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RISK PERCEPTION IN ONLINE COMMUNITIES

by

Jason R. Couraud

A dissertation submitted in partial fulfillment  
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Education  
(Management Information Systems)

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Logan, Utah

2014

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**ABSTRACT**

Risk Perception in Online Communities

by

Jason R. Couraud, Doctor of Philosophy

Utah State University, 2014

Major Professor: John Johnson, Ph.D.  
Department: Management Information Systems

The primary purpose of this research was to examine risk perception in online communities. This research used existing models developed in risk research and MIS to create a new model called the Risk Sensitivity, Attitude and Threat Appraisal (RATA) model. The resulting model was then used to investigate risk perception in online communities.

The method of investigation was a cross-sectional study using a self-reported, web-based survey that was created as a native Facebook app to test the RATA model. The survey targeted individuals who were members of the online community, Facebook. The data collection relied on snowball sampling and recruited a total of 378 participants who completed the online survey.

The research model contained 24 hypothesized relationships that were tested using multiple regression analysis techniques. The model contains six main predicting variables (risk sensitivity, attitude, specific fear/perceived severity, perceive

susceptibility, computer self-efficacy, and risk perception) and four moderating variables (age, education, gender, income). The model explains 25.7% of the variance in risk perception and 4.1% of the variance in the dependent variable, information revelation.

The results obtained demonstrate that certain constructs are more effective than others at influencing risk perception and information revelation. The results showed that risk perception (H6<sub>1</sub>) significantly affected information revelation. Results also showed that attitude (H2<sub>1</sub>), specific fear/perceived severity (H3a<sub>1</sub>), and perceived susceptibility (H4<sub>1</sub>) had significant effects on risk perception.

Information from this research provides evidence that constructs from risk perception research can be used to study risk perception in online communities. Additionally, the relationships of attitude, specific fear/perceived severity, and perceived susceptibility to risk perception provide means to influence an individual's risk perception and thereby influence his information revelation habits. This can be done by educating members of online communities to the dangers that they could be exposed to as a result of risky information revelation behavior.

(253 pages)

**PUBLIC ABSTRACT**

Risk Perception in Online Communities

by

Jason R. Couraud, Doctor of Philosophy

Utah State University, 2014

Online communities have become a part of everyday life for many people. The members of the communities use them to keep in touch with family and friends, do business, look for jobs, play games, and more, both savory and unsavory. The ease of sharing personal information comes with the subsequent risk of having that information exposed publically or even stolen. The purpose of this study was to explore how much awareness of the risks affects a person's decision to post personal information to an online community.

Chapter I introduces the concepts and issues that will be investigated by this paper. Chapter II is a review of the literature on risk. Chapter III explains the model that was developed and used determine the relationships between risk perception, attitude, fear, and information revelation. Chapter IV explains the methods used to gather the data and what data was gathered. Chapter V contains the analysis of the data collected. Chapter VI contains the conclusion drawn from the data, implications for the research, and directions for future research.

## ACKNOWLEDGMENTS

It has been a long road for me to finally reach this stage in my life. I can honestly say that it has taken quite an effort on my part to keep going and to push through when the way ahead was difficult or obscured. However, I would not have been able to arrive at this point without the help of a myriad of others who deserve recognition and my thanks for their aid. I could not have accomplished all that I have without their help.

I would like to thank Dr. John Vinsonhaler for his guidance in getting paperwork initiated, helping me find a committee chair, and helping me form the beginning of my dissertation topic.

My gratitude also extends to the members of my committee. I would not have gotten this far without the aid and guidance from my committee chair, Dr. John Johnson, and my committee members: Dr. Jeff Johnson, Dr. Kelly Fadel, Dr. Zsolt Ugray, and Dr. Brett Shelton. Dr. John Johnson provided me with invaluable guidance and suggestions while refining my dissertation topic and reporting the results from the data that I collected. Dr. Jeff Johnson helped me to improve and research my subject recruitment method. Dr. Fadel provided valuable direction on statistical testing methodologies and software without which I would not have been able to analyze the collected data. Dr. Ugray aided me in clarifying many of the concepts that I used in my research. Dr. Shelton was always available to provide suggestions on possible directions for research and to help refine and clarify concepts. In addition, I am grateful to him for his willingness to join us via teleconference from Spain and then from his new posting at Boise State University.

I am also indebted to the other PhD students in the program with me, Chet, Kelley, Richard, Matt, and Joey. It was great to share an office and talk things through with you. I would probably have gone insane without your help.

I would also like to express my thanks to the many people in the Office of Research and Graduate Studies. I will always be grateful for their help in navigating all of the paperwork and forms required to obtain my Ph.D. They were always knowledgeable, courteous, and prompt with their communications. They definitely made the journey easier.

Last, but certainly not least, I want to thank my family. My wife has been an invaluable help to me during this process. She has helped me to file paperwork, find information, meet deadlines, and recruit subjects. In addition, she has also taken care of our four amazing children and given me the time that I needed to work on the completion of my degree. My children have also been as helpful and understanding as they could be, doing what they could to make sure that dad had the necessary time to work even though they would have rather had him play with them instead. I would also like to thank my extended family and my wife's family. They have provided vital help and encouragement to both my family and me.

Finally, I would like to say, thank you all.

Jason Couraud



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## **CHAPTER I**

### **INTRODUCTION**

The relatively recent advent of the Internet has spurred numerous trends and technological innovations of late. One trend that has risen to prominence lately is social software which is the basis for online social networks, or online communities. There have been a number of studies that have investigated online communities, the technology, the trends, and the issues (see Appendix K) as well as numerous studies investigating social networks outside of the online environment (Granovetter, 1973, 1983). However, few, if any have studied the users' perception of risk in online communities.

The proliferation of internet-ready technologies such as internet-ready cell phones, laptops, and tablet computers and the increasing affordability of these devices have greatly increased the ubiquity of, access to, and use of online services. In a recent radio interview the president of Facebook, Mark Zuckerberg, claimed that Facebook has over 500 million users (Zuckerberg, 2010). Granted, the current population of the world is around 6 billion, but this is still quite an accomplishment for an online community that started up in February of 2004. Considering that 72 million households in the U.S. have internet access, according to a population survey conducted in November 2007 and released in June of 2009 by the U.S. Census Bureau, at least one person in each of those households most likely has an account with at least one online community if not multiple accounts. Do these millions of users recognize that there is risk involved with belonging to an online community?

This dissertation explored the risk perceptions of members of online communities.



Specifically, this project investigated the extent to which members of online communities recognize the risk inherent in the information revelation behaviors in which they participate as members of the community. A new model, Risk Sensitivity, Attitude, and Threat Appraisal (RATA), is proposed to measure risk perception. RATA is a synthesis of research from the fields of Management Information Systems (MIS) and risk analysis. To measure true risk perception, a number of factors will be assessed, namely risk sensitivity, attitude toward the information revelation behaviors, perceived susceptibility, and perceived severity. RATA will enhance our understanding of risk perception in online communities which will better enable the members and the owners of the communities to align their needs and wants for security in the communities. RATA will also open new avenues of research into privacy and security in online communities.

### **Problem Statement**

Every day millions of people post potentially sensitive information to their profiles in online communities. Some information, such as location, place of employment, businesses one frequents, criminal violations, etc. can be much more risky to reveal than others even favorite music, books, movies, and quotes can still provide enough information to put one at risk to someone adept at manipulation of personal information. Risks include stalking (Gross & Acquisti, 2005; Singh, 2008), burglary (Gross & Acquisti, 2005), identity theft (Spanbauer, 2006), social ridicule (Pokin, 2007), physical violence (Daily Mail Reporter, 2010; Our Court Reporter, 2010), arrest (Hass, 2006; Lang, 2009; Lash, 2005), civil legal action (Anderson, 2012), loss of employment

and loss of potential income (Spanbauer, 2006), kidnapping, violence, death, and so forth. Some of these threats are rather on the extreme, worst-case scenario end of the spectrum, but the threats still exist (Anonymous, 2008; Daily Mail Reporter, 2010; Hass, 2006; Lang, 2009; Lash, 2005; Martinez, 2006; Our Court Reporter, 2010; Pokin, 2007; Zylbergold, 2007).

### **Purpose of the Study**

The purpose of this study was to determine to what extent members of online communities realize that there is risk associated with participation in online communities and the relationship between information revelation behavior and risk perception.

There is a wealth of information that demonstrates that the risk exists. Much of this evidence originates from news stories and personal experiences that point to the existence of problems in online communities. For instance, MySpace, once the fastest growing online community, had to change its operating paradigm recently due to its image as a haven for pedophiles (Pareso, 2010). While one can still create a personal profile, MySpace now styles itself as the place to go to discover new bands, promote bands, and listen to music. Do the members recognize the risks? Evidence suggests that when a corporation requests personal information the person to whom the request is made performs a risk-benefit analysis before providing the data (Smith, Dinev, & Xu, 2011). Do members of online communities perform a similar risk assessment before posting their data online?

In addition, this study investigated information revelation behavior in online

communities compared to the perceived risk.

Table 1 shows four combinations of risk perception and information revelation behavior. The most interesting combination of risk perception and information revelation would be high risk/high revelation. This would indicate that the individuals realize that they are putting themselves at risk and are still willing to reveal their personal information. Two other combinations of interest are high risk/low revelation and low risk/high revelation. The high risk/low revelation indicates that the individuals recognize the risk and are abstaining from revealing personal information. Those in this quadrant are more likely to abstain completely from membership in online communities. The low risk/high revelation signifies that the individuals do not see their activities as risky and that may indicate why they reveal personal information. The fourth scenario is that the members feel that the risk is not great and do not reveal or feel no need to reveal their personal information. This last scenario could indicate nonparticipation in online communities. That is not to say that the person does not have an account with an online community, simply that he does not share personal information online.

Table 1

*Risk Perception/Information Revelation Matrix*

Risk perception	Information revelation	
	High Revelation	Low Revelation
High risk	HR/HR	HR/LR
Low risk	LR/HR	LR/LR

## **Conceptual Framework**

This study developed and presents the RATA to study the relationship between risk perception and information revelation in online communities. The RATA is a combination of the Technology Threat Avoidance Theory (TTAT) and the Risk Sensitivity, Attitude, and Specific Fear model (RAF). The main focus of the TTAT is to explain avoidance behavior of which Threat Appraisal is a part. The TTAT is bolstered by the inclusion of certain constructs found the RAF model, which is taken from the field of risk assessment. This study postulates that the inclusion of explanatory factors taken from the RAF model and the TTAT is important to risk assessment in online communities. While both the RAF and TTAT do contain commonalities, the attitude construct is not present in the TTAT.

## **Research Objectives**

This study explores the behavioral precursors involved in risk assessment and information revelation in online communities. The two research objectives were as follows.

1. Explore the relationship between risk assessment and information revelation in online communities.
2. Increase the body of knowledge of risk assessment in the Management Information Systems (MIS) field using the Risk Sensitivity, Attitude, and Threat Appraisal model as a framework.

## Overview of Dissertation

The dissertation is separated into six chapters. Chapter I, the introduction, provides an overview of the research topic, the purpose of the research, and a brief introduction to the model.

Chapter II covers the literature review. The literature review will cover the work done in the fields of risk and MIS, as well as reviewing the concepts of risk target and computer self-efficacy.

Chapter III presents the theoretical model and hypotheses that were tested in this research. The constructs used in the model were adapted from the Risk Sensitivity, Attitude, and Specific Fear model and the Technology Threat Avoidance Theory. The constructs are Risk Sensitivity, Attitude, Threat Appraisal (a combination of Specific Fear/Perceived Severity, and Perceived Susceptibility), and Computer Self-Efficacy. The model also includes demographic moderators: age, education, gender, and income. The dependent variable, Information Revelation, is taken from the MIS literature.

Chapter IV explains the research methodology used in this study. This chapter also discusses the research design and the reasoning behind the approach used in this study. In addition, the constructs are operationalized in this chapter.

Chapter V discusses the data collection, survey procedures, instrument validation, and analysis and results of the research.

Chapter VI, the concluding chapter, will include the results, limitations, and implications for research as well as suggestions for possible future research suggested by the results.

## **CHAPTER II**

### **LITERATURE REVIEW**

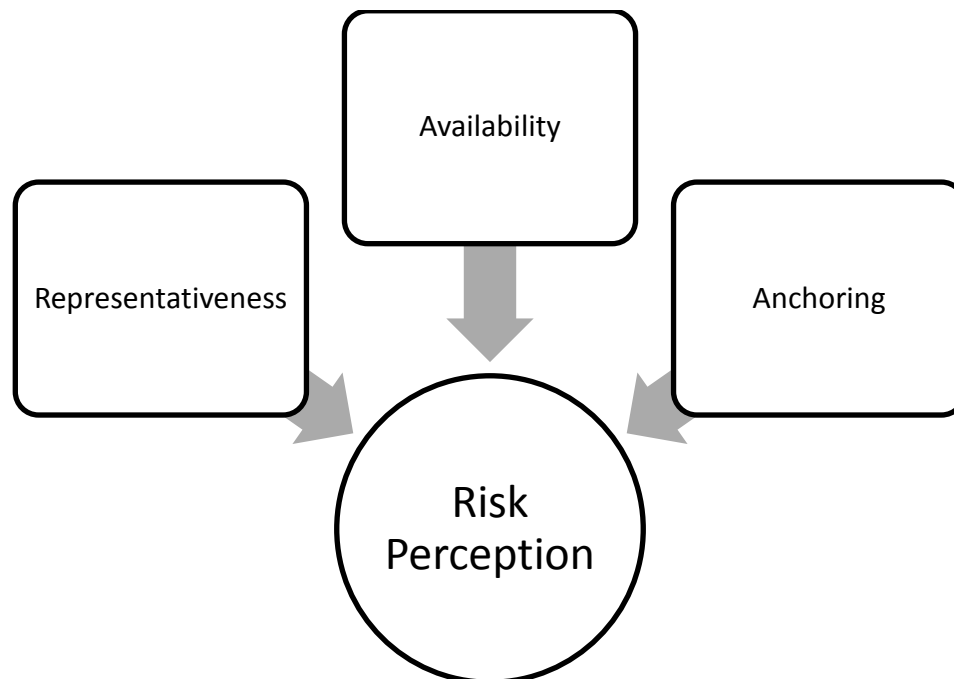
The literature review in this chapter will provide a summary of the research that has been performed in the area of risk perception in both the fields of MIS and risk research. In addition, the literature of research done on the Computer Self-Efficacy construct will also be reviewed.

Since the mid-60s models and approaches have been constructed to test individuals' risk perception (Sjöberg, 2000). Risk perception is defined as the perceived probability of harm occurring as a result of the risk object. Initial work on risk perception limited risk perception to technical estimates of risk (Sowby, 1965). This was later expanded by Starr, who demonstrated that a subjective element also played a role in determining perceived risk (Starr, 1969).

There are two major approaches for modeling risk perception. The first and most commonly utilized approach is based on the psychometric model proposed by Fischhoff, Slovic, Lichtenstein, Read, and Combs (1978). The second approach is based primarily on the cultural theory developed by Douglas and Wildavsky (1983). Each of these approaches has strengths and weaknesses. The models developed using these two approaches will be described, followed by the description and justification of the model chosen for this research study. The models include: heuristics, biases, and risk perception model, psychometric model, cultural theory, risk sensitivity, attitude, and specific fear model, and the technological threat avoidance theory. Further, the concepts of risk target and computer self-efficacy will also be discussed.

## Heuristics, Biases, and Risk Perception

The heuristic approach was originally conceived as an approach for determining how individuals make choices when faced with uncertainty (Tversky & Kahneman, 1974). The heuristic approach uses three heuristics to model the decision making process, namely representativeness, availability, and anchoring (see Figure 1). Representativeness is defined as a probability judgment based on how closely A is similar to B or how closely A represents B. Availability is defined as a frequency judgment made by judging how easily occurrences or instances of the same type can be brought to mind. Anchoring is defined as the starting point for the decision making process. While all three heuristics are necessary for modeling risk perception, availability is central to understanding risk perception (Tversky & Kahneman, 1973). The centrality of availability to the model is

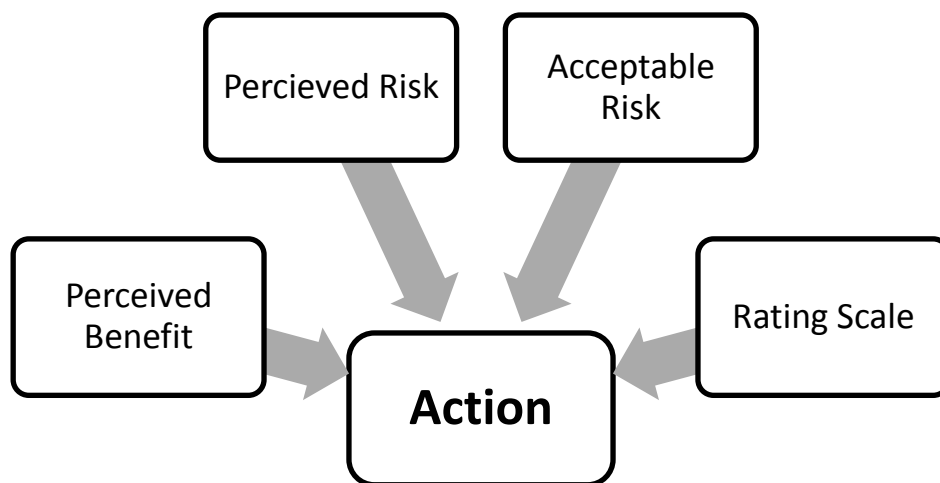


*Figure 1.* The heuristic approach to risk perception.

related to the idea that frequent media exposure of a hazard will increase the level of perceived risk. However, Fischhoff, Slovic, and Lichtenstein (1982) showed that risk perception is much more multidimensional and the role of mass media in risk perception is still under debate (Freudenburg, Coleman, Gonzales, & Helgeland, 1996; Wahlberg & Sjöberg, 2000). In addition, this particular approach presumed that belief distortion is a question of cognition, or that there is a separation between beliefs and values. This is not the case however, as it has been demonstrated that beliefs and values correlate strongly (Sjöberg & Biel, 1983).

### **The Psychometric Model of Risk**

Much of the research into risk perception has been conducted using the psychometric model of risk (Figure 2), as the foundation. The psychometric model of risk was developed and tested by Fischhoff and colleagues (1978). This model of risk measures activities on perceived benefit to society, perceived risk, acceptability of the



*Figure 2.* Psychometric model of risk.



current risk level, and on a rating scale consisting of nine dimensions that were hypothesized to influence risk.

However, according to Sjöberg (2000) there are several inadequacies in the psychometric model. The first is that the scales (originally 9 and expanded to 18) give very few factors when a factor analysis is performed. These factors may account for 80% of the variance but that does not imply that they also account for the perceived level of risk. The scales were compiled from earlier research and left out interference with nature. More recent research has proposed that a new dimension should be added to the psychometric model, that of “unnatural” and “immoral” to cover the interference with nature. In a study of perceived risk of nuclear waste, the addition of the Unnatural and Immoral dimension improved the performance of the psychometric model (Sjöberg, 1996). The only factor in the study with a significant  $\beta$  value was the unnatural and immoral factor. In addition, the variance explained is due to the researchers analyzing the mean ratings and not the raw data. When the raw data is analyzed using the psychometric model the variance explained drops to around 20% indicating that some factors could be missing from the analysis. Sjöberg (1996) also argued that in the case of personal risk perception the responses of the individuals should have greater importance than the average behavior. It has also been argued that in the psychometric model the factors are not inherent to the hazards being rated, but to the respondents’ views on how risk should be managed (Marris, Langford, & O’Riordan, 1998).

## The Cultural Theory

The cultural theory of risk (see Figure 3) proposes that risk perception is a function of the culture to which you belong. Risk avoidance then, is reinforced by social norms. Individuals then reinforce the social structure by their aversion to anti-social behavior and the resentment toward those who participate in such behavior.

Further, cultural theory posits that society can be divided into four types of people based on two dimensions; grid and group. Grid refers to the degree to which an individual's life is limited by externally enforced guidelines. The more an individual feels compelled to follow these guidelines the less life is open to individual determination. Group refers to the degree to which an individual is included into a circumscribed unit. The stronger the individual perceives the group tie to be, the more individual choice is left to the group. For more information on the groups see Appendix C.

A person's social context, or the group to which they belong, is then assumed to govern their beliefs which in turn govern their perception of risk. However, no investigation has been made, as of yet, into the validity of this aspect of the cultural theory.

Further, according to Marris, Langford, and O'Riordan (1998) the purpose behind the cultural theory was not to explain risk ratings, but to explain different viewpoints



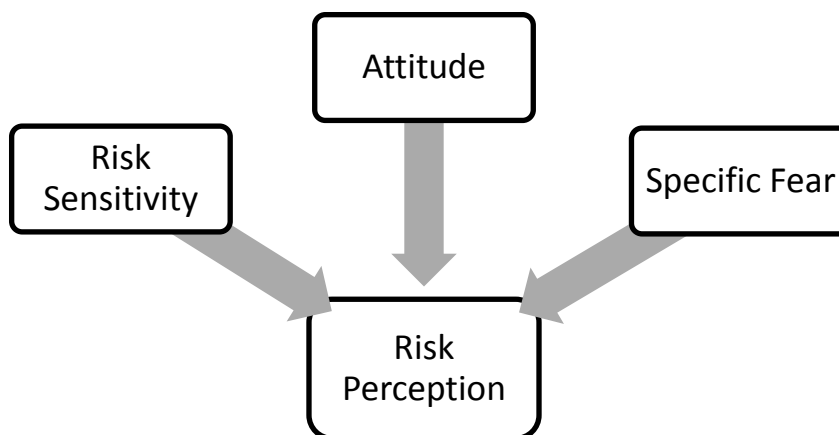
*Figure 3.* Cultural theory of risk.

about how and who should manage risk.

In addition, cultural theory is perhaps the weakest of the risk perception theories and models. In studies conducted in the U.S. and Europe cultural theory only accounts for about 5% of the variance on average (Marris et al., 1996; Sjöberg & Drottz-Sjöberg, 1993).

### **The Risk Sensitivity, Attitude, and Specific Fear Model**

The RAF model (Sjöberg, 2000) is an approach based on the psychometric model (see Figure 4). In this model, risk perception is built using three constructs as the name implies. The first, risk sensitivity, is defined as an individual's reluctance to put himself at risk in a general, nonspecific sense. Second, attitude describes whether the feelings a subject has toward an attitude object are largely positive or negative. Finally, specific fear is defined as the elements or negative consequences that cause an individual to fear a risk object.



*Figure 4.* Risk sensitivity, attitude, and specific fear model.

The RAF model relies on two assumptions. The first is that people truly differ in their sensitivity toward risk. This means that there is a range of risk sensitivity from sensitivity to all risks to no risk sensitivity and each person exists on this continuum irrespective of anyone else. The second assumption is that attitude can and does drive beliefs and values. Fishbein and Ajzen (1975) argued that beliefs and values determine attitude while Sjöberg (1991) argued that structural equation modeling supports the opposite view.

In the area of MIS, Liang and Xue (2009) investigated risk perception in conjunction with risk avoidance and technology adoption. The main focus of their work was analyzing how individuals avoided risk as opposed to adopting technology as a result of running afoul of some threat. The model that they propose, the technology threat avoidance theory (TTAT), see Figure 5, combines a number of theories from various disciplines to model risk avoidance. Part of their model deals with threat appraisal that Liang and Xue asserted occurs as IT users assess the potential dangers in the computing environment.

### **The Technological Threat Avoidance Theory**

The main component of the threat appraisal (Figure 6) is the actual perceived threat. Citing cybernetic theory TTAT defines perceived threat as the degree of danger that an individual perceives as posed by malicious IT. Further, by drawing on health psychology and risk analysis Liang and Xue (2009) maintained that perceived threat is influenced by two antecedents: perceived susceptibility and perceived severity. Perceived

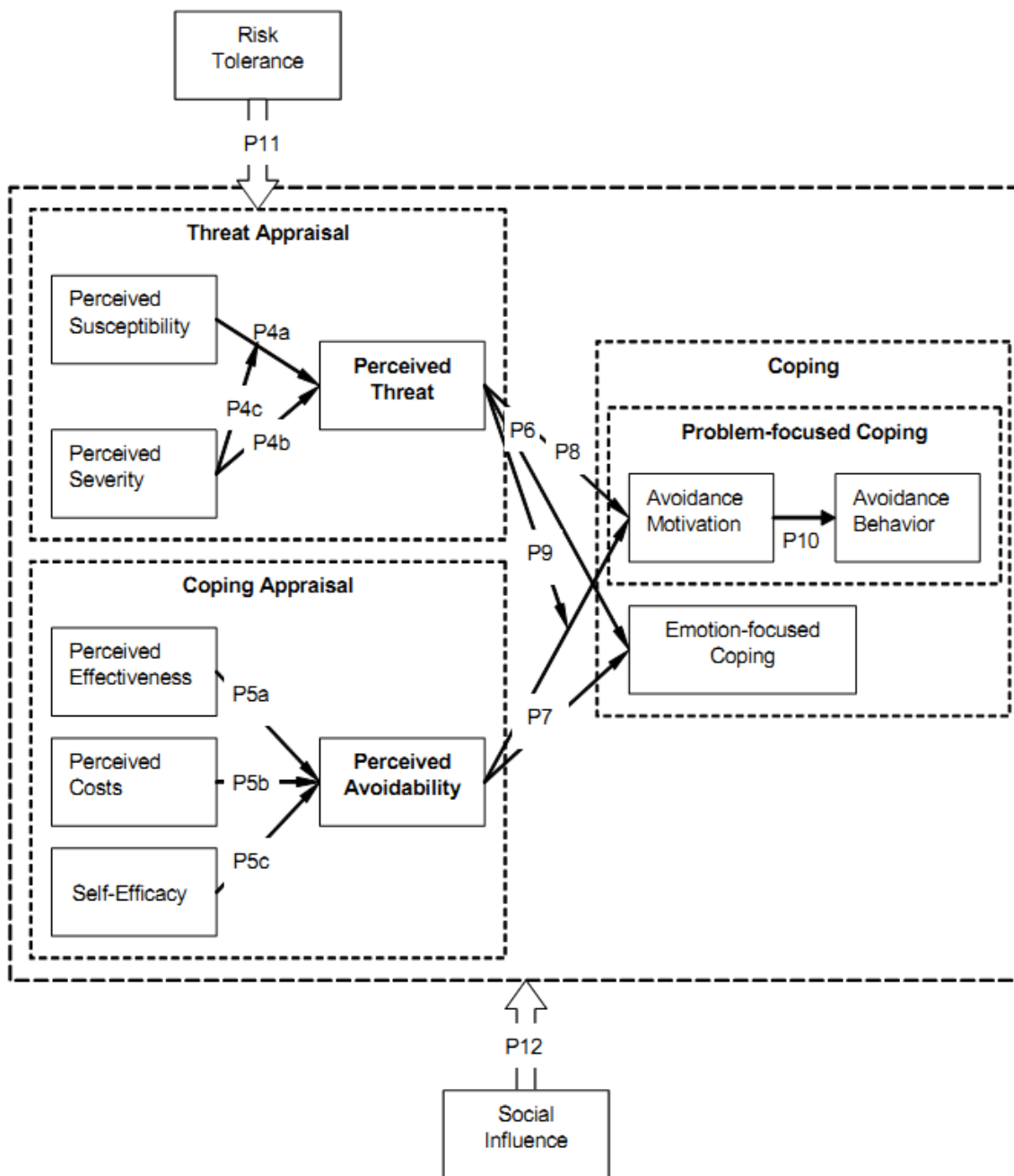


Figure 5. Technological threat avoidance model.

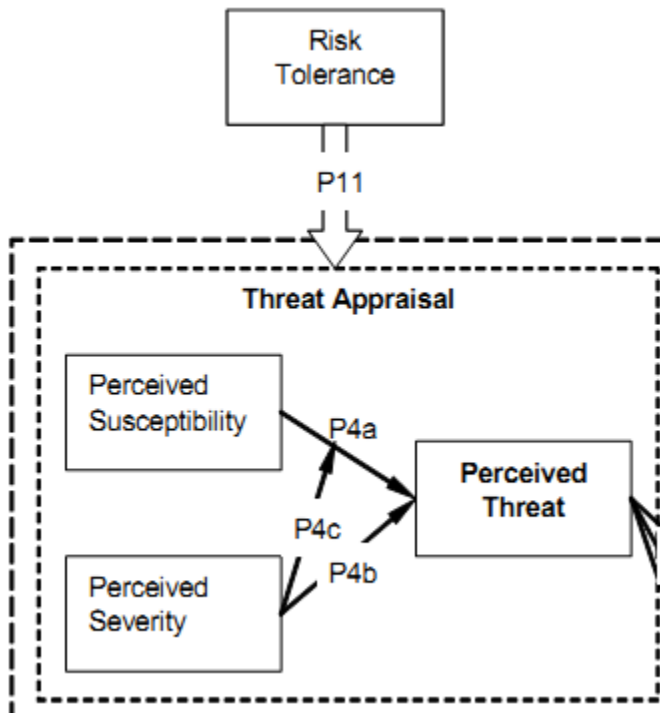


Figure 6. Threat appraisal from TTAT.

susceptibility is defined as the individual's perception of the probability that they will be affected by malicious IT, and perceived severity is defined as severity of the negative consequences of malicious IT as perceived by the individual.

The other two sections of the TTAT, coping appraisal and coping, are outside of the scope of this paper. Coping appraisal deals with the actions of determining the best means to avoid a threat. Coping refers to taking action determined upon in the coping appraisal to avoid a perceived threat.

### **Risk Target**

Risk target is not so much an approach or a model as it is a need to define the

target of the risk in question. Risk target is an often overlooked factor when studying risk perception. People tend to rate risk differently when asked to rate risk in regard to themselves, their family, or to people in general. They tend to rate risks toward themselves lower than risks toward their family or people in general, with risk toward people in general rated the highest. This tendency to rate risk differently when the individual is the subject is related to unrealistic optimism (Weinstein, 1987) and to control over the hazards (Sjöberg, 2000). When researchers fail to specify the risk target this can cause confusion, are the subjects being asked to rate personal risk or general risk? This ambivalence may mean that personal risk perception is not the focus of the study. Hence the risk target is a very important aspect of risk perception research. As focus of this study is personal risk perception, subjects will be asked to rate the risks as they apply to themselves.

### **Computer Self-Efficacy**

The theory of self-efficacy was formalized by Bandura (1977) in his paper *Self-efficacy: Toward a Unifying Theory of Behavioral Change*. Self-efficacy is defined as being able to perform the behaviors that are required to produce a specific outcome. Furthering Bandura's work, Compeau and Higgins (1995) applied self-efficacy to computers and developed a construct they named computer self-efficacy, which they defined as an individual's evaluation of their ability to use a computer for tasks they will attempt in the future. Ng, Kankanhalli, and Xu (2009) then applied the construct of self-efficacy to the question of computer security adoption in conjunction with certain

measures of risk, namely perceived susceptibility and perceived severity (see Appendix B). The TTAT also makes use of the self-efficacy construct, but does not tie it into the threat appraisal. However, Ng and colleagues found that self-efficacy, together with perceived susceptibility, affected computer security behavior. Meaning the subjects of their study were more likely to adopt computer security if they felt they were competent to do so. They also found that perceived severity decreased the positive affect of self-efficacy. The model they used can be found in Appendix A.

### **Risk in Online Communities**

In the recent conference paper on the Social Networking Sites (SNS) user self-disclosure model (see Figure 7), the authors used a measure they called perceived privacy risk (PPR) to model the user's decision to post accurate and honest data. The construct of PPR was influenced by perceived information control ability (PICA) or the user's confidence level in his ability to control the privacy of his data, trust in the social network and the other member of the network, and shared vision that is a measure of group cohesion (Chen, Pan, & Cai, 2013). While this measure touches on risk perception it excludes dimensions of threat appraisal. In addition, the constructs of relational dimension, cognitive dimension can be encompassed by attitude as they deal with how the user feels about the SNS, while PICA and the structural dimension can be encompassed by computer self-efficacy.

Chena and Sharma (2013) also investigated risk perception in online communities. They postulated that risk perception is made up of cyber-attack risk and



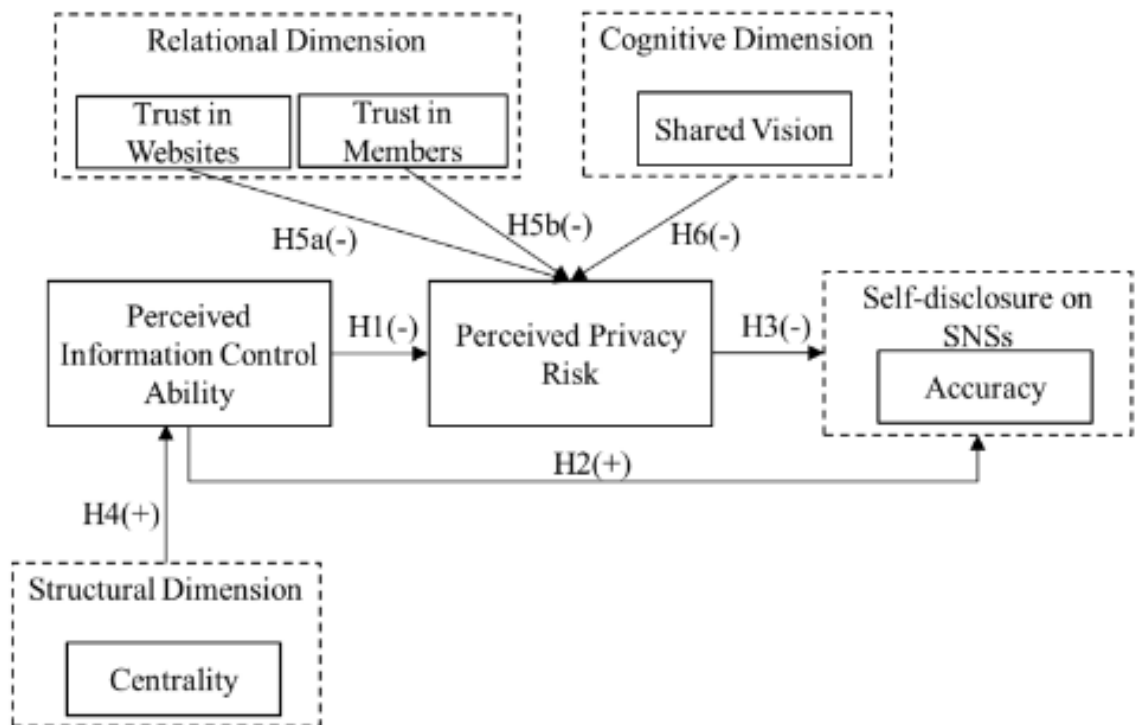


Figure 7. SNS user self-disclosure model.

privacy abuse risk, cyber-attack risk being fear of exposure to cybercrimes and privacy abuse risk is the risk that private information will be exposed publically. These two risk types are affected by internet risk, vendor trust, and privacy value. Internet risk is a judgment of the danger of using the internet. Vendor trust is a measure of confidence in the online community in question. Privacy value is the value that the user puts on his personal privacy. Risk perception then affects attitude which in turn affects site use.

This particular research posits that attitude toward online communities is developed through exposure to the online communities and affected by risk perception. However, as is proposed by the RAF model (see The Risk Sensitivity, Attitude, and Specific Fear Model above), attitude toward the target can influence the perceived risk of

the target. In addition, cyber-attack risk is analogous to perceived susceptibility and privacy abuse risk is analogous to specific fear/perceived severity. Also the internet risk construct falls under perceived susceptibility while vendor trust and privacy value can be seen as antecedents of attitude.

Site use in this case was measured by means of a self-reported survey with questions such as “I regularly log in this social network site,” rather than by direct observation. Additionally, the survey questions, asked to determine site use, were not printed with the report, other than the previous question, which makes it difficult to ascertain what was being measured. The wording of the sample question, “I regularly log in this social network site”, rather than indicating what information the users might be revealing online asks whether or not the online communities are being used. Further information is required to determine exactly what site use is measuring.

Nyre and Jaatun (2013) investigated the Protection Motivation Theory (PMT) modifying it to consider active attackers in the investigation of adopting security measures against the third-party applications on Facebook. In their research they apply risk perception to the adoption of information security measures. Risk perception, according to them, is a function of perceived vulnerability (perceived susceptibility) and perceived severity, as hypothesized by both the RAF and TTAT. However, the main focus of their work was not on information revelation, but on how risk perception influences the adoption of information security measures.

### **Summary of Literature Review**

Risk perception in online communities is a very important for MIS. The amount of data being shared online is not going to diminish and online communities are going to keep making it easier to share our personal information online. In order to help people manage their data we need to know how they perceive risk in online communities.

The lack of personal risk research in MIS is understandable. It has only been relatively recently that we were able to share our personal data in this manner. As such most risk research done in MIS had been aimed at companies, not individuals; thus, the need to combine the Threat Appraisal element from the TTAT with the RAF model. The TTAT benefits from the addition of the risk perception and attitude constructs from the RAF model.

## **CHAPTER III**

### **MODEL DEVELOPMENT**

This section will present the model that will be used in this study and several research hypotheses. This study will examine the behavior of members of the online community Facebook in relation to the information revelation behaviors and security preferences in their personal Facebook accounts using RATA model, developed by the author. The conceptual model can be found in Figure 8. Questions used to measure the constructs can be found in Appendix A.

#### **The Risk Sensitivity, Attitude, and Threat Appraisal Model**

This study addresses the lack of risk perception research in the MIS field in general and online communities in particular by combining elements of the TTAT and the RAF models and examining the effectiveness of the resulting constructs of the RATA model (see Figure 8).

Modifications to the TTAT are necessitated by the underlying assumption that the individual recognizes that a threat is present and wishes to avoid the threat. The TTAT is an adoption model and assumes that the subject knows that a threat exists and is actively pursuing a means to mitigate the threat. Further, the TTAT contains no attitude construct, which may temper an individual's risk perception. Despite the differences, the similarity in the constructs cannot be overlooked with strong similarities in the definitions of the

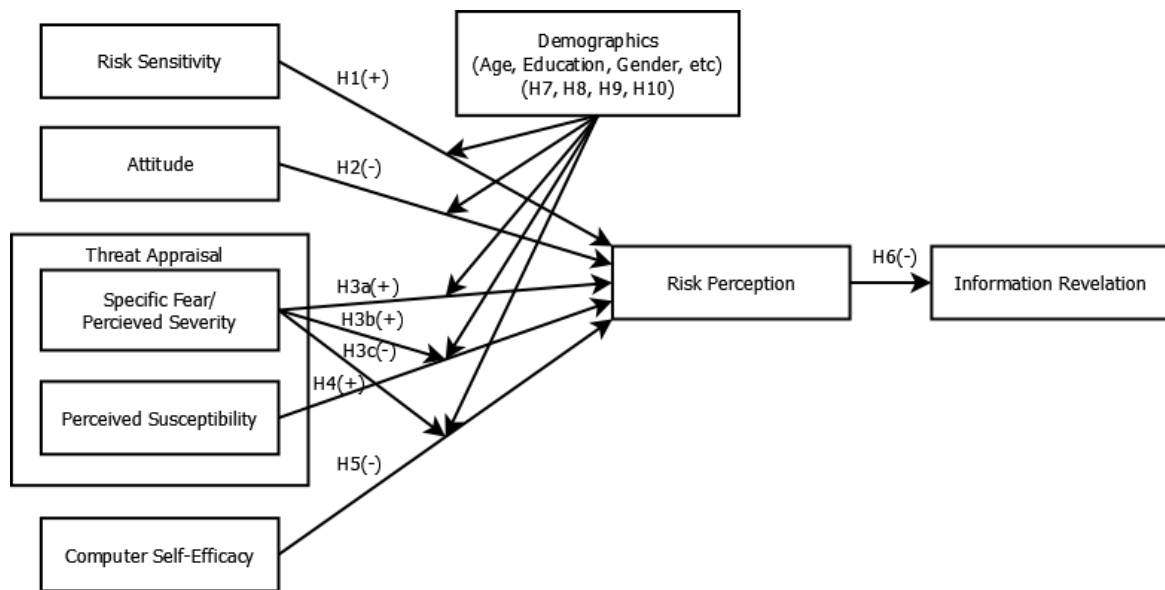


Figure 8. The RATA model.

risk perception/perceived threat (risk perception) and specific fear/perceived severity (specific fear).

The modifications appearing in the RAF are necessitated by the exclusion of perceived susceptibility. Individuals can be very risk averse and can regard the consequences of a possible threat as extremely severe. However, this can all be tempered by their perception that the probability of falling victim to the threat is very low. For instance if an individual is highly risk averse and severely frightened of being stalked they may refrain from participating in information revelation behaviors. However, they may still participate if they perceive that the likelihood of being stalked is excessively low.

This study attempted to assemble an accurate view of risk perception in online communities. The RATA model may provide an excellent starting point for further

exploration of risk perception in online communities and information revelation behavior. In addition, it can help explain the responses to risks from information revelation behavior in online communities.

In addition, the computer self-efficacy construct will be added to the model to attempt to account for differing levels of computer expertise. Confidence in one's abilities has been demonstrated to affect one's behavior on a computer (Compeau & Higgins, 1995). Basically, if the subject is confident of their ability to use a computer they feel that the risk is diminished.

As demonstrated by the model in Figure 8, Risk Sensitivity, Attitude, and Threat Appraisal (a composite of specific fear/perceived severity and perceived susceptibility) are believed to influence risk perception, which is then translated into an action either to reveal or conceal personal information. Gender, age, education, income, and computer experience are believed to moderate the effect that risk sensitivity, attitude, and threat appraisal have on the final risk perception.

## **Core Constructs**

### **Risk Perception**

RATA will attempt to explain risk perception using six constructs. Risk perception is defined as how dangerous an individual perceives participation in an action. If an individual perceives an activity to be risky they will be less likely to participate in that activity.

## **Risk Sensitivity**

Risk sensitivity is defined as an individual's risk tolerance level or how much risk is he willing to experience before he refrains from participation. Some people are more naturally risk averse than others and see risk in any type of activity. While others are more laid back and tend to be indifferent toward possible risks. Risk sensitivity will make an individual more likely to see the inherent risk in any activity as it applies to all risks in general, not to any specific source (Sjöberg, 2000). Risk sensitivity provides a baseline upon which to build a model on risk perception in online communities. This and the threat appraisal, detailed below, are part of the natural process of risk perception. As risk sensitivity will make one more likely to see the risks inherent in any activity it is hypothesized to have a positive effect on risk perception.

**H1<sub>0</sub>** – Risk sensitivity has no effect on risk perception.

**H1<sub>1</sub>** – Risk sensitivity is positively related to risk perception.

## **Attitude**

The second construct is attitude, in this case attitude toward online communities. Attitude is defined as a subject's degree of like or dislike toward the attitude object, in this case online communities. Attitude can and does have an impact on beliefs (Sjöberg, 1991). If your attitude toward online communities is positive you may choose to believe they are less risky and consequently you may be more inclined to participate. Thus a positive attitude will be negatively related to risk perception.

**H2<sub>0</sub>** – Attitude toward online communities has no effect on risk perception.

**H2<sub>1</sub>** – Attitude toward online communities is negatively related to risk perception.

### **Threat Appraisal**

The third concept is threat appraisal which is broken out into two subconstructs, specific fear/perceived severity and perceived susceptibility.

**Specific fear/perceived severity.** The first, specific fear/perceived severity is the element of risk or fear in taking an action. Every hazard causes us to think in specific terms about what might happen to us if we fall victim. In the case of online communities, the major specific fear elements of online communities are stalking (Gross & Acquisti, 2005; Singh, 2008), burglary (Gross & Acquisti, 2005), identity theft (Spanbauer, 2006), social ridicule (Pokin, 2007), physical violence (Daily Mail Reporter, 2010; Our Court Reporter, 2010), arrest (Hass, 2006; Lash, 2005; Lang, 2009), civil legal action (Anderson, 2012), loss of employment, and loss of potential income (Spanbauer, 2006). These are possible negative outcomes of participation in online communities each of which are included in the survey (see Appendix A).

That is not to say that these will occur or even that they might occur, but that if a participant fears these outcomes he will perceive his risk of falling victim to such outcomes as being higher (Liang & Xue, 2009).

**H3a<sub>0</sub>** – Specific fear/perceived severity of the negative consequences of participation in online communities is not related to risk perception.

**H3a<sub>1</sub>** – Specific fear/perceived severity of the negative consequences of participation in online communities is positively related to risk perception.

In addition, this specific fear can also have a moderating influence on an individual's perceived susceptibility. This means that the greater the fear of the



consequences of an action the greater the perception of the likelihood of the event occurring (Liang & Xue, 2009).

**H3b<sub>0</sub>** – Specific fear/perceived severity of the negative consequences of participation in online communities has no effect on the relationship between perceived susceptibility and risk perception.

**H3b<sub>1</sub>** – Specific fear/perceived severity of the negative consequences of participation in online communities increases the effect of perceived susceptibility on risk perception.

As has been mentioned, specific fear has been shown to affect a person's confidence in their abilities. The more dangerous the undertaking the more doubt a person may have as to the effectiveness of his skills to achieve the desired outcome.

**H3c<sub>0</sub>** – Specific fear/perceived severity of the negative consequences of an action has no effect on the relation.

**H3c<sub>1</sub>** – Specific fear/perceived severity of the negative consequences of an action reduces the effect of computer self-efficacy on risk perception.

### **Perceived Susceptibility**

The second subconstruct that contributes to threat appraisal is perceived susceptibility. Perceived susceptibility is defined as the individual's perception of how likely it will be that they will be affected by the negative consequences of an activity, the activity in this case being participation in online communities. If an online community member perceives that they are more susceptible to the possible consequences of revealing personal data they will judge that the risk to them is higher.

**H4<sub>0</sub>** – Perceived susceptibility of the negative consequences of participation in online communities is not related to risk perception.

**H4<sub>1</sub>** – Perceived susceptibility of the negative consequences of participation in online communities is positively related to risk perception.

### **Computer Self-Efficacy**

Computer self-efficacy is a person's confidence in their abilities to use a computer to accomplish a desired result. When applied to online communities this means that the participant is able to use the online community for its stated purpose, to share personal information with family and friends, thus reducing the risk to the participant.

**H5<sub>0</sub>** – Computer self-efficacy is not related to risk perception.

**H5<sub>1</sub>** – Computer self-efficacy is negatively related to risk perception.

### **Information Revelation**

Upon completing the risk assessment, the participant then decides whether or not to participate in the activity with the associated risks. In this case, the participant decides whether or not to participate in the online community by revealing personal details in their online profile.

**H6<sub>0</sub>** – Information Revelation is not related to risk perception.

**H6<sub>1</sub>** – Information Revelation is negatively related to risk perception.

### **Moderating Variables**

The risk perception literature indicates that several demographic and sociopsychological factors can influence an individual's perception of risk (Frewer, 1999;

Sjöberg, 1998, 2004). The following demographic and sociopsychological factors will be used to determine if the moderating effect exists and what impact each may have on the relationship between the independent variables: risk sensitivity, attitude, and specific fear, and the dependent variable, risk perception.

- Gender

**H7a<sub>0</sub>** – Gender does not affect the relationship between risk sensitivity and risk perception.

**H7a<sub>1</sub>** – Gender significantly affects the relationship between risk sensitivity and risk perception.

**H7b<sub>0</sub>** – Gender does not affect the relationship between attitude and risk perception.

**H7b<sub>1</sub>** – Gender significantly affects the relationship between attitude and risk perception.

**H7c<sub>0</sub>** – Gender does not affect the relationship between specific fear/perceived severity and risk perception.

**H7c<sub>1</sub>** – Gender significantly affects the relationship between specific fear/perceived severity and risk perception.

**H7d<sub>0</sub>** – Gender does not affect the relationship between perceived susceptibility and risk perception.

**H7d<sub>1</sub>** – Gender significantly affects the relationship between perceived susceptibility and risk perception.

- Age

**H8a<sub>0</sub>** – Age does not affect the relationship between risk severity and risk perception.

**H8a<sub>1</sub>** – Age significantly affects the relationship between risk sensitivity and risk perception.

**H8b<sub>0</sub>** – Age does not affect the relationship between attitude and risk.

**H8b<sub>1</sub>** – Age significantly affects the relationship between attitude and risk perception.

**H8c<sub>0</sub>** – Age does not affect the relationship between specific fear/perceived severity and risk perception.

**H8c<sub>1</sub>** – Age significantly affects the relationship between specific fear/perceived severity and risk perception.

**H8d<sub>0</sub>** – Age does not affect the relationship between perceived susceptibility and risk perception.

**H8d<sub>1</sub>** – Age significantly affects the relationship between perceived susceptibility and risk perception.

- Education

**H9a<sub>0</sub>** – Education does not affect the relationship between risk sensitivity and risk perception.

**H9a<sub>1</sub>** – Education significantly affects the relationship between risk sensitivity and risk perception.

**H9b<sub>0</sub>** – Education does not affect the relationship between attitude and risk

perception.

**H9b<sub>1</sub>** – Education significantly affects the relationship between attitude and risk perception.

**H9c<sub>0</sub>** – Education does not affect the relationship between specific fear/perceived severity and risk perception.

**H9c<sub>1</sub>** – Education significantly affects the relationship between specific fear/perceived severity and risk perception.

**H9d<sub>0</sub>** – Education does not affect the relationship between perceived susceptibility and risk perception.

**H9d<sub>1</sub>** – Education significantly affects the relationship between perceived susceptibility and risk perception.

Income

**H10a<sub>0</sub>** – Income does not affect the relationship between risk sensitivity and risk perception.

**H10a<sub>1</sub>** – Income significantly affects the relationship between risk sensitivity and risk perception.

**H10b<sub>0</sub>** – Income does not affect the relationship between attitude and risk perception.

**H10b<sub>1</sub>** – Income significantly affects the relationship between attitude and risk perception.

**H10c<sub>0</sub>** – Income does not affect the relationship between specific fear/perceived severity and risk perception.

**H10c<sub>1</sub>** – Income significantly affects the relationship between specific fear/perceived severity and risk perception.

**H10d<sub>0</sub>** – Income does not affect the relationship between perceived susceptibility and risk perception.

**H10d<sub>1</sub>** – Income significantly affects the relationship between perceived susceptibility and risk perception.

### **Chapter Summary**

This chapter has explained the research model and hypotheses. The goal of the chapter has been to define the core and moderating constructs and to develop a model of the connections between these constructs based on the TTAT, as explained by Liang and Xue (2009), and the RAF model, as explained by Sjöberg (2000). The research model was shown in Figure 8.

The expectation is that risk perception will influence whether or not people participate in information revelation activities in online communities. Risk perception itself will be increased by the individual's innate risk sensitivity, his attitude toward online communities will decrease his risk perception, his specific fear/perceived severity of the possible consequences will serve to increase his risk perception, his perceived susceptibility of falling victim to those consequences will also increase his risk perception, and computer self-efficacy will decrease his risk perception. Further expectations are that gender, education, income, and age will exert a moderating influence on the independent variables.

## **CHAPTER IV**

### **RESEARCH METHODS AND PROCEDURES**

This chapter will describe the methods and procedures that were used to test the hypotheses from the previous chapter. The chapter details the population of interest, survey development, operationalization of the constructs, pretest results, and data collection method.

#### **Study Design**

A nonexperimental design was used in conjunction with a cross-sectional online survey to test the RATA model. The population of interest is all members of online communities with an emphasis on Facebook since it is the largest and fastest growing online community.

A pilot study was used to test the reliability and validity of the survey questions in view of the fact that the questions may need to be modified to fit the current context and for the addition of self-developed questions.

#### **Population**

The target population for this research was English speaking members of online communities. As such, the main sample for data collection will be problematic. The major online communities such as Facebook are reluctant to disclose their entire member database with the exact number of members. Additionally, in many instances an individual is a member of more than one online community, so the exact size of the target

population can only be determined by comparing the membership lists of every online community and eliminating the duplicates. This is a near impossible task with new communities popping up almost daily and with Facebook claiming to have 1.23 billion members as of the end of 2013 (Kiss, 2014). While Facebook is the largest online community, just trying to compare the 1.23 billion records on Facebook with the membership lists from the hundreds of other online communities would take so much time that it would hardly be worth the effort. One of the major advantages to using Facebook to gather data is that all Facebook members will have access to the survey as it will take the form of an app running inside Facebook.

### **Survey Development**

Since the RATA model combines elements from the RAF model and the TTAT, the survey for this study will be developed by adapting existing research from the fields of Information Technology and Risk Management. A review process was implemented during scale creation to increase validity. The questions developed for constructs in the RATA were constructed and then reviewed for clarity and suitability with respect to risk perception and online communities. Reviewers for this process included professors from the MIS field, Ph.D. students, undergraduate college students, and several Facebook members. Survey questions can be found in Appendix A.

### **Survey Administration**

This study used a cross-sectional online survey to test the RATA model. A pilot



study was used to test the reliability and validity of the survey questions in view of the fact that the questions may need to be modified to fit the current contexts and for the addition of self-developed questions. The pilot study was administered to students at a western university and people linked to the author on Facebook before main data collection. Feedback received from the pilot study was used to clarify question wording.

Administering the survey online has several advantages. The first is that the data was easily collected and stored without the intervention of human agents. The data was already in electronic format and did not need to be converted. The survey automatically checked for the presence or absence of data without forcing the respondent to try to recall the data themselves. It also automatically served as a control to keep participants from participating more than once. It permitted them to come back to the survey later and check their results. The survey was also easily passed to new participants with a short email, blog post, text message, or Facebook update. The code for the survey instrument is found in Appendix L. The informed consent document is found in Appendix J.

### **Operationalization of Constructs**

This section describes the operationalization of each of the core constructs as used in final data collection. All reliability and construct validity for the scales were performed during data analysis and are reported in Chapter V.

#### **Demographic Variables**

The demographic variables of age, income, and education were assessed on using categorical response options. Age was directly assessed from the respondents' Facebook

profiles. The operationalization of the demographic variables is shown in Table 2.

### **Risk Perception**

Risk perception, which is the perceived probability of harm from the risk object, is designed to test a participant's overall perception of risk. The questions for this section of the survey were adapted from the work done by Gross and Acquisti (2005) and Son and Kim (2008).

These questions are measured on 7-point Likert scale from strongly agree to strongly disagree (PER1, "I feel that participation in online communities (obtaining and

Table 2

#### *Demographic Variables*

Variable	Question	Response options
Gender		Male Female
Age	Age range	18 – 20 21 – 30 31 – 40 41 – 50 51 – 60 61 or over
Education	What is the highest level of education that you have completed?	Less than high school High school or high school equivalent Some college Career training 2-year college degree (Associates) 4-year college degree (BA, BS) Master's degree Doctorate degree Professional degree (MD, JD)
Income	What is your income level?	\$0 – \$25,000 \$25,000 - \$50,000 \$50,000 - \$75,000 \$75,000 - \$100,000 More than \$100,000

maintaining membership, updating and maintaining personal information, uploading photos, etc.) is risky”; PER2, “I can be identified or put at risk by the photos I post on my online community account”; PER3, “All of the personal information that I reveal in my online profile is true” (high risk perception could cause respondents to use false information in their profiles); PER4, “Revealing my physical location in an online community is risky”; PER5, “Revealing details about my family and friends in an online community is risky”; PER6, “Revealing details about my daily schedule in an online community is risky”; PER7, “Revealing details about my likes/dislikes, personal interests, and hobbies in an online community is risky).

### **Risk Sensitivity**

Risk sensitivity, an individual’s risk tolerance level, is designed to test the participants’ overall sensitivity to risk. The questions for this section of the survey were adapted from work done by McCormick (2010), an expert in the field of organizational risk. Some of the wording has been changed for brevity and the scale has been changed from 10-point to 7-point to match the rest of the survey.

These questions are measured on a seven-point Likert scale from Highly Sensitive to Highly Insensitive (SEN1, “Physical risk – activities that involve some type of physical injury. Skydiving, competitive sports, etc.”; SEN2, Career risk – such as job changes, new responsibilities, promotions, etc.”; SEN3, “Financial risk – investing, borrowing, and lending money, etc.”; SEN4, “Social risk – meeting new people, new situations, and risk of embarrassment, etc.”; SEN5, “Intellectual risk – willingness to study a difficult topic, challenge your intellectual convictions, read an intellectually

challenging book, etc.”; SEN6, “Creative risk – painting, drawing, writing, etc.”; SEN7, “Relationship risk – pursue a new relationship, make a relationship commitment, etc.”; SEN8, “Emotional risk – willingness to be emotionally vulnerable, etc.”).

### **Attitude**

Attitude, like or dislike toward attitude object, is designed to test the participants’ overall like or dislike for online communities. The questions for this section were adapted from the Computer Attitude Questionnaire (Institute for the Integration of Technology into Teaching and Learning, 2011) developed by the Institute for the Integration of Technology into Teaching and Learning. The wording was changed to reflect the change in attitude object and the scale was changed from 5-point to 7-point.

These questions are measured on a 7-point Likert scale from strongly agree to strongly disagree (ATT1, “Online communities (Facebook, Myspace, etc.) are beneficial”; ATT2, “Even if my close friends/relatives didn’t have accounts in an online community I would still have one”; ATT3, “Online communities are necessary communication tools”; ATT4, “I check my online community profile often during the course of the day (at least 3)”; ATT5, “I feel uncomfortable not checking my online community profile at least once a day”; ATT6, “Whenever I need to communicated some important news to family, friends, or colleagues, I post the news to my online profile”; ATT7, “I think online communities (Facebook, Myspace, etc.) are valuable communication tools”).

### **Specific Fear/Perceived Severity**

Specific Fear/Perceived Severity, the element of real risk, was designed to test the participants' fear toward various consequences that can occur as a result of information revelation in online communities. The questions in this section were adapted from the work of Gross and Acquisti (2005), Hass (2006), Lang (2009), Lash (2005), Pokin (2007), and Spanbauer (2006), as well as a news incident reported in the Daily Mail Reporter (2010). Each of the consequences was chosen for the possibility of occurrence based on the information revealed in online communities or because of actual real-world occurrence.

These questions are measured on a 7-point Likert scale from negligible to severe (SEV1, "Identity theft"; SEV2, "Stalking"; SEV3, "Burglary"; SEV4, "Loss of employment or employment opportunities"; SEV5, "Public Ridicule"; SEV6, "Arrest"; SEV7, "Being Sued"; SEV8, "Assault").

### **Perceived Susceptibility**

Perceived susceptibility, perception of how likely negative consequences will occur, is designed to test the participants' perception of how likely they will suffer negative consequences as a result of information revelation behavior. The questions in this section reflect the consequences from the previous section, and were adapted from the work of Gross and Acquisti (2005), Hass (2006), Lang (2009), Lash (2005), Pokin (2007), and Spanbauer (2006), as well as a news incident reported in the Daily Mail Reporter (2010).

These questions are measured on a 7-point Likert scale from highly unlikely to

highly likely (SUS1, “My identity being stolen”; SUS2, “Being Stalked”; SUS3, “My home being burglarized”; SUS4, “Being fired from my employment or losing employment opportunities”; SUS5, “Being subject to public ridicule”; SUS6, “Being charged with a criminal offense”; SUS7, “Being subject of a civil suit(non-criminal legal action)”; SUS8, “Being assaulted”).

### **Computer Self-Efficacy**

Computer self-efficacy, confidence in one’s computer skills, was designed to test the participants’ confidence in their computer skill in online communities. The questions in this section were adapted from Ng and colleagues (2009) to reflect the specific research venue, online communities.

These questions are measured on a 7-point Likert scale from highly disagree to highly agree (SEF1, “I know what information I can and cannot safely reveal online”; SEF2, “I am confident of my ability to navigate in an online community”; SEF3, “I am confident of my ability to protect the information that I have posted online”; SEF4, “I am confident of my abilities to recognize who I should and should not accept as friends”).

### **Dependent Variables**

Actual information revealed in the participants’ Facebook profile is the dependent variable for this study. The survey was built as an application inside Facebook and as such was given access to ten items of personal data. Access to this data is implicit unless the participant actively sets those elements of the profile to private. The app recorded the presence or absence of each of the 10 items from the participants’ profiles. The 10 items

are as follows.

**ACT1 Biography:** This is an unstructured section that allows the user to record personal details. The biography can be as detailed or as vague as the user wants.

**ACT2 - Education History:** The user can list all of the high schools and colleges that he is currently or has attended here.

**ACT3 - Hometown:** This is for listing the town where the user was born or grew up.

**ACT4 - Current Location:** The user can list the city in which they currently reside.

**ACT5 - Favorite Quotes:** This is another unstructured section where the user can record favorite quotes.

**ACT6 - Work History:** The user can list current, as well as past, places of employment here.

**ACT7 - Religious Affiliation:** This section is for the user to list and describe his religious association, if any.

**ACT8 - Political Affiliation:** This section stores the user's political view, if any.

**ACT9 - Languages:** In this section the user can list languages with which he is fluent.

**ACT10 - Likes:** Is a section for the user to list his special interests. The user is able to "like" almost anything including abstract concepts such as liberty, concrete terms such as blue, general terms such as books, and specific terms such as a favorite book or movie.

## **Pilot Study**

After construction of the survey, a pilot study was administered to a convenience sample of students in upper level MIS courses and people who had accepted a friend request from the author on Facebook. The pilot study obtained 34 responses. All of the responses were usable for testing for analyzing wording and testing reliability of the scales. Some of the questions were reworded, based on comments from the respondents, to clarify the meaning for respondents without a technical background. The operationalization in the previous section reflects the changes to improve respondent understanding of the questions.

### **Respondent Demographics**

The demographics of the respondents from the pilot study are presented in Table 3. It is expected that for main data collection there will be more diversity in the data, representing more age levels. The disparity in gender and age is to be expected as this reflects Facebook demographics (Saul, 2014).

### **Reliability**

A Cronbach's alpha was computed to determine the internal consistency of the research model constructs. An acceptable Cronbach's alpha is 0.7 or higher, although a lower threshold is sometimes acceptable (Santos, 1999). Table 4 shows the results of the reliability test performed for all constructs. The table shows that all constructs attained a Cronbach's alpha of 0.7 or higher except for risk sensitivity. However, the small sample size caused unequal factor loadings for the risk sensitivity construct, which caused the



Table 3

*Pilot Study Demographics*

Characteristics	Frequency	%
Gender		
Male	13	38.2
Female	21	61.8
Age		
18-20	0	0
21-30	0	0
31-40	17	50.0
41-50	9	26.5
51-60	4	11.8
61 or over	4	11.8
Education		
Less than high school	0	0
High school	2	5.9
Some college	5	14.7
Career training	1	2.9
2-year degree	2	5.9
4-year degree	15	44.1
Master's degree	6	17.6
Doctorate degree	2	5.9
Professional degree	1	2.9
Income		
\$0 – \$25,000	6	17.6
\$25,001 – 50,000	5	15.2
\$50,001 – \$75,000	12	36.4
\$75,001 – \$100,000	3	9.1
Over \$100,000	8	21.2

lower alpha value. The  $\lambda_6$  value, also a measure of reliability (Guttman, 1945) that is sensitive to unequal factor loadings is 0.695, on the cusp of the 0.7 threshold.

Additionally, Cronbach's alpha has been seen to underestimate reliability (Novick & Lewis, 1967). Further reliability analyses were performed on the complete data set that justified inclusion.

Table 4

*Pilot Study Reliability*

Construct	Number of items	Cronbach $\alpha$
Risk perception	7	.733
Risk sensitivity	8	.511
Attitude	7	.778
Specific fear/perceived severity	8	.877
Perceived susceptibility	8	.907
Computer self-efficacy	4	.825

**Data Collection**

Because of the size of the target population and the difficulty of obtaining a true record of membership, a true random sampling of the population will not be possible without prohibitive expense and resource consumption. Since it will be next to impossible to construct an accurate sampling frame, another sampling method was employed.

Snowball sampling is a nonprobability sampling technique that makes use of the participants already gathered into the study to recruit members of their own social networks into the study. This sampling method can be effective for gathering participants where the population is hidden or do not wish to be known. This method can also be used where the difficulty of recruiting members is not feasible as economic hurdles would be prohibitive or where trust may be an issue. Initial participants are identified from the target population and then recruit other participants directly or provide researchers with possible candidates from the same population. Recruitment continues until such time that

the sample size reaches the threshold for data analysis.

Main data collection was initiated with seeds, or primary recruiters, who began the recruitment process into the study. Primary seeds were graduate and under-graduate students in a western university who then recruited others into the study. In addition, the survey was administered as an app on Facebook, which has a method for advertising apps to its members that was utilized to recruit more participants into the study. The link to the Facebook app was also posted to various internet groups, randomly selected, for further recruitment. Collection continued until the sample reached the size necessary for the sampling and the analysis methods used in the study. To keep any one recruiter from dominating the selection process each respondent was limited to recruiting no more than six more participants.

### **Sample Size**

This study employed partial least squares (PLS) to evaluate the RATA model. Standard practice for calculating the sample size is 10 times the largest number of formative links in any one block or 10 times the paths connecting the dependent variable with the largest number of independent variables impacting it, whichever is greater (Chin, 1998). In this case, the greatest number of paths impacting on a dependent variable is five and the greatest number of formative links is eight (from risk sensitivity). Therefore, the recommended sample size is 80. However, the minimum effect size desired is 0.02, the desired statistical power level is 0.8, and the desired  $p$  value is 0.05. In conjunction with the number of independent variables the minimum sample recommended is 100. Using a

power table from regression, using the same criteria reported above, the recommended sample size is 312. To improve results and to aid in data analysis, data gathering continued until at least 312 participants were recruited into the study, final sample size: 378 participants.

### **Data Analysis**

PLS was used to test the proposed research model and the listed hypotheses. As with other structural equation modeling (SEM) techniques, PLS can be used to evaluate non-homogeneous, non-normal data. PLS is also able to analyze smaller sample sizes than other SEM techniques. SmartPLS (Ringle, Wende, & Will, 2005), Microsoft Excel, and IBM SPSS Statistics Version 22 were used to conduct the data analysis.

In addition to the Cronbach's alpha, a confirmatory factor analysis (CFA) was also performed to test for construct validity (Gefen & Straub, 2005). The CFA calculates construct validity by determining the convergent and discriminant validities of the items on the online survey. The analysis of the completed surveys can be found in the next chapter.

### **IRB Approval**

A review of the research methods and survey instrument was completed by the appropriate institutional review board (IRB). The IRB certification for this study can be found in Appendix D.

## **CHAPTER V**

### **DATA ANALYSIS**

This chapter presents the study sample characteristics and analysis as well as the results of the statistical analysis performed on the data. The sample set contains 378 responses. The chapter concludes with analysis of the hypotheses presented in chapter III.

#### **Sample Characteristics**

The survey recorded four points of demographic data that are theorized to affect risk perception: age, education, gender, and income. Table 5 is a frequency table detailing the breakdown of each of the demographic variables into frequencies and percentages.

Female respondents made up the majority of respondents (59.8%) which is closer to the actual gender divisions reported in Facebook (Saul, 2014). Females (53.3%; Saul, 2014) have held the majority position on Facebook for several years. However, males (45.6%; Saul, 2014) have been subscribing at a higher rate in recent years.

The age category with the largest number of respondents was the 21 to 30 year olds (39.9%). This reflects that the survey originated in a college town where the population is skewed toward that age range.

A moderate, though significant, positive relationship exists between income and age (see Table 6), income and age increasing together.

The education category shows bimodal distribution with peaks at some college and 4-year degree (see Figure 9). This is again reflective of the university culture and indicative of the population on Facebook itself. Facebook started as an online community

Table 5

*Sample Characteristics*

Variable	Frequency	%
Gender		
Male	152	40.2
Female	226	59.8
Age		
18-20	54	14.3
21-30	151	39.9
31-40	74	19.6
41-50	33	8.7
51-60	37	9.8
+61	29	7.7
Education		
Less than high school	3	0.8
High school	17	4.5
Some college	138	36.5
Career training	8	2.1
2-year degree	61	16.1
4-year degree	114	30.2
Master's degree	27	7.1
Doctorate degree	4	1.1
Professional degree	6	1.6
Income		
\$0 - \$25,000	187	49.5
\$25,001 - \$50,000	67	17.7
\$50,001 - \$75,000	62	16.4
\$75,001 - \$100,000	30	7.9
+\$100,000	32	8.5

for college students. As the Facebook population has aged, the majority of Facebook users are now college graduates (Saul, 2014).

When comparing education level attained to age we find that a significant, though weak, positive relationship exists between the two variables. A similar significant, but weak, positive relationship exists between education and income (see Table 6). This

Table 6

*Demographic Correlations*

Variable		Correlations			
		Gender	Age	Education	Income
Gender	Pearson correlation	-	.037	-.085	-.031
	Sig. (2-tailed)		.478	.098	.549
	<i>N</i>	378	378	378	378
Age	Pearson correlation	.037	-	.342**	.594**
	Sig. (2-tailed)	.478		.000	.000
	<i>N</i>	378	378	378	378
Education	Pearson correlation	-.085	.342**	-	.397**
	Sig. (2-tailed)	.098	.000		.000
	<i>N</i>	378	378	378	378
Income	Pearson correlation	-.031	.594**	.397**	-
	Sig. (2-tailed)	.549	.000	.000	
	<i>N</i>	378	378	378	378

\*\* Correlation is significant at the 0.01 level (2-tailed).

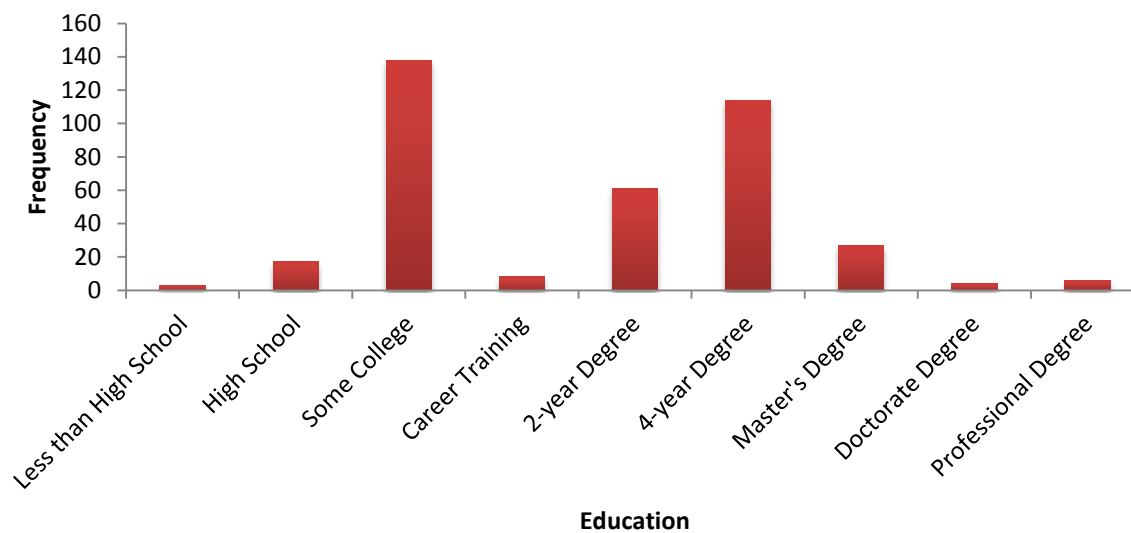


Figure 9. Education frequency.

indicates that, as expected, age and education increase together, and education and income increase together.

The income statistic (see Figure 10) is another indicator of the university culture in which the survey began with the majority of respondents in the \$0 - \$25,000 range. This is consistent with the data published by U.S. Census Bureau in 2012 with most of the highest concentration of wage earners at the bottom of the scale (U.S. Census Bureau, 2012).

Figure 11 shows the breakdown of the information revealed as part of the respondents' Facebook profiles. The most frequently revealed items are likes (64.6%), location (54.8%), hometown (50.8%), and education (49.5%). The items most frequently hidden are politics (2.4%), religion (4.8%), bio (12.2%), and languages (18.5%). On average each respondent revealed 3 (3.24) items of data in their profile. Facebook focuses on likes, location, and education (less so than it in prior years), and while Facebook can be a place to meet like-minded individuals, less emphasis is placed on politics, religion, bio, and languages.

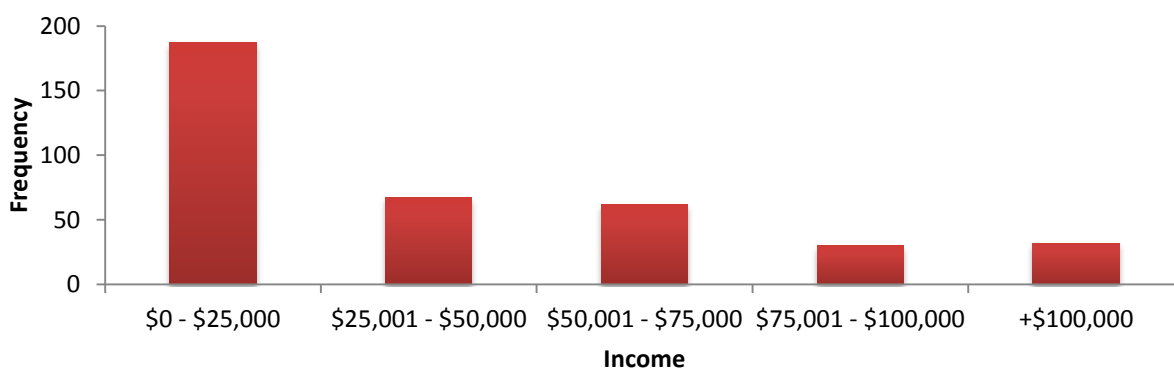


Figure 10. Income frequency.



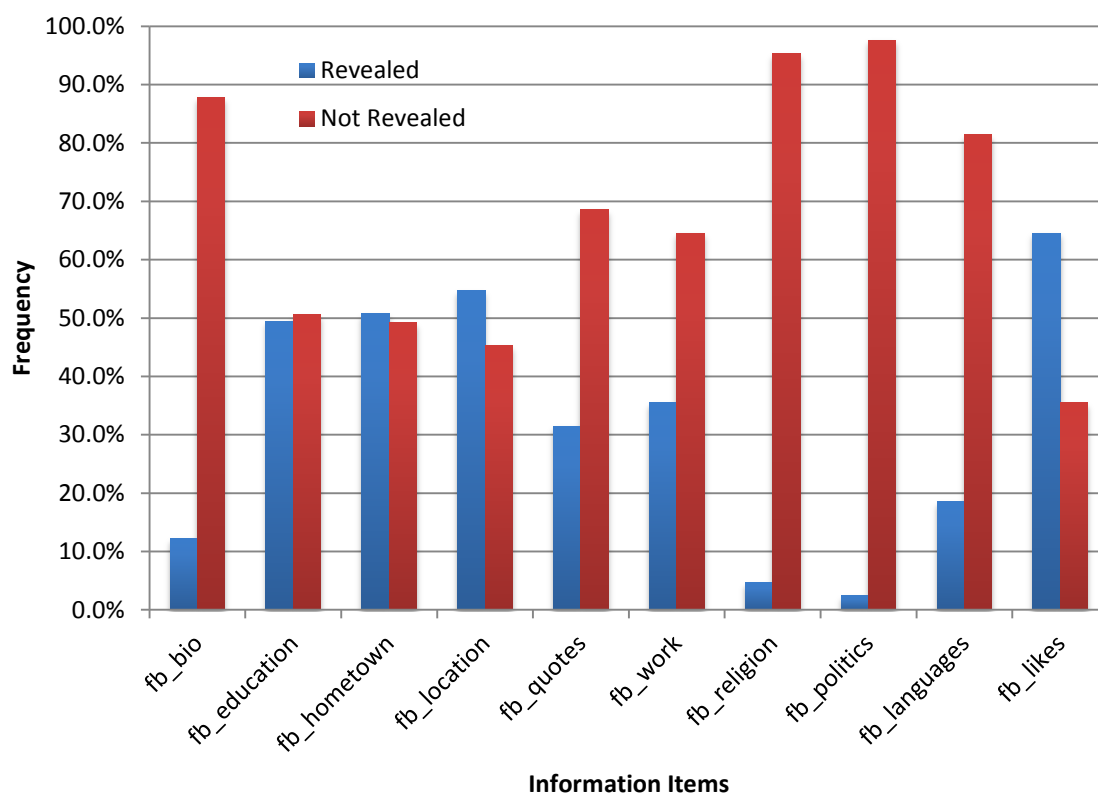


Figure 11. Information revelation frequency.

As a member of Facebook you are encouraged to enter your current location and your hometown so that you can meet people from the same areas. Likes are also emphasized as a means to connect with other people and to tell other about you. Other websites have adopted the Facebook like to facilitate the spread of their brand through social media. However, while Facebook makes it easy, and encourages you, to share your information they place priority on certain information, making it easier to enter and find that information. For instance entering education, hometown, and location information is highly automated with search suggestions when you start typing information into the box. The bio box is simply a text area for entering biographical data freely with little restriction.

Figure 12 shows that females participated much more frequently in information revelation behavior than men. In almost every category women revealed more data than men. Men revealed more often than women which languages they spoke. In performing a crosstab analysis of the data for gender against information revelation only gender\* languages was found to be significant ( $\chi^2 = 10.243$  and  $p = 0.001$ ). The rest, while interesting were not significant. The results of the significant crosstab results are shown in Table 7.

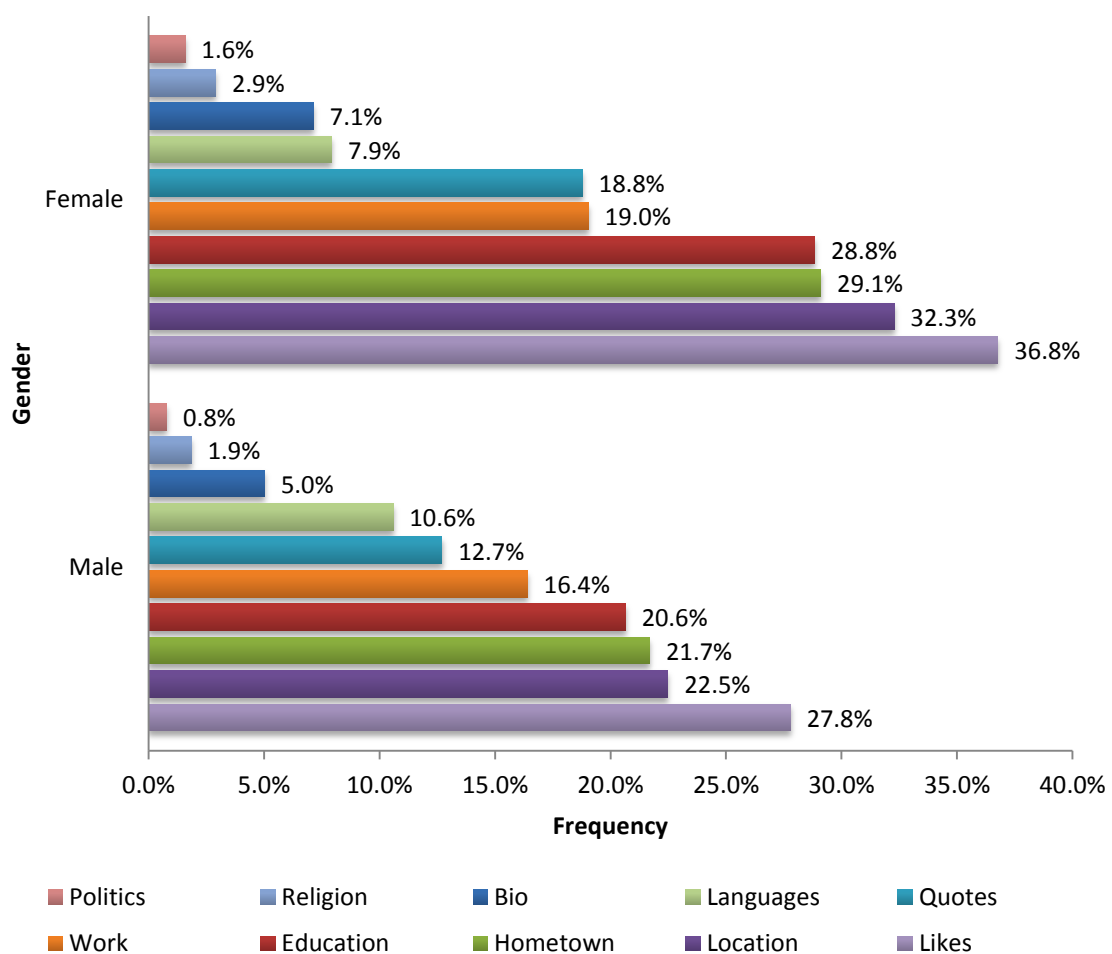


Figure 12. Gender info revelation.

Table 7

*Crosstab Results*

Variables	Chi-Square	<i>p</i> value
Gender*Languages	10.243	0.001
Age*Religion	13.136	0.022
Age*Languages	16.008	0.007
Education*Quotes	17.534	0.025
Education*Religion	18.970	0.015
Education*Politics	32.116	< 0.001
Income*Education	16.568	0.002
Income*Hometown	16.277	0.003
Income*Location	11.098	0.025
Income*Religion	10.900	0.028
Income*Languages	18.310	0.001

The age range that revealed the most information was the 21-30 year olds. Figure 13 shows the rest of the breakdown of age as compared to information revelation. In the instance of age none of the other age groups overtook the 21-30 year olds in any category. There was some variation in the other categories as far as which group was the higher after the 21-30. However, the crosstab analysis indicated that only the age\*religion ( $\chi^2 = 13.136$ ,  $p = 0.022$ ) and age\*languages ( $\chi^2 = 16.008$ ,  $p = 0.007$ ) were significant.

Figure 14 shows the education levels and the rate at which each level shared data. Some college was the level that shared the most information. The next highest concentration was among the 4-year-degree group. Recall from the breakdown of the education groups, these are the two largest groups. The crosstab analysis showed that education\*quotes ( $\chi^2 = 17.543$ ,  $p = 0.025$ ), education\*religion ( $\chi^2 = 18.970$ ,  $p = 0.015$ ), and education\*politics ( $\chi^2 = 32.116$ ,  $p < 0.001$ ) were significant.

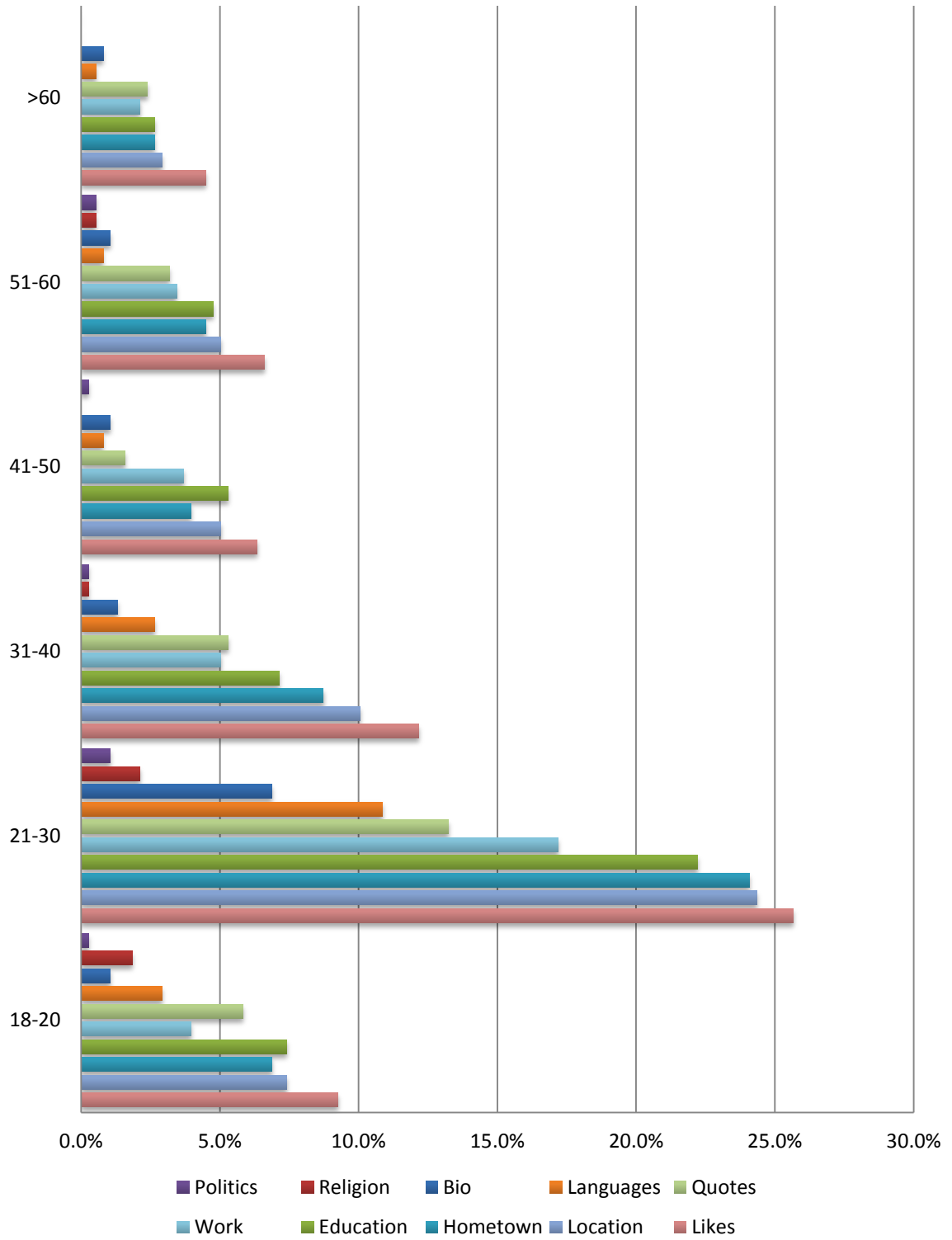


Figure 13. Age info revelation.

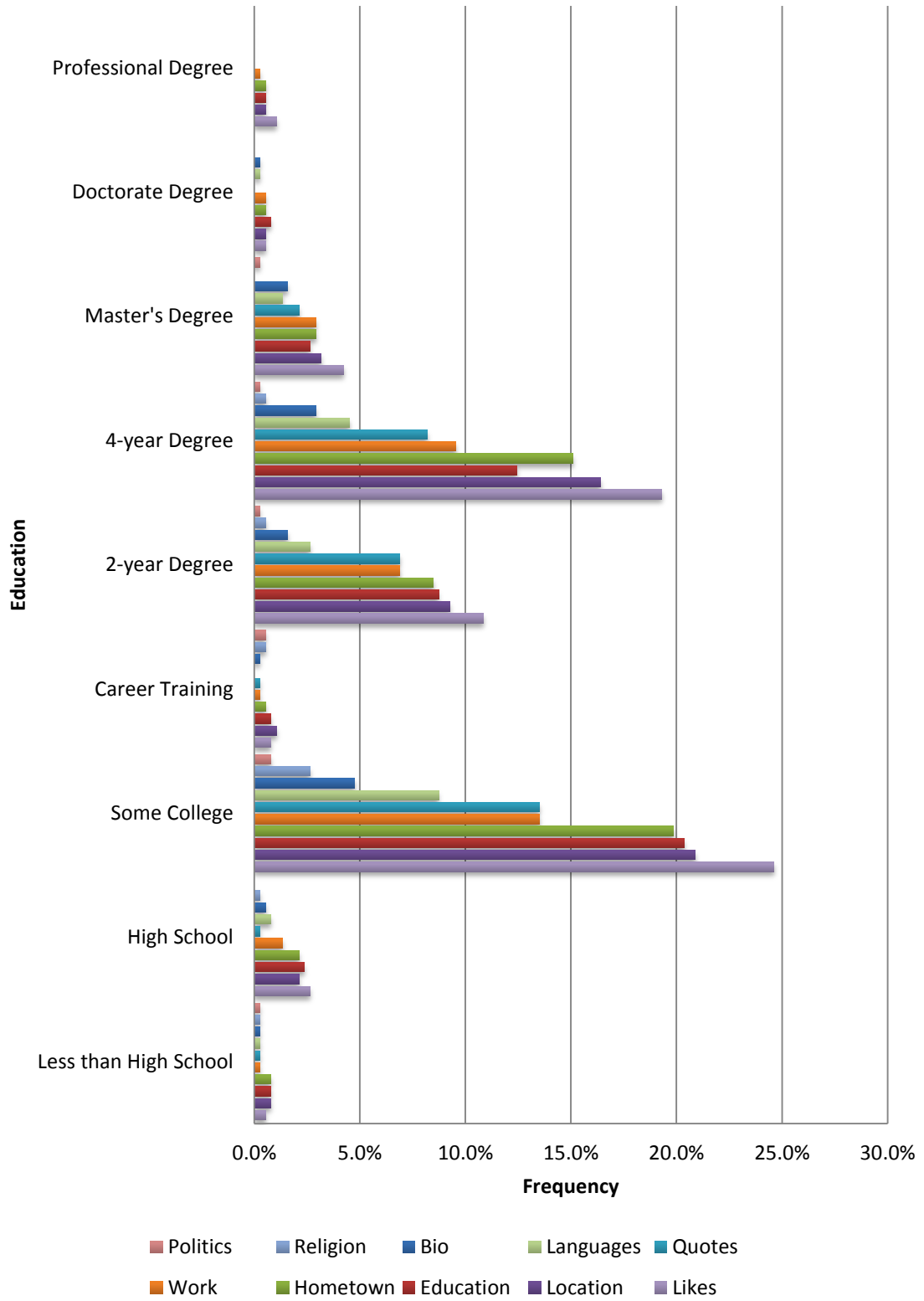


Figure 14. Education info revelation.

Figure 15 shows the income levels and the rate at which each level shared data. The \$0 - \$25,000 group was the group that shared the most information. Again this was the most numerous of the groups and it shows that likes, location, hometown, education, and work are the information most often revealed. The crosstab analysis shows that income\*education ( $\chi^2 = 16.568, p = 0.002$ ), income\*hometown ( $\chi^2 = 16.277, p = 0.003$ ), income\*location ( $\chi^2 = 11.098, p = 0.025$ ), income\*religion ( $\chi^2 = 10.900, p = 0.028$ ), and income\*languages ( $\chi^2 = 18.310, p = 0.001$ ) were significant.

Table 8 shows the results of the analysis of the questions that were asked. The mean result for risk perception (PER) was 5.439 on a scale effective scale of 1 to 7 (from strongly disagree to strongly agree). This would seem to indicate that the majority of respondents do see participation in online communities as risky, which was contrary to expectations. The mean result for risk sensitivity (SEN) was 4.397 on a scale of 1 to 7 (from extremely tolerant to extremely intolerant). This result would seem to indicate that the respondents were risk intolerant. The mean result for attitude (ATT) was 4.403 on a scale of 1 to 7 (from strongly agree to strongly disagree). This result would seem to indicate that the respondents did indeed have a negative attitude toward online communities, viewing them as beneficial communication tools. The mean result of specific fear/perceived severity (SEV) was 5.803 on a scale of 1 to 7 (from negligible to severe). This result would seem to indicate that the respondents were highly sensitive to the negative consequences of participation in online communities. The result for perceived susceptibility was 2.887 on a scale of 1 to 7 (from highly unlikely to highly likely). This result would seem to indicate that the respondents believe that the

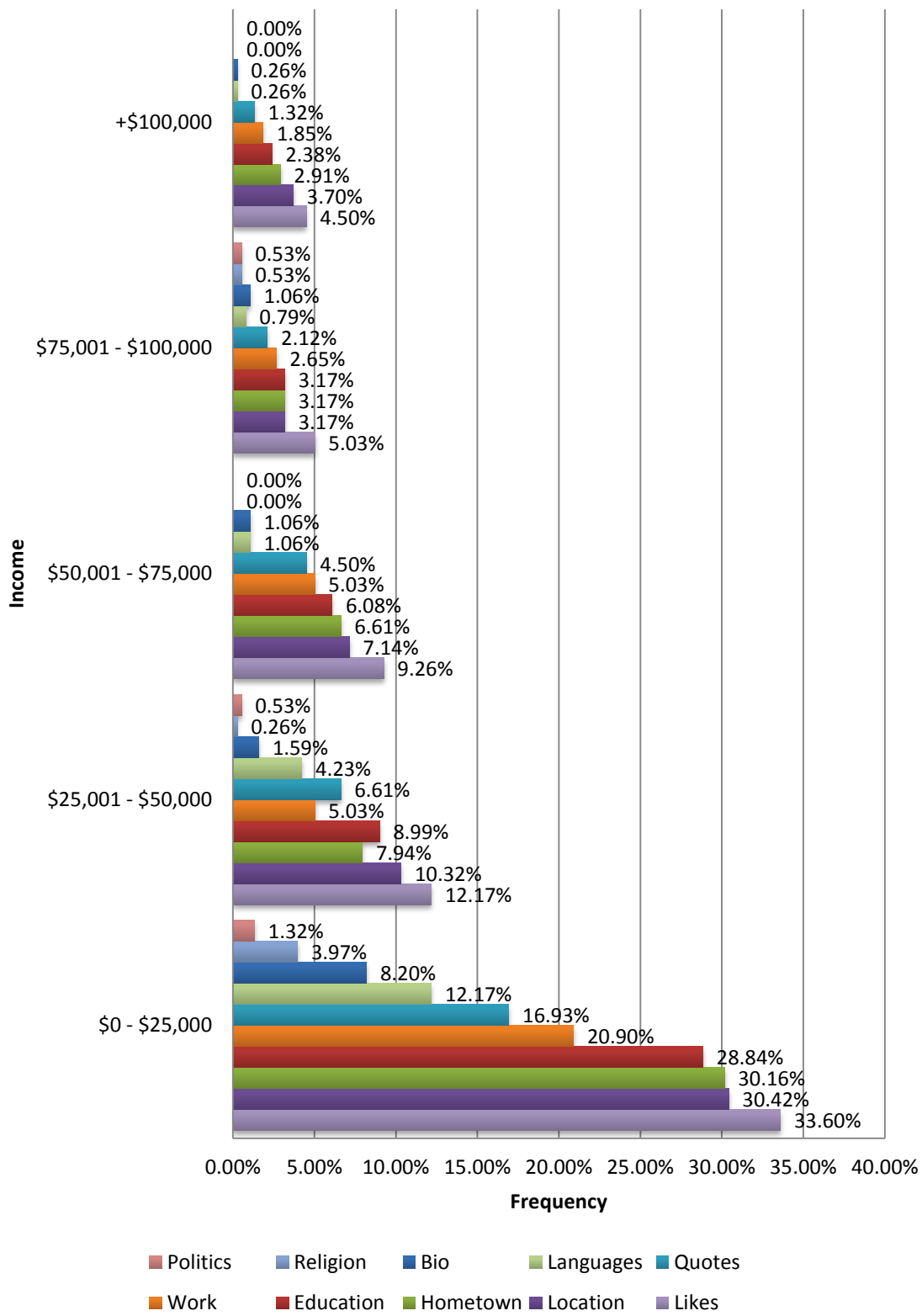


Figure 15. Income info revelation.

Table 8

*Composite Answers*

	N stat	Min stat	Max stat	Mean stat	SD stat	Var stat	Skewness		Kurtosis	
							Stat	Std. error	Stat	Std. error
PER	378	1.333	7.000	5.439	1.105	1.221	-.767	.125	.321	.250
SEN	378	1.000	7.000	4.397	1.427	2.037	-.196	.125	-.609	.250
ATT	378	1.250	7.000	4.403	1.275	1.625	-.171	.125	-.556	.250
SEV	378	1.000	7.000	5.803	1.164	1.354	-1.517	.125	2.456	.250
SUS	378	1.000	7.000	2.887	1.160	1.346	.784	.125	.745	.250
SEF	378	1.750	7.000	5.401	1.142	1.303	-.861	.125	.547	.250
Valid N (listwise)	378									

probability of falling victim to the negative consequences of participation in online communities is very low or they are protected from these consequences in some manner. The mean result for computer self-efficacy (SEF) was 5.401 on a scale of 1 to 7 (from strongly disagree to strongly agree). This result would seem to indicate that the respondents were confident of their abilities to use a computer to protect themselves while in an online community.

Several ANOVA tests were run to determine the differences between the groups. Table shows the results of the test that was run on the data to determine if there was any difference between men and women on the constructs. The ANOVA indicates men and women do differ on the constructs of risk perception ( $p < 0.001$ ) and specific fear/perceived severity ( $p = 0.024$ ). Table 10 shows the results of the ANOVA conducted on differences in age groups. The results indicate that the age groups differ significantly on all constructs. Table 11 contains the results of the ANOVA conducted on the education groups. The results show that the significantly differ on risk perception and



Table 9

*ANOVA Gender Differences*

Variables		Sum of squares	df	Mean square	F	Sig.
PER	Between groups	15.626	1	15.626	13.209	.000
	Within groups	444.815	376	1.183		
	Total	460.441	377			
SEN	Between groups	5.481	1	5.481	2.703	.101
	Within groups	762.496	376	2.028		
	Total	767.976	377			
ATT	Between groups	2.072	1	2.072	1.276	.259
	Within groups	610.543	376	1.624		
	Total	612.615	377			
SEV	Between groups	6.869	1	6.869	5.130	.024
	Within groups	503.511	376	1.339		
	Total	510.381	377			
SUS	Between groups	5.105	1	5.105	3.820	.051
	Within groups	502.456	376	1.336		
	Total	507.561	377			
SEF	Between groups	.057	1	.057	.043	.835
	Within groups	491.335	376	1.307		
	Total	491.392	377			

Table 10

*ANOVA Age Differences*

Variables		Sum of squares	df	Mean square	F	Sig.
PER	Between groups	65.836	5	13.167	12.413	.000
	Within groups	394.606	372	1.061		
	Total	460.441	377			
SEN	Between groups	22.984	5	4.597	2.295	.045
	Within groups	744.992	372	2.003		
	Total	767.976	377			
ATT	Between groups	45.027	5	9.005	5.902	.000
	Within groups	567.588	372	1.526		
	Total	612.615	377			
SEV	Between groups	19.745	5	3.949	2.994	.012
	Within groups	490.635	372	1.319		
	Total	510.381	377			
SUS	Between groups	16.111	5	3.222	2.439	.034
	Within groups	491.450	372	1.321		
	Total	507.561	377			
SEF	Between groups	37.354	5	7.471	6.121	.000
	Within groups	454.037	372	1.221		
	Total	491.392	377			

Table 11

*ANOVA Education Differences*

Variables		Sum of squares	df	Mean square	F	Sig.
PER	Between groups	23.929	8	2.991	2.529	.011
	Within groups	436.512	369	1.183		
	Total	460.441	377			
SEN	Between groups	15.722	8	1.965	.964	.464
	Within groups	752.254	369	2.039		
	Total	767.976	377			
ATT	Between groups	20.518	8	2.565	1.598	.124
	Within groups	592.097	369	1.605		
	Total	612.615	377			
SEV	Between groups	31.116	8	3.890	2.995	.003
	Within groups	479.264	369	1.299		
	Total	510.381	377			
SUS	Between groups	11.171	8	1.396	1.038	.407
	Within groups	496.390	369	1.345		
	Total	507.561	377			
SEF	Between groups	16.236	8	2.030	1.576	.130
	Within groups	475.156	369	1.288		
	Total	491.392	377			

specific fear/perceived severity. Table 12 contains the results of the ANOVA conducted on the income groups. The results of this ANOVA indicate significant differences on risk perception, attitude, perceived severity, and computer self-efficacy.

### **Construct Validity and Reliability**

This section will discuss the analysis to establish the adequacy of the questions used to devise the constructs in the RATA model. The results of the tests for scale reliability, using Cronbach's alpha, and construct validity, using factor analysis, will be reported. Upon establishing the reliability and validity of the constructs, single measures will be computed and the data will be ready to test the hypotheses.

Table 12

*ANOVA Income Differences*

Variables		Sum of squares	df	Mean square	F	Sig.
PER	Between groups	50.001	4	12.500	11.360	.000
	Within groups	410.440	373	1.100		
	Total	460.441	377			
SEN	Between groups	15.290	4	3.822	1.894	.111
	Within groups	752.686	373	2.018		
	Total	767.976	377			
ATT	Between groups	16.950	4	4.237	2.653	.033
	Within groups	595.665	373	1.597		
	Total	612.615	377			
SEV	Between groups	10.076	4	2.519	1.878	.114
	Within groups	500.305	373	1.341		
	Total	510.381	377			
SUS	Between groups	17.725	4	4.431	3.374	.010
	Within groups	489.836	373	1.313		
	Total	507.561	377			
SEF	Between groups	15.042	4	3.761	2.945	.020
	Within groups	476.349	373	1.277		
	Total	491.392	377			

The model used in this research has six independent variables, four moderating variables, and the dependent variable. The composite variables in the model are reflective in nature with the exception of risk sensitivity. The items that make up risk sensitivity define the construct rather than draw context from the construct. In addition, if any of the items were to be eliminated that would change the meaning of the construct. Further the individual items are shown in Table 13 not to covary. This is confirmed by the coefficients of correlation in Table 14. Moreover, while all of the items measure risk they measure different aspects of risk and being highly risk sensitive in one item, such as physical risk, does not mean that the respondent will be sensitive in any of the other items, such as emotional or spiritual risk (Peters, Straub, & Rai, 2007). The composite variables in the research model include all the independent variables (risk perception, risk

Table 13

*Risk Sensitivity Covariance*

Item	SEN1	SEN2	SEN3	SEN4	SEN5	SEN6	SEN7	SEN8
SEN1	-	0.7404	0.5690	0.6595	0.2644	-0.3144	0.1876	0.0773
SEN2	0.7404	-	0.8567	0.6585	0.3817	0.2954	0.4576	0.4949
SEN3	0.5690	0.8567	-	0.4139	0.2595	-0.0971	0.2297	0.1877
SEN4	0.6595	0.6585	0.4139	-	0.2996	0.1240	0.8478	0.8722
SEN5	0.2644	0.3817	0.2595	0.2996	-	0.5913	0.1144	0.0698
SEN6	-0.3144	0.2954	-0.0971	0.1240	0.5913	-	0.3371	0.3614
SEN7	0.1876	0.4576	0.2297	0.8478	0.1144	0.3371	-	1.4956
SEN8	0.0773	0.4949	0.1877	0.8722	0.0698	0.3614	1.4956	-

Table 14

*Risk Sensitivity Coefficient of Correlation*

Item	SEN1	SEN2	SEN3	SEN4	SEN5	SEN6	SEN7	SEN8
SEN1	-	0.3145	0.2276	0.2583	0.1313	-0.1101	0.0715	0.0273
SEN2	0.3145	-	0.4201	0.3162	0.2324	0.1268	0.2138	0.2146
SEN3	0.2276	0.4201	-	0.1872	0.1488	-0.0393	0.1010	0.0766
SEN4	0.2583	0.3162	0.1872	-	0.1682	0.0491	0.3652	0.3487
SEN5	0.1313	0.2324	0.1488	0.1682	-	0.2969	0.0625	0.0354
SEN6	-0.1101	0.1268	-0.0393	0.0491	0.2969	-	0.1299	0.1292
SEN7	0.0715	0.2138	0.1010	0.3652	0.0625	0.1299	-	0.5817
SEN8	0.0273	0.2146	0.0766	0.3487	0.0354	0.1292	0.5817	-

sensitivity, attitude, specific fear/perceived severity, perceived susceptibility, and computer self-efficacy) and the dependent variable, information revelation.

### **Reliability Analysis**

A reliability analysis of the items that make up the construct was conducted using SPSS to confirm that the constructed scales reliably measured the constructs, as they were intended. During the reliability analysis several items were identified as potential problems. These items were in the risk perception, risk sensitivity, attitude, and specific fear/perceived severity constructs. The scale reliability of risk perception would be enhanced from 0.796 to 0.869 by the removal of PER3. The scale reliability of attitude would increase from 0.770 to 0.773 with the elimination of ATT2. The scale reliability of specific fear/perceived severity would increase from 0.890 to 0.897 with the elimination of SEV5. The initial reliability analysis can be found in Table 15. The final reliability analysis of the combine constructs, after the removals, can be found in Table 16.

### **Construct Validity**

A factor analysis was completed in SmartPLS. The purpose of this analysis is to ensure that items are loading correctly on the constructs to which they are intended and do not cross load to other constructs. Table 17 shows the results of the analysis of the factor loadings. ATT1, ATT2, ATT3, ATT5, SEF1, SEF4, SEV5, PER3, SUS4, SUS5, SUS6, and SUS7 are the only loadings that fall below the acceptable value of 0.7. Table 18 shows the results of the cross factor analysis. There are no major cross loadings as

Table 15

*Reliability Analysis*

Item	Cronbach's $\alpha$	$\alpha$ if item deleted
Risk perception	.796	
PER1		.741
PER2		.765
PER3		.869
PER4		.747
PER5		.738
PER6		.750
PER7		.745
Attitude	.770	
ATT1		.737
ATT2		.773
ATT3		.730
ATT4		.732
ATT5		.752
ATT6		.741
ATT7		.720
Specific fear/perceived severity	.890	
SEV1		.883
SEV2		.879
SEV3		.869
SEV4		.880
SEV5		.897
SEV6		.864
SEV7		.867
SEV8		.864
Perceived susceptibility	.876	
SUS1		.869
SUS2		.866
SUS3		.857
SUS4		.857
SUS5		.862
SUS6		.861
SUS7		.859
SUS8		.854
Computer self-efficacy	.845	
SEF1		.805
SEF2		.786
SEF3		.783
SEF4		.834

Table 16

*Final Scale Reliability*

Construct	# of Items	Cronbach's $\alpha$
Risk perception	6	.869
Attitude	7	.770
Specific fear/perceived severity	8	.890
Perceived susceptibility	8	.876
Computer self-efficacy	4	.845

none of the other loadings are within 0.2, even on ATT1, ATT2, ATT3, ATT5, SEF1, SEF4, SEV5, PER3, SUS4, SUS5, SUS6, and SUS7.

The final result of the factor analysis indicated that all factors load cleanly on the intended constructs. The item loadings were higher than 0.7 except for those mentioned previously. Items that with loadings lower than 0.7 are frequently deleted at this stage of the analysis unless removal would threaten content validity. For that reason ATT2, and PER3 were removed. The content of question ATT2 is mirrored in question ATT6. The content of PER3 is assumed by the other questions from that construct. The remaining variables were retained as removal would have affected content validity and would have had a negative impact the Cronbach's alpha score of each construct. Removing the measures from perceived susceptibility would have necessitated the removal of the matching measures from specific fear/perceived severity as well as attitude and risk perception, and risk perception and computer self-efficacy.

The final reliability and convergent validity measure are shown in Table 19. Each of the constructs had a composite reliability (CR) higher than the 0.7 necessary for

Table 17

*Factor Loadings*

Item	Factors					
	ATT	SEF	SUS	PER	SEN	SEV
ATT1	0.5688	0	0	0	0	0
ATT2	0.4194	0	0	0	0	0
ATT3	0.6884	0	0	0	0	0
ATT4	<b>0.7164</b>	0	0	0	0	0
ATT5	0.6954	0	0	0	0	0
ATT6	<b>0.7035</b>	0	0	0	0	0
ATT7	<b>0.7116</b>	0	0	0	0	0
SEF1	0	0.4188	0	0	0	0
SEF2	0	<b>0.8854</b>	0	0	0	0
SEF3	0	<b>0.8204</b>	0	0	0	0
SEF4	0	0.6907	0	0	0	0
SUS1	0	0	<b>0.7485</b>	0	0	0
SUS2	0	0	<b>0.7531</b>	0	0	0
SUS3	0	0	<b>0.8251</b>	0	0	0
SUS4	0	0	0.6916	0	0	0
SUS5	0	0	0.6756	0	0	0
SUS6	0	0	0.6503	0	0	0
SUS7	0	0	0.6582	0	0	0
SUS8	0	0	<b>0.7784</b>	0	0	0
PER1	0	0	0	<b>0.8027</b>	0	0
PER2	0	0	0	<b>0.7091</b>	0	0
PER3	0	0	0	-0.1246	0	0
PER4	0	0	0	<b>0.7654</b>	0	0
PER5	0	0	0	<b>0.8423</b>	0	0
PER6	0	0	0	<b>0.7674</b>	0	0
PER7	0	0	0	<b>0.8011</b>	0	0
SEV1	0	0	0	0	0	<b>0.7278</b>
SEV2	0	0	0	0	0	<b>0.768</b>
SEV3	0	0	0	0	0	<b>0.8366</b>
SEV4	0	0	0	0	0	<b>0.7276</b>
SEV5	0	0	0	0	0	0.6567
SEV6	0	0	0	0	0	<b>0.7651</b>
SEV7	0	0	0	0	0	<b>0.7439</b>
SEV8	0	0	0	0	0	<b>0.7717</b>



Table 18

*Cross Loadings*

Item	Factors					
	ATT	SEF	SUS	PER	SEN	SEV
ATT1	0.5688	0.2151	-0.0108	-0.014	0.028	0.1732
ATT2	0.4194	0.1666	0.0009	-0.0648	0.0845	0.0278
ATT3	0.6884	0.2445	-0.1029	-0.1358	0.0083	0.0084
ATT4	<b>0.7164</b>	0.3673	-0.0939	-0.1316	-0.0265	0.0772
ATT5	0.6954	0.17	-0.1448	-0.1739	-0.0398	-0.0372
ATT6	<b>0.7035</b>	0.2815	-0.0989	-0.1443	0.037	0.0253
ATT7	<b>0.7116</b>	0.2972	-0.1545	-0.111	0.0404	0.0511
SEF1	0.1333	0.4188	-0.0265	0.0821	-0.0149	0.0122
SEF2	0.3891	<b>0.8854</b>	-0.1344	-0.1251	0.0624	-0.0348
SEF3	0.2591	<b>0.8204</b>	-0.0827	-0.0934	0.0663	-0.032
SEF4	0.1926	0.6907	-0.122	-0.0662	-0.0326	0.0369
SUS1	-0.1771	-0.1742	<b>0.7485</b>	0.446	-0.0021	0.2679
SUS2	-0.0112	-0.0035	<b>0.7531</b>	0.2689	0.078	0.3395
SUS3	-0.1395	-0.2112	<b>0.8251</b>	0.4118	-0.0242	0.3189
SUS4	-0.1646	-0.0959	0.6916	0.1865	0.0576	0.1583
SUS5	-0.1198	-0.1089	0.6756	0.1604	0.088	0.2152
SUS6	-0.0875	-0.0449	0.6503	0.1432	0.0818	0.1466
SUS7	-0.1499	-0.1249	0.6582	0.1353	0.0594	0.1063
SUS8	-0.0951	-0.0591	<b>0.7784</b>	0.2578	0.0281	0.2549
PER1	-0.1831	-0.1884	0.3461	<b>0.8027</b>	-0.1456	0.2478
PER2	-0.1266	-0.07	0.3706	<b>0.7091</b>	-0.1054	0.2141
PER3	0.0983	0.0886	-0.1433	-0.1246	-0.0397	-0.0651
PER4	-0.0883	-0.0895	0.2688	<b>0.7654</b>	-0.1048	0.2391
PER5	-0.156	-0.1178	0.2839	<b>0.8423</b>	-0.0929	0.2283
PER6	-0.1522	-0.0773	0.2341	<b>0.7674</b>	-0.1044	0.1901
PER7	-0.1738	-0.2425	0.2821	<b>0.8011</b>	-0.1314	0.2006
SEV1	-0.0028	-0.0357	0.2285	0.2557	-0.0468	<b>0.7278</b>
SEV2	-0.0148	-0.0669	0.2609	0.2751	-0.1252	<b>0.768</b>
SEV3	0.0201	-0.022	0.2522	0.2367	-0.1312	<b>0.8366</b>
SEV4	0.0279	-0.0713	0.2506	0.1961	-0.1355	<b>0.7276</b>
SEV5	0.0277	-0.0299	0.3435	0.2848	-0.0872	0.6567
SEV6	0.1125	0.0581	0.1836	0.065	-0.0207	<b>0.7651</b>
SEV7	0.0528	0.0405	0.1976	0.0969	0.0291	<b>0.7439</b>
SEV8	0.0495	0.0165	0.2135	0.1011	-0.0264	<b>0.7717</b>

Table 19

*Reliability and Convergent Validity*

Item	AVE	Composite reliability	$R^2$	Cronbachs alpha	Communality	Redundancy	$\sqrt{\text{AVE}}$
ATT	0.500	0.833	0	0.773	0.500	0	0.707
SEF	0.713	0.881	0	0.845	0.713	0	0.844
SUS	0.650	0.881	0	0.876	0.650	0	0.806
PER	0.617	0.906	0.257	0.869	0.617	0.021	0.785
SEV	0.552	0.907	0	0.890	0.552	0	0.743

reliability. The constructs also had an average variance extracted (AVE) above the 0.5 and in each case the AVE is less than the CR which is necessary to demonstrate convergent validity (Hair, Black, Babin, & Anderson, 2010).

Discriminant validity is demonstrated by the interconstruct correlations being less than the corresponding square roots of AVE for each construct. The interconstruct correlations are listed in Table 20, and the square roots of the AVE for each construct are in Table 19 (Gefen & Straub, 2005).

### **Hypothesis Testing**

To test the hypotheses detailed in Chapter III, a PLS path analysis was conducted using SmartPLS. The path analysis used the path weighting scheme with data metric: Mean 0, Var 1, to standardize the data. The maximum iterations were set at 300. The abortion criterion was set at 0.00001 (i.e., 1.0E-5). The abort criterion is the distance between the recent estimates of the model parameters. The parameter for initial weights was set at 1.0. This means that the algorithm stops when the maximum number of

Table 20

*Interconstruct Correlations*

Item	<i>PER</i>	<i>SEN</i>	<i>ATT</i>	<i>SEV</i>	<i>SUS</i>	<i>SEF</i>
PER	1					
SEN	0.035092	1				
ATT	-0.14778	0.14451	1			
SEV	0.201112	0.119437	0.109634	1		
SUS	0.35232	0.045655	-0.13581	0.261345	1	
SEF	-0.05495	0.067607	0.324212	-0.00609	-0.09513	1

iterations, 300, or the abort criterion, 0.00001, has been reached. The stop criterion of the algorithm was reached in 8 iterations, meaning that the algorithm found a stable solution after 8 iterations. The results of the path analysis are found in Table 21. The  $R^2$  value for risk perception were shown in Table 19.

Upon completion of the path analysis, bootstrapping, to examine the structural path significance, was performed. The settings for bootstrapping were 378 cases (i.e. total sample size) and 5,000 bootstrap samples (Hair, Ringle, & Sarstedt, 2011). Bootstrapping requires a large enough number of replications to get good bootstrap variance and so that resulting the empirical distribution can be used as an approximation of the population's true distribution (Gould & Pitblado, 2010). Results of bootstrapping are in Table 22.

Overall, the model used in this research explains 25.7% of the variance in Risk Perception. However, the model is only able to explain 4.2% of the variance in the dependent variable, information revelation. The low explained variance is expected as trying to predict human behavior is difficult (Frost, 2013) and the models used in risk research are low performing, including the improvements from the RAF model (Sjöberg,

Table 21

*Path Analysis—Path Coefficients*

Item	ACT	ATT	PER	SEF	SEN	SEV	SUS
ATT	0.0271	0	-0.1298	0	0	0	0
PER	-0.2087	0	0	0	0	0	0
SEF	0.0066	0	-0.0318	0	0	0	0
SEN	-0.0038	0	0.0183	0	0	0	0
SEV	-0.0517	0	0.2477	-0.0493	0	0	0.3517
SUS	-0.0721	0	0.3457	0	0	0	0
SUS*SEV	0	0	-0.6978	0	0	0	0
SEF*SEV	0	0	-0.5862	0	0	0	0
Age	0	-0.0893	0.0492	0	-0.0126	-0.0374	0.0475
Education	0	0.0419	0.0063	0	0.045	0.0112	-0.0105
Gender	0	0.0619	0.074	0	0.1835	0.0712	0.0535
Income	0	-0.0092	0.0219	0	0.0089	0.0117	0.0073
ATT * Gender	0	0	0.1682	0	0	0	0
SEN * Gender	0	0	0.0296	0	0	0	0
SEV * Gender	0	0	-0.096	0	0	0	0
SUS * Gender	0	0	-0.0718	0	0	0	0
ATT * Age	0	0	-0.0065	0	0	0	0
SEN * Age	0	0	-0.0036	0	0	0	0
SEV * Age	0	0	-0.0613	0	0	0	0
SUS * Age	0	0	-0.043	0	0	0	0
ATT * Education	0	0	0.0252	0	0	0	0
SEN * Education	0	0	0.0043	0	0	0	0
SEV * Education	0	0	-0.0268	0	0	0	0
SUS * Education	0	0	-0.0425	0	0	0	0
ATT * Income	0	0	0.0064	0	0	0	0
SEN * Income	0	0	-0.0056	0	0	0	0
SEV * Income	0	0	-0.0621	0	0	0	0
SUS * Income	0	0	-0.0255	0	0	0	0

Table 22

*Bootstrapping—Path Coefficients*

Predictor	Original sample (O)	Sample mean (M)	SD	STERR	t stat	p value
SUS -> PER	0.3554	0.3568	0.0415	0.0415	<b>8.5626</b>	< 0.0001
SEV -> SUS	0.3173	0.3189	0.0454	0.0454	<b>6.9854</b>	< 0.0001
PER -> ACT	-0.2045	-0.2286	0.0403	0.0403	<b>5.0734</b>	< 0.0001
Age -> ATT	-0.2874	-0.2926	0.0619	0.0619	<b>4.6448</b>	< 0.0001
Age -> SUS	0.2239	0.2278	0.0569	0.0569	<b>3.9353</b>	< 0.0001
Age -> SEV	-0.2121	-0.2143	0.0765	0.0765	<b>2.7727</b>	0.0058
Gender -> SEV	0.1356	0.1362	0.0506	0.0506	<b>2.6775</b>	0.0077
Education -> ATT	0.1556	0.1595	0.0609	0.0609	<b>2.5574</b>	0.0109
SEV -> PER	0.132	0.1321	0.0591	0.0591	<b>2.2353</b>	0.0260
ATT -> PER	-0.1123	-0.1151	0.0539	0.0539	<b>2.0814</b>	0.0381
Gender -> SUS	0.0848	0.0856	0.0517	0.0517	1.6398	0.1019
Gender -> SEN	0.0993	0.0968	0.0625	0.0625	1.589	0.1129
ATT * Gender -> PER	0.3139	0.3335	0.1948	0.1948	1.6117	0.1079
SUS * Education -> PER	-0.2199	-0.2028	0.1527	0.1527	1.44	0.1507
Education -> SEN	0.0833	0.0836	0.0633	0.0633	1.3172	0.1886
SEV * Age -> PER	-0.2955	-0.3174	0.2386	0.2386	1.2388	0.2162
ATT * Education -> PER	0.2379	0.2052	0.1936	0.1936	1.2288	0.2199
Gender -> ATT	0.0671	0.0671	0.0562	0.0562	1.1952	0.2328
Education -> SEV	0.0726	0.0716	0.0623	0.0623	1.1648	0.2448
SUS * Age -> PER	-0.1652	-0.1427	0.1548	0.1548	1.0672	0.2866
SEF * SEV -> PER	-0.1697	-0.0446	0.1611	0.1611	1.0538	0.2926
SEV * Income -> PER	-0.2665	-0.2447	0.2671	0.2671	0.998	0.3189
Education -> SUS	-0.0572	-0.0585	0.0577	0.0577	0.9928	0.3214
SEV -> SEF	-0.052	-0.052	0.0533	0.0533	0.9754	0.3300
Income -> SEV	0.0598	0.06	0.0684	0.0684	0.8738	0.3828
SEN * Gender -> PER	0.1299	0.1205	0.1569	0.1569	0.8277	0.4084
Income -> SUS	0.0312	0.0308	0.0644	0.0644	0.4841	0.6286
SEV * Gender -> PER	-0.1479	-0.1779	0.2492	0.2492	0.5934	0.5533
SUS * Income -> PER	-0.0768	-0.0751	0.1382	0.1382	0.5555	0.5789
SUS * Gender -> PER	-0.0727	-0.0637	0.1331	0.1331	0.5461	0.5853
SEV * Education -> PER	-0.1695	-0.1261	0.3382	0.3382	0.5012	0.6165
SEN * Education -> PER	0.0846	0.0726	0.173	0.173	0.489	0.6251
SUS * SEV -> PER	-0.0698	-0.0059	0.1601	0.1601	0.436	0.6631
Income -> ATT	-0.027	-0.0265	0.0688	0.0688	0.3923	0.6951
SEN * Income -> PER	-0.0673	-0.0799	0.1737	0.1737	0.3875	0.6986
SEN -> PER	0.0169	0.0182	0.0513	0.0513	0.3292	0.7422
SEN * Age -> PER	-0.0502	-0.0644	0.1618	0.1618	0.3105	0.7564
Age -> SEN	-0.0202	-0.0248	0.0733	0.0733	0.2759	0.7828
ATT * Age -> PER	-0.0393	-0.0052	0.1567	0.1567	0.2506	0.8023
SEF -> PER	-0.0143	-0.0112	0.0594	0.0594	0.2404	0.8102
ATT * Income -> PER	0.0328	0.0342	0.1596	0.1596	0.2053	0.8374
Income -> SEN	0.013	0.0189	0.0781	0.0781	0.1663	0.8680

2000). Notwithstanding the low variance explained the path analysis shows that several of the effects between the constructs and the demographic variables were significant.

H1<sub>1</sub>, which predicted that risk sensitivity would be positively related to risk perception, was not supported,  $t(377) = 0.3292, p = 0.3711$ . H2<sub>1</sub>, which predicted that attitude toward online communities would be negatively related to risk perception, was supported,  $t(377) = 2.0814, p = 0.019$ . H3a<sub>1</sub>, which predicted that specific fear/perceived severity of the negative consequences of participation in online communities would be positively related to risk perception, was supported,  $t(377) = 2.2353, p = 0.013$ . H3b<sub>1</sub>, which predicted that specific fear/perceived severity would have a positive moderating effect on the relationship between perceived susceptibility and risk perception, was not supported,  $t(377) = 0.436, p = 0.6631$ . H3c<sub>1</sub>, which predicted that specific fear/perceived severity would have a negative moderating effect on the relationship between computer self-efficacy and risk perception, was not supported,  $t(377) = 0.9754, p = 0.165$ . H4<sub>1</sub>, which predicted that perceived susceptibility of the negative consequences of participation in online communities would be positively related to risk perception, was the most strongly supported hypothesis,  $t(377) = 8.5626, p < 0.0001$ . H5<sub>1</sub>, which predicted that computer self-efficacy would be negatively related to risk perception, was not supported,  $t(377) = 0.2404, p = 0.4051$ . H6<sub>1</sub>, which predicted that risk perception is negatively related to information revelation, was supported,  $t(377) = 5.0734, p < 0.0001$ . The remaining hypotheses are related to the demographic data.

Hypotheses H7a-d predicted that gender would have a significant moderating effect on the relationship between risk perception and risk sensitivity, attitude, specific

fear/perceived severity, or perceived susceptibility. The null hypotheses failed to be rejected; H7a<sub>1</sub>,  $t(377) = 0.8277$ ,  $p = 0.4084$ ; H7b<sub>1</sub>,  $t(377) = 1.6117$ ,  $p = 0.1079$ ; H7c<sub>1</sub>,  $t(377) = 0.5934$ ,  $p = 0.5533$ ; H7d<sub>1</sub>,  $t(377) = 0.5461$ ,  $p = 0.5853$ .

However, while gender did not have a significant moderating effect on the relationship between risk perception and risk sensitivity, attitude, specific fear/perceived severity, or perceived susceptibility, gender did have a main effect on specific fear/perceived severity,  $t(377) = 2.6775$ ,  $p = 0.0077$ . Figure 16 shows the average response for each of the questions that make up the SEV construct. Females on average rated the severity of risk participating in online communities higher than males.

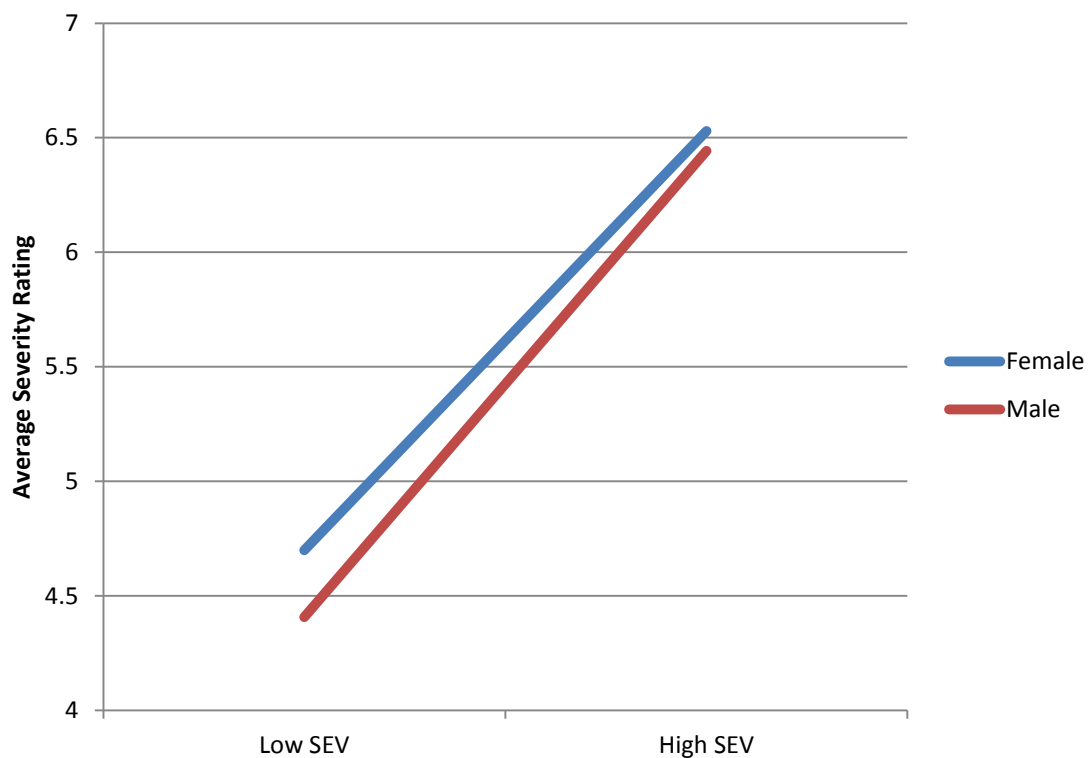


Figure 16. Gender/severity effect.

Hypotheses H8a-d predicted that age would have a significant moderating effect on between risk perception and risk sensitivity, attitude, and specific fear/perceived severity, or perceived susceptibility. The null hypotheses failed to be rejected; H8a<sub>1</sub>,  $t(377) = 0.3105$ ,  $p = 0.7564$ ; H8b<sub>1</sub>,  $t(377) = 0.2506$ ,  $p = 0.8023$ ; H8c<sub>1</sub>,  $t(377) = 1.2388$ ,  $p = 0.2162$ ; H8d<sub>1</sub>,  $t(377) = 1.0672$ ,  $p = 0.2866$ .

While age did not significantly moderate the effect between attitude and risk perception, there was a main effect between age and attitude,  $t(377) = 4.6448$ ,  $p < 0.0001$ ; age and perceived susceptibility,  $t(377) = 3.9353$ ,  $p < 0.0001$ ; and age and specific fear/perceived severity,  $t(377) = 2.7727$ ,  $p = 0.0058$ . The path coefficients indicate a negative relationship between age and attitude,  $t(377) = 4.6448$ ,  $p < 0.0001$  (see Figure 17) and age and perceived severity,  $t(377) = 2.7727$ ,  $p = 0.0058$  (see Figure 18); while there is a positive relationship between age and perceived susceptibility,  $t(377) = 3.9353$ ,  $p < 0.0001$  (see Figure 19).

Hypotheses H9a-d predicted that education would have significant moderating effect between risk perception and risk sensitivity, attitude, specific fear/perceived severity, or perceived susceptibility. The null hypotheses failed to be rejected; H9a<sub>1</sub>,  $t(377) = 0.489$ ,  $p = 0.6251$ ; H9b<sub>1</sub>,  $t(377) = 1.2288$ ,  $p = 0.2199$ ; H9c<sub>1</sub>,  $t(377) = 0.5012$ ,  $p = 0.6165$ ; H9d<sub>1</sub>,  $t(377) = 1.44$ ,  $p = 0.1507$ .

Education did have a main positive effect on attitude,  $t(377) = 2.5574$ ,  $p = 0.0109$  (see Figure 20). This indicates, for the most part, that as education increases, attitude toward online communities increases as well. There is a dip at the PhD level, but that could be due to the low number of respondents at that particular level.



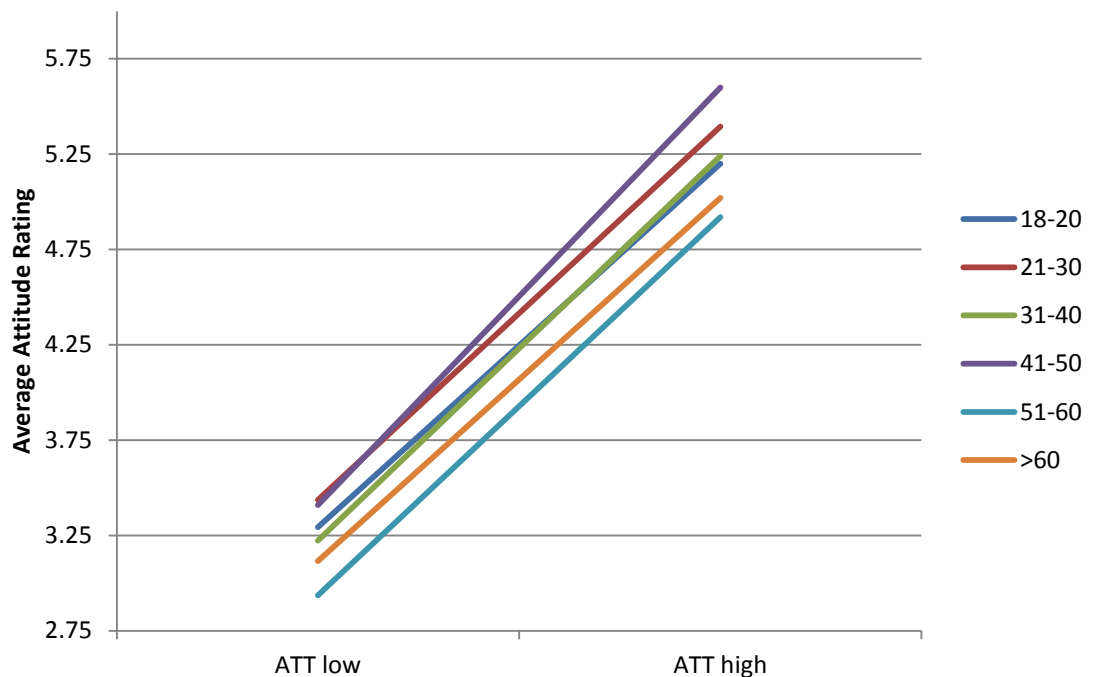


Figure 17. Attitude/age effect.

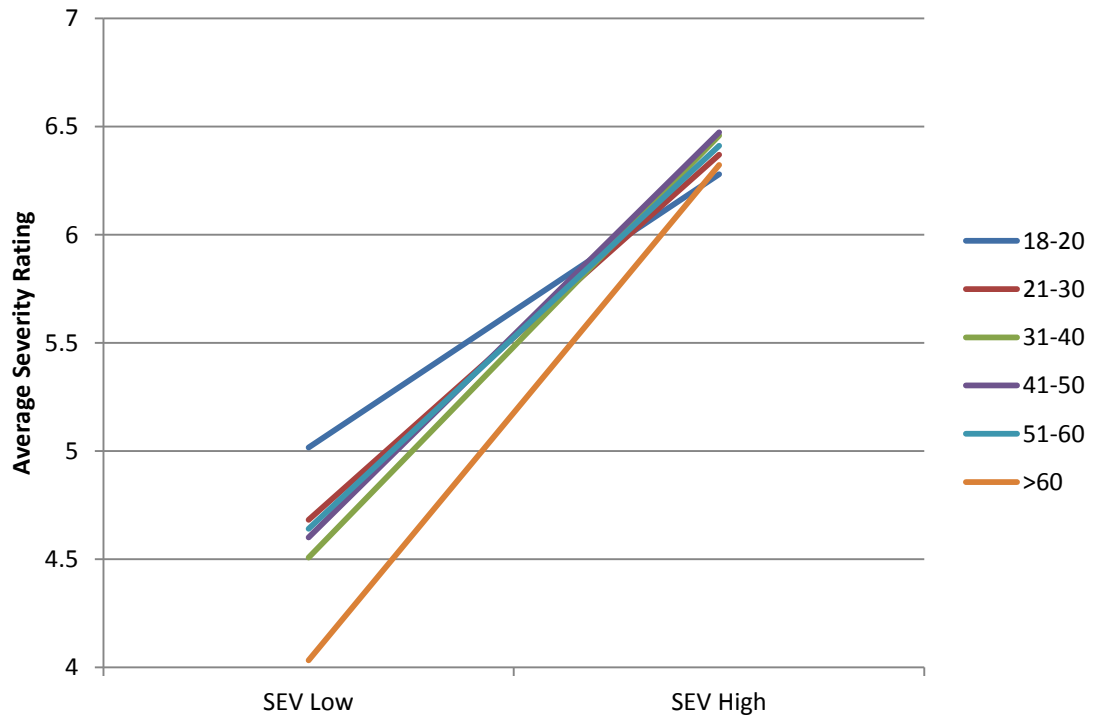


Figure 18. Age/severity effect.

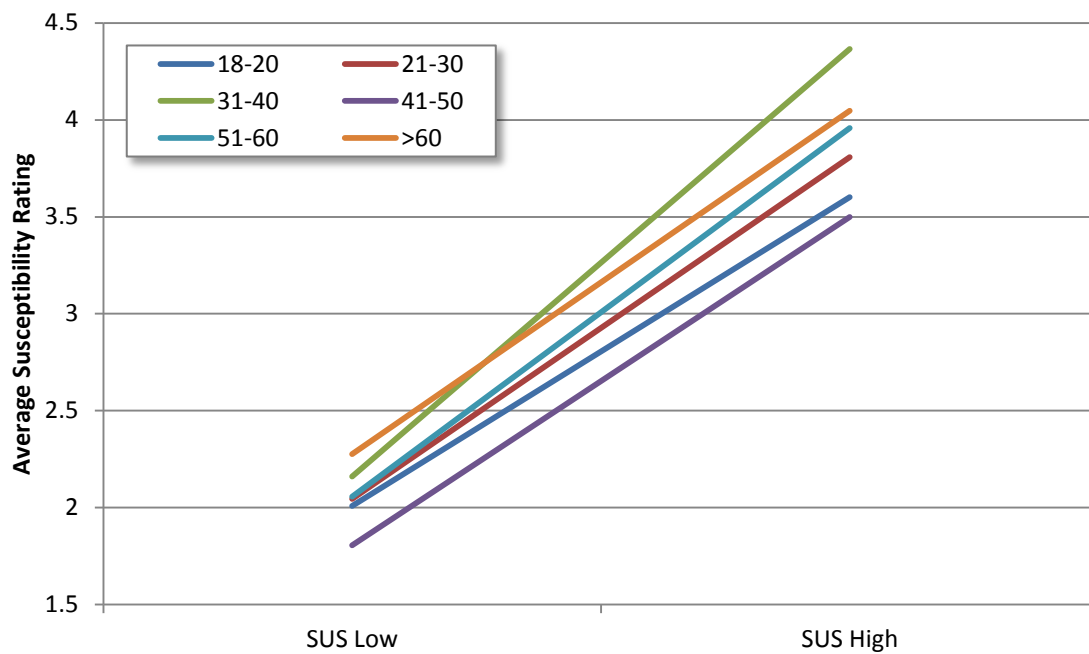


Figure 19. Age/susceptibility effect.

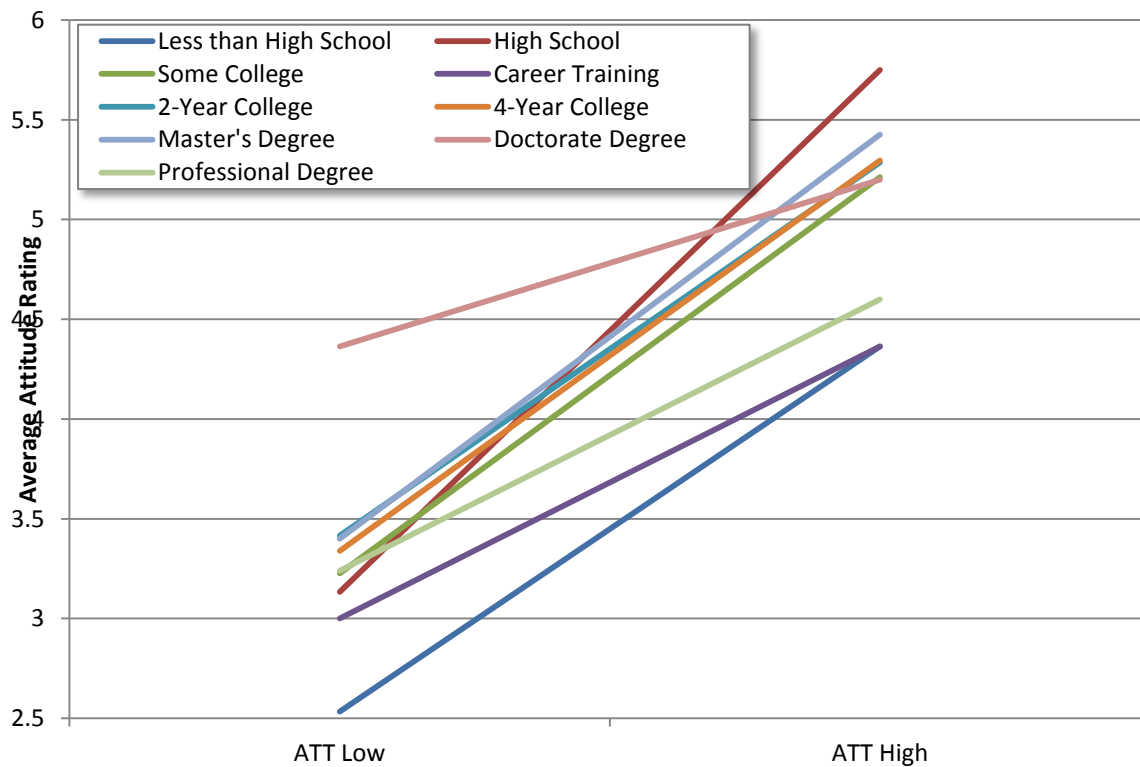


Figure 20. Education/attitude effect.

Hypotheses H10a-d predicted that income would have a significant moderating effect on the relationship between risk perception and risk sensitivity, attitude, specific fear/perceived severity, or perceived susceptibility. The null hypotheses failed to be rejected; H10a<sub>1</sub>,  $t(377) = 0.3875$ ,  $p = 0.6986$ ; H10b<sub>1</sub>,  $t(377) = 0.2053$ ,  $p = 0.8374$ ; H10c<sub>1</sub>,  $t(377) = 0.998$ ,  $p = 0.3189$ ; H10d<sub>1</sub>,  $t(377) = 0.5555$ ,  $p = 0.5789$ ).

Table contains a review of the hypotheses. The hypotheses in bold indicate when the null hypothesis was rejected.

### **Post Hoc Power Analysis**

In all, only 4 of the 24 hypotheses (see Table 23) were confirmed during the analysis of the research model. A post hoc power analysis was conducted using an online statistical calculator provided by Dr. Daniel S. Soper at [www.danielsoper.com](http://www.danielsoper.com). The power analysis was conducted using an alpha level of .05, 6 predictors,  $R^2 = 0.042$ , and sample size of 378. The results from the analysis indicate that the power for model is 0.87727741. This value is higher than the minimum of 0.8, indicating that the sample was of sufficient size to find small effect size (Soper, 2014). The effect size of the full model is a Cohen  $f^2$  value of 0.04384134. Effect sizes of 0.02, 0.15, and 0.35 are considered small, medium, and large respectively (Cohen, 1988), where  $f^2 = R^2 / (1 - R^2)$ . The power analysis would seem to indicate that sampling power was high enough to detect the small effects.

Table 23

*Hypothesis Review*

Hypothesis	Description	Status
H1 <sub>0</sub>	Risk sensitivity has no effect on risk perception.	Failed to reject
H1 <sub>1</sub>	Risk sensitivity is positively related to risk perception.	Rejected
H2 <sub>0</sub>	Attitude toward online communities has no effect on risk perception.	Rejected
<b>H2<sub>1</sub></b>	<b>Attitude toward online communities is negatively related to risk perception.</b>	✓
H3a <sub>0</sub>	Specific fear/perceived severity of the negative consequences of participation in online communities is not related to risk perception.	Rejected
<b>H3a<sub>1</sub></b>	<b>Specific fear/perceived severity of the negative consequences of participation in online communities is positively related to risk perception.</b>	✓
H3b <sub>0</sub>	Specific fear/perceived severity of the negative consequences of participation in online communities has no effect on the relationship between perceived susceptibility and risk perception.	Failed to reject
H3b <sub>1</sub>	Specific fear/perceived severity of the negative consequences of participation in online communities increases the effect of perceived susceptibility on risk perception.	Rejected
H3c <sub>0</sub>	Specific fear/perceived severity of the negative consequences of an action has no effect on the relation.	Failed to reject
H3c <sub>1</sub>	Specific fear/perceived severity of the negative consequences of an action reduces the effect of computer self-efficacy on risk perception.	Rejected
H4 <sub>0</sub>	Perceived susceptibility of the negative consequences of participation in online communities is not related to risk perception.	Rejected
<b>H4<sub>1</sub></b>	<b>Perceived susceptibility of the negative consequences of participation in online communities is positively related to risk perception.</b>	✓
H5 <sub>0</sub>	Computer self-efficacy is not related to risk perception.	Failed to reject
H5 <sub>1</sub>	Computer self-efficacy is negatively related to risk perception.	Rejected
H6 <sub>0</sub>	Information Revelation is not related to risk perception.	Rejected
<b>H6<sub>1</sub></b>	<b>Information Revelation is negatively related to risk perception.</b>	✓
H7a <sub>0</sub>	Gender does not affect the relationship between risk sensitivity and risk perception.	Failed to reject
H7a <sub>1</sub>	Gender significantly affects the relationship between risk sensitivity and risk perception.	Rejected
H7b <sub>0</sub>	Gender does not affect the relationship between attitude and risk perception.	Failed to reject
H7b <sub>1</sub>	Gender significantly affects the relationship between attitude and risk perception.	Rejected
H7c <sub>0</sub>	Gender does not affect the relationship between specific fear/perceived severity and risk perception.	Failed to reject
H7c <sub>1</sub>	Gender significantly affects the relationship between specific fear/perceived severity and risk perception.	Rejected
H7d <sub>0</sub>	Gender does not affect the relationship between perceived susceptibility and risk perception.	Failed to reject

*(table continues)*

Hypothesis	Description	Status
H7d <sub>1</sub>	Gender significantly affects the relationship between perceived susceptibility and risk perception.	Rejected
H8a <sub>0</sub>	Age does not affect the relationship between risk severity and risk perception.	Failed to reject
H8a <sub>1</sub>	Age significantly affects the relationship between risk sensitivity and risk perception.	Rejected
H8b <sub>0</sub>	Age does not affect the relationship between attitude and risk.	Failed to reject
H8b <sub>1</sub>	Age significantly affects the relationship between attitude and risk perception.	Rejected
H8c <sub>0</sub>	Age does not affect the relationship between specific fear/perceived severity and risk perception.	Failed to reject
H8c <sub>1</sub>	Age significantly affects the relationship between specific fear/perceived severity and risk perception.	Rejected
H8d <sub>0</sub>	Age does not affect the relationship between perceived susceptibility and risk perception.	Failed to reject
H8d <sub>1</sub>	Age significantly affects the relationship between perceived susceptibility and risk perception.	Rejected
H9a <sub>0</sub>	Education does not affect the relationship between risk sensitivity and risk perception.	Failed to reject
H9a <sub>1</sub>	Education significantly affects the relationship between risk sensitivity and risk perception.	Rejected
H9b <sub>0</sub>	Education does not affect the relationship between attitude and risk perception.	Failed to reject
H9b <sub>1</sub>	Education significantly affects the relationship between attitude and risk perception.	Rejected
H9c <sub>0</sub>	Education does not affect the relationship between specific fear/perceived severity and risk perception.	Failed to reject
H9c <sub>1</sub>	Education significantly affects the relationship between specific fear/perceived severity and risk perception.	Rejected
H9d <sub>0</sub>	Education does not affect the relationship between perceived susceptibility and risk perception.	Failed to reject
H9d <sub>1</sub>	Education significantly affects the relationship between perceived susceptibility and risk perception.	Rejected
H10a <sub>0</sub>	Income does not affect the relationship between risk sensitivity and risk perception.	Failed to reject
H10a <sub>1</sub>	Income significantly affects the relationship between risk sensitivity and risk perception.	Rejected
H10b <sub>0</sub>	Income does not affect the relationship between attitude and risk perception.	Failed to reject
H10b <sub>1</sub>	Income significantly affects the relationship between attitude and risk perception.	Rejected
H10c <sub>0</sub>	Income does not affect the relationship between specific fear/perceived severity and risk perception.	Failed to reject
H10c <sub>1</sub>	Income significantly affects the relationship between specific fear/perceived severity and risk perception.	Rejected
H10d <sub>0</sub>	Income does not affect the relationship between perceived susceptibility and risk perception.	Failed to reject
H10d <sub>1</sub>	Income significantly affects the relationship between perceived susceptibility and risk perception.	Rejected

## **CHAPTER VI**

### **CONCLUSION**

Chapter VI will examine the findings of this study in relation to the original goals of the research. There will be three main sections: contributions to the body of knowledge, limitations of this research study, and possible directions for future directions for research in this area.

#### **Summary**

The primary goal of this research was to explore risk perception in online communities. Risk research in IS has focused mainly on corporate or business risk rather than personal risk. In addition, the current research models in IS that do focus on personal risk do not take into account an individual's attitude toward the risk object. They also don't include an individual's confidence in their computer skills, nor do they explore the possible effects of demographic variables on the constructs of the risk model. Now, with the proliferation of personal information in online communities more personal information is now available for exploitation online than ever before more focus needs to be directed toward the individual. In researching models for this research the RAF model was combined with the TTAT. The TTAT had elements of risk research: risk sensitivity, perceived severity, and perceived susceptibility and those elements were combined with matching and complimentary elements from the RAF model. In addition, the construct of computer self-efficacy was added as a measure of confidence in an IS environment. This combination of elements was tested as the RATA model.

A web-based survey embedded within Facebook was used to test the RATA model. The questions developed for the survey were shaped by the review of the literature and by the Facebook culture and then programmed and administered online. The survey targeted individuals with a Facebook account.

There were 24 hypotheses tested using PLS regression analysis techniques and that explain 4.2% of the variance in information revelation behavior, or the model was able to predict the outcome 4.2% of the time. The model was also able to explain 25.7% of the variance in risk perception, or it was able to predict the outcome 25.7% of the time. The results demonstrate that risk perception does have a weak negative influence on information revelation (H6), or that as risk perception increased it had the effect of reducing the rate of information revelation, but only by a small amount. The two main predictors that had the strongest effect in the model were perceived susceptibility and specific fear/perceived severity, both of which had the effect of increasing risk perception. Part of the goal of this research was to show that fear of the consequences and perception of the likelihood of the consequences occurring increased a person's risk perception. However, another influence, possibly social pressure or expectation of action, accounts for the low  $R^2$ .

The greatest effects were found between perceived susceptibility and risk perception (H4) and risk perception and information revelation (H6). Perceived susceptibility was found to have a significant positive influence on risk perception.

Weaker, though still significant, relationships were found between specific fear/perceived severity and risk perception (H3a) and attitude and risk perception (H2).

Specific fear/perceived severity was found to have a significant positive influence on risk perception. Attitude was found to have a negative influence on risk perception.

The relationships hypothesized between the moderating variables (gender, age, education, and income) were not found to be significant. However main effects not hypothesized were discovered between age and attitude, age and perceived susceptibility, age and specific fear/perceived severity, gender and severity, and education and attitude. The effect between age and attitude and age and specific fear/perceived severity was found to be negative. The effects between age and perceived susceptibility, gender and specific fear/perceived severity, and education and attitude were all found to be significantly positive.

The risk sensitivity construct was not found to have a significant effect in the model. An analog of this construct can be found in the TTAT in the form of risk tolerance. For this research it was hypothesized that risk sensitivity would have a direct effect on risk perception. Subsequent tests to determine if a direct or moderating effect exists between risk sensitivity and specific fear/perceived severity and perceived susceptibility are shown in Table 24. These tests show that no relationship appears to exist between risk sensitivity and specific fear/perceived severity and perceived susceptibility.

The fact that risk sensitivity was not found to influence risk perception,  $t(377) = 0.3292$ ,  $p = 0.7422$ , is interesting. Logic would seem to dictate that an individual's risk sensitivity would have a direct bearing on their perception of risk. However, risk sensitivity attempts to capture all facets of a person's attitude toward risk. It could be that



Table 24

*Significance Test for Risk Sensitivity on Specific Fear and Perceived Susceptibility*

Item	Original sample (O)	Sample mean (M)	SD	Standard error (STERR)	t statistics ( O/STERR )	p value
SEN -> SEV	0.2461	0.2257	0.1654	0.1654	1.4876	0.1377
SEN -> SUS	0.1548	0.1624	0.1336	0.1336	1.1587	0.2473
SEV * SEN -> ACT	0.0058	0.0024	0.0372	0.0372	0.1565	0.8757
SEV * SEN -> PER	-0.0285	-0.0098	0.1603	0.1603	0.1778	0.859
SUS * SEN -> ACT	-0.0019	0.0018	0.0594	0.0594	0.0326	0.974
SUS * SEN -> PER	0.0095	-0.0096	0.2575	0.2575	0.0369	0.9706

in this case risk sensitivity was too general for the purpose of this research. Indeed, in examining the scores for risk sensitivity, the average rating was 4.4 on a scale of 1 to 7, with 1 being highly intolerant and 7 being highly tolerant. This would seem to indicate that people are more tolerant of risk than hypothesized. It could also indicate that there is an interaction between perceived susceptibility and risk sensitivity. Should that be the case, the respondents could view themselves and their data as safe in this environment and their risk sensitivity in this situation is lessened. It could, as previously indicated, mean that risk sensitivity is situational, and respondents viewed themselves as safe in this situation.

### **Contributions**

There is a lack of research in the MIS area that examines personal risk. The RATA is the first model in IS research to attempt to apply personal risk research to the

field of IS in general and information revelation in online communities in particular. The empirical evidence uncovered during the course of the research provides support for the assumption that constructs from the RATA model can be applied to information revelation. In addition, this has further implications for research in the field of IS as it can be applied to any area of IS where risk perception is the area of interest.

The two most significant constructs in the model that contributed to risk perception were found to be specific fear/perceived severity and perceived susceptibility. Perceived susceptibility was found to have a significant effect on risk perception and was also highly affected by specific fear/perceived severity. The construct of specific fear/perceived severity was also found to have a significant effect on perceived susceptibility, which could partially explain the effect of perceived susceptibility on risk perception. This suggests that fear of the consequences and the perceived susceptibility of those consequences increased risk perception. It also implies that the fear of the consequences increases the perception of the susceptibility of falling victim to those consequences.

### **Implications for Research**

The RATA provides a foundation for continuing research in the field of risk perception in the field of IS. This is the first attempt to address risk perception in online communities. However, the base model, the RAF, has been tested on data from the field of risk perception. The study conducted by Sjöberg (2000) was testing for risk perception toward nuclear power. That study reported higher  $R^2$  (0.445) than was obtained here. However, that particular study did not take into consideration actions undertaken by the

respondents as a result of their risk perception. It also did not take into consideration any expertise or experience that the respondents may have had with the risk object. It also excluded any demographic variables that have been shown in the risk research to influence risk perception.

Additionally, this model was constructed to examine moderating effects from several demographic variables. Gender, age, and education were shown to have significant direct effects on several of the constructs. Future research could investigate the direct effects of gender on specific fear/perceived severity of the consequences of participation in online communities, age on attitude toward online communities, perceived susceptibility of the negative consequences of participation in online communities, and specific fear/perceived severity of those negative consequences, and education on attitude toward online communities.

Further, specific fear/perceived severity was shown to have a direct effect, rather than a moderating effect, on perceived susceptibility, an unexpected result. This indicates that as the fear of the negative consequences of participation increased the perception that they would occur also increased. It would be interesting to discover the extent that specific fear/perceived severity influences perceived susceptibility and what other factors, if any, also acted on this relationship.

This research also collected behavioral data from the respondents to bolster the survey data. After the respondent completed the survey the data collection instrument also scanned the respondent's Facebook profile for the presence or absence of certain pieces of information (see Appendix A or Dependent Variables in Chapter IV), with

absence indicating an unwillingness to share that information. In truth, there is a vast amount of information posted in online communities by the members above that which could be collected by the data collection instrument. Future research could delve into which activities are the most common in online communities as well as what other information is attainable.

Finally, the risk sensitivity construct was shown to be unrelated to risk perception. Further investigation is necessary to establish why it appears that that risk sensitivity was unrelated. It is possible that risk sensitivity is a second order construct. Risk sensitivity attempted to measure how susceptible the respondents were to all forms of risk. It is possible risk sensitivity should have been split to show each type of risk as a separate construct.

### **Implications for Practice**

Facebook is ostensibly a venue for sharing information and the participants presumably joined for the purpose of sharing their information, not hiding it. However, this research provides a theoretical foundation to help motivate people to protect their online information. The most basic recommendation is user education. By educating the users to the reality of the risks involved and what could befall them as a result could motivate more caution on the part of the individual users.

Risk perception does indeed influence, to a small degree, information revelation behavior. If a person's risk perception is high enough he should be less inclined to reveal personal information.

There are several things that can be influenced to raise a person's risk perception.

Risk perception was shown to be influenced by specific fear/perceived severity, perceived susceptibility, and attitude. In the case of specific fear/perceived severity the influence is positive, meaning that as either construct increases, risk sensitivity increases as well. On the other hand, as attitude toward online communities improves, risk perception decreases. In practical terms, if we wish to influence a person's information revelation behavior through risk perception we can go about it by increasing his specific fear/perceived susceptibility and his perceived susceptibility of the negative consequences of participation in online communities. In addition, we can worsen his attitude toward online communities. This decline in attitude will be followed by an increase in risk perception and a decline in information revelation behavior. For parents, this could take the form of teaching their children of the dangers of revealing information online. Parents should also de-emphasize the importance of online communities, instead stressing the importance of face-to-face communication. Parents should also teach their children never to talk to strangers. When this was first taught to children, not to talk to strangers, online communities did not exist. Now that they do, parents need to make sure that this caution is extended to online communities, especially since it is so easy to hide one's identity. In fact, many people online tend to go by a screen name rather than by their given name.

### **Limitations**

The major limitation of this study was the vast size of the population in question and the difficulty of contacting said members. The results being that a non-probability

method of data collection was employed in order to recruit participants into the study. Additionally, the anonymous nature of the data collection and the inability to track who were exposed to the invitations to participate means that we cannot test for non-responder bias in this study.

Another limitation of the study is the survey instrument itself. Survey instruments can introduce self-report bias that would make the participants appear to be more aware of the risks of participation than they actually are. For that reason additional behavioral data (see Appendix A or Dependent Variables in Chapter IV) were also gathered.

Finally, the nature of the attempting to gather survey data in an online community means that you need to have community appeal, you need to offer something to the community which interests it and garners its attention. If the research is of no interest to the community in general then you only obtain responses from the individuals interested in the research topic. This could create response bias in the study. This is also an issue of trust. If the community doesn't know or has no reason to trust the researcher they will be less inclined to participate, again biasing the research toward those who know or trust the researcher.

### **Future Research**

This research provides a starting point for continuing research into risk perception in online communities based on the results that have been presented in the previous chapter, the limitations of the research, and questions that have arisen during the course of the research. The first obvious step would be to replicate the research using a more

representative sample from the population. This would permit a more applicable generalization to the general population of online community members. Additionally, in regard to the hypotheses that were not confirmed during the course of the research it is unknown whether this was due to an error in the model itself, sampling, or something else which could be remedied by a replication study.

The model could also be reworked to test for direct effects of some of the independent variables on the dependent variable that were not examined in this study, such as does attitude have a direct effect on information revelation.

This study also attempted to use community involvement and email notices to recruit participants. The recruitment emails and examples of the Facebook posts can be found in Appendices E through I. This does allow for a broader canvassing of potential participants. However, the limitation of community investment means that only those invested in the research topic, or who are otherwise enticed, will participate, creating the respondent bias that the researcher would avoid. At this point it is unclear what would be the proper method for engaging the community.

This study also was only interested in examining the participants' general Facebook profile. It was not interested in the truthfulness of the data presented and it treated missing and inaccessible data the same. There is also the potential to find much more information available on a user's Facebook account. There are friend links, family links, applications, status postings, what are their likes, messages posted on their wall, etc. Future applications of this model could involve wall posts, images, friend connections, family, applications used, and likes.

Lastly, future applications could also investigate social pressures. Do the pressures from friends, coworkers, organizations, and so forth, have any effect on an individual's perception of the risk of online communities?



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**APPENDICES**



Appendix A  
Survey

## Survey

## Gender

- Male
- Female

## Age Range

- 18 – 20
- 21 – 30
- 31 – 40
- 41 – 50
- 51 – 60
- 61 or over

## What is the highest level of education that you have completed?

- Less than high school
- High school or high school equivalent
- Some college
- Career training
- 2-year college degree (Associates)
- 4-year college degree (BA, BS)
- Master's degree
- Doctorate degree
- Professional degree (MD, JD)

## What is your income level?

- \$0 – \$25,000
- \$25,000 - \$50,000
- \$50,000 - \$75,000
- \$75,000 - \$100,000
- More than \$100,000

Risk Perception (PER) – an individual’s perception of risk in online communities

(Question measured on a 7-point Likert scale from Strongly Disagree to Strongly Agree)

Variable	Measurement	Source
PER1	I feel that participation in online communities (obtaining and maintaining membership, updating and maintaining personal information, uploading photos, etc) is risky.	Adapted from (Gross & Acquisti, 2005)
PER2	I can be identified or put at risk by the photos I post on my online community account.	Adapted from (Gross & Acquisti, 2005)
PER3	All of the personal information that I reveal in my online profile is true.	Adapted from (Son & Kim, 2008)
PER4	Revealing my physical location in an online community is risky.	Adapted from (Gross & Acquisti, 2005)
PER5	Revealing details about my family and friends in an online community is risky.	Adapted from (Gross & Acquisti, 2005)
PER6	Revealing details about my daily schedule in an online community is risky.	Adapted from (Gross & Acquisti, 2005)
PER7	Revealing details about my likes/dislikes, personal interests, and hobbies in an online community is risky.	Adapted from (Gross & Acquisti, 2005)

Risk Sensitivity (SEN) – an individual’s risk tolerance level.

Rate your personal tolerance for the following types of risk.

(All questions measure on a 7-point Likert scale from Extremely Intolerant to Extremely Tolerant)

Variable	Measurement	Source
SEN1	Physical risk – activities that involve some type of physical injury. Skydiving, competitive sports, etc.	Adapted from (McCormick, 2010)
SEN2	Career risk – such as job changes, new responsibilities, promotions, etc.	Adapted from (McCormick, 2010)
SEN3	Financial risk – investing, borrowing, and lending money, etc.	Adapted from (McCormick, 2010)
SEN4	Social risk – meeting new people, new situations, and risk of embarrassment, etc.	Adapted from (McCormick, 2010)
SEN5	Intellectual risk – willingness to study a difficult topic, challenge your intellectual convictions, read an intellectually challenging book, etc.	Adapted from (McCormick, 2010)
SEN6	Creative risk – painting, drawing, writing, etc.	Adapted from (McCormick, 2010)
SEN7	Relationship risk – pursue a new relationship, make a relationship commitment, etc.	Adapted from (McCormick, 2010)
SEN8	Emotional risk – willingness to be emotionally vulnerable, etc.	Adapted from (McCormick, 2010)

Attitude – a subject’s degree of like or dislike toward the attitude object, in this case online communities.

(All questions measure on a 7-point Likert scale from Strongly Disagree to Strongly Agree)

Variable	Measurement	Source
ATT1	Online communities (facebook, myspace, etc.) are beneficial.	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)
ATT2	Even if my close friends/relatives didn’t have accounts in an online community I would still have one.	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)
ATT3	Online communities are necessary communication tools.	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)
ATT4	I check my online community profile often during the course of the day (at least 3).	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)
ATT5	I feel uncomfortable not checking my online community profile at least once a day.	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)
ATT6	Whenever I need to communicated some important news to family, friends, or colleagues, I post the news to my online profile.	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)
ATT7	I think online communities (facebook, myspace, etc.) are valuable communication tools.	Adapted from (Institute for the Integration of Technology into Teaching and Learning, 2011)

Threat Appraisal – a combination of specific fear/perceived severity and perceived susceptibility.

Specific Fear/Perceived Severity – the element of risk. Worded as such to have the participant think in general terms, not picturing himself as the target.

Rate the severity of each of the following. Rate each item separately, do not rank them:

(All questions measure on a 7-point Likert scale from Negligible to Severe)

Variable	Measurement	Source
SEV1	Identity theft	Adapted from (Gross & Acquisti, 2005)
SEV2	Stalking	Adapted from (Gross & Acquisti, 2005)
SEV3	Burglary	Adapted from (Gross & Acquisti, 2005)
SEV4	Loss of employment or employment opportunities	Adapted from (Spanbauer, 2006)
SEV5	Public Ridicule	Adapted from (Pokin, 2007)
SEV6	Arrest	Adapted from (Hass, 2006; Lang, 2009; Lash, 2005)
SEV7	Being Sued	Adapted from (Spanbauer, 2006)
SEV8	Assault	Adapted from (Daily Mail Reporter, 2010)

Perceived Susceptibility (SUS) – the individual’s perception of how likely it will be that they will be affected by the negative consequences of an activity, in this case being participation in online communities. The wording is different from specific fear/perceived severity to make the participant think of himself as the risk target.

As a result of my participation in online communities, participation being posting personally identifiable information to my online profile, friending others, posting images, etc., how likely to do you feel the following would happen to you as a result?

(All questions measure on a 7-point Likert scale from Highly Unlikely to Highly Likely)

Variable	Measurement	Source
SUS1	My identity being stolen	Adapted from (Gross & Acquisti, 2005)
SUS2	Being stalked	Adapted from (Gross & Acquisti, 2005)
SUS3	My home being burglarized	Adapted from (Gross & Acquisti, 2005)
SUS4	Being fired from my employment or losing employment opportunities	Adapted from (Spanbauer, 2006)
SUS5	Being subject to public ridicule	Adapted from (Pokin, 2007)
SUS6	Being charged with a criminal offense	Adapted from (Hass, 2006; Lang, 2009; Lash, 2005)
SUS7	Being subject of a civil suit(non-criminal legal action)	Adapted from (Spanbauer, 2006)
SUS8	Being assaulted	Adapted from (Daily Mail Reporter, 2010)

Computer Self-Efficacy – An individual’s confidence in their computer skills to protect their information in an online environment.

(All questions measure on a 7-point Likert scale from Strongly Disagree to Strongly Agree)

Variable	Measurement	Source
SEF1	I know what information I can and cannot safely reveal online.	Adapted from (Ng, Kankanhalli, & Xu, 2009)
SEF2	I am confident of my ability to navigate in an online community.	Adapted from (Ng, Kankanhalli, & Xu, 2009)
SEF3	I am confident of my ability to protect the information that I have posted online.	Adapted from (Ng, Kankanhalli, & Xu, 2009)
SEF4	I am confident of my abilities to recognize who I should and should not accept as friends.	Adapted from (Ng, Kankanhalli, & Xu, 2009)

Information Revelation (ACT) – information revealed by the participants. Since the survey is electronic, it will automatically check for the public availability of the following information, no private information will be recorded.

(Each of the following will be recorded as public, if found, or private, if not present or protected)

Variable	Action Item	Source	Revelation Score
ACT1	Bio	Facebook.com	1
ACT2	Education History	Facebook.com	1
ACT3	Hometown	Facebook.com	1
ACT4	Current Location	Facebook.com	1
ACT5	Favorite Quotes	Facebook.com	1
ACT6	Work History	Facebook.com	1
ACT7	Religious Affiliation	Facebook.com	1
ACT8	Political Affiliation	Facebook.com	1
ACT9	Languages	Facebook.com	1
ACT10	Likes	Facebook.com	1



Appendix B  
Heath Belief Model

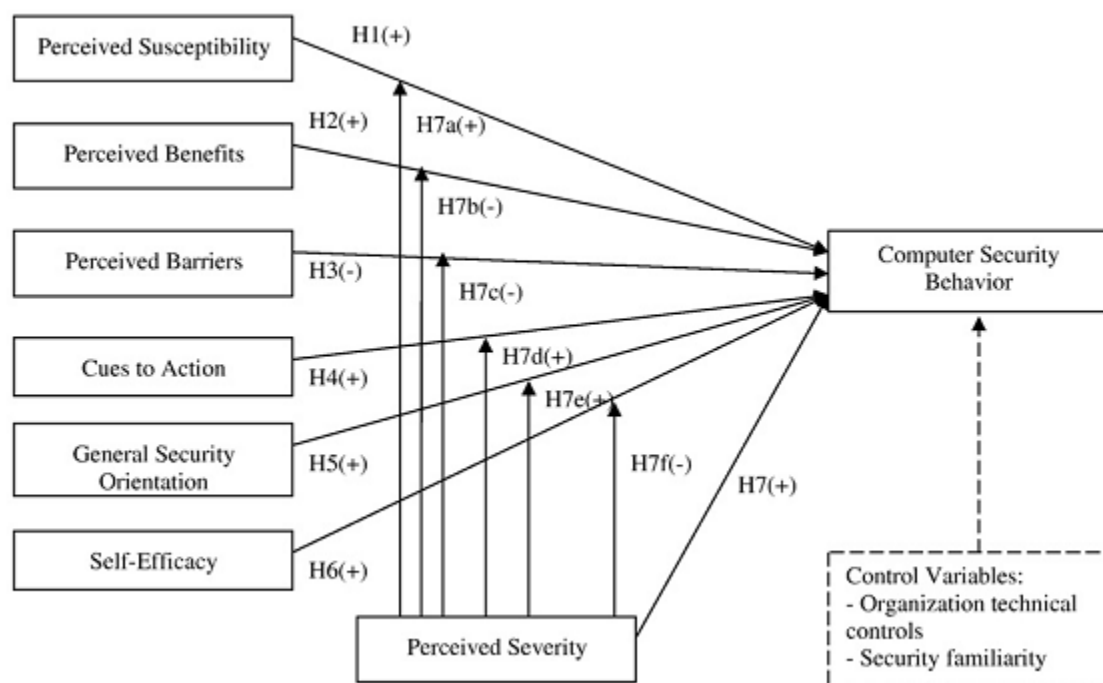


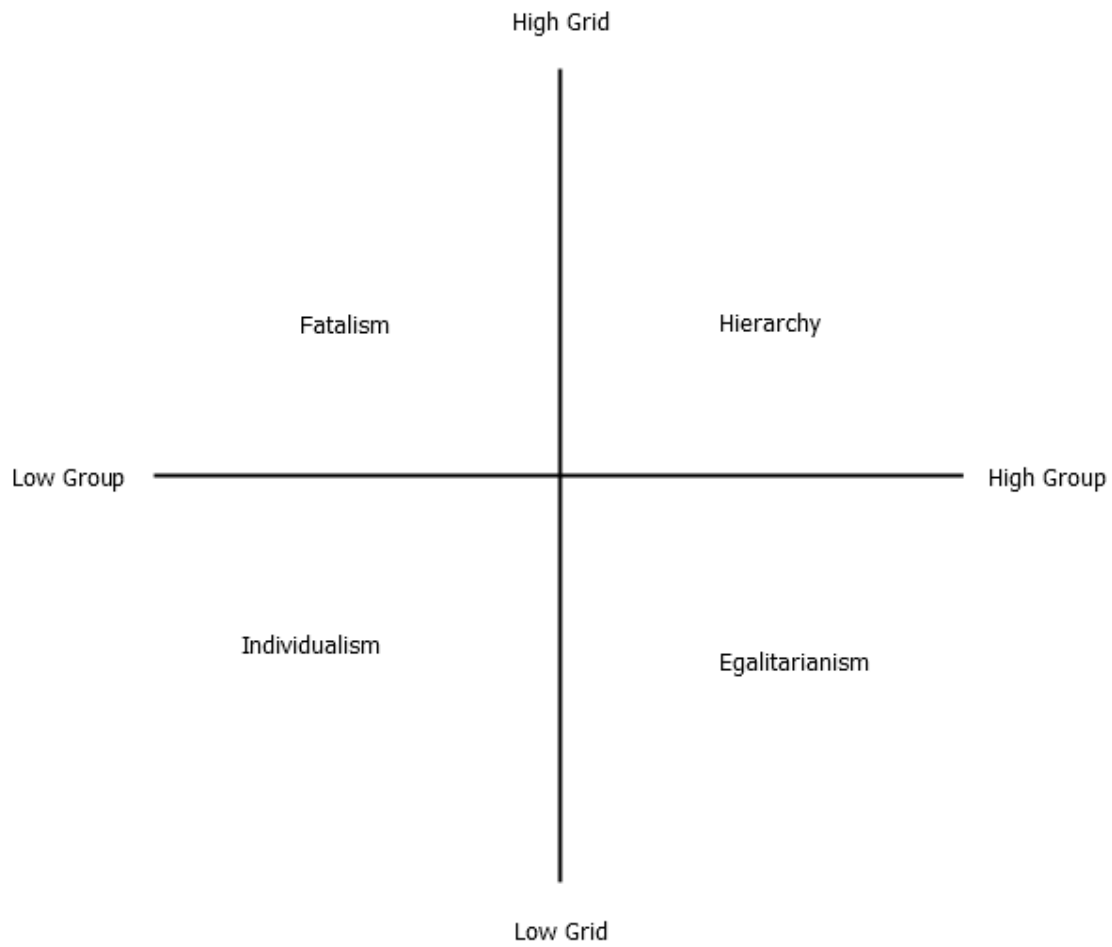
Figure B1. The health belief model used by Ng, Kankanhalli, and Xu.

Appendix C

Cultural Theory of Risks: Group Definitions

### Cultural Theory of Risks: Group Definitions

- Hierarchists – distinguished by strong group affiliation and strong adherence to external guidelines.
  - A hierarchist will tend to trust a centralized authority and fear changes to the social order.
- Egalitarians – defined by a strong group affiliation but only have a weak adherence to external guidelines.
  - An egalitarian will tend to distrust centralized authority and trust the “will of the people”.
- Individualists – do not feel bound by group affiliation or external guidelines.
  - An individualist will mistrust anything that imposes on his ability to conduct himself as he wishes and tend to trust that which empowers him to make his own choices.
- Fatalists – defined by their strong adherence to external guidelines, but have weak group affiliations.
  - A fatalist mistrusts change and perceives change as something imposed by outside forces and will tend to trust the status quo.



*Figure C1.* Cultural theory of risk: social context.

Appendix D  
IRB Certification

## Institutional Review Board

USU Assurance: FWA#00003308



Exemption #2



### Certificate of Exemption

FROM: Melanie Domenech Rodriguez, IRB Chair  
 True M. Rubal, IRB Administrator

To: John Johnson, Jason Couraud  
 Date: September 04, 2013  
 Protocol #: 5297  
 Title: Risk Perception In Online Communities

The Institutional Review Board has determined that the above-referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2:

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through the identifiers linked to the subjects: and (b) any disclosure of human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

This exemption is valid for three years from the date of this correspondence, after which the study will be closed. If the research will extend beyond three years, it is your responsibility as the Principal Investigator to notify the IRB before the study's expiration date and submit a new application to continue the research. Research activities that continue beyond the expiration date without new certification of exempt status will be in violation of those federal guidelines which permit the exempt status.

As part of the IRB's quality assurance procedures, this research may be randomly selected for continuing review during the three year period of exemption. If so, you will receive a request for completion of a Protocol Status Report during the month of the anniversary date of this certification.

In all cases, it is your responsibility to notify the IRB prior to making any changes to the study by submitting an Amendment/Modification request. This will document whether or not the study still meets the requirements for exempt status under federal regulations.

Upon receipt of this memo, you may begin your research. If you have questions, please call the IRB office at (435) 797-1821 or email to [irb@usu.edu](mailto:irb@usu.edu).

The IRB wishes you success with your research.

Appendix E  
Recruitment Email 1



I am a PhD student at Utah State University. I am studying risk perception in online communities. If you have 15 to 20 minutes and a Facebook account, I would ask that you [login to this Facebook app](#) and help me complete my research.

If you choose to participate in this research you will be asked to answer a series of questions. Upon completion of the questions you will be given information on the security of your public Facebook data. In addition, you will be asked to pass along this survey to no more than six of your friends. Should you choose, you are not required to pass the survey to your friends. If you do not, you will still be able to answer the questions and receive the information about your public Facebook data.

Jason Couraud

Student Researcher

Utah State University

Department of Management Information Systems

Appendix F

Recruitment Email 2

Hi,

I'm a Business graduate student here at USU, and I need your help to complete my research. The survey will only take 15 minutes and there will be a drawing for 5 Visa giftcards worth \$50 each as an incentive. Each person who takes my survey will be entered once for taking it and once for each person they refer, up to 6 referrals. As an added bonus, my survey will let you know what personal information, if any, an app on Facebook can access.

If you have a Facebook account, you can access my survey by clicking on this link:

<http://apps.facebook.com/facesurvey>

(If you are using an iPhone, some people have had issues with accessing the survey. If you have trouble, use a desktop computer or other device.)

The survey will ask for your email and permission to post a small message on your Facebook page. The message is just a short post saying that you took the survey and the link so others can take it as well. Your survey answers and contact information will, of course, be kept confidential.

Thanks for your help. The drawing will be held as soon as I get enough responses, hopefully within the next two weeks. The five winners will be notified by Email.

Jason Couraud

[j.couraud@aggiemail.usu.edu](mailto:j.couraud@aggiemail.usu.edu)

Appendix G

Facebook Recruitment Post 1

My Safety Rating:



**Find Out How Safe You Are**

My safety rating

By helping out a PhD student I found out what information I am revealing to the public. Click on the link above and you can find out how safe you are.

Like · Comment · Share

Appendix H  
Facebook Recruitment Post 2



**Jason Couraud**  
January 28 



**Facesurvey**

This app was created to gather data for my dissertation. If you choose to participate you will be guided through a short survey. Upon completion of the survey you will be provided with an evaluation of your public Facebook data. I would like to thank you for your participation and I hope that I can...

Community: 6 like this

[Like](#) · [Comment](#) · [Promote](#) · [Share](#)

Appendix I

Facebook Recruitment Post 3



**How Safe Are You?**

apps.facebook.com

Enter to win \$50 by taking a brief survey. This app will ask questions about your facebook participation and associated risk.

Appendix J  
Informed Consent

f
How Safe Are You?

## Informed Consent

**\*Introduction/ Purpose** Dr. John Johnson in the Department of Management Information Systems at Utah State University is conducting a research study to find out more about Risk Perception in Online Communities. You have been asked to take part because you have an account with the online community Facebook. There will be approximately 312 total participants in this research. Jason Couraud, a student researcher, will also be involved in the collection of data for this research.

**\*Procedures** If you agree to be in this research study, you will be asked to answer a series of questions on the following topics: risk perception, risk sensitivity, risk attitude, threat appraisal, and computer self-efficacy. It should take you about 15-20 minutes to complete the survey. Upon completion of the survey you will be given information on the security of your public Facebook data. You will also be asked to invite a small number (no more than 6) of your friends to participate in the study.

**\*Risks** Participation in this research study may involve some added risks or discomforts. These include a loss of confidentiality. However, steps will be taken to reduce this risk by limiting access to the data and keeping participation records separate from the survey answers given by participants. In addition, apart from your email address none of your Facebook data will be recorded.

**\*Benefits** Your participation in this study will provide you with details on the security of your public Facebook data. It may also provide you with information on how to protect yourself in the future.

**Explanation & offer to answer questions** Instructions will be provided on the following page and specific instructions for each section will be provided at the top of each section. If you have other questions or research-related problems, you may reach Jason Couraud at [j.couraud@aggiemail.usu.edu](mailto:j.couraud@aggiemail.usu.edu).

**\*Voluntary nature of participation and right to withdraw without consequence** Participation in research is entirely voluntary. You may refuse to participate or withdraw. However, you must do so before answering the survey questions. To preserve your anonymity your answers cannot be tied back to you and thus cannot be excluded. You may be withdrawn from this study without your consent by the investigator. If your answers are incomplete you will be excluded from the study.

**\*Confidentiality** Research records will be kept confidential, consistent with federal and state regulations. Only the investigator and student researcher will have access to the data which will be kept on a password protected computer in a locked room. To protect your privacy, personal, identifiable information will be removed from study documents and replaced with a study identifier. Identifying information will be stored separately from data and will be kept for a period of one year.

**\*IRB Approval Statement** The Institutional Review Board for the protection of human participants at Utah State University has approved this research study. If you have any questions or concerns about your rights or a research-related injury and would like to contact someone other than the research team, you may contact the IRB Administrator at (435) 797-0567 or email [irb@usu.edu](mailto:irb@usu.edu) to obtain information or to offer input.

**\*Investigator Statement** "I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered."

Progress: 
Step 2 of 10

## Appendix K

Online Communities, Technology, Trends, Issues

## Online Communities, Technology, Trends, Issues

<b>Communities</b>	
www.bloggers.com	(Puri, 2007)
Friendster	(Puri, 2007; Gross & Acquisti, 2005)
Yahoo! 360	(Puri, 2007)
Tribe	(Puri, 2007; Gross & Acquisti, 2005)
www.snubster.com	(Singh, 2008)
www.isolatr.com	(Singh, 2008)
www.introvertster.com	(Singh, 2008)
Enemybook	(Singh, 2008)
Facebook	(Singh, 2008; Raacke & Bonds-Raacke, 2008; Peluchette & Karl, 2008; Comley, 2008; Coyle & Vaughn, 2008; Gross & Acquisti, 2005)
Orkut	(Singh, 2008)
MySpace	(Singh, 2008; Raacke & Bonds-Raacke, 2008; Magnuson & Dundes, 2008; Comley, 2008)
WELL	(Preece, 2001)
www.krebsgemeinschaft.de	(Leimeister, Ebner, & Krcmar, 2005)
Flickr	(Suler, 2008)
Bebo	(Comley, 2008)
<b>Technology</b>	
Cellphones	(Puri, 2007)
Chat Rooms	(Puri, 2007)
Email	(Puri, 2007)
RSS	(Puri, 2007)
Computer Virtual Environments	(Preece, 2001)
Digital Photography	(Suler, 2008)
World Wide Web	(Magnuson & Dundes, 2008)
Digital Information	(Erickson, 2006)
<b>Trends</b>	
Blogging	(Puri, 2007; Thevenot, 2007)
Webnography	(Puri, 2007)
Anti-Social Networking	(Singh, 2008)
Photo Sharing	(Suler, 2008; Peluchette & Karl, 2008)
Information Sharing	(Erickson, 2006; Lin, 2006)
Information Falsification	(Erickson, 2006)
Personal Information Management	(Erickson, 2006)
Group Information Management	(Erickson, 2006)
Information Revelation	(Gross & Acquisti, 2005)
Privacy	(Gross & Acquisti, 2005)
Computer Mediated Communication	(Wellman, 2005)
<b>Issues</b>	
Social Engineering	(Know the Dangers: Social Networking, n.d.)
Identity Theft	(Safer Social Networking, n.d.)
Personal Information Privacy Violations	(Earp, Antón, Aiman-Smith, & Stufflebeam, 2005)
Trust Violations	(Leimeister, Ebner, & Krcmar, 2005)
Child Exploitation	(Troiano, 2008)
Cyber-Bullying	(Singh, 2008; Wheeler, 2006)

Hate Speech	(Singh, 2008; Wheeler, 2006)
Sexual Assault	(Internet Law - Communications Decency Act - Texas District Court Extends § 230 Immunity to Social Networking Sites, 2008)
Violation of Social Norms	(Joe & Lin, 2008)
Violation of Self-Esteem and Well-Being	(Valkenburg, Peter, & Schouten, 2006)

Appendix L

Online Survey Code

## Online Survey Code

The file facebook.php is part of the Facebook SDK and can be obtained from the developer page on facebook (<https://developers.facebook.com/>). The file jquery.js is the jQuery javascript library and can be obtained from <http://jquery.com/>

**acceptance.php**

```
<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Informed Consent</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
        window.fbAsyncInit = function() {
```



```

// init the FB JS SDK
FB.init({
  appId: '<?php echo APP_ID;?>',
  status: false,
  xfbml: false
});

FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
})(document, 'script', 'facebook-jssdk');
</script>
</head>
<body>
  <div id="header">
    <h1>Informed Consent</h1>
  </div>
  <div id="center"><p><strong>*Introduction/ Purpose</strong> Dr. John Johnson in
the Department of Management Information Systems at Utah State University is
conducting a research study to find out more about Risk Perception in Online
Communities. You have been asked to take part because you have an account with the
online community Facebook. There will be approximately 312 total participants in this
research. Jason Couraud, a student researcher, will also be involved in the collection of
data for this research.</p>
  <p><strong>*Procedures</strong> If you agree to be in this research study, you
will be asked to answer a series of questions on the following topics: risk perception, risk
sensitivity, risk attitude, threat appraisal, and computer self-efficacy. It should take you
about 15-20 minutes to complete the survey. Upon completion of the survey you will be
given information on the security of your public Facebook data. You will also be asked to
invite a small number (no more than 6) of your friends to participate in the study.</p>
  <p><strong>*Risks</strong> Participation in this research study may involve
some added risks or discomforts. These include a loss of confidentiality. However, steps
will be taken to reduce this risk by limiting access to the data and keeping participation
records separate from the survey answers given by participants. In addition, apart from
your email address none of your Facebook data will be recorded.</p>
  <p><strong>*Benefits</strong> Your participation in this study will provide you
with details on the security of your public Facebook data. It may also provide you with
information on how to protect yourself in the future.</p>

```

**Explanation & offer to answer questions** Instructions will be provided on the following page and specific instructions for each section will be provided at the top of each section. If you have other questions or research-related problems, you may reach Jason Couraud at [email\\_address](mailto:emailaddress?subject=Risk%20Research%20Questions).

**\*Voluntary nature of participation and right to withdraw without consequence** Participation in research is entirely voluntary. You may refuse to participate or withdraw. However, you must do so before answering the survey questions. To preserve your anonymity your answers cannot be tied back to you and thus cannot be excluded. You may be withdrawn from this study without your consent by the investigator. If your answers are incomplete you will be excluded from the study.

**\*Confidentiality** Research records will be kept confidential, consistent with federal and state regulations. Only the investigator and student researcher will have access to the data which will be kept on a password protected computer in a locked room. To protect your privacy, personal, identifiable information will be removed from study documents and replaced with a study identifier. Identifying information will be stored separately from data and will be kept for a period of one year.

**\*IRB Approval Statement** The Institutional Review Board for the protection of human participants at Utah State University has approved this research study. If you have any questions or concerns about your rights or a research-related injury and would like to contact someone other than the research team, you may contact the IRB Administrator at (435) 797-0567 or email [irb@usu.edu](mailto:irb@usu.edu?subject=IRB%20Research%20Approval) to obtain information or to offer input.

**\*Investigator Statement** I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered.

[Yes, I understand and wish to continue](instructions.php?sid=<?php echo session_id();?> "Yes, I understand and wish to continue")

[No, I do not wish to continue](negative.php?sid=<?php echo session_id();?> "No, I do not wish to continue")

Progress:  Step 2 of 10

**authorize.php**

```

<?php
require 'lib/src/fbconfig.php';

$my_url = "http://redirectURL/acceptance.php";

$code = $_REQUEST["code"];

if(empty($code)) {
    $_SESSION['state'] = md5(uniqid(rand(), TRUE)); // CSRF protection
    $dialog_url = "http://www.facebook.com/dialog/oauth?client_id="
        . APP_ID . "&redirect_uri=" . urlencode($my_url) . "&state="
        . $_SESSION['state'] .
"&scope=email,read_friendlists"/*"&scope=user_about_me,user_activities,user_birthday
,user_education_history,user_events,user_groups,user_hometown,user_interests,user_like
s,user_location,user_notes,user_online_presence,user_photo_video_tags,user_photos,user
_relationships,user_relationship_details,user_religion_politics,user_status,user_videos,us
er_website,user_work_history,email,read_friendlists,read_insights,read_stream,publish_s
tream"*/;

    echo("<script> top.location.href=\"" . $dialog_url . "\"</script>");
}

$token_url = "https://graph.facebook.com/oauth/access_token?client_id="
    . APP_ID . "&redirect_uri=" . urlencode($my_url) . "&client_secret="
    . APP_SECRET . "&code=" . $code;

$ch = curl_init();
curl_setopt($ch, CURLOPT_URL, $token_url);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);

$access_token = curl_exec($ch);

// $access_token = file_get_contents($token_url);

$graph_url = "https://graph.facebook.com/me?" . $access_token;

if(!curl_errno($ch)){
    $info = curl_getinfo($ch);
    echo 'Took ' . $info['total_time'] . ' seconds to send a request to ' .
$info['url'];
} else {
    echo 'Curl error: ' . curl_error($ch);
}

```

```

        curl_close($ch);
        echo $access_token;

// $user = json_decode()

// $user = json_decode(file_get_contents($graph_url));

// echo("Hello " . $user->name);

?>

```

### **config.inc**

```

<?php
/**
 * File config.inc
 * This is the configuration file for the facebook survey
 */

//define the debug level (true|false)
$facebook_config['debug'] = true;

//define the API Key and secret
$facebook_config['api_key'] = API_KEY;
$facebook_config['secret'] = SECRET;

//include the client library
require_once('lib/src/facebook.php');

//create facebook object
$facebook = new Facebook(array(
    'appId' => API_KEY,
    'secret' => SECRET));

//require users to be logged in
$user = $facebook->getUser();

//callback URL
$callback_url = "callback_url";

?>

```

### **index.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';

```

```

require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

//spl_autoload_register('my_autoloader');

$ref = getG('ref');

if($ref){
    $_SESSION['ref'] = getG('ref');
}else{
    $_SESSION['ref'] = 0;
}

$my_url = "http://apps.facebook.com/facesurvey/introduction.php?sid=" . session_id();

$code = isset($_REQUEST["code"]) ? $_REQUEST['code'] : "";

if(empty($code)) {
    $dialog_url = "http://www.facebook.com/dialog/oauth?client_id="
        . APP_ID . "&redirect_uri=" . urlencode($my_url) .
        "&scope=email,publish_stream" . "*" . "&scope=user_about_me,user_activities,user_birthday,
        user_education_history,user_events,user_groups,user_hometown,user_interests,user_likes,
        user_location,user_notes,user_online_presence,user_photo_video_tags,user_photos,user_
        _relationships,user_relationship_details,user_religion_politics,user_status,user_videos,us
        er_website,user_work_history,email,read_friendlists,read_insights,read_stream,publish_s
        tream" . "*";

    echo("<script> top.location.href=\"" . $dialog_url . "\"</script>");
}

$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

// We may or may not have this data based on a $_GET or $_COOKIE based session.
//
// If we get a session here, it means we found a correctly signed session using
// the Application Secret only Facebook and the Application know. We dont know
// if it is still valid until we make an API call using the session. A session
// can become invalid if it has already expired (should not be getting the
// session back in this case) or if the user logged out of Facebook.

```

```
$session = $facebook->getUser();
$_SESSION['face_session'] = $session;
```

```
$me = null;
// Session based API call.
if($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
session_write_close();
?>
```

### **instruction.php**

```
<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
}
```

```

session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
  <head>
    <title>Online Community Risk Survey - Instructions</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
      window.fbAsyncInit = function() {
        // init the FB JS SDK
        FB.init({
          appId: '<?php echo APP_ID;?>',
          status: false,
          xfbml: false
        });

        FB.Canvas.setSize({ width:800});
      }

      (function(d, s, id){
        var js, fjs = d.getElementsByTagName(s)[0];
        if (d.getElementById(id)) {return;}
        js = d.createElement(s); js.id = id;
        js.src = "//connect.facebook.net/en_US/all.js";
        fjs.parentNode.insertBefore(js, fjs);
      })(document, 'script', 'facebook-jssdk');
    </script>
  </head>
  <body>
    <div id="header"><h3>Instructions</h3></div>
    <div id="center"><p>On the following pages you will be asked a series of questions.
    You will need to answer each of the questions on a scale of 1 to 7. Each of the pages will
    have further instructions specific to that page and the details of the scale that will be used
    on questions on that page. </p>
    <p>If you understand the instructions please click continue.</p>
    <p><a href="page1.php?sid=<?php echo session_id();?>" class="button"
    title="Continue" target="_self">Continue</a>
    <a href="negative.php?sid=<?php echo session_id();?>" class="button"
    title="Decline" target="_self">Decline</a></p></div>
    <div id="footer"><p>Progress: <progress value="30" max="100"></progress> Step
    3 of 10</p></div>
  </body>
</html>

```

**introduction.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

if(getG('jump')){
    session_write_close();
    header("Location:page8.php?sid=" . session_id());
}

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
    'domain' => 'localhost'
));

$session = $facebook->getUser();
$_SESSION['face_session'] = $session;
$me = null;

// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
        // $permissions = $facebook->api('/me/permissions');
    } catch (FacebookApiException $e) {
        // printR($e);
    }
}

if(!$uid){
    header('Location:negative.php?sid=' . session_id());
}
// login or logout url will be needed depending on current user state.
if ($me) {
    $logoutUrl = $facebook->getLogoutUrl();
}

```



```

} else {
    $loginUrl = $facebook->getLoginUrl();
}

$db = new database();
$db->connect();
$select = "select * from participants where fb_id = $uid";
$db->query($select);
$done = $db->singleRecord();
$data = $db->Record;
if(isset($data['send_friends'])){
    $_SESSION['send_friends'] = $data['send_friends'];
}else{
    $_SESSION['send_friends'] = 0;
}
session_write_close();
if($done /*|| $uid == 100000551056343*/){
    header("Location:page7_process.php?sid=" . session_id());
}
session_write_close();
//printR($facebook->getAccessToken());
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
    // init the FB JS SDK
    FB.init({
        appId: '<?php echo APP_ID;?>',
        status: false,
        xfbml: false
    });

    FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
    var js, fjs = d.getElementsByTagName(s)[0];
    if (d.getElementById(id)) {return;}
    js = d.createElement(s); js.id = id;

```

```

    js.src = "//connect.facebook.net/en_US/all.js";
    fjs.parentNode.insertBefore(js, fjs);
  }(document, 'script', 'facebook-jssdk'));
</script>
</head>
<body>
  <div id="header">
    <h1>Online Community Risk Survey</h1>
  </div>
  <div id="center">
    <?php if ($me): ?>

    <p>Hello <?php echo $me['first_name']; ?>,<br />
    I am a PhD student at Utah State University. I am in the process of gathering
    information for my dissertation. I am investigating risk perception in online communities.
    I would greatly appreciate your participation in my research.<br /> I realize that
    participation in research is not all that exciting. So, as an incentive if you complete the
    following survey you will be entered in a drawing for five $50 Visa giftcards. In addition,
    you will be given a security assessment of your Facebook data. None of your personal
    data will be saved and your survey answers will be kept confidential. The drawing will be
    held as soon as I have enough responses, hopefully within the next two weeks.<br />
    Should you choose to participate in the survey you will be directed to an informed
    consent page that will provide you with more information on the process and on your
    rights as a research subject. Due to the legal issues involved in conducting research with
    live subjects, and because I am a student, you will see the name of my committee chair,
    Dr. John Johnson at the top of the consent form.<br />
    If you have reservations about participation please contact me at <a
    href="mailto:emailaddress" title="send an email to Jason Couraud">email address</a>.
    You can also find more information on <a
    href="http://huntsman.usu.edu/htm/directory/memberID=133" title="Dr. John Johnson at
    USU" target="_self">Dr. John Johnson</a> in the <a
    href="http://huntsman.usu.edu/mis/" title="Department of Management Information
    Systems">Department of Management Information Systems</a> at the <a
    href="http://huntsman.usu.edu/" title="Huntsman School of Business"
    target="_blank">Huntsman School of Business</a> at <a href="http://www.usu.edu"
    title="Utah State University" target="_blank">Utah State University</a>.<br />
    I would like to thank you in advance for your participation.
    </p>
    <p>Jason Couraud</p>
    <p>If you choose to complete the survey click yes.</p>
    <p><a href="acceptance.php?sid=<?php echo session_id();?>" title="Continue"
    target="_self" class="button">Continue</a>

```

```

    <a href="negative.php<?php echo session_id();?>" title="Decline" target="_self"
class="button">Decline</a></p>

```

```

<?php else: ?>
<strong><em>Please refresh your page and the app will start.</em></strong>
<?php endif ?>

```

```

<?php if ($me): ?>
<p><a href="<?php echo $logoutUrl; ?>">
  
</a></p>
<?php else: ?>

```

```

<?php endif ?>
</div>
<div id="footer">
<p>Progress: <progress value="10" max="100"></progress> Step 1 of 10</p>
</div>
</body>
</html>

```

### negative.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
  'appId' => APP_ID,
  'secret' => APP_SECRET,
  'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
  try {
    $uid = $facebook->getUser();

```

```

    $me = $facebook->api('/me');
  } catch (FacebookApiException $e) {
    error_log($e);
  }
}
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
  <head>
    <title>Online Community Risk Survey</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript"
src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
  // init the FB JS SDK
  FB.init({
    appId: '<?php echo APP_ID;?>',
    status: false,
    xfbml: false
  });

  FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
})(document, 'script', 'facebook-jssdk');
</script>
</head>
<body>
  <div id="header"><h1>Online Community Risk Survey</h1></div>
  <div id="center"><p>Thank you for taking the time to consider volunteering for
my research study. I understand that you are busy and that your time is valuable. I would
like to ask you to reconsider participating in this study.</p>
  <p>If you do choose to complete the survey please click yes.</p>
  <p><a href="index.php" title="Yes" target="_self" class="button">Yes</a>
  <a href="http://www.facebook.com/<?php echo $me['username'];?>"
title="Got to my Facebook page" target="_self" class="button">Decline</a></p>

```

```

        </div>
        <div id="footer">&nbsp;</div>
    </body>
</html>

```

### page1.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
        $permissions = $facebook->api('/me/permissions');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
$session_value = session_id();
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Participation</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="scripts/jquery.js"></script>
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>

```

```

<script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
  // init the FB JS SDK
  FB.init({
    appId: '<?php echo APP_ID;?>',
    status: false,
    xfbml: false
  });

  FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
}(document, 'script', 'facebook-jssdk'));

function validate(){
  if (!$('input[name=PER1]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 1");
    return false;
  }else if (!$('input[name=PER2]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 2");
    return false;
  }else if (!$('input[name=PER3]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 3");
    return false;
  }else if (!$('input[name=PER4]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 4");
    return false;
  }else if (!$('input[name=PER5]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 5");
    return false;
  }else if (!$('input[name=PER6]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 6");
  }
}

```

```

return false;
}else if (!$('input[name=PER7]:checked').length) {
// at least one of the radio buttons was not checked
alert("Please answer question 7");
return false;
}else{
// no radio button was checked
return true; // stop whatever action would normally happen
}
}
</script>
</head>
<body>
<div id="header"><h3>Page 1</h3></div>
<div id="center"><form id="page_1" method="POST"
action="page1_process.php" onsubmit="return validate();">
<input type="hidden" id="sid" name="sid" value ="<?php echo
$session_value;?>" />
<div id="footer">
<p>Progress: <progress value="40" max="100"></progress> Step 4 of 10</p>
</div>
<p>Rate each of the following from Strongly Disagree to Strongly Agree:</p>

<table border="0" cellpadding="5" cellspacing="0" id="survey">
<tr>
<td colspan="9"><p>1. I feel that participation in online
communities (obtaining and maintaining membership, updating and maintaining personal
information, uploading photos, etc) is risky.</p></td>
</tr>
<tr>
<td>&nbsp;</td>
<td><label for="PER1_1"><div>-1-</div></label></td>
<td><label for="PER1_2"><div>-2-</div></label></td>
<td><label for="PER1_3"><div>-3-</div></label></td>
<td><label for="PER1_4"><div>-4-</div></label></td>
<td><label for="PER1_5"><div>-5-</div></label></td>
<td><label for="PER1_6"><div>-6-</div></label></td>
<td><label for="PER1_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
<tr>
<td class="lineunder">Strongly Disagree</td>

```

```

                <td class="lineunder"><input name="PER1" id="PER1_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 1) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="PER1" id="PER1_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 2) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="PER1" id="PER1_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 3) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="PER1" id="PER1_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 4) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="PER1" id="PER1_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 5) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="PER1" id="PER1_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 6) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="PER1" id="PER1_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER1']) &&
$_SESSION['crit']['PER']['PER1'] == 7) echo "checked='checked'";?> /></td>
                <td class="lineunder">Strongly Agree</td>
            </tr>
            <tr>
                <td colspan="9"><p>2. I can be identified or put at risk by
the photos I post on my online community account.</p></td>
            </tr>
            <tr>
                <td>&nbsp;</td>
                <td><label for="PER2_1"><div>-1-</div></label></td>
                <td><label for="PER2_2"><div>-2-</div></label></td>
                <td><label for="PER2_3"><div>-3-</div></label></td>
                <td><label for="PER2_4"><div>-4-</div></label></td>
                <td><label for="PER2_5"><div>-5-</div></label></td>
                <td><label for="PER2_6"><div>-6-</div></label></td>
                <td><label for="PER2_7"><div>-7-</div></label></td>
                <td>&nbsp;</td>
            </tr>
            <tr>
                <td class="lineunder">Strongly Disagree</td>
                <td class="lineunder"><input name="PER2" id="PER2_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 1)echo "checked='checked'";?> /></td>

```



```

        <td class="lineunder"><input name="PER2" id="PER2_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER2" id="PER2_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER2" id="PER2_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER2" id="PER2_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER2" id="PER2_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER2" id="PER2_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER2']) &&
$_SESSION['crit']['PER']['PER2'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>3. All of the personal information that
I reveal in my online profile is true.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="PER3_1"><div>-1-</div></label></td>
        <td><label for="PER3_2"><div>-2-</div></label></td>
        <td><label for="PER3_3"><div>-3-</div></label></td>
        <td><label for="PER3_4"><div>-4-</div></label></td>
        <td><label for="PER3_5"><div>-5-</div></label></td>
        <td><label for="PER3_6"><div>-6-</div></label></td>
        <td><label for="PER3_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="PER3" id="PER3_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER3" id="PER3_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 2) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="PER3" id="PER3_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER3" id="PER3_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER3" id="PER3_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER3" id="PER3_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER3" id="PER3_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER3']) &&
$_SESSION['crit']['PER']['PER3'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>4. Revealing my physical location in
an online community is risky.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="PER4_1"><div>-1-</div></label></td>
        <td><label for="PER4_2"><div>-2-</div></label></td>
        <td><label for="PER4_3"><div>-3-</div></label></td>
        <td><label for="PER4_4"><div>-4-</div></label></td>
        <td><label for="PER4_5"><div>-5-</div></label></td>
        <td><label for="PER4_6"><div>-6-</div></label></td>
        <td><label for="PER4_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="PER4" id="PER4_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER4" id="PER4_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER4" id="PER4_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 3) echo "checked='checked'";?> /></td>

```

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        <td class="lineunder"><input name="PER4" id="PER4_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER4" id="PER4_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER4" id="PER4_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER4" id="PER4_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER4']) &&
$_SESSION['crit']['PER']['PER4'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>5. Revealing details about my family
and friends in an online community is risky.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="PER5_1"><div>-1-</div></label></td>
        <td><label for="PER5_2"><div>-2-</div></label></td>
        <td><label for="PER5_3"><div>-3-</div></label></td>
        <td><label for="PER5_4"><div>-4-</div></label></td>
        <td><label for="PER5_5"><div>-5-</div></label></td>
        <td><label for="PER5_6"><div>-6-</div></label></td>
        <td><label for="PER5_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="PER5" id="PER5_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER5" id="PER5_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER5" id="PER5_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER5" id="PER5_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 4) echo "checked='checked'";?> /></td>

```

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        <td class="lineunder"><input name="PER5" id="PER5_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER5" id="PER5_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER5" id="PER5_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER5']) &&
$_SESSION['crit']['PER']['PER5'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
</tr>
        <td colspan="9"><p>6. Revealing details about my daily
schedule in an online community is risky.</p></td>
    </tr>
</tr>
    <td>&nbsp;</td>
    <td><label for="PER6_1"><div>-1-</div></label></td>
    <td><label for="PER6_2"><div>-2-</div></label></td>
    <td><label for="PER6_3"><div>-3-</div></label></td>
    <td><label for="PER6_4"><div>-4-</div></label></td>
    <td><label for="PER6_5"><div>-5-</div></label></td>
    <td><label for="PER6_6"><div>-6-</div></label></td>
    <td><label for="PER6_7"><div>-7-</div></label></td>
    <td>&nbsp;</td>
    </tr>
</tr>
    <td class="lineunder">Strongly Disagree</td>
    <td class="lineunder"><input name="PER6" id="PER6_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 1) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="PER6" id="PER6_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 2) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="PER6" id="PER6_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 3) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="PER6" id="PER6_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 4) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="PER6" id="PER6_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 5) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="PER6" id="PER6_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER6" id="PER6_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER6']) &&
$_SESSION['crit']['PER']['PER6'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
</tr>
        <td colspan="9"><p>7. Revealing details about my
likes/dislikes, personal interests, and hobbies in an online community is risky.</p></td>
</tr>
<tr>
<td>&nbsp;</td>
<td><label for="PER7_1"><div>-1-</div></label></td>
<td><label for="PER7_2"><div>-2-</div></label></td>
<td><label for="PER7_3"><div>-3-</div></label></td>
<td><label for="PER7_4"><div>-4-</div></label></td>
<td><label for="PER7_5"><div>-5-</div></label></td>
<td><label for="PER7_6"><div>-6-</div></label></td>
        <td><label for="PER7_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
</tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="PER7" id="PER7_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER7" id="PER7_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER7" id="PER7_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER7" id="PER7_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER7" id="PER7_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="PER7" id="PER7_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 6) echo "checked='checked'";?> /></td>

```

```

                <td class="lineunder"><input name="PER7" id="PER7_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['PER']['PER7']) &&
$_SESSION['crit']['PER']['PER7'] == 7) echo "checked='checked'";?> /></td>
                <td class="lineunder">Strongly Agree</td>
            </tr>
        </table>

        <p><input type="submit" id="affirmative" value="Submit" />
<input id="negative" type="reset" value="Reset" /></p>

    </form></div>
<div id="footer">
    <p>Progress: <progress value="40" max="100"></progress> Step 4 of 10</p>
</div>
</body>
</html>

```

### page1\_process.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

$data = array();
foreach ($_POST as $id => $info){
    if($id != 'sid'){
        $data[$id] = $info;
    }
}

$_SESSION['crit']['PER'] = $data;
session_write_close();
header("Location: page2.php?sid=" . session_id());
?>

```

### page2.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

```

```

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.

if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
$session_value = session_id();
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Risk Sensitivity</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="scripts/jquery.js"></script>
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
        window.fbAsyncInit = function() {
            // init the FB JS SDK
            FB.init({
                appId: '<?php echo APP_ID;?>',
                status: false,
                xfbml: false
            });

            FB.Canvas.setSize({ width:800});
        }

        (function(d, s, id){

```

```

var js, fjs = d.getElementsByTagName(s)[0];
if (d.getElementById(id)) {return;}
js = d.createElement(s); js.id = id;
js.src = "//connect.facebook.net/en_US/all.js";
fjs.parentNode.insertBefore(js, fjs);
}(document, 'script', 'facebook-jssdk'));

function validate(){
  if (!$('input[name=SEN1]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 1");
    return false;
  }else if (!$('input[name=SEN2]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 2");
    return false;
  }else if (!$('input[name=SEN3]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 3");
    return false;
  }else if (!$('input[name=SEN4]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 4");
    return false;
  }else if (!$('input[name=SEN5]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 5");
    return false;
  }else if (!$('input[name=SEN6]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 6");
    return false;
  }else if (!$('input[name=SEN7]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 7");
    return false;
  }else if (!$('input[name=SEN8]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 8");
    return false;
  }else{
    // no radio button was checked
    return true; // stop whatever action would normally happen
  }
}

```



```

}
</script>
</head>
<body>
  <div id="header"><h3>Page 2</h3></div>
  <div id="center"><form id="page_2" method="POST" action="page2_process.php"
  enctype="multipart/form-data" onsubmit="return validate();">
    <input type="hidden" id="sid" name="sid" value = "<?php echo
  $session_value;?>" />
    <div id="footer"><p>Progress: <progress value="50" max="100"></progress>
  Step 5 of 10</p></div>
    <p>Rate your personal tolerance on each of the following:</p>
    <table border="0" cellpadding="5" cellspacing="0" id="survey">
      <tr>
        <td colspan="9"><p>1. Physical risk &dash; activities that involve
  some type of physical injury. Skydiving, competitive sports, etc.</p></td>
      </tr>
      <tr>
        <td>&nbsp;</td>
        <td><label for="SEN1_1"><div>-1-</div></label></td>
        <td><label for="SEN1_2"><div>-2-</div></label></td>
        <td><label for="SEN1_3"><div>-3-</div></label></td>
        <td><label for="SEN1_4"><div>-4-</div></label></td>
        <td><label for="SEN1_5"><div>-5-</div></label></td>
        <td><label for="SEN1_6"><div>-6-</div></label></td>
        <td><label for="SEN1_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
      </tr>
      <tr>
        <td class="lineunder">Extremely Intolerant</td>
        <td class="lineunder"><input name="SEN1" id="SEN1_1"
  type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
  $_SESSION['crit']['SEN']['SEN1'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN1" id="SEN1_2"
  type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
  $_SESSION['crit']['SEN']['SEN1'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN1" id="SEN1_3"
  type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
  $_SESSION['crit']['SEN']['SEN1'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN1" id="SEN1_4"
  type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
  $_SESSION['crit']['SEN']['SEN1'] == 4) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="SEN1" id="SEN1_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
$_SESSION['crit']['SEN']['SEN1'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN1" id="SEN1_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
$_SESSION['crit']['SEN']['SEN1'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN1" id="SEN1_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN1']) &&
$_SESSION['crit']['SEN']['SEN1'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Extremely Tolerant</td>
    </tr>
    <tr>
        <td colspan="9"><p>2. Career risk &dash; such as job
changes, new responsibilities, promotions, etc.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEN2_1"><div>-1-</div></label></td>
        <td><label for="SEN2_2"><div>-2-</div></label></td>
        <td><label for="SEN2_3"><div>-3-</div></label></td>
        <td><label for="SEN2_4"><div>-4-</div></label></td>
        <td><label for="SEN2_5"><div>-5-</div></label></td>
        <td><label for="SEN2_6"><div>-6-</div></label></td>
        <td><label for="SEN2_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Extremely Intolerant</td>
        <td class="lineunder"><input name="SEN2" id="SEN2_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN2" id="SEN2_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN2" id="SEN2_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN2" id="SEN2_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN2" id="SEN2_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 5) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="SEN2" id="SEN2_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN2" id="SEN2_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN2']) &&
$_SESSION['crit']['SEN']['SEN2'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Extremely Tolerant</td>
    </tr>
    <tr>
        <td colspan="9"><p>3. Financial risk &dash; investing,
borrowing, and lending money, etc.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Extremely Intolerant</td>
        <td class="lineunder"><input name="SEN3" id="SEN3_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN3" id="SEN3_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN3" id="SEN3_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN3" id="SEN3_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN3" id="SEN3_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN3" id="SEN3_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 6) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="SEN3" id="SEN3_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN3']) &&
$_SESSION['crit']['SEN']['SEN3'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Extremely Tolerant</td>
    </tr>
    <tr>
        <td colspan="9"><p>4. Social risk &dash; meeting new
people, new situations, and risk of embarrassment, etc.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEN4_1"><div>-1-</div></label></td>
        <td><label for="SEN4_2"><div>-2-</div></label></td>
        <td><label for="SEN4_3"><div>-3-</div></label></td>
        <td><label for="SEN4_4"><div>-4-</div></label></td>
        <td><label for="SEN4_5"><div>-5-</div></label></td>
        <td><label for="SEN4_6"><div>-6-</div></label></td>
        <td><label for="SEN4_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Extremely Intolerant</td>
        <td class="lineunder"><input name="SEN4" id="SEN4_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN4" id="SEN4_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN4" id="SEN4_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN4" id="SEN4_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN4" id="SEN4_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN4" id="SEN4_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN4" id="SEN4_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN4']) &&
$_SESSION['crit']['SEN']['SEN4'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Extremely Tolerant</td>

```

```

</tr>
<tr>
    <td colspan="9"><p>5. Intellectual risk &dash; willingness
to study a difficult topic, challenge your intellectual convictions, read an intellectually
challenging book, etc.</p></td>
</tr>
<tr>
    <td>&nbsp;</td>
    <td><label for="SEN5_1"><div>-1-</div></label></td>
    <td><label for="SEN5_2"><div>-2-</div></label></td>
    <td><label for="SEN5_3"><div>-3-</div></label></td>
    <td><label for="SEN5_4"><div>-4-</div></label></td>
    <td><label for="SEN5_5"><div>-5-</div></label></td>
    <td><label for="SEN5_6"><div>-6-</div></label></td>
    <td><label for="SEN5_7"><div>-7-</div></label></td>
    <td>&nbsp;</td>
</tr>
<tr>
    <td class="lineunder">Extremely Intolerant</td>
    <td class="lineunder"><input name="SEN5" id="SEN5_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 1) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEN5" id="SEN5_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 2) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEN5" id="SEN5_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 3) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEN5" id="SEN5_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 4) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEN5" id="SEN5_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 5) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEN5" id="SEN5_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 6) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEN5" id="SEN5_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN5']) &&
$_SESSION['crit']['SEN']['SEN5'] == 7) echo "checked='checked'";?> /></td>
    <td class="lineunder">Extremely Tolerant</td>
</tr>
<tr>

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        <td colspan="9"><p>6. Creative risk &dash; painting,
drawing, writing, etc.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEN6_1"><div>-1-</div></label></td>
        <td><label for="SEN6_2"><div>-2-</div></label></td>
        <td><label for="SEN6_3"><div>-3-</div></label></td>
        <td><label for="SEN6_4"><div>-4-</div></label></td>
        <td><label for="SEN6_5"><div>-5-</div></label></td>
        <td><label for="SEN6_6"><div>-6-</div></label></td>
        <td><label for="SEN6_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Extremely Intolerant</td>
        <td class="lineunder"><input name="SEN6" id="SEN6_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN6" id="SEN6_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN6" id="SEN6_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN6" id="SEN6_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN6" id="SEN6_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN6" id="SEN6_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEN6" id="SEN6_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN6']) &&
$_SESSION['crit']['SEN']['SEN6'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Extremely Tolerant</td>
    </tr>
    <tr>
        <td colspan="9"><p>7. Relationship risk &dash; pursue a
new relationship, make a relationship commitment, etc.</p></td>
    </tr>
    <tr>

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<td>&nbsp;</td>
<td><label for="SEN7_1"><div>-1-</div></label></td>
<td><label for="SEN7_2"><div>-2-</div></label></td>
<td><label for="SEN7_3"><div>-3-</div></label></td>
<td><label for="SEN7_4"><div>-4-</div></label></td>
<td><label for="SEN7_5"><div>-5-</div></label></td>
<td><label for="SEN7_6"><div>-6-</div></label></td>
<td><label for="SEN7_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
<tr>
<td class="lineunder">Extremely Intolerant</td>
<td class="lineunder"><input name="SEN7" id="SEN7_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 1) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN7" id="SEN7_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 2) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN7" id="SEN7_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 3) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN7" id="SEN7_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 4) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN7" id="SEN7_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 5) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN7" id="SEN7_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 6) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN7" id="SEN7_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN7']) &&
$_SESSION['crit']['SEN']['SEN7'] == 7) echo "checked='checked'";?> /></td>
<td class="lineunder">Extremely Tolerant</td>
</tr>
<tr>
<td colspan="9"><p>8. Emotional risk &dash; willingness
to be emotionally vulnerable, etc.</p></td>
</tr>
<tr>
<td>&nbsp;</td>
<td><label for="SEN8_1"><div>-1-</div></label></td>
<td><label for="SEN8_2"><div>-2-</div></label></td>
<td><label for="SEN8_3"><div>-3-</div></label></td>

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<td><label for="SEN8_4"><div>-4-</div></label></td>
<td><label for="SEN8_5"><div>-5-</div></label></td>
<td><label for="SEN8_6"><div>-6-</div></label></td>
<td><label for="SEN8_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
<tr>
<td class="lineunder">Extremely Intolerant</td>
<td class="lineunder"><input name="SEN8" id="SEN8_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 1) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN8" id="SEN8_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 2) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN8" id="SEN8_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 3) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN8" id="SEN8_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 4) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN8" id="SEN8_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 5) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN8" id="SEN8_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 6) echo "checked='checked'";?> /></td>
<td class="lineunder"><input name="SEN8" id="SEN8_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEN']['SEN8']) &&
$_SESSION['crit']['SEN']['SEN8'] == 7) echo "checked='checked'";?> /></td>
<td class="lineunder">Extremely Tolerant</td>
</tr>
</table>
<p><input type="submit" id="submit" value="Submit" />
<input id="reset" type="reset" value="Reset" /></p>
</form></div>
<div id="footer"><p>Progress: <progress value="50" max="100"></progress> Step
5 of 10</p></div>
</body>
</html>

```

### page2\_process.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';

```



```

require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

$data = array();
foreach ($_POST as $id => $info){
    if($id != 'sid'){
        $data[$id] = $info;
    }
}

$_SESSION['crit']['SEN'] = $data;
session_write_close();
header("Location:page3.php?sid=" . session_id());
?>

```

### **page3.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
$session_value = session_id();

```

```

session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
  <title>Online Community Risk Survey - Attitude</title>
  <link rel="stylesheet" type="text/css" href="styles/main.css" />
  <script type="text/javascript" src="scripts/jquery.js"></script>
  <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
  <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
  // init the FB JS SDK
  FB.init({
    appId: '<?php echo APP_ID;?>',
    status: false,
    xfbml: false
  });

  FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
}(document, 'script', 'facebook-jssdk'));
function validate(){
  if (!$('input[name=ATT1]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 1");
    return false;
  }else if (!$('input[name=ATT2]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 2");
    return false;
  }else if (!$('input[name=ATT3]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 3");
    return false;
  }else if (!$('input[name=ATT4]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 4");
  }
}

```

```

return false;
}else if (!$('input[name=ATT5]:checked').length) {
// at least one of the radio buttons was not checked
alert("Please answer question 5");
return false;
}else if (!$('input[name=ATT6]:checked').length) {
// at least one of the radio buttons was not checked
alert("Please answer question 6");
return false;
}else if (!$('input[name=ATT7]:checked').length) {
// at least one of the radio buttons was not checked
alert("Please answer question 7");
return false;
}else{
// no radio button was checked
return true; // stop whatever action would normally happen
}
}
</script>
</head>

<body>
<div id="header"><h3>Page 3</h3></div>
<div id="center"><form id="page_3" method="POST" action="page3_process.php"
enctype="multipart/form-data" onsubmit="return validate();">
<input type="hidden" id="sid" name="sid" value ="<?php echo
$session_value;?>" />
<div id="footer"><p>Progress: <progress value="60" max="100"></progress>
Step 6 of 10</p></div>
<p>Rate each of the following statements from Strongly Disagree to
Strongly Agree:</p>
<table border="0" cellpadding="5" cellspacing="0" id="survey">
<tr>
<td colspan="9"><p>1. Online communities (facebook,
myspace, etc.) are beneficial.</p></td>
<tr>
<td>&nbsp;</td>
<td><label for="ATT1_1"><div>-1-</div></label></td>
<td><label for="ATT1_2"><div>-2-</div></label></td>
<td><label for="ATT1_3"><div>-3-</div></label></td>
<td><label for="ATT1_4"><div>-4-</div></label></td>
<td><label for="ATT1_5"><div>-5-</div></label></td>
<td><label for="ATT1_6"><div>-6-</div></label></td>

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                <td><label for="ATT1_7"><div><div>-7-
</div></div></label></td>
                <td>&nbsp;</td>
            </tr>
            <tr>
                <td class="lineunder">Strongly Disagree</td>
                <td class="lineunder"><input name="ATT1" id="ATT1_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 1) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="ATT1" id="ATT1_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 2) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="ATT1" id="ATT1_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 3) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="ATT1" id="ATT1_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 4) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="ATT1" id="ATT1_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 5) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="ATT1" id="ATT1_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 6) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="ATT1" id="ATT1_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT1']) &&
$_SESSION['crit']['ATT']['ATT1'] == 7) echo "checked='checked'";?> /></td>
                <td class="lineunder">Strongly Agree</td>
            </tr>
            <tr>
                <td colspan="9"><p>2. Even if my close friends/relatives
didn't have accounts in an online community I would still have one.</p></td>
            </tr>
            <tr>
                <td>&nbsp;</td>
                <td><label for="ATT2_1"><div>-1-</div></label></td>
                <td><label for="ATT2_2"><div>-2-</div></label></td>
                <td><label for="ATT2_3"><div>-3-</div></label></td>
                <td><label for="ATT2_4"><div>-4-</div></label></td>
                <td><label for="ATT2_5"><div>-5-</div></label></td>
                <td><label for="ATT2_6"><div>-6-</div></label></td>
                <td><label for="ATT2_7"><div><div>-7-
</div></div></label></td>
                <td>&nbsp;</td>
            </tr>

```

```

        </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="ATT2" id="ATT2_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT2" id="ATT2_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT2" id="ATT2_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT2" id="ATT2_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT2" id="ATT2_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT2" id="ATT2_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT2" id="ATT2_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT2']) &&
$_SESSION['crit']['ATT']['ATT2'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>3. Online communities are necessary
communication tools.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="ATT3_1"><div>-1-</div></label></td>
        <td><label for="ATT3_2"><div>-2-</div></label></td>
        <td><label for="ATT3_3"><div>-3-</div></label></td>
        <td><label for="ATT3_4"><div>-4-</div></label></td>
        <td><label for="ATT3_5"><div>-5-</div></label></td>
        <td><label for="ATT3_6"><div>-6-</div></label></td>
        <td><label for="ATT3_7"><div><div>-7-
</div></div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>

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        <td class="lineunder"><input name="ATT3" id="ATT3_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT3" id="ATT3_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT3" id="ATT3_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT3" id="ATT3_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT3" id="ATT3_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT3" id="ATT3_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT3" id="ATT3_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT3']) &&
$_SESSION['crit']['ATT']['ATT3'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>4. I check my online community
profile often during the course of the day (at least 3).</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="ATT4_1"><div>-1-</div></label></td>
        <td><label for="ATT4_2"><div>-2-</div></label></td>
        <td><label for="ATT4_3"><div>-3-</div></label></td>
        <td><label for="ATT4_4"><div>-4-</div></label></td>
        <td><label for="ATT4_5"><div>-5-</div></label></td>
        <td><label for="ATT4_6"><div>-6-</div></label></td>
        <td><label for="ATT4_7"><div><div>-7-
</div></div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="ATT4" id="ATT4_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 1) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="ATT4" id="ATT4_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT4" id="ATT4_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT4" id="ATT4_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT4" id="ATT4_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT4" id="ATT4_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT4" id="ATT4_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT4']) &&
$_SESSION['crit']['ATT']['ATT4'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>5. I feel uncomfortable not checking
my online community profile at least once a day.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="ATT5_1"><div>-1-</div></label></td>
        <td><label for="ATT5_2"><div>-2-</div></label></td>
        <td><label for="ATT5_3"><div>-3-</div></label></td>
        <td><label for="ATT5_4"><div>-4-</div></label></td>
        <td><label for="ATT5_5"><div>-5-</div></label></td>
        <td><label for="ATT5_6"><div>-6-</div></label></td>
        <td><label for="ATT5_7"><div><div>-7-
</div></div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="ATT5" id="ATT5_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT5" id="ATT5_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 2) echo "checked='checked'";?> /></td>

```

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        <td class="lineunder"><input name="ATT5" id="ATT5_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT5" id="ATT5_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT5" id="ATT5_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT5" id="ATT5_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT5" id="ATT5_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT5']) &&
$_SESSION['crit']['ATT']['ATT5'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>6. Whenever I need to communicate
some important news to family, friends, or colleagues, I post the news to my online
profile.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="ATT6_1"><div>-1-</div></label></td>
        <td><label for="ATT6_2"><div>-2-</div></label></td>
        <td><label for="ATT6_3"><div>-3-</div></label></td>
        <td><label for="ATT6_4"><div>-4-</div></label></td>
        <td><label for="ATT6_5"><div>-5-</div></label></td>
        <td><label for="ATT6_6"><div>-6-</div></label></td>
        <td><label for="ATT6_7"><div><div>-7-
</div></div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="ATT6" id="ATT6_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT6" id="ATT6_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 2) echo "checked='checked'";?> /></td>

```



```

        <td class="lineunder"><input name="ATT6" id="ATT6_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT6" id="ATT6_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT6" id="ATT6_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT6" id="ATT6_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT6" id="ATT6_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT6']) &&
$_SESSION['crit']['ATT']['ATT6'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>7. I think online communities
(facebook, myspace, etc.) are valuable communication tools.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="ATT7_1"><div>-1-</div></label></td>
        <td><label for="ATT7_2"><div>-2-</div></label></td>
        <td><label for="ATT7_3"><div>-3-</div></label></td>
        <td><label for="ATT7_4"><div>-4-</div></label></td>
        <td><label for="ATT7_5"><div>-5-</div></label></td>
        <td><label for="ATT7_6"><div>-6-</div></label></td>
        <td><label for="ATT7_7"><div><div>-7-
</div></div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="ATT7" id="ATT7_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT7" id="ATT7_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT7" id="ATT7_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 3) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="ATT7" id="ATT7_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT7" id="ATT7_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT7" id="ATT7_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="ATT7" id="ATT7_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['ATT']['ATT7']) &&
$_SESSION['crit']['ATT']['ATT7'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
</table>
<p><input type="submit" id="submit" value="Submit" />
<input id="reset" type="reset" value="Reset" /></p>
</form></div>
<div id="footer"><p>Progress: <progress value="60" max="100"></progress> Step 6
of 10</p></div>
</body>
</html>

```

### page3\_process.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

$data = array();
foreach ($_POST as $id => $info){
    if($id != 'sid'){
        $data[$id] = $info;
    }
}

$_SESSION['crit']['ATT'] = $data;
session_write_close();
header("Location:page4.php?sid=" . session_id());
?>

```

### page4.php

```

<?php

```

```

require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
$session_value = session_id();
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Severity</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="scripts/jquery.js"></script>
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
    // init the FB JS SDK
    FB.init({
        appId: '<?php echo APP_ID;?>',
        status: false,
        xfbml: false
    });

```

```

    FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
    var js, fjs = d.getElementsByTagName(s)[0];
    if (d.getElementById(id)) {return;}
    js = d.createElement(s); js.id = id;
    js.src = "//connect.facebook.net/en_US/all.js";
    fjs.parentNode.insertBefore(js, fjs);
})(document, 'script', 'facebook-jssdk');

function validate(){
    if (!$('input[name=SEV1]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 1");
        return false;
    }else if (!$('input[name=SEV2]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 2");
        return false;
    }else if (!$('input[name=SEV3]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 3");
        return false;
    }else if (!$('input[name=SEV4]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 4");
        return false;
    }else if (!$('input[name=SEV5]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 5");
        return false;
    }else if (!$('input[name=SEV6]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 6");
        return false;
    }else if (!$('input[name=SEV7]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 7");
        return false;
    }else if (!$('input[name=SEV8]:checked').length) {
        // at least one of the radio buttons was not checked
        alert("Please answer question 8");
    }
}

```

```

    return false;
  }else{
    // no radio button was checked
    return true; // stop whatever action would normally happen
  }
}
</script>
</head>

<body>
  <div id="header"><h3>Page 4</h3></div>
  <div id="center"><form id="page_4" method="POST" action="page4_process.php"
  enctype="multipart/form-data" onsubmit="return validate();">
    <input type="hidden" id="sid" name="sid" value = "<?php echo
  $session_value;?>" />
    <div id="footer"><p>Progress: <progress value="70" max="100"></progress>
  Step 7 of 10</p></div>
    <p>Rate the severity of each of the following. Rate each item separately, do not
  rank them.</p>
    <table border="0" cellpadding="5" cellspacing="0" id="survey">
      <tr>
        <td colspan="9"><p>1. Identity theft</p></td>
      </tr>
      <tr>
        <td>&nbsp;</td>
        <td><label for="SEV1_1"><div>-1-</div></label></td>
        <td><label for="SEV1_2"><div>-2-</div></label></td>
        <td><label for="SEV1_3"><div>-3-</div></label></td>
        <td><label for="SEV1_4"><div>-4-</div></label></td>
        <td><label for="SEV1_5"><div>-5-</div></label></td>
        <td><label for="SEV1_6"><div>-6-</div></label></td>
        <td><label for="SEV1_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
      </tr>
      <tr>
        <td class="lineunder">Negligible</td>
        <td class="lineunder"><input name="SEV1" id="SEV1_1"
  type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
  $_SESSION['crit']['SEV']['SEV1'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV1" id="SEV1_2"
  type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
  $_SESSION['crit']['SEV']['SEV1'] == 2) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="SEV1" id="SEV1_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
$_SESSION['crit']['SEV']['SEV1'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV1" id="SEV1_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
$_SESSION['crit']['SEV']['SEV1'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV1" id="SEV1_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
$_SESSION['crit']['SEV']['SEV1'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV1" id="SEV1_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
$_SESSION['crit']['SEV']['SEV1'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV1" id="SEV1_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV1']) &&
$_SESSION['crit']['SEV']['SEV1'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Severe</td>
    </tr>
    <tr>
        <td colspan="9"><p>2. Stalking</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEV2_1"><div>-1-</div></label></td>
        <td><label for="SEV2_2"><div>-2-</div></label></td>
        <td><label for="SEV2_3"><div>-3-</div></label></td>
        <td><label for="SEV2_4"><div>-4-</div></label></td>
        <td><label for="SEV2_5"><div>-5-</div></label></td>
        <td><label for="SEV2_6"><div>-6-</div></label></td>
        <td><label for="SEV2_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Negligible</td>
        <td class="lineunder"><input name="SEV2" id="SEV2_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV2" id="SEV2_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV2" id="SEV2_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 3) echo "checked='checked'";?> /></td>

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        <td class="lineunder"><input name="SEV2" id="SEV2_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV2" id="SEV2_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV2" id="SEV2_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV2" id="SEV2_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV2']) &&
$_SESSION['crit']['SEV']['SEV2'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Severe</td>
    </tr>
    <tr>
        <td colspan="9"><p>3. Burglary</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEV3_1"><div>-1-</div></label></td>
        <td><label for="SEV3_2"><div>-2-</div></label></td>
        <td><label for="SEV3_3"><div>-3-</div></label></td>
        <td><label for="SEV3_4"><div>-4-</div></label></td>
        <td><label for="SEV3_5"><div>-5-</div></label></td>
        <td><label for="SEV3_6"><div>-6-</div></label></td>
        <td><label for="SEV3_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Negligible</td>
        <td class="lineunder"><input name="SEV3" id="SEV3_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV3" id="SEV3_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV3" id="SEV3_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV3" id="SEV3_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 4) echo "checked='checked'";?> /></td>

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        <td class="lineunder"><input name="SEV3" id="SEV3_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV3" id="SEV3_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV3" id="SEV3_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV3']) &&
$_SESSION['crit']['SEV']['SEV3'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Severe</td>
    </tr>
    <tr>
        <td colspan="9"><p>4. Loss of employment or
employment opportunities</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEV4_1"><div>-1-</div></label></td>
        <td><label for="SEV4_2"><div>-2-</div></label></td>
        <td><label for="SEV4_3"><div>-3-</div></label></td>
        <td><label for="SEV4_4"><div>-4-</div></label></td>
        <td><label for="SEV4_5"><div>-5-</div></label></td>
        <td><label for="SEV4_6"><div>-6-</div></label></td>
        <td><label for="SEV4_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Negligible</td>
        <td class="lineunder"><input name="SEV4" id="SEV4_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV4" id="SEV4_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV4" id="SEV4_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV4" id="SEV4_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV4" id="SEV4_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 5) echo "checked='checked'";?> /></td>

```



```

        <td class="lineunder"><input name="SEV4" id="SEV4_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV4" id="SEV4_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV4']) &&
$_SESSION['crit']['SEV']['SEV4'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Severe</td>
    </tr>
    <tr>
        <td colspan="9"><p>5. Public Ridicule</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEV5_1"><div>-1-</div></label></td>
        <td><label for="SEV5_2"><div>-2-</div></label></td>
        <td><label for="SEV5_3"><div>-3-</div></label></td>
        <td><label for="SEV5_4"><div>-4-</div></label></td>
        <td><label for="SEV5_5"><div>-5-</div></label></td>
        <td><label for="SEV5_6"><div>-6-</div></label></td>
        <td><label for="SEV5_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Negligible</td>
        <td class="lineunder"><input name="SEV5" id="SEV5_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV5" id="SEV5_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV5" id="SEV5_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV5" id="SEV5_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV5" id="SEV5_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV5" id="SEV5_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 6) echo "checked='checked'";?> /></td>

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                <td class="lineunder"><input name="SEV5" id="SEV5_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV5']) &&
$_SESSION['crit']['SEV']['SEV5'] == 7) echo "checked='checked'";?> /></td>
                <td class="lineunder">Severe</td>
            </tr>
        <tr>
            <td colspan="9"><p>6. Arrest</p></td>
        </tr>
        <tr>
            <td>&nbsp;</td>
            <td><label for="SEV6_1"><div>-1-</div></label></td>
            <td><label for="SEV6_2"><div>-2-</div></label></td>
            <td><label for="SEV6_3"><div>-3-</div></label></td>
            <td><label for="SEV6_4"><div>-4-</div></label></td>
            <td><label for="SEV6_5"><div>-5-</div></label></td>
            <td><label for="SEV6_6"><div>-6-</div></label></td>
            <td><label for="SEV6_7"><div>-7-</div></label></td>
            <td>&nbsp;</td>
        </tr>
        <tr>
            <td class="lineunder">Negligible</td>
            <td class="lineunder"><input name="SEV6" id="SEV6_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 1) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEV6" id="SEV6_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 2) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEV6" id="SEV6_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 3) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEV6" id="SEV6_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 4) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEV6" id="SEV6_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 5) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEV6" id="SEV6_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 6) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEV6" id="SEV6_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV6']) &&
$_SESSION['crit']['SEV']['SEV6'] == 7) echo "checked='checked'";?> /></td>
            <td class="lineunder">Severe</td>
        </tr>

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<tr>
    <td colspan="9"><p>7. Being Sued</p></td>
</tr>
<tr>
    <td>&nbsp;</td>
    <td><label for="SEV7_1"><div>-1-</div></label></td>
    <td><label for="SEV7_2"><div>-2-</div></label></td>
    <td><label for="SEV7_3"><div>-3-</div></label></td>
    <td><label for="SEV7_4"><div>-4-</div></label></td>
    <td><label for="SEV7_5"><div>-5-</div></label></td>
    <td><label for="SEV7_6"><div>-6-</div></label></td>
    <td><label for="SEV7_7"><div>-7-</div></label></td>
    <td>&nbsp;</td>
</tr>
<tr>
    <td class="lineunder">Negligible</td>
    <td class="lineunder"><input name="SEV7" id="SEV7_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 1) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEV7" id="SEV7_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 2) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEV7" id="SEV7_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 3) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEV7" id="SEV7_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 4) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEV7" id="SEV7_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 5) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEV7" id="SEV7_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 6) echo "checked='checked'";?> /></td>
    <td class="lineunder"><input name="SEV7" id="SEV7_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV7']) &&
$_SESSION['crit']['SEV']['SEV7'] == 7) echo "checked='checked'";?> /></td>
    <td class="lineunder">Severe</td>
</tr>
<tr>
    <td colspan="9"><p>8. Assault</p></td>
</tr>
<tr>
    <td>&nbsp;</td>

```

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        <td><label for="SEV8_1"><div>-1-</div></label></td>
        <td><label for="SEV8_2"><div>-2-</div></label></td>
        <td><label for="SEV8_3"><div>-3-</div></label></td>
        <td><label for="SEV8_4"><div>-4-</div></label></td>
        <td><label for="SEV8_5"><div>-5-</div></label></td>
        <td><label for="SEV8_6"><div>-6-</div></label></td>
        <td><label for="SEV8_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
</tr>
    <td class="lineunder">Negligible</td>
        <td class="lineunder"><input name="SEV8" id="SEV8_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV8" id="SEV8_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV8" id="SEV8_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV8" id="SEV8_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV8" id="SEV8_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV8" id="SEV8_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEV8" id="SEV8_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEV']['SEV8']) &&
$_SESSION['crit']['SEV']['SEV8'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Severe</td>
    </tr>
</table>
<p><input type="submit" id="affirmative" value="Submit" />
<input id="negative" type="reset" value="Reset" /></p>
</form></div>
<div id="footer"><p>Progress: <progress value="70" max="100"></progress> Step 7
of 10</p></div>
</body>
</html>

```

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

$data = array();
foreach ($_POST as $id => $info){
    if($id != 'sid'){
        $data[$id] = $info;
    }
}

$_SESSION['crit']['SEV'] = $data;
session_write_close();
header("Location:page5.php?sid=" . session_id());
?>

```

### **page5.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}

```

```

    }
  }
  $session_value = session_id();
  session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
  <title>Online Community Risk Survey - Susceptibility</title>
  <link rel="stylesheet" type="text/css" href="styles/main.css" />
  <script type="text/javascript" src="scripts/jquery.js"></script>
  <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
  <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
  // init the FB JS SDK
  FB.init({
    appId: '<?php echo APP_ID;?>',
    status: false,
    xfbml: false
  });

  FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
}(document, 'script', 'facebook-jssdk'));

function validate(){
  if (!$('input[name=SUS1]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 1");
    return false;
  }else if (!$('input[name=SUS2]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 2");
    return false;
  }else if (!$('input[name=SUS3]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 3");
  }
}

```

```

    return false;
} else if (!$('input[name=SUS4]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 4");
    return false;
} else if (!$('input[name=SUS5]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 5");
    return false;
} else if (!$('input[name=SUS6]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 6");
    return false;
} else if (!$('input[name=SUS7]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 7");
    return false;
} else if (!$('input[name=SUS8]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 8");
    return false;
} else {
    return true;
}
}
</script>
</head>

<body>
<div id="header"><h3>Page 5</h3></div>
<div id="center"><form id="page_5" method="POST" action="page5_process.php"
enctype="multipart/form-data" onsubmit="return validate();">
    <input type="hidden" id="sid" name="sid" value ="<?php echo
    $session_value;?>" />
    <div id="footer"><p>Progress: <progress value="80" max="100"></progress>
Step 8 of 10</p></div>
    <p>Rate how likely you feel that the following could happen to you as a result of
your membership and participation in online communities such as facebook.com:</p>
    <table border="0" cellpadding="5" cellspacing="0" id="survey">
        <tr>
            <td colspan="9"><p>1. My identity being stolen</p></td>
        </tr>
        <tr>
            <td>&nbsp;</td>

```

```

<td><label for="SUS1_1"><div>-1-</div></label></td>
<td><label for="SUS1_2"><div>-2-</div></label></td>
<td><label for="SUS1_3"><div>-3-</div></label></td>
<td><label for="SUS1_4"><div>-4-</div></label></td>
<td><label for="SUS1_5"><div>-5-</div></label></td>
<td><label for="SUS1_6"><div>-6-</div></label></td>
      <td><label for="SUS1_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
<tr>
  <td class="lineunder">Highly Unlikely</td>
    <td class="lineunder"><input name="SUS1" id="SUS1_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 1) echo "checked='checked'";?> /></td>
      <td class="lineunder"><input name="SUS1" id="SUS1_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS1" id="SUS1_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 3) echo "checked='checked'";?> /></td>
          <td class="lineunder"><input name="SUS1" id="SUS1_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 4) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SUS1" id="SUS1_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 5) echo "checked='checked'";?> /></td>
              <td class="lineunder"><input name="SUS1" id="SUS1_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 6) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SUS1" id="SUS1_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS1']) &&
$_SESSION['crit']['SUS']['SUS1'] == 7) echo "checked='checked'";?> /></td>
                  <td class="lineunder">Highly Likely</td>
</tr>
<tr>
  <td colspan="9"><p>2. Being stalked</p></td>
</tr>
<tr>
  <td>&nbsp;</td>
  <td><label for="SUS2_1"><div>-1-</div></label></td>
  <td><label for="SUS2_2"><div>-2-</div></label></td>
  <td><label for="SUS2_3"><div>-3-</div></label></td>
  <td><label for="SUS2_4"><div>-4-</div></label></td>
  <td><label for="SUS2_5"><div>-5-</div></label></td>

```



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<td><label for="SUS2_6"><div>-6-</div></label></td>
      <td><label for="SUS2_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
<tr>
  <td class="lineunder">Highly Unlikely</td>
  <td class="lineunder"><input name="SUS2" id="SUS2_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 1) echo "checked='checked'";?> /></td>
  <td class="lineunder"><input name="SUS2" id="SUS2_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 2) echo "checked='checked'";?> /></td>
  <td class="lineunder"><input name="SUS2" id="SUS2_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 3) echo "checked='checked'";?> /></td>
  <td class="lineunder"><input name="SUS2" id="SUS2_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 4) echo "checked='checked'";?> /></td>
  <td class="lineunder"><input name="SUS2" id="SUS2_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 5) echo "checked='checked'";?> /></td>
  <td class="lineunder"><input name="SUS2" id="SUS2_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 6) echo "checked='checked'";?> /></td>
  <td class="lineunder"><input name="SUS2" id="SUS2_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS2']) &&
$_SESSION['crit']['SUS']['SUS2'] == 7) echo "checked='checked'";?> /></td>
  <td class="lineunder">Highly Likely</td>
</tr>
<tr>
  <td colspan="9"><p>3. My home being
burglarized</p></td>
</tr>
<tr>
  <td>&nbsp;</td>
  <td><label for="SUS3_1"><div>-1-</div></label></td>
  <td><label for="SUS3_2"><div>-2-</div></label></td>
  <td><label for="SUS3_3"><div>-3-</div></label></td>
  <td><label for="SUS3_4"><div>-4-</div></label></td>
  <td><label for="SUS3_5"><div>-5-</div></label></td>
  <td><label for="SUS3_6"><div>-6-</div></label></td>
  <td><label for="SUS3_7"><div>-7-</div></label></td>
  <td>&nbsp;</td>
</tr>

```

```

<tr>
  <td class="lineunder">Highly Unlikely</td>
    <td class="lineunder"><input name="SUS3" id="SUS3_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 1) echo "checked='checked'";?> /></td>
      <td class="lineunder"><input name="SUS3" id="SUS3_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS3" id="SUS3_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 3) echo "checked='checked'";?> /></td>
          <td class="lineunder"><input name="SUS3" id="SUS3_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 4) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SUS3" id="SUS3_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 5) echo "checked='checked'";?> /></td>
              <td class="lineunder"><input name="SUS3" id="SUS3_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 6) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SUS3" id="SUS3_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS3']) &&
$_SESSION['crit']['SUS']['SUS3'] == 7) echo "checked='checked'";?> /></td>
          <td class="lineunder">Highly Likely</td>
    </td>
  </tr>
  <tr>
    <td colspan="9"><p>4. Being fired from my employment
or losing employment opportunities</p></td>
  </tr>
  <tr>
    <td>&nbsp;</td>
    <td><label for="SUS4_1"><div>-1-</div></label></td>
    <td><label for="SUS4_2"><div>-2-</div></label></td>
    <td><label for="SUS4_3"><div>-3-</div></label></td>
    <td><label for="SUS4_4"><div>-4-</div></label></td>
    <td><label for="SUS4_5"><div>-5-</div></label></td>
    <td><label for="SUS4_6"><div>-6-</div></label></td>
    <td><label for="SUS4_7"><div>-7-</div></label></td>
    <td>&nbsp;</td>
  </tr>
  <tr>
    <td class="lineunder">Highly Unlikely</td>

```

```

        <td class="lineunder"><input name="SUS4" id="SUS4_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS4" id="SUS4_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS4" id="SUS4_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS4" id="SUS4_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS4" id="SUS4_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS4" id="SUS4_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS4" id="SUS4_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS4']) &&
$_SESSION['crit']['SUS']['SUS4'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Highly Likely</td>
    </tr>
    <tr>
        <td colspan="9"><p>5. Being subject to public
ridicule</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SUS5_1"><div>-1-</div></label></td>
        <td><label for="SUS5_2"><div>-2-</div></label></td>
        <td><label for="SUS5_3"><div>-3-</div></label></td>
        <td><label for="SUS5_4"><div>-4-</div></label></td>
        <td><label for="SUS5_5"><div>-5-</div></label></td>
        <td><label for="SUS5_6"><div>-6-</div></label></td>
        <td><label for="SUS5_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Highly Unlikely</td>
        <td class="lineunder"><input name="SUS5" id="SUS5_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 1) echo "checked='checked'";?> /></td>

```

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        <td class="lineunder"><input name="SUS5" id="SUS5_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS5" id="SUS5_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS5" id="SUS5_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS5" id="SUS5_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS5" id="SUS5_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS5" id="SUS5_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS5']) &&
$_SESSION['crit']['SUS']['SUS5'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Highly Likely</td>
    </tr>
    <tr>
        <td colspan="9"><p>6. Being charged with a criminal
offense</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SUS6_1"><div>-1-</div></label></td>
        <td><label for="SUS6_2"><div>-2-</div></label></td>
        <td><label for="SUS6_3"><div>-3-</div></label></td>
        <td><label for="SUS6_4"><div>-4-</div></label></td>
        <td><label for="SUS6_5"><div>-5-</div></label></td>
        <td><label for="SUS6_6"><div>-6-</div></label></td>
        <td><label for="SUS6_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Highly Unlikely</td>
        <td class="lineunder"><input name="SUS6" id="SUS6_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS6" id="SUS6_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 2) echo "checked='checked'";?> /></td>

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        <td class="lineunder"><input name="SUS6" id="SUS6_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS6" id="SUS6_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS6" id="SUS6_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS6" id="SUS6_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS6" id="SUS6_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS6']) &&
$_SESSION['crit']['SUS']['SUS6'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Highly Likely</td>
    </tr>
    <tr>
        <td colspan="9"><p>7. Being subject of a civil suit(non-
criminal legal action)</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SUS7_1"><div>-1-</div></label></td>
        <td><label for="SUS7_2"><div>-2-</div></label></td>
        <td><label for="SUS7_3"><div>-3-</div></label></td>
        <td><label for="SUS7_4"><div>-4-</div></label></td>
        <td><label for="SUS7_5"><div>-5-</div></label></td>
        <td><label for="SUS7_6"><div>-6-</div></label></td>
        <td><label for="SUS7_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Highly Unlikely</td>
        <td class="lineunder"><input name="SUS7" id="SUS7_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS7" id="SUS7_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS7" id="SUS7_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 3) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="SUS7" id="SUS7_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS7" id="SUS7_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS7" id="SUS7_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS7" id="SUS7_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS7']) &&
$_SESSION['crit']['SUS']['SUS7'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Highly Likely</td>
    </tr>
    <tr>
        <td colspan="9"><p>8. Being assaulted</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SUS8_1"><div>-1-</div></label></td>
        <td><label for="SUS8_2"><div>-2-</div></label></td>
        <td><label for="SUS8_3"><div>-3-</div></label></td>
        <td><label for="SUS8_4"><div>-4-</div></label></td>
        <td><label for="SUS8_5"><div>-5-</div></label></td>
        <td><label for="SUS8_6"><div>-6-</div></label></td>
        <td><label for="SUS8_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Highly Unlikely</td>
        <td class="lineunder"><input name="SUS8" id="SUS8_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS8" id="SUS8_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS8" id="SUS8_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS8" id="SUS8_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 4) echo "checked='checked'";?> /></td>

```

```

        <td class="lineunder"><input name="SUS8" id="SUS8_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS8" id="SUS8_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SUS8" id="SUS8_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SUS']['SUS8']) &&
$_SESSION['crit']['SUS']['SUS8'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Highly Likely</td>
    </tr>
</table>
<p><input type="submit" id="affirmative" value="Submit" />
<input id="negative" type="reset" value="Reset" /></p>
</form></div>
<div id="footer"><p>Progress: <progress value="80" max="100"></progress> Step 8
of 10</p></div>
</body>
</html>

```

### page5\_process.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

$data = array();
foreach ($_POST as $id => $info){
    if($id != 'sid'){
        $data[$id] = $info;
    }
}

$_SESSION['crit']['SUS'] = $data;
session_write_close();
header("Location:page6.php?sid=" . session_id());
?>

```

### page6.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';

```

```

require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
$session_value = session_id();
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Susceptibility</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="scripts/jquery.js"></script>
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
    // init the FB JS SDK
    FB.init({
        appId: '<?php echo APP_ID;?>',
        status: false,
        xfbml: false
    });

    FB.Canvas.setSize({ width:800});
}

```



```

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
})(document, 'script', 'facebook-jssdk');

function validate(){
  if (!$('input[name=SEF1]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 1");
    return false;
  }else if (!$('input[name=SEF2]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 2");
    return false;
  }else if (!$('input[name=SEF3]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 3");
    return false;
  }else if (!$('input[name=SEF4]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 4");
    return false;
  }else{
    return true;
  }
}
</script>
</head>

<body>
  <div id="header"><h3>Page 6</h3></div>
  <div id="center"><form id="page_6" method="POST" action="page6_process.php"
  enctype="multipart/form-data" onsubmit="return validate();">
    <input type="hidden" id="sid" name="sid" value = "<?php echo
  $session_value;?>" />
    <div id="footer"><p>Progress: <progress value="90" max="100"></progress>
  Step 9 of 10</p></div>
    <p>Rate each of the following from Strongly Disagree to Strongly Agree:</p>
    <table border="0" cellpadding="5" cellspacing="0" id="survey">
      <tr>

```

```

                <td colspan="9"><p>1. I know what information I can and
cannot safely reveal online.</p></td>
            </tr>
            <tr>
                <td>&nbsp;</td>
                <td><label for="SEF1_1"><div>-1-</div></label></td>
                <td><label for="SEF1_2"><div>-2-</div></label></td>
                <td><label for="SEF1_3"><div>-3-</div></label></td>
                <td><label for="SEF1_4"><div>-4-</div></label></td>
                <td><label for="SEF1_5"><div>-5-</div></label></td>
                <td><label for="SEF1_6"><div>-6-</div></label></td>
                <td><label for="SEF1_7"><div>-7-</div></label></td>
                <td>&nbsp;</td>
            </tr>
            <tr>
                <td class="lineunder">Strongly Disagree</td>
                <td class="lineunder"><input name="SEF1" id="SEF1_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 1) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF1" id="SEF1_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 2) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF1" id="SEF1_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 3) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF1" id="SEF1_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 4) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF1" id="SEF1_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 5) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF1" id="SEF1_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 6) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF1" id="SEF1_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEF']['SEF1']) &&
$_SESSION['crit']['SEF']['SEF1'] == 7) echo "checked='checked'";?> /></td>
                <td class="lineunder">Strongly Agree</td>
            </tr>
            <tr>
                <td colspan="9"><p>2. I am confident of my ability to
navigate in an online community.</p></td>
            </tr>
            <tr>

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        <td>&nbsp;</td>
        <td><label for="SEF2_1"><div>-1-</div></label></td>
        <td><label for="SEF2_2"><div>-2-</div></label></td>
        <td><label for="SEF2_3"><div>-3-</div></label></td>
        <td><label for="SEF2_4"><div>-4-</div></label></td>
        <td><label for="SEF2_5"><div>-5-</div></label></td>
        <td><label for="SEF2_6"><div>-6-</div></label></td>
        <td><label for="SEF2_7"><div>-7-</div></label></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="SEF2" id="SEF2_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF2" id="SEF2_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF2" id="SEF2_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF2" id="SEF2_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF2" id="SEF2_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF2" id="SEF2_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF2" id="SEF2_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEF']['SEF2']) &&
$_SESSION['crit']['SEF']['SEF2'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
    <tr>
        <td colspan="9"><p>3. I am confident of my ability to
protect the information that I have posted online.</p></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><label for="SEF3_1"><div>-1-</div></label></td>
        <td><label for="SEF3_2"><div>-2-</div></label></td>
        <td><label for="SEF3_3"><div>-3-</div></label></td>

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<td><label for="SEF3_4"><div>-4-</div></label></td>
<td><label for="SEF3_5"><div>-5-</div></label></td>
<td><label for="SEF3_6"><div>-6-</div></label></td>
      <td><label for="SEF3_7"><div>-7-</div></label></td>
<td>&nbsp;</td>
</tr>
<tr>
  <td class="lineunder">Strongly Disagree</td>
    <td class="lineunder"><input name="SEF3" id="SEF3_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 1) echo "checked='checked'";?> /></td>
      <td class="lineunder"><input name="SEF3" id="SEF3_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF3" id="SEF3_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 3) echo "checked='checked'";?> /></td>
          <td class="lineunder"><input name="SEF3" id="SEF3_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 4) echo "checked='checked'";?> /></td>
            <td class="lineunder"><input name="SEF3" id="SEF3_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 5) echo "checked='checked'";?> /></td>
              <td class="lineunder"><input name="SEF3" id="SEF3_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 6) echo "checked='checked'";?> /></td>
                <td class="lineunder"><input name="SEF3" id="SEF3_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEF']['SEF3']) &&
$_SESSION['crit']['SEF']['SEF3'] == 7) echo "checked='checked'";?> /></td>
                  <td class="lineunder">Strongly Agree</td>
</tr>
<tr>
  <td colspan="9"><p>4. I am confident of my abilities to
recognize who I should and should not accept as friends.</p></td>
</tr>
<tr>
  <td>&nbsp;</td>
    <td><label for="SEF4_1"><div>-1-</div></label></td>
      <td><label for="SEF4_2"><div>-2-</div></label></td>
        <td><label for="SEF4_3"><div>-3-</div></label></td>
          <td><label for="SEF4_4"><div>-4-</div></label></td>
            <td><label for="SEF4_5"><div>-5-</div></label></td>
              <td><label for="SEF4_6"><div>-6-</div></label></td>
                <td><label for="SEF4_7"><div>-7-</div></label></td>

```

```

        <td>&nbsp;</td>
    </tr>
</tr>
    <td class="lineunder">Strongly Disagree</td>
        <td class="lineunder"><input name="SEF4" id="SEF4_1"
type="radio" value="1" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 1) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF4" id="SEF4_2"
type="radio" value="2" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 2) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF4" id="SEF4_3"
type="radio" value="3" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 3) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF4" id="SEF4_4"
type="radio" value="4" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 4) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF4" id="SEF4_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 5) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF4" id="SEF4_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 6) echo "checked='checked'";?> /></td>
        <td class="lineunder"><input name="SEF4" id="SEF4_7"
type="radio" value="7" <?php if(isset($_SESSION['crit']['SEF']['SEF4']) &&
$_SESSION['crit']['SEF']['SEF4'] == 7) echo "checked='checked'";?> /></td>
        <td class="lineunder">Strongly Agree</td>
    </tr>
</table>
    <p><input type="submit" id="affirmative" value="Submit" />
    <input id="negative" type="reset" value="Reset" /></p>
</form></div>
    <div id="footer"><p>Progress: <progress value="90" max="100"></progress> Step 9
of 10</p></div>
</body>
</html>

```

### page6\_process.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

$data = array();

```

```

foreach ($_POST as $id => $info){
    if($id != 'sid'){
        $data[$id] = $info;
    }
}

$_SESSION['crit']['SEF'] = $data;
session_write_close();
header("Location:page7.php?sid=" . session_id());
?>

```

### **page7.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}
$session_value = session_id();
session_write_close();

$gender = 0;
if($me['gender'] != 'male'){

```

```

    $gender = 1;
}

?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
  <title>Online Community Risk Survey - Demographics</title>
  <link rel="stylesheet" type="text/css" href="styles/main.css" />
  <script type="text/javascript" src="scripts/jquery.js"></script>
  <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
  <script type="text/javascript" language="JavaScript">
window.fbAsyncInit = function() {
  // init the FB JS SDK
  FB.init({
    appId: '<?php echo APP_ID;?>',
    status: false,
    xfbml: false
  });

  FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
  var js, fjs = d.getElementsByTagName(s)[0];
  if (d.getElementById(id)) {return;}
  js = d.createElement(s); js.id = id;
  js.src = "//connect.facebook.net/en_US/all.js";
  fjs.parentNode.insertBefore(js, fjs);
})(document, 'script', 'facebook-jssdk');

function validate(){
  if(!$('input[name=AGE]:checked').length){
    alert("Please answer question 1")
    return false;
  }else if (!$('input[name=EDUC]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 2");
    return false; // allow whatever action would normally happen to continue
  }else if (!$('input[name=INCOME]:checked').length) {
    // at least one of the radio buttons was not checked
    alert("Please answer question 3");
    return false; // allow whatever action would normally happen to continue
  }else{

```

```

        return true;
    }
}
</script>
</head>

<body>
    <div id="header"><h3>Page 7</h3></div>
    <div id="center"><form id="page_7" method="POST" action="page7_process.php"
    enctype="multipart/form-data" onsubmit="return validate();">
        <input type="hidden" id="sid" name="sid" value = "<?php echo
    $session_value;?>" />
        <div id="footer"><p>Progress: <progress value="100" max="100"></progress>
    Step 10 of 10</p></div>
        <table border="0" cellpadding="5" cellspacing="0" id="survey">
            <tr>
                <td class="lineunder"><p>Gender: <?php echo $me['gender'];?>
                    <input type="hidden" name="GENDER" id="GENDER" value="<?php
    echo $gender;?>" /></p>
                </td>
            </tr>
            <tr>
                <td><p>1. Age Range:</p></td>
            </tr>
            <tr>
                <td><p><input name="AGE" id="AGE_1" type="radio" value="1" <?php
    if(isset($_SESSION['crit']['DEMO']['AGE']) && $_SESSION['crit']['DEMO']['AGE'] ==
    1) echo "checked='checked'";?> /><label for="AGE_1">18-20</label></p></td>
            </tr>
            <tr>
                <td><p><input name="AGE" id="AGE_2" type="radio" value="2" <?php
    if(isset($_SESSION['crit']['DEMO']['AGE']) && $_SESSION['crit']['DEMO']['AGE'] ==
    2) echo "checked='checked'";?> /><label for="AGE_2">21-30</label></p></td>
            </tr>
            <tr>
                <td><p><input name="AGE" id="AGE_3" type="radio" value="3" <?php
    if(isset($_SESSION['crit']['DEMO']['AGE']) && $_SESSION['crit']['DEMO']['AGE'] ==
    3) echo "checked='checked'";?> /><label for="AGE_3">31-40</label></p></td>
            </tr>
            <tr>
                <td><p><input name="AGE" id="AGE_4" type="radio" value="4" <?php
    if(isset($_SESSION['crit']['DEMO']['AGE']) && $_SESSION['crit']['DEMO']['AGE'] ==
    4) echo "checked='checked'";?> /><label for="AGE_4">41-50</label></p></td>
            </tr>

```



```

<tr>
  <td><p><input name="AGE" id="AGE_5" type="radio" value="5" <?php
if(isset($_SESSION['crit']['DEMO']['AGE']) && $_SESSION['crit']['DEMO']['AGE'] ==
5) echo "checked='checked'";?> /><label for="AGE_5">51-60</label></p></td>
</tr>
<tr>
  <td class="lineunder"><p><input name="AGE" id="AGE_6"
type="radio" value="6" <?php if(isset($_SESSION['crit']['DEMO']['AGE']) &&
$_SESSION['crit']['DEMO']['AGE'] == 6) echo "checked='checked'";?> /><label
for="AGE_6">61 and over</label></p></td>
</tr>
<tr>
  <td><p>2. What is the highest level of education that you have
completed?</p></td>
</tr>
<tr>
  <td><p><input name="EDUC" id="EDUC_1" type="radio" value="1"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 1) echo "checked='checked'";?> /><label
for="EDUC_1">Less than high school</label></p></td>
</tr>
<tr>
  <td><p><input name="EDUC" id="EDUC_2" type="radio" value="2"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 2) echo "checked='checked'";?> /><label
for="EDUC_2">High school or high school equivalent</label></p></td>
</tr>
<tr>
  <td><p><input name="EDUC" id="EDUC_3" type="radio" value="3"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 3) echo "checked='checked'";?> /><label
for="EDUC_3">Some college</label></p></td>
</tr>
<tr>
  <td><p><input name="EDUC" id="EDUC_4" type="radio" value="4"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 4) echo "checked='checked'";?> /><label
for="EDUC_4">Career training</label></p></td>
</tr>
<tr>
  <td><p><input name="EDUC" id="EDUC_5" type="radio" value="5"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 5) echo "checked='checked'";?> /><label
for="EDUC_5">&dash;year college degree (Associates)</label></p></td>

```

```

        </tr>
        <tr>
            <td><p><input name="EDUC" id="EDUC_6" type="radio" value="6"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 6) echo "checked='checked'";?> /><label
for="EDUC_6">4&dash;year college degree (BA, BS)</label></p></td>
        </tr>
        <tr>
            <td><p><input name="EDUC" id="EDUC_7" type="radio" value="7"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 7) echo "checked='checked'";?> /><label
for="EDUC_7">Master's degree</label></p></td>
        </tr>
        <tr>
            <td><p><input name="EDUC" id="EDUC_8" type="radio" value="8"
<?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 8) echo "checked='checked'";?> /><label
for="EDUC_8">Doctorate degree</label></p></td>
        </tr>
        <tr>
            <td class="lineunder"><p><input name="EDUC" id="EDUC_9"
type="radio" value="9" <?php if(isset($_SESSION['crit']['DEMO']['EDUC']) &&
$_SESSION['crit']['DEMO']['EDUC'] == 9) echo "checked='checked'";?> /><label
for="EDUC_9">Professional degree (MD, JD)</label></p></td>
        </tr>
        <tr>
            <td><p>3. What is your income level?</p></td>
        </tr>
        <tr>
            <td><p><input name="INCOME" id="INCOME_1" type="radio"
value="1" <?php if(isset($_SESSION['crit']['DEMO']['INCOME']) &&
$_SESSION['crit']['DEMO']['INCOME'] == 1) echo "checked='checked'";?> /><label
for="INCOME_1">$0 &dash; $25,000</label></p></td>
        </tr>
        <tr>
            <td><p><input name="INCOME" id="INCOME_2" type="radio"
value="2" <?php if(isset($_SESSION['crit']['DEMO']['INCOME']) &&
$_SESSION['crit']['DEMO']['INCOME'] == 2) echo "checked='checked'";?> /><label
for="INCOME_2">$25,001 &dash; $50,000</label></p></td>
        </tr>
        <tr>
            <td><p><input name="INCOME" id="INCOME_3" type="radio"
value="3" <?php if(isset($_SESSION['crit']['DEMO']['INCOME']) &&

```

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$_SESSION['crit']['DEMO']['INCOME'] == 3) echo "checked='checked'";?> /><label
for="INCOME_3">$50,001 &dash; $75,000</label></p></td>
    </tr>
    <tr>
        <td><p><input name="INCOME" id="INCOME_4" type="radio"
value="4" <?php if(isset($_SESSION['crit']['DEMO']['INCOME'])) &&
$_SESSION['crit']['DEMO']['INCOME'] == 4) echo "checked='checked'";?> /><label
for="INCOME_4">$75,001 &dash; $100,000</label></p></td>
    </tr>
    <tr>
        <td class="lineunder"><p><input name="INCOME" id="INCOME_5"
type="radio" value="5" <?php if(isset($_SESSION['crit']['DEMO']['INCOME'])) &&
$_SESSION['crit']['DEMO']['INCOME'] == 5) echo "checked='checked'";?> /><label
for="INCOME_5">More than $100,000</label></p></td>
    </tr>
</table>
<p><input type="submit" id="affirmative" value="Submit" />
<input id="negative" type="reset" value="Reset" /></p>
</form></div>
<div id="footer"><p>Progress: <progress value="100" max="100"></progress> Step
10 of 10</p></div>
</body>
</html>

```

### page7\_process.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');
$_SESSION['crit']['DEMO'] = $data;

$facebook = new Facebook(array(
    'appId' => APP_ID,

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'secret' => APP_SECRET,
'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
$access_token = null;

if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me', 'GET');
        $access_token = $facebook->getAccessToken();
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}

$total = 10;
$public = array();
$fb_bio = 0;
if(isset($me['bio'])){
    $fb_bio = 1;
    $total -= 1;
    $public[] = "About You";
}

$fb_education = 0;
if(isset($me['education'])){
    $fb_education = 1;
    $total -= 1;
    $public[] = "Education History";
}

$fb_hometown = 0;
if(isset($me['hometown'])){
    $fb_hometown = 1;
    $total -= 1;
    $public[] = "Your Hometown";
}

$fb_location = 0;
if(isset($me['location'])){

```

```

    $fb_location = 1;
    $total -= 1;
    $public[] = "Your Current City";
}

$fb_quotes = 0;
if(isset($me['quotes'])){
    $fb_quotes = 1;
    $total -= 1;
    $public[] = "Your Favorite Quotations";
}

$fb_work = 0;
if(isset($me['work'])){
    $fb_work = 1;
    $total -= 1;
    $public[] = "Your Work History";
}

$fb_religion = 0;
if(isset($me['religion'])){
    $fb_religion = 1;
    $total -= 1;
    $public[] = "Your Religious Views";
}

$fb_politics = 0;
if(isset($me['political'])){
    $fb_politics = 1;
    $total -= 1;
    $public[] = "Your Political Views";
}

$fb_languages = 0;
if(isset($me['languages'])){
    $fb_languages = 1;
    $total -= 1;
    $public[] = "Languages";
}

$fb_likes = 0;
$likes = null;
try {
    $likes = $facebook->api('/me/likes?limit=10');
}

```

```

} catch (FacebookApiException $e) {
    $fb_likes = 0;
}

if(!empty($likes['data'])){
    $fb_likes = 1;
    $total -= 1;
    $public[] = "Your Likes";
}elseif(isset($me['sports'])){
    $fb_likes = 1;
    $total -= 1;
    $public[] = "Your Likes";
}elseif(isset($me['favorite_teams'])){
    $fb_likes = 1;
    $total -= 1;
    $public[] = "Your Likes";
}elseif(isset($me['favorite_athletes'])){
    $fb_likes = 1;
    $total -= 1;
    $public[] = "Your Likes";
}elseif(isset($me['inspirational_people'])){
    $fb_likes = 1;
    $total -= 1;
    $public[] = "Your Likes";
}

if(empty($public)){
    $public[] = "no items";
}
$_SESSION['public'] = $public;

$_SESSION['rating'] = $total;

$db = new database();
$db->connect();

$select = "select * from participants where fb_id = $uid";
$db->query($select);
$done = $db->singleRecord();
//printRdie($_SESSION);

//uncomment the following line before going live
if($uid != 10000551056343){
    if(!$done){

```

```

$email = $facebook->api('/me?fields=email');

$ref = getS('ref');

$name = mysql_real_escape_string($me['name']);

$insert = "insert ignore into participants (fb_id, fb_name, fb_email, fb_refID,
security_score) values($uid, " . $name . ", " . $email['email'] . ", '$ref', $total)";

$success = $db->query($insert);

$update = "update ignore participant_requests set responded = 1 where fb_id =
$uid";
$db->query($update);

if(!empty($success)){
    $per = implode(""," $_SESSION['crit']['PER'];
    $sen = implode(""," $_SESSION['crit']['SEN'];
    $att = implode(""," $_SESSION['crit']['ATT'];
    $sev = implode(""," $_SESSION['crit']['SEV'];
    $sus = implode(""," $_SESSION['crit']['SUS'];
    $sef = implode(""," $_SESSION['crit']['SEF'];
    $dem = implode(""," $_SESSION['crit']['DEMO'];

    $insert = "insert into responses (demo_gender, demo_age, demo_educ,
demo_income, per_1, per_2, per_3, per_4, per_5, per_6, per_7, sen_1, sen_2, sen_3,
sen_4, sen_5, sen_6, sen_7, sen_8, att_1, att_2, att_3, att_4, att_5, att_6, att_7, sev_1,
sev_2, sev_3, sev_4, sev_5, sev_6, sev_7, sev_8, sus_1, sus_2, sus_3, sus_4, sus_5,
sus_6, sus_7, sus_8, sef_1, sef_2, sef_3, sef_4, fb_bio, fb_education, fb_hometown,
fb_location, fb_quotes, fb_work, fb_religion, fb_politics, fb_languages, fb_likes) values
(" . $dem . ", " . $per . ", " . $sen . ", " . $att . ", " . $sev . ", " . $sus . ", " . $sef . ", " .
$fb_bio . ", " . $fb_education . ", " . $fb_hometown . ", " . $fb_location . ", " .
$fb_quotes . ", " . $fb_work . ", " . $fb_religion . ", " . $fb_politics . ", " .
$fb_languages . ", " . $fb_likes . ")";

    $success = $db->query($insert);
    if(!empty($success) || $uid == 100000551056343){
        header("Location:page8.php?sid=$session_id");
    }else{
        printRdie("A problem has occurred.");
    }
}
}else{
    header("Location:page8.php?sid=$session_id");
}

```

```

    }
}else{
    header("Location:page8.php?sid=$session_id");
}
session_write_close();
?>

```

### **page8.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

$public = getS('public');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$session = $_SESSION['face_session'];

$db = new database();
$db->connect();
$select = "select fb_id from participants";
$db->query($select);
$new_friends = array();
while($db->nextRecord()){
    // $new_friends[] = $db->Record['fb_id'];
}
if(!empty($_SESSION['send_friends']) && $_SESSION['send_friends'] == 6){
    header("Location:thanks.php?sid=" . session_id());
}
$me = null;
$friends = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();

```



```

    $me = $facebook->api('/me');
    $friends_temp = $facebook->api('/me/friends?limit=504');
    $friends = $friends_temp['data'];
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}

$friends2 = array();
foreach ($friends as $friend){
    $select = "select * from participants where fb_id = " . $friend['id'];
    $db->query($select);
    if($db->singleRecord()){
        continue;
    }else{
        $friends2[] = $friend;
    }
}

$message2 = "You may want to check your profile and make sure you want the above
items available to the public. Some items may need to be deleted to hide them from the
public.";
if($public[0] == "no items"){
    $message2 = "";
}

$parameters = array(
    'message' => "My Safety Rating:",
    'picture' => "http://www.sig mish.com/facebook/images/q_mark.png",
    'link' => "http://apps.facebook.com/facesurvey/index.php?ref=$uid",
    'name' => "Find Out How Safe You Are",
    'caption' => "My safety rating",
    'description' => "By completing a short survey I was entered in a prize drawing for $50
and found out what information I am revealing to the public. Click on the link above and
you can find out how safe you are."/*,
    'privacy' => array('value' => 'EVERYONE')*/
);
$parameters['access_token'] = $facebook->getAccessToken();

$select = "select * from participants where fb_id = $uid";
$db->query($select);
$done = $db->singleRecord();
$data = $db->Record;
//uncomment the following section before going live

```

```

$permissions = $facebook->api('/me/permissions');

if($suid != 100000551056343 && !$data['posted']){
    try {
        $facebook->api(
            '/me/feed',
            'POST',
            $parameters
        );
        $update = "update participants set posted = 1 where fb_id = $suid";
        $db->query($update);
    } catch (FacebookApiException $e) {
        $my_url = "http://apps.facebook.com/facesurvey/introduction.php?sid=" .
session_id();
        $dialog_url = "http://www.facebook.com/dialog/oauth?client_id="
            . APP_ID . "&redirect_uri=" . urlencode($my_url . "&jump=1") . "&state="
            . $_SESSION['state'] . "&scope=email,publish_stream";

        echo("<script> top.location.href=\"" . $dialog_url . "\"</script>");
    }
}

$select = "select send_friends from participants where fb_id = $suid";
$db->query($select);
$done = $db->singleRecord();
$numLeft = $db->Record;

$session_value = session_id();
session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Demographics</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />
    <script type="text/javascript" src="scripts/jquery.js"></script>
    <script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
    <script type="text/javascript">
window.fbAsyncInit = function() {
    // init the FB JS SDK
    FB.init({
        appId: '<?php echo APP_ID;?>',
        status: false,

```

```

        xfbml: false,
        frictionlessRequests : true
    });
    FB.Canvas.setSize({ width:800});
}

function validate(){
    <?php
    if($uid == 100000551056343){
        ?>
        return true;
        <?php
    }
    ?>
    if($('input[type=checkbox]:checked').length < 1){
        alert("Please select at least one friend to invite to participate.");
        return false;
    }else{
        sendRequest();
        return true;
    }
}

function checkNum(obj){
    <?php
    if($uid != 100000551056343){
        ?>
        if($('input[type=checkbox]:checked').length > <?php echo 6 -
$numLeft['send_friends'];?>){
            alert("You have already selected 6 friends. Please click the submit button at the
bottom of the page.");
            $(obj).prop('checked',false);
        }
        <?php
    }
    ?>
}

(function(d, s, id){
    var js, fjs = d.getElementsByTagName(s)[0];
    if (d.getElementById(id)) {return;}
    js = d.createElement(s); js.id = id;
    js.src = "//connect.facebook.net/en_US/all.js";
    fjs.parentNode.insertBefore(js, fjs);

```

```

})(document, 'script', 'facebook-jssdk'));

function sendRequest() {
    // Get the list of selected friends
    var sendUIDs = "";

    $('input[type=checkbox]:checked').each(function(){
        sendUIDs += $(this).val() + ',';
    });

    //    alert(sendUIDs);
    // Use FB.ui to send the Request(s)
    //    FB.ui({method: 'apprequests',
    //        to: sendUIDs,
    //        title: 'How Safe Are You',
    //        message: 'Find out how safe you are',
    //        data: '<?php // echo $uid;?>'
    //    });
    FB.ui({method: 'apprequests',
        to: sendUIDs,
        title: 'How Safe Are You? - Enter Prize Drawing',
        message: 'Find out how safe you are with your Facebook data:
http://apps.facebook.com/facesurvey Take a short 15 minute survey and find out if you
are sharing more data than you would like. By taking the survey you will also be entered
in a prize drawing for one of five $50 giftcards.',
        data: '<?php echo $uid;?>'
    });
}
</script>
</head>

<body>
    <div id="header"><h3>Thank You for Participating.</h3></div>
    <div id="center"><form id="page_8" method="POST" action="page8_process.php"
    enctype="multipart/form-data" onsubmit="return validate();">
        <input type="hidden" id="sid" name="sid" value = "<?php echo $session_value;?>"
    />
        <p>Thank you for participating in this survey. Please send this survey to at least one of
    your friends, but no more than six. They must be 18 years or older.</p>
        <p><input type="submit" id="affirmative" value="Continue to Evaluation" />
        <input id="negative" type="reset" value="Reset" /></p>
        <table border="0" cellpadding="5" cellspacing="1" id="friends" style="border: 2px
    solid #3b5998;" width="100%">
            <?php

```

```

$counter = 0;
$row_count = 1;
foreach ($friends2 as $friend){

    if($counter == 0){
        echo "<tr>";
    }
    ?>
    <td style="text-align: center; border: 2px solid #3b5998;">
        <label for="friend_<?php echo $friend['id']; ?>"></label><br />
        <p style="text-align: center;"><label for="friend_<?php echo $friend['id'];
?>"><?php echo $friend['name'];?></label></p>
        <br />
        <input type="checkbox" name="friends[]" id="friend_<?php echo $friend['id'];
?>" value="<?php echo $friend['id']; ?>" onclick="checkNum(this);" />
    </td>
    <?php
    if($counter == 2){
        echo "</tr>";
        $counter = 0;

        if(($row_count%12) == 0){

            ?>
            </table>
            <p><input type="submit" id="affirmative" value="Continue to Evaluation" />
                <input id="negative" type="reset" value="Reset" />
            <!--
                <a href="#" title="No thanks. I don't want to send this to my friends"
onclick="noThanks();">No thanks, I don't want to send this to my friends.</a--></p>
                <table border="0" cellpadding="5" cellspacing="1" id="friends" style="border:
2px solid #3b5998;" width="100%">
                    <?php

                }
                $row_count++;
                continue;
            }
            $counter++;
            $row_count++;
        }
    ?>
</table>

```

```

<p><input type="submit" id="affirmative" value="Continue to Evaluation" />
  <input id="negative" type="reset" value="Reset" /></p>
</form></div>
<div id="footer">&nbsp;</div>
</body>
</html>

```

### **page8\_process.php**

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

// Create our Application instance (replace this with your appId and secret).
$facebook = new Facebook(array(
    'appId' => APP_ID,
    'secret' => APP_SECRET,
    'cookie' => true,
));

$_SESSION['face_session'];

$me = null;
$friends = null;
// Session based API call.
if ($_SESSION) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}

$friends = $_POST['friends'];

$db = new database();
$db->connect();

$sids = array();
if(!empty($friends) && $uid != 100000551056343){

```

```

foreach ($friends as $friend){
    $recipient = $facebook->api("/$friend");
    $headers = "";
    if(!isset($me['username'])){
        $headers = "MIME-Version: 1.0\r\n" .
            "Content-Type: text/plain; charset=ISO-8859-1; format=flowed\r\n" .
            "Content-Transfer-Encoding: 7bit\r\n" .
            "X-Originating-IP: [" . $_SERVER['SERVER_ADDR'] . "]\r\n";
    }else{
        $headers = "MIME-Version: 1.0\r\n" .
            "Content-Type: text/plain; charset=ISO-8859-1; format=flowed\r\n" .
            "Content-Transfer-Encoding: 7bit\r\n" .
            "X-Originating-IP: [" . $_SERVER['SERVER_ADDR'] . "]\r\n" .
            "From: " . $me['username'] . "@facebook.com\r\n";
    }
    @mail($recipient['username'] . "@facebook.com", "How Safe Are You? - Enter
Prize Drawing", "Find out how safe you are with your Facebook data:
http://apps.facebook.com/facesurvey Take a short 15 minute survey and find out if you
are sharing more data than you would like. By taking the survey you will also be entered
in a prize drawing for one of five $50 giftcards.", "From: " . $me['username'] .
"@facebook.com");
    $insert = "insert ignore participant_requests (fb_id, sender) values ($friend, $uid)";
    $db->query($insert);
}
$send_friends = count($friends);
$update = "update participants set send_friends = $send_friends where fb_id = $uid";
$db->query($update);
}

session_write_close();
header("Location:thanks.php?sid=" . session_id());
?>

```

### return.php

```

<?php
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';

spl_autoload_register('my_autoloader');

$facebook = new Facebook(array(
    'appId' => APP_ID,

```

```

'secret' => APP_SECRET,
'cookie' => true,
));

$session = $_SESSION['face_session'];

$me = null;
$access_token = null;

if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
        $access_token = $facebook->getAccessToken();
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}

// Unset all of the session variables.
$_SESSION = array();

// If it's desired to kill the session, also delete the session cookie.
// Note: This will destroy the session, and not just the session data!
if (ini_get("session.use_cookies")) {
    $params = session_get_cookie_params();
    setcookie(session_name(), "", time() - 42000,
        $params["path"], $params["domain"],
        $params["secure"], $params["httponly"]
    );
}

// Finally, destroy the session.
session_destroy();

header("Location:http://www.facebook.com/" . $me['username']);
?>

terms.php
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
    <title>Online Community Risk Survey - Informed Consent</title>
    <link rel="stylesheet" type="text/css" href="styles/main.css" />

```



</head>

<body>

<div id="header">

<h1>Informed Consent</h1>

</div>

<div id="center"><p><strong>\*Introduction/ Purpose</strong> Dr. John Johnson in the Department of Management Information Systems at Utah State University is conducting a research study to find out more about Risk Perception in Online Communities. You have been asked to take part because you have an account with the online community Facebook. There will be approximately 312 total participants in this research. Jason Couraud, a student researcher, will also be involved in the collection of data for this research.</p>

<p><strong>\*Procedures</strong> If you agree to be in this research study, you will be asked to answer a series of questions on the following topics: risk perception, risk sensitivity, risk attitude, threat appraisal, and computer self-efficacy. It should take you about 15-20 minutes to complete the survey. Upon completion of the survey you will be given information on the security of your public Facebook data. You will also be asked to invite a small number (no more than 6) of your friends to participate in the study.</p>

<p><strong>\*Risks</strong> Participation in this research study may involve some added risks or discomforts. These include a loss of confidentiality. However, steps will be taken to reduce this risk by limiting access to the data and keeping participation records separate from the survey answers given by participants. In addition, apart from your email address none of your Facebook data will be recorded.</p>

<p><strong>\*Benefits</strong> Your participation in this study will provide you with details on the security of your public Facebook data. It may also provide you with information on how to protect yourself in the future.</p>

<p><strong>Explanation & offer to answer questions</strong> Instructions will be provided on the following page and specific instructions for each section will be provided at the top of each section. If you have other questions or research-related problems, you may reach Jason Couraud at <a href="mailto:emailaddress?subject=Risk%20Research%20Questions">email address</a>.</p>

<p><strong>\*Voluntary nature of participation and right to withdraw without consequence</strong> Participation in research is entirely voluntary. You may refuse to participate or withdraw. However, you must do so before answering the survey questions. To preserve your anonymity your answers cannot be tied back to you and thus cannot be excluded. You may be withdrawn from this study without your consent by the investigator. If your answers are incomplete you will be excluded from the study.</p>

<p><strong>\*Confidentiality</strong> Research records will be kept confidential, consistent with federal and state regulations. Only the investigator and student researcher will have access to the data which will be kept on a password protected computer in a locked room. To protect your privacy, personal, identifiable information will be removed from study documents and replaced with a study identifier.

Identifying information will be stored separately from data and will be kept for a period of one year.</p>

<p><strong>\*IRB Approval Statement</strong> The Institutional Review Board for the protection of human participants at Utah State University has approved this research study. If you have any questions or concerns about your rights or a research-related injury and would like to contact someone other than the research team, you may contact the IRB Administrator at (435) 797-0567 or email <a href="mailto:irb@usu.edu?subject=IRB%20Research%20Approval">irb@usu.edu</a> to obtain information or to offer input.</p>

<p><strong>\*Investigator Statement</strong> &#8220;I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered.&#8221;</p>

</div>

<div id="footer">

</div>

</body>

</html>

### thanks.php

```
<?php
```

```
require 'lib/src/sessions.php';
require 'lib/src/functions.php';
require 'lib/src/fbconfig.php';
require 'lib/src/facebook.php';
```

```
spl_autoload_register('my_autoloader');
```

```
// Create our Application instance (replace this with your appId and secret).
```

```
$facebook = new Facebook(array(
```

```
  'appId' => APP_ID,
```

```
  'secret' => APP_SECRET,
```

```
  'cookie' => true,
```

```
));
```

```
$session = $_SESSION['face_session'];
```

```
$subject = "Thanks for your participation";
```

```
$message = "Thank you for helping me with my research. I hope that you have received some valuable feedback on the security of your Facebook data as a result.\r\n
```

```
To continue my research, I hope that you referred a few friends to the app that I built. If you haven't I encourage you to do so by either returning to the app and using the in app referral process. If you do return to the app you will be automatically directed to the
```

referral page and you will not have to retake the survey. You can also send the following link to anyone who might be interested: <http://apps.facebook.com/facesurvey>\r\n Again I would like to thank you for your responses. Your help has been invaluable.\r\n

```
Jason Couraud";
$headers = 'From: emailaddress' . "\r\n" .
    'Reply-To: emailaddress' . "\r\n" .
//    'X-Mailer: PHP/' . phpversion() .
    'MIME-Version: 1.0' . "\r\n" .
    'Content-type: text/plain; charset=iso-8859-1' . "\r\n";
```

```
$me = null;
// Session based API call.
if ($session) {
    try {
        $uid = $facebook->getUser();
        $me = $facebook->api('/me');
    } catch (FacebookApiException $e) {
        error_log($e);
    }
}

try{
    $email = $facebook->api('/me?fields=email');
    @mail($email['email'], $subject, $message);
} catch(Exception $e){
    error_log($e);
}
```

```
$score = ($_SESSION['rating']/10) * 100;
```

```
$rating = 6;
if($score >= 90){
    $rating = 10;
}elseif($score >= 80 && $score <= 89){
    $rating = 9;
}elseif($score >= 70 && $score <= 79){
    $rating = 8;
}elseif ($score >= 60 && $score <= 69) {
    $rating = 7;
}elseif ($score >= 50 && $score <= 59) {
    $rating = 6;
}elseif ($score >= 40 && $score <= 49) {
    $rating = 5;
}elseif ($score >= 30 && $score <= 39) {
```

```

    $rating = 4;
}elseif ($score >= 20 && $score <= 29) {
    $rating = 3;
}elseif ($score >= 10 && $score <= 19) {
    $rating = 2;
}else{
    $rating = 1;
}
$disp_rating = "";
$salt_tag = "";

$color = "#0F0";
switch ($rating){
    case 10:
        $color = "#0F0";
        $disp_rating = "a_plus.jpg";
        $salt_tag = "You got an A+ rating";
        break;
    case 9:
        $color = "#0F0";
        $disp_rating = "a.jpg";
        $salt_tag = "You got an A rating";
        break;
    case 8:
        $color = "#0F0";
        $disp_rating = "b_plus.jpg";
        $salt_tag = "You got a B+ rating";
        break;
    case 7:
        $color = "#0F0";
        $disp_rating = "b.jpg";
        $salt_tag = "You got a B rating";
        break;
    case 6:
        $color = "#FF0";
        $disp_rating = "c_plus.jpg";
        $salt_tag = "You got a C+ rating";
        break;
    case 5:
        $color = "#FF0";
        $disp_rating = "c.jpg";
        $salt_tag = "You got an C rating";
        break;
    case 4:

```

```

    $color = "#FF0";
    $disp_rating = "d_plus.jpg";
    $alt_tag = "You got an D+ rating";
    break;
case 3;
    $color = "#FF0";
    $disp_rating = "d.jpg";
    $alt_tag = "You got an D rating";
    break;
case 2;
    $color = "#F00";
    $disp_rating = "f_plus.jpg";
    $alt_tag = "You got an F+ rating";
    break;
case 1;
    $color = "#F00";
    $disp_rating = "f.jpg";
    $alt_tag = "You got an F rating";
    break;
}

$public = $_SESSION['public'];

$message2 = "You may want to check your profile and make sure you want the above
items available to the public";
if($public[0] == "no items"){
    $message2 = "";
}

session_write_close();
?>
<!doctype html>
<html xmlns:fb="http://www.facebook.com/2008/fbml">
<head>
<title>Online Community Risk Survey - Thank You</title>
<link rel="stylesheet" type="text/css" href="styles/main.css" />
<script type="text/javascript" src="http://connect.facebook.net/en_US/all.js"></script>
<script type="text/javascript">
window.fbAsyncInit = function() {
    // init the FB JS SDK
    FB.init({
        appId: '<?php echo APP_ID;?>',
        status: false,
        xfbml: false

```

```

    });

    FB.Canvas.setSize({ width:800});
}

(function(d, s, id){
    var js, fjs = d.getElementsByTagName(s)[0];
    if (d.getElementById(id)) {return;}
    js = d.createElement(s); js.id = id;
    js.src = "//connect.facebook.net/en_US/all.js";
    fjs.parentNode.insertBefore(js, fjs);
})(document, 'script', 'facebook-jssdk');
</script>
<style>
    #image{
        margin: 0px;
        padding: 0px;
        /*border: 1px solid #000;*/
        display: table;
    }

    #image-row {
        margin: 0px;
        padding: 0px;
        display: table-row
    }

    #image-row div{
        margin: 0px;
        padding: 0px;
        /*border: 1px solid #000;*/
        display: table-cell;
        vertical-align: top;
    }
</style>
</head>
<body>
    <div id="header">
        <h3>Thank You for Your Help</h3>
    </div>
    <div id="center">
        <div>

```

```

    <p><?php echo $me['first_name']; ?>, thank you for participating in this study.
    Your participation is invaluable. I know that you are busy and I appreciate the time you
    have taken to participate.</p>

```

```

    </div>

```

```

    <div>

```

```

    <p>The purpose of this study is to gather information about how members of
    online communities perceive the risk of posting information online. Your answers to the
    survey questions will help build a profile of risk assessment in online communities. This
    profile will aid me in understanding risk assessment in online communities.</p>

```

```

    </div>

```

```

    <div id="image">

```

```

        <div id="image-row">

```

```

            <div>Your security score is:</div>

```

```

            <div><span style="font-size: 6em; font-weight: bold; color: <?php echo
    $color;?>;line-height: .8em;"><?php echo $rating;?>/10</span></div>

```

```

            </div>

```

```

        </div>

```

```

    <br />

```

```

    <div id="image">

```

```

        <div id="image-row">

```

```

            <div>Your security rating is:</div>

```

```

            <div>" /></div>

```

```

            </div>

```

```

        </div>

```

```

    <div>

```

```

    <p>The following items from your profile are available to the public:</p>

```

```

    <p><ul>

```

```

        <?php

```

```

        foreach ($public as $item){

```

```

            echo "<li>" . $item . "</li>" ;

```

```

        }

```

```

    ?></ul></p>

```

```

    <?php

```

```

    if($message2){

```

```

        echo "<p>" . $message2 . "</p>";

```

```

    }

```

```

    ?>

```

```

    </div>

```

```

    <div>

```

```

    <p><a href="return.php?sid=<?php echo session_id();?>" target="_top"
    title="Return to my facebook page">Return to my facebook page</a></p>

```

```

    </div>

```

```

</div>

```

```
<div id="footer">&nbsp;</div>
</body>
</html>
```

### **main.css**

```
/*
  Document   : main
  Created on : Feb 15, 2013, 6:30:31 PM
  Author    : Jason
  Description:
      Purpose of the stylesheet follows.
*/

root {
  display: block;
}

body{
  font-family: 'lucida grande',tahoma,verdana,arial,sans-serif;
  font-size: .75em;
  line-height: 1.38;
  background-color:#FFF;
  margin:0;
  padding:0;
}

#header{
  color: #FFF;
  background-color: #3b5998;
  height: 50px;
  border: 2px solid #3b5998;
  padding: 10px;
}

#center {
  background-color: #FFF;
  min-height: 400px; /* for modern browsers */
  height: auto !important; /* for modern browsers */
  height: 400px; /* for IE5.x and IE6 */
  border: 2px solid #3b5998;
  padding: 2px;
}

#footer {
```



```
    color: #FFF;
    clear: both;
    background-color: #3b5998;
    height: 35px;
    border: 2px solid #3b5998;
    padding: 2px;
}

h1 a {
    text-decoration: none;
    color: #000;
}

h1 a:hover {
    text-decoration: underline;
}

p{
    text-align:justify;
    padding: 5px;
}

p img {
    padding: 5px;
    float: left;
    margin-right: 5px;
}

.lineunder{
    border-bottom: 1px solid #000;
    height: 1.5em;
    vertical-align: bottom;
}

#survey{
    width: 100%;
    border-top: 1px solid #000;
}

.title{
    border-bottom: 1px solid #000;
}

progress {
```

```
    width: 450px;
}

a:hover {
    text-decoration: underline;
}

a {
    color: #3b5998;
    cursor: pointer;
    text-decoration: none;
}

strong, b {
    color: #3b5998;
    font-weight: bold;
}

.button {
    font: bold 11px Arial;
    text-decoration: none;
    background-color: #EEEEEE;
    color: #333333;
    padding: 2px 6px 2px 6px;
    border-top: 1px solid #CCCCCC;
    border-right: 1px solid #333333;
    border-bottom: 1px solid #333333;
    border-left: 1px solid #CCCCCC;
}

table tr td p{
    padding: 0px;
    margin: 0px;
    spacing: 0px;
    text-align: left;
}

table tr td {
    text-align: center;
}

database.php
<?php
```

```

/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */

/**
 * Description of database
 *
 */
class database
{
    var $Host    = "db_host";    // Hostname of our MySQL server.
    var $Database = "db";    // Logical database name on that server.
    var $User    = "db_user";    // User and Password for login.
    var $Password = "db_password";

    var $Link_ID = 0;    // Result of mysql_connect().
    var $Query_ID = 0;    // Result of most recent mysql_query().
    var $Record  = array();    // current mysql_fetch_array()-result.
    var $Row;    // current row number.
    var $LoginError = "";

    var $Errno  = 0;    // error state of query...
    var $Error  = "";

//-----
//  Connects to the database
//-----
    function connect()
    {
        if( 0 == $this->Link_ID )
            $this->Link_ID=mysql_connect( $this->Host, $this->User, $this->Password );
        if( !$this->Link_ID )
            $this->halt( "Link-ID == false, connect failed" );
        if( !mysql_query( sprintf( "use %s", $this->Database ), $this->Link_ID ) )
            $this->halt( "cannot use database ".$this->Database );
    } // end function connect

//-----
//  Queries the database
//-----
    function query( $Query_String )
    {
        $this->connect();

```

```

$this->Query_ID = mysql_query( $Query_String,$this->Link_ID );
$this->Row = 0;
$this->Errno = mysql_errno();
$this->Error = mysql_error();
if( !$this->Query_ID )
    $this->halt( "Invalid SQL: ".$Query_String );
return $this->Query_ID;
} // end function query

//-----
//  If error, halts the program
//-----
function halt( $msg )
{
    printf( "
<strong>Database error:</strong> %s
n", $msg );
    printf( "<strong>MySQL Error</strong>: %s (%s)
n", $this->Errno, $this->Error );
    die( "Session halted." );
} // end function halt

//-----
//  Retrieves the next record in a recordset
//-----
function nextRecord()
{
    @ $this->Record = mysql_fetch_array( $this->Query_ID );
    $this->Row += 1;
    $this->Errno = mysql_errno();
    $this->Error = mysql_error();
    $stat = is_array( $this->Record );
    if( !$stat )
    {
        @ mysql_free_result( $this->Query_ID );
        $this->Query_ID = 0;
    }
    return $stat;
} // end function nextRecord

//-----
//  Retrieves a single record
//-----
function singleRecord()

```

```

    {
    $this->Record = mysql_fetch_array( $this->Query_ID );
    $stat = is_array( $this->Record );
    return $stat;
    } // end function singleRecord

//-----
// Returns the number of rows in a recordset
//-----
function numRows()
    {
    return mysql_num_rows( $this->Query_ID );
    } // end function numRows

//-----
// Returns the Last Insert Id
//-----
function lastId()
    {
    return mysql_insert_id();
    } // end function numRows

//-----
// Returns Escaped string
//-----
function mysql_escape_mimic($inp)
    {
    if(is_array($inp))
        return array_map(__METHOD__, $inp);
    if(!empty($inp) && is_string($inp)) {
        return str_replace(array("\|", "\0", "\n", "\r", "'", '"', "\x1a"), array("\\|", '\\0', '\\n',
        '\\r', '\\\'', '\\\"', '\\Z'), $inp);
    }
    return $inp;
    }

//-----
// Returns the number of rows in a recordset
//-----
function affectedRows()
    {
    return mysql_affected_rows();
    } // end function numRows

//-----

```

```
// Returns the number of fields in a recordset
//-----
function numFields()
{
    return mysql_num_fields($this->Query_ID);
} // end function numRows

} // end class database
?>
```

### **session.php**

```
<?php
if(isset($_GET['sid'])){
    session_id($_GET['sid']);
}else if($_POST['sid'){
    session_id($_POST['sid']);
}
session_start();

//$value = 'something from somewhere';
//
//setcookie("TestCookie", $value);
//
//if(isset($_COOKIE['cookie'])){
//    print_r("Cookie Set");
//}
//else{
//    print_r("Cookie Not Set");
//}
//echo session_id() . "<br />";
?>
```

### **functions.php**

```
<?php
/**
 * Output a print_r of a variable
 * @param mixed $var
 */
function printR($var)
{
    ?><div align="left" style="background-color:#FFF ! important;color:#000 !
important;font-size:12pt;"><pre><?php echo print_r($var, true);?></pre></div><?php
}
```

```

/**
 * Output a print_r of a variable and die
 * @param mixed $var
 */
function printRdie($var)
{
    printR($var);
    die();
}

/**
 * Retrieve the contents of the get or post variable with the desired name
 * @param string $var
 * @param various $default
 * @return various
 */
function getGP($var, $default = ""){
    if(isset($_POST[$var])){
        return $_POST[$var];
    }elseif(isset($_GET[$var])){
        return $_GET[$var];
    }else{
        return $default;
    }
}

/**
 * Retrieve the contents of the get variable with the desired name
 * @param string $var
 * @param various $default
 * @return various
 */
function getG($var, $default = ""){
    if(isset($_GET[$var])){
        return $_GET[$var];
    }else{
        return $default;
    }
}

/**
 * Retrieve the contents of the post variable with the desired name
 * @param string $var
 * @param various $default

```

```

* @return various
*/
function getP($var, $default = ""){
    if(isset($_POST[$var])){
        return $_POST[$var];
    }else{
        return $default;
    }
}

/**
 * Retrieve the contents of the session variable with the desired name
 * @param string $var
 * @param various $default
 * @return various
 */
function getS($var, $default = ""){
    if(isset($_SESSION[$var])){
        return $_SESSION[$var];
    }else{
        return $default;
    }
}

/**
 * autoloader function
 * @param string $class_name
 */
function my_autoloader($class_name) {
    $path = "lib/src/";
    $class = strtolower($class_name);
    if(file_exists($path . $class . '.php')) {
        require_once($path. $class . '.php');
    } else {
        printRdie("Unable to load $class_name class.");
    }
}
?>

```

### **fbconfig.php**

```

<?php
define('APP_ID', 'app_id');
define('APP_SECRET', 'app_secret');
?>

```



The following code will recreate the table structure used by the above code.

```
--
-- Database: `facesurvey`
--
CREATE DATABASE `facesurvey` DEFAULT CHARACTER SET utf8 COLLATE
utf8_general_ci;
USE `facesurvey`;
```

```
-----

--
-- Table structure for table `contacts`
--

CREATE TABLE `contacts` (
  `email` varchar(255) NOT NULL,
  `fname` varchar(45) default NULL,
  `lname` varchar(45) default NULL,
  `fbprofile` text,
  PRIMARY KEY (`email`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

```
-----

--
-- Table structure for table `contacts_sent`
--

CREATE TABLE `contacts_sent` (
  `email` varchar(255) NOT NULL,
  PRIMARY KEY (`email`)
) ENGINE=MyISAM DEFAULT CHARSET=utf8;
```

```
-----

--
-- Table structure for table `participant_requests`
--

CREATE TABLE `participant_requests` (
  `fb_id` bigint(20) NOT NULL,
  `sender` bigint(20) NOT NULL,
```

```

`responded` tinyint(4) NOT NULL default '0',
PRIMARY KEY (`fb_id`)
) ENGINE=MyISAM DEFAULT CHARSET=utf8;

```

```
-----
```

```

--
-- Table structure for table `participants`
--

```

```

CREATE TABLE `participants` (
  `fb_id` bigint(20) NOT NULL COMMENT 'facebook id',
  `fb_name` varchar(50) NOT NULL COMMENT 'name',
  `fb_email` varchar(50) NOT NULL COMMENT 'email address',
  `fb_refID` bigint(20) NOT NULL,
  `send_friends` int(11) NOT NULL default '0',
  `security_score` int(11) NOT NULL default '0',
  `posted` tinyint(4) NOT NULL default '0',
  PRIMARY KEY (`fb_id`)
) ENGINE=MyISAM DEFAULT CHARSET=latin1 COMMENT='Save participants so
they can't take survey multiple times';

```

```
-----
```

```

--
-- Table structure for table `responses`
--

```

```

CREATE TABLE `responses` (
  `response_id` int(10) NOT NULL auto_increment,
  `demo_gender` tinyint(2) NOT NULL,
  `demo_age` tinyint(2) NOT NULL,
  `demo_educ` tinyint(2) NOT NULL,
  `demo_income` tinyint(2) NOT NULL,
  `per_1` tinyint(2) NOT NULL,
  `per_2` tinyint(2) NOT NULL,
  `per_3` tinyint(2) NOT NULL,
  `per_4` tinyint(2) NOT NULL,
  `per_5` tinyint(2) NOT NULL,
  `per_6` tinyint(2) NOT NULL,
  `per_7` tinyint(2) NOT NULL,
  `sen_1` tinyint(2) NOT NULL,
  `sen_2` tinyint(2) NOT NULL,
  `sen_3` tinyint(2) NOT NULL,

```

```
`sen_4` tinyint(2) NOT NULL,  
`sen_5` tinyint(2) NOT NULL,  
`sen_6` tinyint(2) NOT NULL,  
`sen_7` tinyint(2) NOT NULL,  
`sen_8` tinyint(2) NOT NULL,  
`att_1` tinyint(2) NOT NULL,  
`att_2` tinyint(2) NOT NULL,  
`att_3` tinyint(2) NOT NULL,  
`att_4` tinyint(2) NOT NULL,  
`att_5` tinyint(2) NOT NULL,  
`att_6` tinyint(2) NOT NULL,  
`att_7` tinyint(2) NOT NULL,  
`att_8` tinyint(2) NOT NULL,  
`sev_1` tinyint(2) NOT NULL,  
`sev_2` tinyint(2) NOT NULL,  
`sev_3` tinyint(2) NOT NULL,  
`sev_4` tinyint(2) NOT NULL,  
`sev_5` tinyint(2) NOT NULL,  
`sev_6` tinyint(2) NOT NULL,  
`sev_7` tinyint(2) NOT NULL,  
`sev_8` tinyint(2) NOT NULL,  
`sus_1` tinyint(2) NOT NULL,  
`sus_2` tinyint(2) NOT NULL,  
`sus_3` tinyint(2) NOT NULL,  
`sus_4` tinyint(2) NOT NULL,  
`sus_5` tinyint(2) NOT NULL,  
`sus_6` tinyint(2) NOT NULL,  
`sus_7` tinyint(2) NOT NULL,  
`sus_8` tinyint(2) NOT NULL,  
`sef_1` tinyint(2) NOT NULL,  
`sef_2` tinyint(2) NOT NULL,  
`sef_3` tinyint(2) NOT NULL,  
`sef_4` tinyint(2) NOT NULL,  
`fb_bio` tinyint(2) NOT NULL,  
`fb_education` tinyint(2) NOT NULL,  
`fb_hometown` tinyint(2) NOT NULL,  
`fb_location` tinyint(2) NOT NULL,  
`fb_quotes` tinyint(2) NOT NULL,  
`fb_work` tinyint(2) NOT NULL,  
`fb_religion` tinyint(2) NOT NULL,  
`fb_politics` tinyint(2) NOT NULL,  
`fb_languages` tinyint(2) NOT NULL,  
`fb_likes` tinyint(2) NOT NULL,  
PRIMARY KEY (`response_id`)
```

```
) ENGINE=MyISAM DEFAULT CHARSET=latin1 AUTO_INCREMENT=385 ;
```

```
-----
```

```
--
```

```
-- Table structure for table `sessions`
```

```
--
```

```
CREATE TABLE `sessions` (  
  `id` varchar(32) NOT NULL,  
  `access` int(10) unsigned default NULL,  
  `data` text,  
  PRIMARY KEY (`id`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## VITA

### JASON COURAUD

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#### QUALIFICATION SUMMARY

Experience teaching university computer courses  
Publication and presentation experience  
Experience in software design and development practices

#### EDUCATION

Utah State University, Logan, UT

##### **Ph.D in Education**

Areas of Concentration: Management Information Systems **2014**  
Dissertation: "Risk Perception in Online Communities"

Utah State University, Logan, UT

##### **M.A. in Management Information Systems**

**2006**

Utah State University, Logan, UT

##### **B.A. in Business Information Systems**

**2003**

Areas of Concentration: Electronic Commerce  
Institutional Honors: Cum Laude

#### AWARDS

Nominated: Best Research Paper IACIS 2006 International Conference **October 2006**

#### TEACHING EXPERIENCE

Utah State University, Logan, UT

##### **Teaching Assistant to Professor John Johnson in Office Systems Support 1400**

**January 2008 – May 2010**

Taught two sections of OSS 1400 from January 2008 until May 2010. Course covered basic computer concepts (how computers work, how data is stored, etc.), basic internet concepts (what is a url, how the internet finds information, etc.), email (what is cc, what is bcc, etc.), electronic ethics (information privacy, copyright, licensing, etc), Microsoft Word, Excel, and PowerPoint, and basic HTML and CSS.

#### RELATED EXPERIENCE

Versatrend, Logan, UT

##### **Web Programmer**

**March 2013 – June 2014**

Develop web software using a combination of PHP, MySQL, JavaScript, HTML, CSS, and AJAX for use in the Microlending/Banking industry. Experimented with mobile app development for feasibility study. Create and test intuitive web UI's to facilitate user interaction with the software. Additionally, trained users on web software. Created training documents.

ABMS, Inc., Logan, UT

##### **Web Programmer**

**December 2009 – January 2013**

Develop web software using a combination of PHP, MySQL, JavaScript, HTML, CSS, and AJAX for use in the retail/wholesale tire industry. Create and test intuitive

web UI's to facilitate user interaction with the software. Additionally, trained clients on web software. Created training documents.

Computer Information Literacy, Utah State University, Logan, UT

**Content Developer**

May 2008 – May 2009

Developed instructional and assessment material for basic computing, basic internet, email, electronic ethics, and Microsoft Excel. Translated and modified tutorial and assessment material for Microsoft Word, Excel, and PowerPoint to be compatible for practice and assessment using the OpenOffice equivalents.

Center for Open and Sustainable Learning, Utah State University, Logan, UT

**Web Content Developer**

2005

Digitize USU course material using HTML, CSS, PHP, and JavaScript for display on the COSL website. Courses digitized included Fluid Dynamics, Economics, Anthropology, etc.

Cassie Designs and Development, Logan, UT

**Web Developer**

2004

Developed websites using a combination of PHP, MySQL, JavaScript, HTML, and CSS.

**PUBLICATIONS AND PAPERS**

*"Locking Down Log Files: Enhancing Network Security by Protecting Log Files"*

Paper presented at IACIS 2006, Reno, NV

2006

*"Intrusion Detection: Detecting Masquerade Attacks Using Unix Command Lines"*

Paper presented at The Security Conference 2007, Las Vegas, NV

2007

*"IS Curriculum Recommendations For Web Courses Based On Current Technology Use By Fortune 400 Companies"*

Paper presented at AMCIS 2007, Keystone, CO

2007

*"IS Curriculum Recommendations for Web Courses in Higher Education"*

Paper published in Journal of Learning in Higher Education

2013

**LANGUAGES**

English – native language

Italian – speak, read, write with basic competence

**MEMBERSHIPS**

Golden Key Honor Society

Phi Beta Kappa

Beta Gamma Sigma