

See no rival, hear no rival

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See no Rival, hear no Rival

B.J. Gajadhar
Eindhoven University of Technology
Game Experience Lab
IPO building 0.15
B.J.Gajadhar@tue.nl

ABSTRACT

Digital games increasingly allow for social interaction between players [1,2,3], because being able to interact with others adds to the fun and engagement [4,5,6]. In addition to the multiplayer modes offered by many games, there is frequently the opportunity to employ live audio (headset) and/or video (webcam) to enable or enhance the communication between gamers [7]. In the current presentation, we aim to explain the influence such additional social communication channels may have on player experience and social presence.

In Computer-Mediated Communication (CMC) literature, face-to-face interaction is often assumed to be the richest – and hence best – form of interaction; accordingly, communication media can be ordered in social richness according to how well they approximate the face-to-face setting. To test whether results from CMC literature also apply for digital gaming, we present an empirical study in which social presence and player experience are investigated as a function of social cues when digital games are played over a distance (i.e. online play). The availability of social cues (audio and video) is systematically varied. Employing video data and questionnaires, we hypothesized that the same results would be revealed as in CMC literature, i.e. more cues would enhance social presence and player experience.

To address the research question a 2x2x2x2 experimental mixed groups design was employed, where the Availability of Audio Cues (yes vs. no; within subjects), Availability of Visual Cues (yes vs. no; within subjects), and Player Performance (winner vs. loser) were used as fixed factors. The study was divided in a group of 40 dyads playing in collaboration and 40 dyads that played in competition (factor Configuration). After the game (Unreal Tournament), participants filled in a questionnaire which included the Game Experience Questionnaire [8] and the Social Presence in Gaming Questionnaire [9]. During the sessions participants were recorded by cameras for enabling observation analysis afterwards.

Preliminary results on self-reports show similar effects found in a previous pilot study [7]. Social presence in gaming is strongly influenced by the availability of audio cues in digital game settings; the added value of visual cues was modest. Observation data revealed that talking and – especially – laughing & cheering caused differences in experienced social presence. These results are similar for players in collaboration and those in competition. Furthermore, several components of player experience were significantly influenced when conversation is possible. Though, hardly any impact on player experience was found when players could see each other. Interestingly, players in collaboration significantly experienced less challenge and

frustration when they were able to speak each other. This supports early results found in Gajadhar, de Kort, IJsselsteijn & Poels [3]

These preliminary findings reveal that having the opportunity to use vocal sounds – i.e. speak, laugh and cheer – significantly adds to a more positive player experience in terms of enjoyment and engagement. Analyses furthermore demonstrate that changes in player experience are mediated by the feelings of social presence, similar as in [4]. With the use of observation data, mediation analyses statistically proved that social presence is increased by the use of talking, laughing and cheering; i.e. the use of vocal sounds. Besides social fun, the ability to have conversations also decreases the difficulty of the game, since players may give hints to each other. This effect was only found for players in collaboration. It therefore seems that the ability to exchange vocal cues causes player experience to be more positive, due to the social fun and the more easy game play.

Keywords: *Social play, digital gaming, social interaction, social presence, player experience, SPGQ, GEQ.*

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