The influence of new UX principles for inclusive UI design

How older people perceive Facebook compared to a senior-dedicated social media platform?

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Background and objectives

The coinciding trends of an ageing population and technology that pervades our lives poses several interesting challenges for the science of ergonomics. The increasing use of technology may result in usability problems for all users but will pose a particular difficulty for older adults (Rogers, Stronge & Fisk, 2005). The present study aims to examine issues related to the design for older users, with a special emphasis placed on the evaluation of the usefulness of design principles (e.g. simplicity, transparency, coherence…).

Participants from two age groups were recruited for the study. One group represented younger adults, the other group consisted of older adult users. Two systems providing social media services were evaluated – Resoli, which was developed for this study, and Facebook, which is used as a reference system for comparison.

We expected that older participants would use Resoli more efficiently and with a higher satisfaction than Facebook and anticipated that also younger participants would benefit from the implemented design principles.

Design and Method

Study Design Quasi-experimental 2×2 mixed design, factors: Age (young vs. old, between factor) and System (Resoli vs. Facebook, randomized within factor).

Participants All participants (N = 46) did not use Resoli and Facebook on a regular basis.

Measures Subjective Usability Scale (SUS; Brooke, 1996); Visual Aesthetics of Websites Inventory (Moshagen & Thielsch, 2013); AniSAM (Sonderegger et al., 2016).

Tasks 5 typical tasks (e.g. create an event) identical for both systems.

Procedure Lab-based usability test, 20 CHF reward, randomized order of system evaluation, duration 45-60 minutes.

Interfaces The Resoli user interface was designed using parameters such as simplicity (1), transparency (2), interactivity (3), consistency (4), comprehensibility (5), flexibility (6), security (7). See opposite for details.

Results

Discussion

— Application of inclusive design principles are useful for both, young and older users, but older adults seem to benefit more.
— Older participants need more time to complete tasks – and they’re having a particularly hard time with Facebook, which can also be seen in the measure of affect.
— For both devices, ratings of older participants are more critical than the ones of the young.
— Limitations: Everybody knows Facebook; difficult to find non-users; biased results due to the data scandal from Facebook; Systems do vary with regard to functional complexity; larger variance of age for older participants.
— Future studies: Test design elements individually, longitudinal study.

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References:

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