# (7) Effects of Screen Size on Physical Presence, Self Presence, Mood, and Attitude toward Virtual Characters in Computer/Video Game Playing

Kwan M Lee & Wei Peng

Annnenberg School for Communication

University of Southern California

Los Angeles, CA 90089, USA

Email: kwanminl@usc.edu

## Abstract

The current study investigates the effects of screen size on feelings of presence (physical and self), mood, and social responses to avatars on the screen, in the context of computer game playing. Thirty participants played a third-person point of view (POV) computer game--Tomb Raider II--with either a small screen (14 inch standard monitor) or a large screen (81 inch ImmersaDesk). Participants who played the game with a large screen reported significantly higher feelings of presence (both physical and self presence). Furthermore, they exhibited more intense changes in their mood after playing the game, especially Positive Affect measured by MAACL-R (Multiple Affect Adjective Check List-Revised). Participants with a large screen also evaluated the avatar--Lora Craft--of the game as being more sociable. In addition, the analyses of the pre-experiment survey data reveal that game users' feelings of presence are positively correlated with their computer game self efficacy and negatively correlated with their age. Theoretical implications of the current study to the study of presence and social interaction with avatars are discussed.