

Social Interaction in Games : Measuring Physiological Linkage and Social Presence

EKMAN, Inger, *et al.*

Abstract

Psychophysiological methodology has been successfully applied to investigate media responses, including the experience of playing digital games. The approach has many benefits for a player experience assessment—it can provide detailed, unbiased, and time-accurate data without interrupting the gameplay. However, gaming can be a highly social activity. This article extends the methodological focus from single player to include multiple simultaneous players. A physiological metric for investigating social experience within a shared gaming context is introduced: Physiological linkage is measured by gathering simultaneous psychophysiological measurements from several players. The authors review how physiological linkage may be associated with social presence among participants in various gaming situations or social contexts. These metrics provide such information about the interaction among participants that is not currently available by any other method. The authors discuss various measures used to calculate linkage, the related social processes, and how to use physiological linkage in game experience research.

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Social Interaction in Games

Measuring Physiological Linkage and Social Presence



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Abstract

Psychophysiological methodology has been successfully applied to investigate media responses, including the experience of playing digital games. The approach has many benefits for a player experience assessment—it can provide detailed, unbiased, and time-accurate data without interrupting the gameplay. However, gaming can be a highly social activity. This article extends the methodological focus from single player to include multiple simultaneous players. A physiological metric for investigating social experience within a shared gaming context is introduced: *Physiological linkage* is measured by gathering simultaneous psychophysiological measurements from several players. The authors review how physiological linkage may be associated with *social presence* among participants in various gaming situations or social contexts. These metrics provide such information about the interaction among participants that is not currently available by any other method. The authors discuss various measures used to calculate linkage, the related social processes, and how to use physiological linkage in game experience research.

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