meaning at a sufficiently early level of processing to influence attention. We end by discussing implications of our results for design practice and research in psychology.

General information
Publication status: Published
Organisations: Department of Management Engineering, Engineering Systems, Copenhagen Center for Health Technology
Contributors: Andersen, E., Maier, A.
Number of pages: 1
Pages: 519-528
Publication date: 2017

Host publication information
Title of host publication: Proceedings of the 21st International Conference on Engineering Design (ICED17), Vol. 8: Human Behaviour in Design
Publisher: Design Society
Keywords: Attention in design, Emotional design, Communication, HUman behaviour in design, Visualisation
Electronic versions:
Andersen_Maier_DS87_Vol8_DesHum_431.pdf
Source: PublicationPreSubmission
Source ID: 132847701
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review