

DISSERTATION PROGRESS

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I successfully defended my dissertation on April 4, 2011. I made the few revisions requested by my committee and the Graduate School, and my dissertation was accepted by the Graduate School on April 25, 2011. I graduated with my Ph.D. in Communication from the University of Kentucky on May 8, 2011.

UNDERSTANDING INTERACTIVE EXPERIENCES:
PERCEIVED INTERACTIVITY AND PRESENCE WITH AND WITHOUT
OTHER AVATARS IN THE ONLINE VIRTUAL WORLD SECOND LIFE

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Communications and Information Studies
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ABSTRACT OF DISSERTATION

UNDERSTANDING INTERACTIVE EXPERIENCES: PERCEIVED INTERACTIVITY AND PRESENCE WITH AND WITHOUT OTHER AVATARS IN THE ONLINE VIRTUAL WORLD SECOND LIFE

Interactivity research lacks consensus regarding the qualities and consequences of interactive experiences. Empirical proof is needed to substantiate the numerous interactivity theories and provide direction for new media technology developers. Specifically, there is a shortage of research on differences between user experiences of interactivity when technology enables communication versus when it does not. In addition, interactivity research is often confounded by the construct of presence.

This study's objectives included: 1) identifying qualities associated with interactive experiences; 2) disambiguating the constructs of interactivity and presence; and 3) developing a measure of perceived interactivity for VW research. The experimental design measured perceived interactivity and presence following completion of a simple task in the online Virtual World (VW) known as Second Life. It was hypothesized that both perceived interactivity and presence would be greater for subjects encountering avatars believed to be controlled by other people than for subjects encountering no other avatars in the VW. A total of 180 subjects from the University of Kentucky participated in a 2 by 4 factorial experiment. Perceived interactivity was measured by modifying McMillan and Hwang's Measure of Perceived Interactivity for the VW context.

Two essential qualities of interactive experiences were identified: Responsiveness and engagement. These qualities are characteristic of unmediated, FTF conversation, which was perceived as the most interactive communication context above technologies routinely described as interactive. Decreased responsiveness of technology at a second study venue caused significant decline in perceived interactivity, demonstrating the importance of a technology's reaction speed and control provided to the user. Significant main effects for perceived interactivity due to encountering other avatars were confounded by interaction effects due to differences in technology responsiveness. Interactivity and presence appear to be separate psychological constructs

which covary in the context of a new media experience. Implications and directions for future research are discussed.

KEYWORDS: Interactivity, Presence, Virtual World, New Media, Communication
Technology

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Student's Signature

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Date

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