**IRB Synopsis of Proposal**

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

1. The potential subjects for this study are from two sources. The first source, which will make up the largest number of subjects, consists of graduate students at Texas State University-San Marcos. There are no requirements of age, sex, ethnic background or state of health. Students, on a volunteer basis, will be assigned randomly to a group of 5 individuals. The second source will consist of professionals working in the area of school shooting prevention. This can include law enforcement, school staff and medical professionals who will be recruited on a voluntary basis. The data will be of two forms, video and questionnaires. The groups will be asked to discuss potential evacuation solutions to school shooting scenarios and the discussions will be videotaped along with information from the software the subjects will use. At the end of each session, the subjects will be asked to fill out a questionnaire concerning their experience with the technology used and their interactions with the group. There will potentially be 5 groups of 5 graduate students and 1 group of professionals.
2. The recruitment for graduate students will be through graduate classes and the Department of Geography at Texas State University-San Marcos. The recruitment for the professional subjects will be through the Texas State University-San Marcos affiliate, ALERRT, which is a source of training for officers dealing with emergency response to situations such as school shootings. The subjects will be asked to join on a voluntary basis with no compensation. The recruitment will include word-of-mouth, email notices and posted signup sheets. The subjects that volunteer will have full disclosure of the purpose of the study and what information will be gathered from them. They will be asked to read and sign a consent form in the presence of the researcher and will have an opportunity to address any concerns before the sessions start. The consent form has been included.
3. In this study, groups of 5 will use different media technology to discuss evacuation options during a school shooting scenario. The study includes two sessions for each group. In one session subjects use blueprints, building images and text documents to aid in the discussion while in the second session subjects use a virtual world application to aid in the discussion. Each session will be videotaped and at the end of the session, each subject will fill out a questionnaire concerning their experience with the technology and with the group. The yes/no section of the questionnaire will be analyzed using the Chi-square test of homogeneity to determine if a difference exists between the two sessions. The videotaped discussion and the open-ended portion of the survey will be analyzed using Adaptive Structuration Theory to determine if particular components of the technology had an impact on the discussion. The questionnaire has been included.
4. The risks related to this study are minimal. The physical requirements are to sit for a period of time and use a computer. These are equal to a short period of time working in an office setting. The subject matter is sensitive and the subjects will be made aware of this from the beginning of the study and that they have the option of ending their participation in the study at any time. If the experience is unsettling, the subjects will be informed in writing and verbally of different places they can go, such as the Texas State University Health Center, to talk with a counselor.
5. This study presents minimal risks, both physical and mental. The subjects will be made aware of options to speak with a counselor if the subject matter is uncomfortable such as the Texas State University Health Center.
6. This study looks at specific components of a software application to determine if those components benefit decision-making in group discussion compared to more traditional media. In a specific context, virtual worlds are easily accessible and provide a rich depiction of the world through time and space information. If this type of technology can aid in decision-making for hazardous situations, then more individuals may include this option to aid in understanding a wide range of hazardous situations. In the larger context, many new types of technology are becoming available to schools, government and business. These new technologies, such as Google Earth and GIS, have potential for teaching, communicating and exploring information, yet very little research has been conducted to compare the new technology with existing technology such as topographic maps and images. Looking at how the different technologies compare to one another can help groups with limited recourses decide which technology most effectively utilizes their investment.
7. There will be no compensation offered in this study.
8. The risks and benefits are very minimal for the subjects in the study. The subjects may feel uncomfortable with the subject matter and leave the study or need to discuss this with a counselor, while they may benefit from an understanding of how groups work together to reach decisions and how technologies aid this process. There are no discernable risks for society at large but the benefits are in understanding how new technology can benefit society, how to approach this understanding and where to invest resources effectively.
9. There are no agencies, outside of Texas State University-San Marcos, involved with this study.
10. I am a doctoral student at Texas State University-San Marcos and this research is the foundation for my dissertation. My advisor is Dr. Sven Fuhrmann in the Department of Geography.
11. I have included a letter from my advisor addressing the approval of my committee for my proposal.
12. This study has not been reviewed by another IRB.
13. Individuals that will have access to the results of this study will include my advisor, my committee, the subjects of the study and parties interested in reviewing the study for future work.