

Abstract

Based on an empirically validated and well-established model of the components of user experience – the *CUE-model* (Thüring & Mahlke, 2007) – a new questionnaire, the *meCUE* (Minge & Riedel, 2013) consisting of 33 items that assess *instrumental* and *non-instrumental product perceptions, emotions, consequences and overall judgment* was developed. These subscales form four modules that can also be applied separately. In contrast to existing questionnaires, which lack central aspects of user experience, this tool offers a new method that assesses the major components of user experience in a comprehensive manner.

This study addresses the discriminative, convergent and criterion-related validity of the questionnaire. Moreover it is investigated whether the *meCUE* qualifies for application in industrial settings where interactive consumer goods are the object of evaluation. An expert review was conducted to identify three public transport apps with different quality of usability and design. These apps served as independent variables in the main study where the *meCUE* and relevant other questionnaires were applied by 24 participants to evaluate the interaction with the apps. The results show that the data of the *meCUE* successfully discriminates between the different apps. Moreover, the pattern of results is consistent with other validated questionnaires. In order to assess the convergent validity, correlations of the *meCUE*'s modules with related constructs of other questionnaires were calculated and produced significant results. Finally the results reveal significant correlations with a relevant external criterion.

The thesis shows that the *meCUE* produces valid results and can be of special interest in product development of interactive systems.