**Communication and Interaction in Group Decision-Making during School Shooting Simulations**

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Submitted November 29, 2010

IRB Synopsis

With increasingly limited resources available to government agencies as well as private industry, decisions to invest in new technology such as high-powered computers and specialized software become more dependent on the proven effectiveness of such technologies. This research examines the effectiveness of design elements, such as the visualization of time data and agent based modeling, in supporting communication for task driven decision-making. Small groups are observed using both a geovisualization application as well as more traditional tools such as maps and images, ass support tool. The groups are tasked with policy choices with regards to emergency management in school shooting scenarios. The data is collected through surveys and video recordings of discussions. Both quantitative and qualitative methods are used to identify multiple constructs within the communication of the group. These constructs are evaluated specifically for effects by the software application.