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A STUDY ON THE USABILITY EVALUATION OF THE FOREST DIGITAL DETOX APP

Abstract:

Smartphone dependency presents risks to mental well-being, prompting the development of digital-detox applications aimed at enhancing focus and productivity.

Forest, a widely used focus application employing gamification through virtual tree cultivation, boasts a substantial user base; however, its usability has not been subjected to rigorous evaluation. This study sought to assess the usability of Forest's user interface (UI) to optimize user experience (UX) and reinforce its efficacy in supporting digital detoxification, while simultaneously contributing to the field of human-computer interaction research.

A mixed-methods evaluation was conducted with a sample of five participants. Guided by Nielsen's usability heuristics, the study centered on user control, personalization, clarity, and visibility.

Participants completed a five-item Likert-scale questionnaire and participated in semi-structured interviews to explore UX challenges and propose design enhancements. Evaluation elements encompassed the time selector, plant button, warning pop-up, ambient-sound control, and tree-selection functionalities.

Survey results indicated favorable ratings for time-selector clarity, start-button discoverability, and tree-selection flexibility, each achieving a score of 4.0/5. In contrast, warning message clarity received a score of 3.8/5, and ambient-sound usefulness was rated at 2.0/5.

Interviews highlighted strengths such as the intuitive time selection process, readily discoverable controls, and unambiguous visual prompts.

Conversely, users expressed concerns regarding the complexity of the time wheel, the inadequate discoverability of the ambient-sound feature, small font sizes and low contrast ratios, the suboptimal organization of settings, and the absence of an automatic background-lock function.

Based on these findings, the authors recommend incorporating a digital time-input alternative or enhancing the clarity of the time wheel, providing more accessible and adaptable ambient-sound controls, improving text legibility and accessibility options, restructuring the settings UI, reducing the plant-button delay, and implementing a focus-mode auto-lock.

While the sample size was limited, addressing these identified usability issues has the potential to improve user satisfaction and more effectively support digital detoxification objectives. Future research will employ larger and more diverse samples and conduct comparative analyses between Forest and other digital detox applications to validate the generalizability of the findings and to identify variations in usability patterns across diverse user groups.

Keywords:

Usability evaluation, User experience, Digital detox, Mobile application