

# **The impact of persuasive technology on user emotional experience and user experience over time**

## **Abstract**

Experience is key in deciding whether or not to adopt a system such as persuasive technology, which aims to persuade people to take up a targeted attitude or behavior. Thousands of persuasive technologies have been developed for commercial and academic uses; however, many studies on experience have mainly been conducted on products and none have focused on studying experience in the context of persuasive technologies. Therefore, this study aims to investigate emotional experience and user experience when using persuasive technology. Twenty-five participants comprising university staffs and students were given 6 weeks to use two different persuasive web applications-one on health and the other on environmental issues. A pre-post interaction approach was carried out to analyze the participants' emotional experiences; Positive and Negative Affect Schedule (PANAS) instruments and questionnaires were used to assess user experience based on the pragmatic, hedonic, and appeal quality of the web applications. From 20 PANAS emotions, only six emotions were found to have significant impact. Although a significant change happened in user experience perceptions from the pre-interaction to post-interaction stages, no significant change happened in user emotional experience. The findings imply that the changes in user experience perceptions over time may contribute towards altering persuasion, whether by increasing or reducing persuasion via persuasive technology. As a result, this study contributes new information to the theory of designing persuasive technology such that more concern is put on the hedonic quality and appealingness of a system for greater user experience and an emotionally impactful and successful persuasion