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Recording lying, cheating, and defiance in an Internet Based Simulated Environment

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Abstract

This study explored the utility of an Internet Based Simulated Environment (IBSE) in eliciting and recording the behaviors of lying, cheating, and defiance. The IBSE created for the study simulated an online 'quiz' environment which was programmed to elicit frustration of the participants and record their actions based on pre-defined and pre-programmed descriptions of lying, cheating, and defiance. The study was successful in eliciting and recording a total of 85 occurances of these behaviors from 191 participants.
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1. Introduction

Is it possible that a computer program could handle the task of recording human behavior? Could a computer program produce an environment that elicits or offers the opportunity to exhibit certain behaviors? The answer to both questions is yes.

We may not always recognize it but we witness and participate in the recording of human behavior by computers and Internet applications everyday. When we send emails, talk to others in an online chat room, use key words for a Google search, or simply

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bookmark our favorite website our actions are being recorded in some way by a pre-defined program running on a computer. We utilize and interact with this technology in our personal and work lives, but do we effectively utilize these environments for scientific research? How can we best maximize this technology to not only *record* behavior, but to create simulated environments designed to present the opportunity for specific behaviors to occur?

Currently, computers and Internet technologies are being utilized in scientific research from physiological disorders to social interactions. For example, eye movements and facial expressions can be captured and coded via a camera connected to a computer software program designed to record such actions (Bianchi-Berthouze & Lisetti, 2002; Oyekoya & Stentiford, 2006). Online social interactions have also been recorded via bulletin board and chat room exchanges (Nguyen, Torlina, Peszynski, & Corbitt, 2006; Schweizer, Paechter, & Weidenmann, 2003). In a review of current psychological research on the Internet, Skitka and Sargis (2006) found that translational research represents the majority of research being conducted utilizing the Internet as a tool. In other words, most psychological research being conducted on the Internet includes simply changing the delivery method of questionnaires from paper-and-pencil to an electronic equivalence. Although this transition will offer advantages over traditional methods and is a step forward, it does not embrace the full capabilities of an Internet environment as a tool. The authors found no reports of Internet research being conducted in which behavior was both elicited and recorded in a pre-defined, controlled Internet environment. As Skitka and Sargis (2006) state:

> The focus of translational research tends to be less on the Web per se than it is on using the Web as a tool that facilitates ease of reaching participants and ease of data collection. In short, using the Web in translational research is a means to an end, not an interesting end in itself for most of these researchers. (p. 535)

Other than highly complex and expensive software creations of virtual realities such as flight training simulations, research is lacking in utilizing electronically generated environment such as an Internet Based Simulated Environment (IBSE) to mimic experiences that can elicit and record specific pre-defined behaviors of interest to scientists. More specifically, research utilizing such technology to record behavioral manifestations of human personality traits is needed. This need for an electronic environment such as an IBSE will be driven by the inherent difficulty of utilizing direct observation in a real or laboratory setting which often leads researchers to rely on self-reports of behavior.

Some researchers have gone beyond presenting a static questionnaire on the computer and maximized questionnaires by utilizing the capabilities of computers to dynamically or logically progress participants through the questionnaire (Russell, 2006). For example, the Graduate Record Exam tailors or modifies which questions are presented to test-takers based on their skill level ascertained by how previous questions were answered. The authors plan to continue this evolution and further take advantage of the dynamic abilities of computer programming to conduct research in the social sciences. In this study, the authors will utilize an IBSE designed to elicit and record pre-defined behavior helping to minimize some difficulties encountered by current methodologies to record human behavior and provide a way forward with IBSE research.