

Using psychophysiological techniques to measure user experience with entertainment technologies

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Emerging technologies offer exciting new ways of using entertainment technology to create fantastic play experiences and foster interactions between players. Evaluating entertainment technology is challenging because success isn't defined in terms of productivity and performance, but in terms of enjoyment and interaction. Current subjective methods of evaluating entertainment technology aren't sufficiently robust. This paper describes two experiments designed to test the efficacy of physiological measures as evaluators of user experience with entertainment technologies. We found evidence that there is a different physiological response in the body when playing against a computer versus playing against a friend. These physiological results are mirrored in the subjective reports provided by the participants. In addition, we provide guidelines for collecting physiological data for user experience analysis, which were informed by our empirical investigations. This research provides an initial step towards using physiological responses to objectively evaluate a user's experience with entertainment technology.